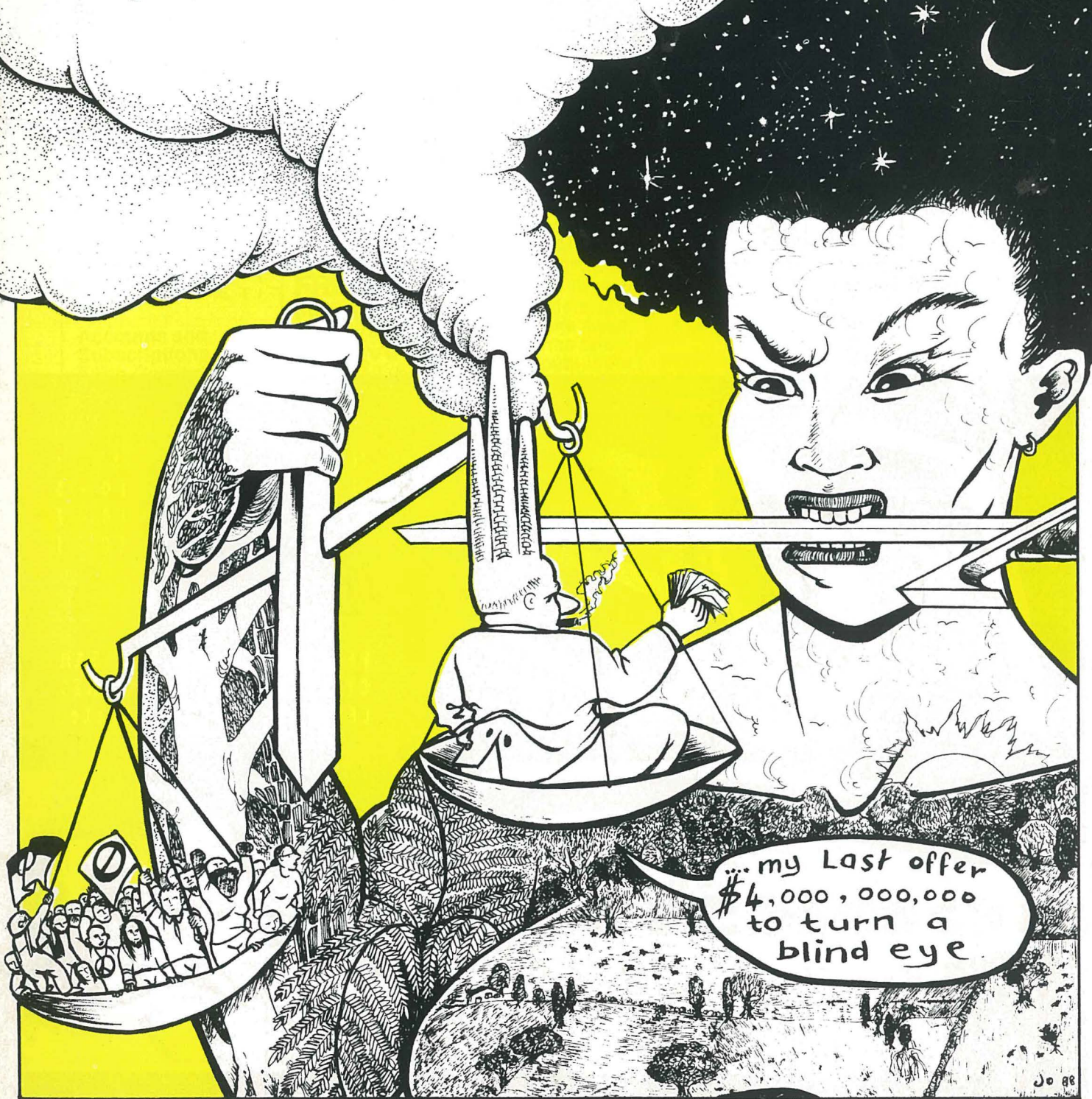


Chain Reaction

Friends of the Earth Australia

Number 56 Summer 1988-89 \$2.75

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Cover: Jo Waite

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LETTERS

Hinch

At at recent screening of *the Journey*, filmmaker Peter Watkins spoke of the importance of challenging how the mass media recreate the world each night in the most inhuman, cynical and condescending way. This prompts me to put on paper my interpretation of a guest appearance on Derryn Hinch's 'Hinch at Seven', the top ranking nightly current affairs program on Chennal Seven; a network which currently advertises its news and current affairs service under the slogan 'Leadership'.

Early one week about four months ago a producer of the show rang the FOE office and invited up to ten members of FOE to participate in 'Friday Forum', a fifteen minute public access segment screened each Friday as half of that night's show.

After a deal of debate about the merits of the Hinch approach to journalism, unhampered by the fact that nobody present had ever seen the show, we decided that it would be interesting to

You are invited to write letters to *Chain Reaction* with your comments on the magazine or on other issues of interest. Letters should be kept within 300 words so that as many as possible may be published. Longer letters may be edited. Write today to *Chain Reaction*, GPO Box 530E, Melbourne, Vic 3001, Australia.

go. So we planned the issues we wished to raise: Uranium mining, US Bases, Nuclear ship visits and War toys.

Five intrepid volunteers showed up at the appointed time of 12.15 pm on Friday at the studio door for the pre-recording. A security gaurd showed us into a dingy waiting room where we were joined by about twenty other assorted concerned members of the public. we waited patiently, without disturbance from our hosts, under the security gaurd's watchful eyes. a tray of meaty sandwiches and drikns arrived some time later to ameliorate our wait. after 50 minutes we began mumbling about when we might give up and leave but just then, without fanfare or introductions of any kind, wew ere led into the studio. The five of us sat together feeling rather bemused. The numbers for the day were down a bit so a few channel workers were rounded up and asked to sit in the back. they didn't mind, it beat working. First one producer briefed us, then another warmed us up; one happened to be the prominent spouse of a prominent conservative politician. this caused a few low gasps from the more impressionable amongst the others.

We were wondering when we might be able to introduce ourselves and the topics we wished to raise when, without warning, the great man rushed in apologising profusely for being so late. Held up at his lawyers! But now the free-for-all was about to begin. Hinch's idea of a forum, as we soon realised, was for him to perch on a stool/chair up the front while those members of the 'audience' who could manage it yelled for his attention. He scanned the

imploring crowd and picked the person who best grabbed his attention, then the camera and mike zoomed in. The lucky person gave a short monologue on their topic, sometimes interrupted by Hinch cross-examining. Then forcefully Derryn delivered his pronouncement on the issue. Nobody else spoke. Next please. We sat in incredulity.

An anti-abortionist got the nod, and a public transport activist, then a save the penguins women, a brace of animal liberationists and a man claiming police harrasement. In all about six people got a go. None of us did. But then again we didn't compete. It quickly became dawned on me that we were neither going to be acknowledged or asked to contribute. But for the life of me I cound not bring myself to start yelling out 'Derryn, Derryn' at the end of each item no matter how good the cause. Wesat there quietly for the 45 minutes or so it took to prerecord enough material and then the great man thanked us and was whisked off. We were all led out through the waiting room and into Dorcas Street. Nobody spoke to us during our visit nor have we heard anything from the network since.

That night I watched the final product with great interest. three carefullt edited contributions were screened in the 15 minutes (less ads etc) of 'Friday Forum'. None of the free-for-all appeared. It all looked so civilized, he looked so concerned, we seemed so considerate. We were certainly shown some 'leadership' that day.

Gavan Thomas
Northcote, Vic.

Radical

I have an old issue of the magazine. I find it very good. Very inspiring, informative and I love the way people are encouraged to write to complain or find out more.

I also appreciate the radical nature of views, and the breadth of involvement. Partly due to a spectrum of organisations covering other needs, and partly financial, but unfortunately I fear partly due to oppression, FoE (Scotland) is much less keen to stick its neck out, or to even partially associate itself with any radicalism. They leave these things to other groups and remain a very environmental organisation - pollution and countryside, but little on social issues.

Susan Gray
London, England

Life in India

Thanks a ton for sending me a copy of *Chain Reaction* which I received sometime back. The articles dealt with therein are excellent and very much in my line of thinking. I am interested in receiving *Chain Reaction* regularly. I shall make use of the attached subscription form soon.

I would like very much to get back copies of *Chain reaction* that dealt with the 'Nuclear Industry'. Here in India nukes are in a very big way and we already have six of them operating around, though not very smoothly. There is one at Kalpakkam (300 miles from my place) near Madras which works in spurts and jerks. There is

Continued on page 47

Anyone for a chemical cocktail?

On Monday 28 November Melbourne residents were once again exposed to toxic fumes from a fire involving chemicals. The fire occurred at a large transport depot in Melbourne's western region in an area where heat shrinking was taking place. Bags of a material called Paraloid were being wrapped in a plastic that is shrunk with a flame. It is believed that some of the bags were damaged and the flame caused a minor dust explosion. This led to other highly flammable chemicals stored there catching alight.

At the height of the blaze, fire balls leapt 100 metres into the air, sending showers of debris to the ground. Several explosions propelled huge drums into the sky. It took 120 firemen three hours and millions of litres of water to control the blaze. Thousands of litres of water used to control the fire swept into stormwater drains that flow into the Maribyrong River.

While a list of the chemicals stored at the site was available at the time of the fire it only provided the trade name not chemical names and it was not known where specific types of chemicals were located in the depot. As a result it was not known which chemicals were burnt nor how they mixed in the heat of the fire.

The chief fire officer, Jeff Godfredson, said that the firefighters had difficulty identifying the hazardous chemicals that came together to produce the 'chemical cocktail' of smoke that rose over the city.

'If that cloud came to ground level, I wouldn't be wanting to breathe



Photo: Melbourne Times

those fumes', said Godfredson.

Despite lack of information the EPA blandly informed the public that the fumes from the fire posed no public health risk. It was revealed that the Environment Protection Authority (EPA) did not take air samples till at least 24 hours after the fire.

One week after the fire neither the EPA nor other government agencies involved were exactly sure of the

chemicals or by-products contained within the cloud of smoke that poured over Melbourne, although tests had shown that hydrogen cyanide gas, among others, had been produced.

This fire is just one of a series of major accidents involving hazardous chemicals that have occurred in Melbourne over the last three and a half years, including two other major fires.

A public meeting in neighbouring Footscray in December re-

established the Hazardous Chemicals Action Group, and there was strong feeling that the Government had not done enough to control chemicals following the previous similar fire at nearby Butler's Transport Company in 1984. The public still does not have the right to know whether chemicals are stored in their area and the dangers they present.

Source: *The Age*, *The Herald*, *The Western Times*

Underpaid and overworked

The women workers of South East Asia are overworked, underpaid and restricted to marginal or labour intensive sectors with dim prospects of economic advancement. Their contribution to family income and their stabilising role in society have yet to receive the recognition they deserve. A study by the Asian Regional Team for Employment Promotion (ARTEP) of the International Labour Office (ILO) says that policy planners often overlook the special needs of working women.

In post-colonial South-East Asia, development programmes have opened up new opportunities for women, but these have also tended to create 'new inequalities and exacerbate old ones', leading to worsening poverty in some cases. This is further worsened by systems of male domination and gender hierarchies. 'Thus, when development programmes have negative effects, these are felt more acutely by women, when development programmes have positive effects, women are not necessarily the ones who benefit.'

In rural areas, studies have shown that 'women have heavier work burdens than men, working longer hours and undertaking a multiplicity of income earning activities in the agricultural and



non-agricultural sectors in order to survive'. The earnings of these women are crucial for family survival - 'in other words, women are active contributors to rural development, with very substantial responsibility for the maintenance of rural life,' notes the study. But 'women are ignored and continue to perform their work ... because of competitive pressure on land and other resources as well as population pressure, without any assistance in the form of education, training and improved technology.'

Source: *Development Forum* published by the United Nations Department of Public Information

Organic wine

An Australian wine-maker is cashing in on vast new international markets created by consumer resistance to chemical additives in food production.

Gil Wahlquist of Botolobar Wines in NSW's Mudgee district has become Australia's first recognised organic wine maker.

The grapes are grown without the use of chemical fertilisers or insecticides and the wines are bottled with no or

Vanishing treasures

The World Health Organisation report that in the fight against disease, the rain forest is a vast but under used resource. Three quarters of the world's people rely on plant-based traditional medicine for primary health care. Chinese herbalists use up to 5,000 different species, compared to Western pharmacists, who limit themselves to 95 flowering plants for their plant-based prescription drugs. Many of the rain forests' yet unidentified species may have medical applications. More than 1,400 tropical plants have promising anti-cancer properties, says the Washington based World Resources Institute.

Tropical forests also provide fibres, oils and resins used in making furniture, clothing, varnishes, pesticides, lubricants, adhesives and many household products. However, the prolific jungle is surprisingly fragile. When its canopy is ripped open by loggers, species that have evolved over the past 60 million years perish in the harsh light, heat and rain.

The extinction of species is not new, it has been happening at the rate of one per year for millions of years, according to Judith



Gradwohl and Russell Greenberg, tropical biologists at the Smithsonian Institution in the United States. However, they estimate we may now be using six times as many species each hour. If the deforestation continues, by the turn of the century the world will have lost 20 to 50 per cent of its genetic resources in exchange for timber revenue.

Source: *Asiaweek*

minimal preservatives.

However establishing the farm was not easy. Back in 1971, they refused to spray the vines with DDT, a common practice in the grape growing industry, only to see them ravaged by caterpillars that had no natural predators because the birds that once ate them had also fallen victim to DDT.

The birds were encouraged to return by allowing a controlled amount of weeds to grow under the vines to harbour insects the birds

could feed on.

The birds were then found to be attacking the grapes for their moisture content, but that was overcome by providing tubs of water for them to drink.

The efforts have paid off. The farm now has been officially recognised by the National Association for Sustainable Agriculture, which took soil samples before conferring its endorsement.

Source: *The Australian* November 1988

Pulp alternative

Japanese researchers have found a way to produce pulp from sugar cane and banana trees, replacing timber as a source of paper products, according to the Japanese National Chemical Laboratory for Industries.

Officials said the process, involving material containing a lot of fibre, would help conserve forests and the environment.

Source: *The Age* November 1988

Arsenic in wool

The Australian Wool Corporation (AWC) have threatened to severely penalise farmers using illegal sheep dips. The arsenic residues could threaten the international wool trade.

The AWC has stepped up its pesticide monitoring program with the introduction of random tests aimed at detecting arsenic residues in wool. Arsenic dips were banned from use on sheep in all Australian states from December 1986, but the AWC remains concerned that wool growers might be tempted to use old stocks.

AWC chairman Mr Hugh Beggs said that over the next three months, the corporation would monitor the level of illegal use of arsenic to identify the magnitude of the problem and establish industry standards for subsequent routine testing. He said that wool growers found to have used arsenic-based dips illegally could then be prosecuted by state authorities, have their properties quarantined or even have their clips withdrawn from sale.

Source: *Financial Review*

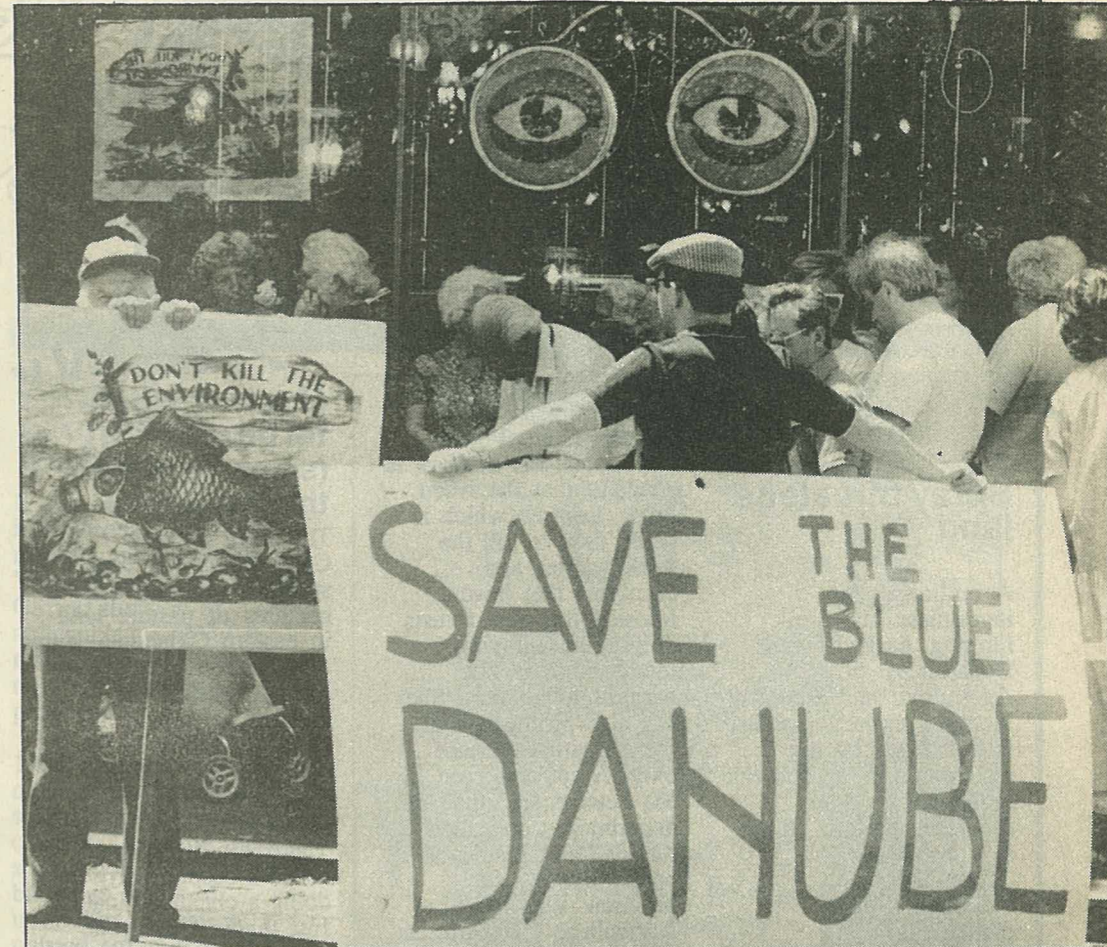


Photo: The Age

Save the blue Danube

More than 150 Hungarians assembled outside the Austrian consulate in High Street, Armadale, Victoria on 14 November 1988 to protest against plans to dam the Danube River in Hungary.

In early October 1988 plans were finalised to build a large water basin in the border region between the Hungarian town of Nagymaros and Bos in Czechoslovakia to be completed by 1995. This would be used to create a hydro-electric system and would affect

200 kilometres of the river.

According to one of the demonstrators, Mr Andrew Kovescy, Austria will lend Hungary 70 per cent of the money to build its dam and in return get as much power as it needs from the system until 2015. Czechoslovakia will also build two dams as part of the system. Another protester, Mr George Lugosi, a chemical engineer of Hungarian descent, said Hungary's deal with Austria was ridiculous, because by 2015, when the Hungarians took control over the power provided

by the dam, the process would be obsolete.

The deputy director of the Australian Conservation Foundation, Mr Bill Hare, who addressed the protesters, was worried about the impact the dam would have on Hungary's environment, as it would bear the brunt of the project. It is estimated that 4000 hectares of forest would be destroyed. Hungarians have protested in America, Great Britain, West Germany and in Czechoslovakia and Hungary.

Source: *The Age*

EARTH NEWS



Spray threatens land

A million dollar investment in organic farming, backed by the Department of Agriculture and aimed at lucrative export markets, is threatened by the resumption of a statewide herbicide spraying program, protest groups say.

Spraying teams working on pine plantations in north-eastern Victoria have already been stymied by angry residents and farmers, who fear a repeat of the spray-drift accidents that affected apple and nut crops three years ago, leading to a three year moratorium on aerial weed control. The Department of Conservation, Forests and Lands, which owns the pine plantations and plans to spray throughout Victoria this season, has been unable to placate local farmers, many of whom have invested heavily in the new organic farming techniques with the encouragement of the Department of Agriculture.

'It's just not negotiable,' said Mr Nick Greene, of Organic Croppers at Rose River. 'We bought in this valley because it was very clean. The water sources were clean and the soil was clean. Now we're being looked at with suspicion.'

Some residents and farmers blocked spraying at several sites. They recently placed an advertisement in Melbourne newspapers warning tourists to 'take extreme care' and saying that pregnant women were 'especially at risk'.

The Minister for Conservation, Forests and Lands, Ms Setches, is adamant that the weed killer, Lontrel, which is being used to kill the thick wattles and eucalypts that have infested the pine forests during the spraying moratorium, is not harmful to humans. She has also promised that the spraying is a once only. A spokesperson for Ms Setches said that the department consulted farmers and residents before starting its program. But a local Agriculture Department officer said the State Government probably brought the conflict upon itself by 'proceeding by decree rather than consultation'. He said the pine forest program, which has claimed much prime farmland for tree plantation in the past year, was already the cause of considerable friction.

The north-eastern regional director of the Conservation Department, Mr Bernie Evans, said no one could guarantee 100 per cent target accuracy but sprayers were specially trained and residues were being monitored.

Source: *The Age*



Nuclear waste fertilizer!!??!! (some consider this recycling)

The Kerr McGee Corporation has been spraying thousands of hectares of pasture land in eastern Oklahoma with a fertiliser recycled from nuclear waste. The corporation says it is harmless and even contains less uranium than some other commercial fertilisers. There is not one word about a second party doing a chemical analysis. Just think, if everyone just spread a little in their garden we wouldn't have a nuclear waste problem!

The Oklahoma Department of Agriculture licensed treated raffinate as fertiliser in 1987.

Residents have called on state and federal governments to halt the spraying program, citing unexplained deaths of farm animals, several instances of gross malformations in newborn livestock and the discovery of a nine legged frog in a pond that drains a pasture sprayed with raffinate. Kerr McGee says the fertiliser produces excellent forage yields but some local residents contend that it kills much of the grass it is sprayed on. Officials stated that the company plans to apply in 1989 for a permit from the Nuclear Regulatory Commission to sell raffinate fertiliser commercially.

Source: *Earth Island Journal*

Deforestation

When the Ganges gushed out of heaven, goes the Indian legend, the god Shiva trapped the river in the coils of his matted hair and made it flow gently out to sea. Man, however, has now shorn the river's catchment areas in the Himalaya, and in recent years the Ganges has unleashed its

fury.

In September 1988, as heavy monsoons lashed the mountains. The river roared unimpeded through the denuded valleys into Bangladesh, rendering 25 million people homeless. It was just one example of the devastating cost of deforestation.

Source: *Asiaweek*

Dow chemical may change name

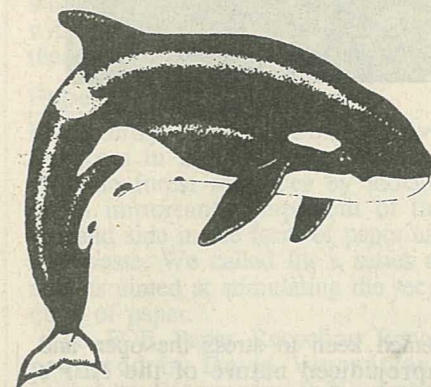
Dow Chemical Company is thinking about changing its name after 91 years and numerous image wrenching controversies. Dow officials confirmed they have hired a corporate image consultant and organised a team internally to consider whether a new name would improve its image.

At issue is whether Dow should keep the word 'Chemical' in its name. Mr Richard Long, Dow Chemical's corporate communications Director, who is heading the study said, 'Let's face it, that word does nobody much good these days. Chemical has a less than desirable public connotation.' The public has tended to associate 'chemical' companies with pollution and other health hazards.

Concern about the word 'chemical' is nothing new in the chemical industry. The largest chemical group in the United States, Dupont, even dropped the end of its corporate slogan, which once read: 'Better things for better living through chemistry'.

Still Dow stubbornly clung to its name. The company stayed with it in the 1960s when Vietnam war protesters criticised Dow for its napalm production. Uproars over dioxin, Agent Orange and other environmental contaminations traced to Dow also failed to convince company executives to make a switch.

Source: *Financial Review* 7 October 1988



No to mining bill

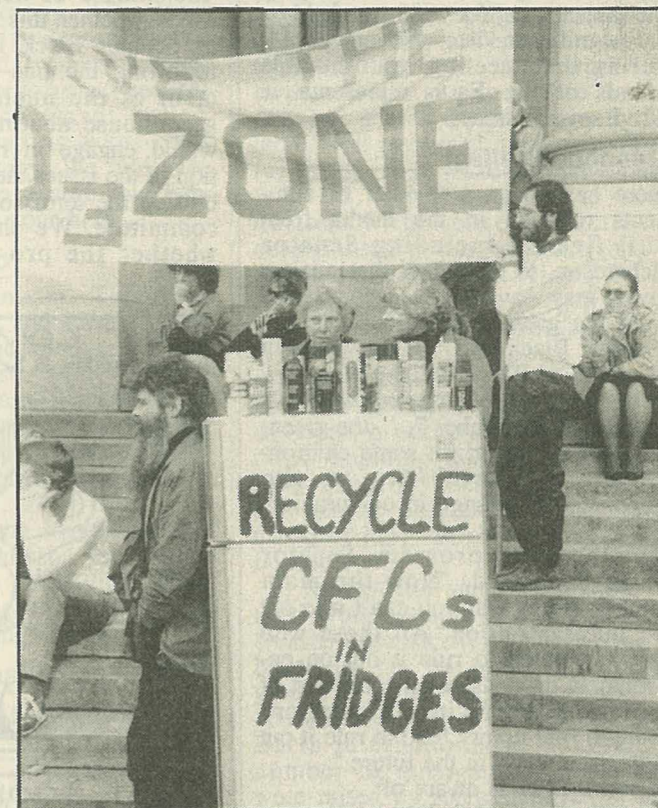
A bill has been introduced to the Belgian Parliament which would outlaw minerals activities in the Antarctic by Belgian corporations and nationals. The bill was signed by MPs from five parties and formally introduced in the Lower House.

Source: *Antarctic News*

Australian ozone hole problem

It was confirmed at an international scientific meeting in Aspendale Victoria organised by the CSIRO division of atmospheric research, that the ozone hole is now an Australian problem.

On the 11 December 1987, a tongue of ozone depleted air licked across southern Australia, causing Tasmania and southern Victoria to be bathed in levels of ultraviolet radiation normally seen only at the height of summer. In just two days, ozone levels plummeted by 10 per cent, resulting in a 20 per cent increase in dangerous ultraviolet radiation. The depletion lasted until the end of the month, during which people in Melbourne were at a considerably increased risk of sunburn and slightly increased their long term risk of skin cancer. It was a foretaste of a phenomenon that is likely to recur every few years for the next three centuries, until the atmosphere has rid itself of the huge reservoir of ozone destroying chlorofluorocarbon gases accumulated over the



past three decades.

Among the scientists attending the meeting was Professor Emeritus Sherwood Rowland of the University of California, who in 1973 conducted the laboratory experiments that alerted the world to the alarming possibility that CFC gases could destroy ozone in the stratosphere and increase the amount of ultraviolet radiation reaching the earth's

surface.

Professor Rowland said companies were now scrambling to be the first into the market with substitute gases, a prize worth \$1 billion a year. The best chance appeared to be a hydrofluorocarbon called 134A, whose molecules did not contain destructive chlorine atoms.

Source: *The Age*

The Peak Conservation Meeting

Two or three times a year, representatives of 18 environment groups and environment councils meet with the Federal Minister for the Environment, Senator Graham Richardson. The last meeting for 1988 was held on that significant date, November 11. During that meeting, your humble Friends of the Earth representative raised several issues.

Greenhouse effect

There have been a number of comments reported in the media from ALP figures, including Senator Richardson, to the effect that nuclear power may have to be reconsidered given the greenhouse effect.

Senator Black (ALP, Qld), who will be on the ALP's committee of review on uranium policy said on *The World Tonight* on November 7, '...the greenhouse effect has given some environmental respectability to the proponents of change in our uranium policy.'

On the same program, Senator Richardson said, "Now the main point to say is that you can't rule out the nuclear option. All those who have attempted to rule it out on environment grounds or on some sort of doomsday theory in the past, are going to find it very hard to rule it out in the same way in the future."

The Minister is aware of:

- the depth of feeling in the community against the uranium industry's use of the greenhouse effect to push their barrow;
- the expression of this Australia-wide at the Greenhouse 88 conferences;
- the powerful arguments that show that 'greenhouse vs. nuclear is invalid.'

He deflected questioning about his attitude on these questions, merely stating that he thought the arguments about energy conservation didn't answer long term energy needs. He

seemed keen to stress the open and unprejudiced nature of the ALP's policy review committee and that it wouldn't be expected to report until 'the middle of next year'. When I asked whether this committee would, as Senator Black had suggested, be following the line that the development of the nuclear industry was greenhouse abating, or whether it would engage in rational consideration of the issues, he said that this was outside the terms of reference of the committee. We shall wait and see whether the pro-uranium wolves

dress in the sheep's clothing of professed concern about the greenhouse effect.

It is expected that money requested by Senator Richardson and the poor relation, Science Minister Barry Jones, for further research into the greenhouse effect will be granted. Unfortunately it is dedicated to the study of predicted consequences, such as climatic projection, rather than abatement strategies to avoid it getting worse, for which Friends of the Earth has been campaigning for years.



I presented the Minister with a copy of the Australian NGO Statement on the Greenhouse Effect, a preprint of the paper by Bill Keepin and Gregory Katz which is in the December issue of *EnergyPolicy*, and a list of sources on the potential of energy efficiency in reducing fossil fuel use and hence greenhouse emissions.

Ozone Depletion

The Ozone Protection Bill 1988 was tabled on November 10 and represents the Government's ratification of the Montreal Protocol. This international agreement to limit chlorofluorocarbons (CFCs) is now considered inadequate to protect the ozone layer by most involved in the issue, including the head of the US EPA, Lee Thomas.

Something fishy is going on about the level of exports allowed in the Government's bill. Friends of the Earth had previously criticised the Government over the stated plan to allow 3,800 tonnes of CFCs to be exported (domestic consumption in 1989 is expected to be 12,000 tonnes). The anomaly is that everything else in the CFC regulatory framework relates to 1986 levels as a baseline, which were 2,300 tonnes (1987 - 3,200 tonnes; 1988 estimated 4,200 tonnes). When I asked the Minister to explain the levels, the reply (from his minders) was that the 1987 levels were used as a baseline. This is convenient for the CFC manufacturers and still leaves questions about the 600 tonne difference and is of course not much chop for the ozone layer. We shall investigate further.

The lenience shown to the industry doesn't surprise FOE which has publicised the industry domination of the regulation process and the lack of consultation with environment and consumer groups.

Genetic Engineering

Friends of the Earth and the Australian Conservation Foundation put forward an agenda item on the risks from the deliberate release of genetically engineered organisms, proposals for which are likely to increase a great deal after a release in Adelaide in June 1987. We are calling for a moratorium on further releases and an Inquiry to consider all aspects of the release, among other things. Send a stamped self addressed envelope to Friends of the Earth (Sydney) for more details.

The Minister made it clear that a moratorium was out of the question but he did appear to shift ground on

the call for an Inquiry, and said he would raise the possibility with the Prime Minister. Such an Inquiry would hopefully allow the opportunity for public discussion on the whole gamut of questions associated with the techniques and proposals for their widespread use.

Paper Recycling

FOE may have made decisive progress in the battle to conserve valuable forest resources by looking at an important component of the demand side in the form of paper use and waste. We called for a series of actions aimed at stimulating the recycling of paper.

The FOE Paper Recycling Report prepared by David Vincent and launched Wednesday 9 November was received favorably by Department officials and presented to the Minister at the meeting. After hearing the arguments raised in the report he appeared inclined towards establishing some form of government paper procurement policy, which we identified as a key component of the strategy. We will keep the pressure on to ensure this happens, but we need your help...

What you can do

Write to the Minister. There are many issues above, and a letter on any or all of them to the Minister is a useful political exercise. Make sure your letter gets a response, perhaps by including some questions, the tougher the better. Send copies of replies to Friends of the Earth (Sydney) PO Box 474A, Sydney, 2001.

Send letters to the Prime Minister on these issues, and send your replies to FOE (Sydney). The Prime Minister is usually more efficient than Ministers at sending replies.

For more information and action

Contact or form a Friends of the Earth group.

Stuart White is an active member of Friends of the Earth (Sydney).

Friends of the Earth International

The 1988 Friends of the Earth International AGM was held in Krakow, Poland's cultural capital and also a major centre for heavy industry. It was the first non-governmental international environment conference to be held in the East bloc, and indicative of the influences of glasnost and perestroika. The AGM was held alongside a three day meeting with representatives from a number of East European environment groups.

The FOEI conference was attended

by representatives from 25 member nations, and held over five days. It was divided into Business Meetings; reports and discussions of campaign issues; discussions of future objectives; workshops on international and other FOE issues; meetings and press conferences with local dignitaries; and a visit to the local Huta Lenina Steel Works. It was unfortunate that the bulk of the conference seemed to be concerned with financial and organisational matters, and this from a Euro-centric perspective. Consequently, totally inadequate time was given to such issues as the environment movement in developing nations and some international campaign issues.

Organisational structure, decision making, the degree of available resources, relations with and funding by government, campaign issues and strategies, and the political context of operations are all areas in which there are marked differences between FOE groups. The basic division seems to be between the large, well resourced, politically careful groups like FOE England and FOE US, and FOE groups in other nations with limited resources, decentralised power structures and a grass roots orientation. FOE Australia fits into the second group, and we think it important that Australian groups explore ways of creating closer links with like-minded groups, particularly in developing nations. This could include financing specific projects of joint concern; exchanging information on the operations of particular companies; working on joint boycotts.

In the last few years the number of third world groups in FOEI has increased dramatically, which has been hailed by the so-called first world groups as a great step forward for the environment and Friends of the Earth internationally. However, a number of quite strong criticisms were raised by representatives of the third world groups. They pointed out that FOE International brings them very little advantage at present, and often brings unexpected disadvantages. They are expected to pay membership fees and/or to pay in kind, which is often simply not possible. They receive no direct financial assistance from the FOE International Executive, except to attend the international meeting, but membership of a 'wealthy, international group like FOE' is often used by their governments as an excuse to not give any financial assistance. Non-english

speaking groups still get almost all newsletters in English, and spending time on translations isn't possible. The larger western groups often use the fact that there is a high 'third world membership' to gain credibility or prestige for their own groups, without assisting their southern partners.

Some larger northern groups do directly assist southern groups, most notably Holland, Sweden and the United States. There was a great deal of discussion about how best to increase the flow of finances and equipment, as well as information, from the 'northern' groups (including Australia) to the southern groups. One model suitable for Australia is that of Sweden. They've set up an Eco-development Foundation which sends money to groups and projects in the south, mostly South America. Their central office keeps a register of groups and projects in the south and gets in touch with groups within Sweden who then decide which project they could 'adopt' - one that is within their financial means or closely related to the work they are doing. The central office then gets them in touch with each other and they take it from there.

International Issues:

Nuclear

Unfortunately, very little time was given to this topic during plenary sessions. Most Western European groups, except Italy, tend not to prioritise nuclear issues. The major exception is Earthwatch Ireland, which proposed and subsequently will take the initiative on a major Nuclear Free Seas Campaign.

Given this context we feel FOEI is not the most appropriate forum for international networking on nuclear issues. We can not expect a great deal of support from Western European FOE groups. Furthermore it is our belief that supply countries are better placed to restrict the nuclear industry's activities than the demand countries. One of the more effective strategies would be to develop better links with activists in supplier nations, especially Canada.

Ozone

This issue seemed to be one of the major priorities of FOE Canada, US and England. The main focus is the Montreal Protocol, the signing of which is considered an attainable goal, and the resultant success is being seen as important for FOE's public profile. All FOE groups are

asked to put pressure on their governments to ratify the treaty where this has not been done.

Some steps in this area include:

- DuPont Canada is funding a pilot project to examine recycling CFCs. Recycling plants exist in Denmark but have a maximum recovery rate of only 50 per cent.
- Industry seems to acknowledge the need for CFC alternatives.
- FOE England has a slide kit on ozone depletion and the greenhouse effect, which may be copied for use by other groups.
- FOE US produces a quarterly magazine *Atmosphere* devoted to ozone protection.

Julia Langer (FOE Canada) and Liz Cook (FOE US) are the international contact people for this campaign.

Tropical Rain Forests

This is a major international campaign priority. The European campaign is based around consumer education and the boycotting of tropical timbers. FOE England remains one of the major campaigners in this field with its recent publication of the Good Wood Guide, among others.

Other groups with a significant TRF campaign are:

- Japan, which is working with JATAN on uncovering the financial links between Japanese companies and logging in tropical rainforests.
- SAM, which is still very active although their political context has been severely affected by

the Government crackdowns since last year.

- The Rainforest Information Centre in Lismore, NSW is an affiliate of FOEI, and is the best Australian contact for tropical rainforest information.

Kay Thompson (FOE England) and SAM Malaysia are co-ordinating the campaign internationally.

Future Directions

of FOE International

This paper was discussed in some detail at the end of the AGM. Its basic purpose is to formalise a few of the major structures which already exist in FOEI, and to clarify how these structures will operate. A number of proposals were accepted, and a copy should be available from FOE Fitzroy.

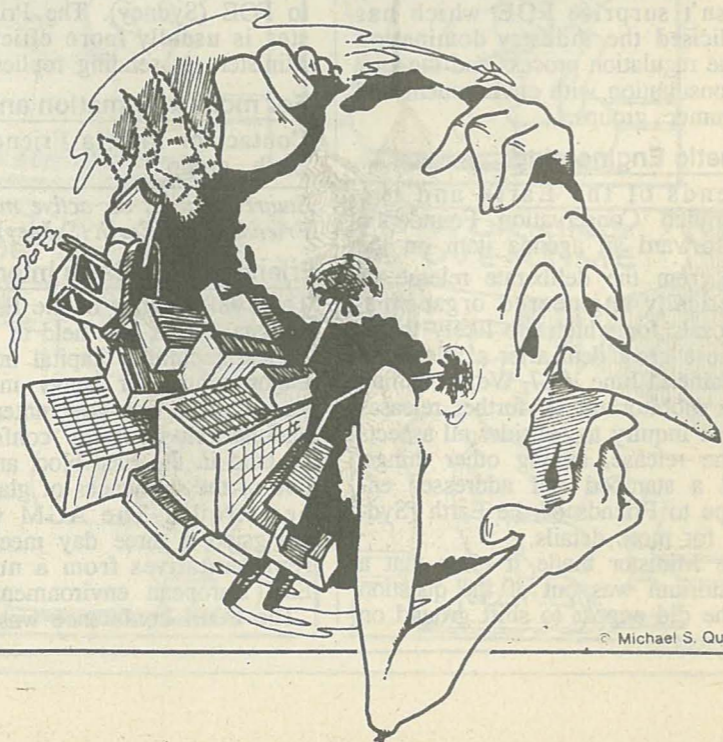
AGM 1989

It was proposed that the 1989 AGM be held in Argentina, however following a proposal from FOE US, it was agreed that the 1989 meeting be held in Washington DC. We spewed too!

1989 Executive Committee

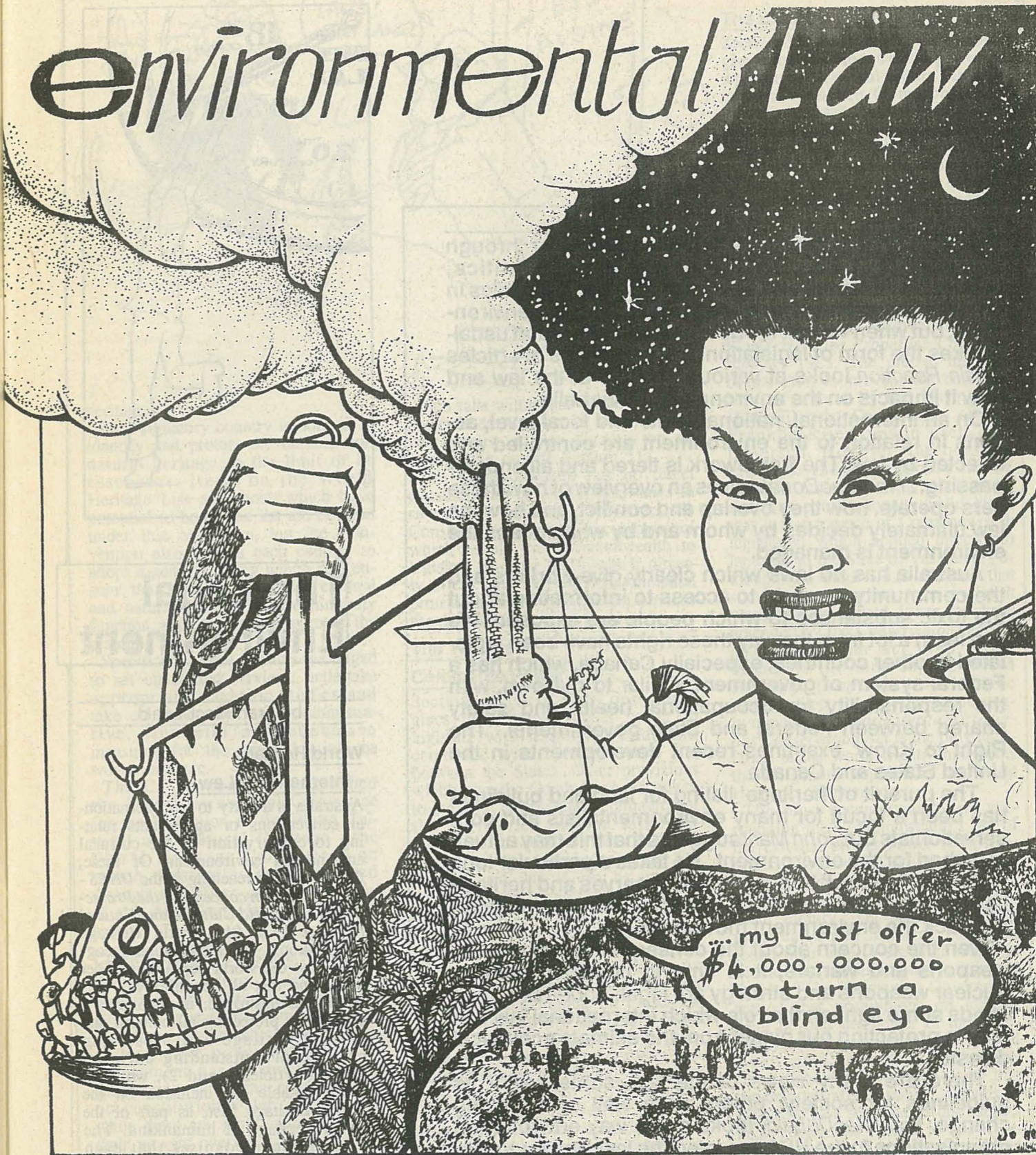
The 1989 Executive Committee will consist of representatives elected from Netherlands, England, Malaysia, Argentina, Canada, Ghana, United States. It was also agreed that the International Secretariat be located in London for a further two years.

Jane Basden and Dave Sweeney, Sheffield November 1988.



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environmental Law



The legal system affects us all, either directly or through the impact it has on the environment. Politics, economics, science and education also play vital roles in drawing attention to the need for action on the environment, but when we ask for Government action, that usually takes the form of legislation. In these series of articles *Chain Reaction* looks at various aspects of the law and how it impacts on the environment in Australia.

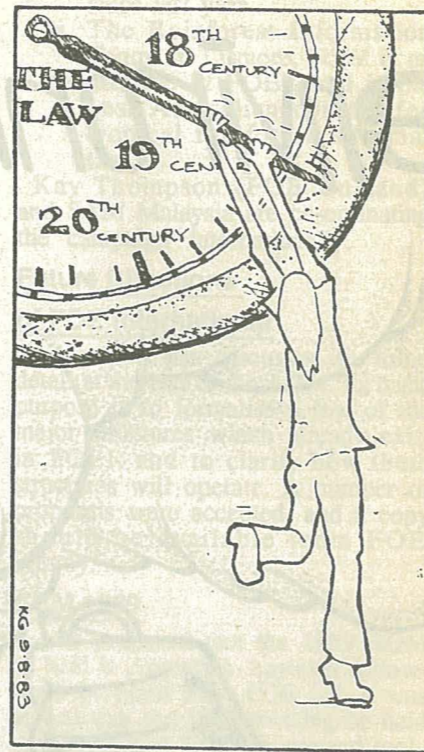
On an international, national, State and local level, actions in relation to the environment are controlled and directed by law. The framework is tiered and all encompassing. . . *Fran MacDonald* gives an overview of how these tiers operate, how they overlap and conflict, and how the law ultimately decides by whom and by what means the environment is managed.

Australia has no laws which clearly give workers and the community the right to access to information about the toxic substances to which people are exposed. We can learn a lot from the way these rights have been legislated in other countries, especially Canada, which has a Federal system of government similar to our own, with the responsibility for occupational health and safety shared between Federal and State governments. 'The Right to Know' examines recent developments in the United States and Canada.

The pursuit of 'heritage' listing for land and buildings has been a focus for many environmentalists and conservationists but *John Mant* suggests that this may actually be bad for the environment. He takes a particular look at the way 'special' things such as reserves and heritage listings have developed and how they may now be holding back the environment movement

Given the concern about the consequences of nuclear weapons and warfare, it is time to consider whether nuclear weapons and strategy are legal. *Robert Burrowes* sheds some light on the role which international law can play in protecting our planet from the ultimate ecological disaster.

There are many views of the law, some see it as guidelines for society, others as a way of achieving change. *Fran MacDonald* looks at the way environment organisations in the US have used the law, and suggests that there is scope for more legal action in Australia.



The Legal Environment

by Fran MacDonald

World Heritage

- International Law

Australia is a party to ten international conventions or agreements relating to conservation of the cultural and natural environment. Of these, the most wide-reaching is the *UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage* 1972 (the World Heritage Convention). The Convention recognises that the world heritage is under threat and that all countries will suffer if it is destroyed; it establishes a system for protecting all cultural and natural heritage and preserving heritage of 'outstanding universal value' (Articles 1 and 2), which is items suitable for inclusion on the World Heritage List, as part of the world heritage of humankind. The Convention recognises that each country is responsible for its own heritage protection, but that the whole international community also has a duty to protect the world



heritage.

Each signatory country is obliged to identify and protect the cultural and natural heritage to the limit of its resources. Items on the World Heritage List and those which have potential to be on the list are covered under this obligation, but the Convention also obliges each country to adopt a general policy which will ensure that protection of the cultural and natural heritage is a community function and an integral part of the planning process.

Specifically, each country is obliged to set up staffed services, undertake appropriate scientific studies and take all necessary legal, administrative, financial and educative measures for the protection of the world heritage.

The Convention also established the 'Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage' (the World Heritage Committee) on which Australia is represented through an officer or Commissioner of the Australian Heritage Commission.

Commonwealth v State Powers

Our federal system of law, as embodied in the Commonwealth Constitution, gives the Commonwealth and State governments distinct areas of legislative power. Each tier of government has its own legislative sphere into which the other tier has no constitutional right to intrude, while there are some areas on which their powers overlap. Broadly speaking, heads of powers listed under Section 51 of the Constitution fall to the Commonwealth and powers not so listed are in the States' domain, although Commonwealth legislation

which falls within one of the heads of power under Section 51 is not invalid just because it also operates on an area falling outside Section 51.

The Commonwealth has no direct constitutional power to make laws in relation to land use. However, the Constitution does contain provisions which enable the Commonwealth to legislate in other areas which directly affect land use and environmental protection. Some of the most obvious provisions are:

The Trade and Commerce Power

Section 51 (i) of the Constitution gives the Commonwealth power to legislate with respect to trade and commerce with other countries and between the States. Other provisions which give the Commonwealth power to legislate on trade and commerce of the Territories and the supply of goods or services to the Commonwealth reinforce this power. It has been argued that it can be used to enact heritage protection legislation.

In 1976, after a major enquiry, the Commonwealth used its power to refuse to issue licences for the export of minerals from Fraser Island. As the mining operation depended on export income, mining on Fraser Island was effectively stopped. Despite the fact that the Queensland government has continued to actively encourage mining and mining leases are still being granted, the Commonwealth has maintained its position. As nearly all mining activities would have the same export requirements as the Fraser Island minerals, the trade and commerce power would seem a powerful tool for the Commonwealth to use to prevent such activities.

The External Affairs Power

Section 51 (xxix) of the Constitution gives the Commonwealth power to legislate on 'external affairs'. It is incumbent on the Commonwealth government to implement the provisions of any international Convention to which Australia is a party and the High Court has held that the Commonwealth can use the external affairs power to fulfill such obligations.

The Commonwealth has legislated to fulfill treaty obligations in a number of incidents, but perhaps the most notorious piece of legislation was in order to fulfill the provisions of the World Heritage Convention, the *World Heritage Properties Conservation Act* 1983. The precise intention of the Act, to prevent the construction of a dam by the Tasmanian Hydro-Electric Commission on the Franklin River, was in itself controversial. However, the question taken to the High Court in the *Franklin Dam Case* was whether the Act was constitutionally valid given that it was a piece of Commonwealth legislation which applied directly to land use in the State of Tasmania. Although the High Court decided that some parts of the Act were invalid, it was generally upheld. It has now been amended by the *Conservation Legislation Amendment Act* 1988 which broadens the meaning of World Heritage property which can be made subject to the Act. Interestingly enough, the *World Heritage Properties Conservation Act* is the only legislation in the world which implements the obligations imposed by the World Heritage Convention.

The most recent controversy surrounding the Commonwealth's use of the external affairs power is in relation to *The Lemnathyme and Southern Forests (Commission of Inquiry) Act* 1987, enacted to establish the Hclsham Inquiry. Yet again, the Commonwealth and State of Tasmania found their way to the High Court to decide the constitutional validity of the Act. The Tasmanian Government argued that prohibitions on logging went beyond the power of the Commonwealth to implement the World Heritage Convention. The High Court upheld the Act and ruled that the external affairs power 'extends to support a law required to discharge a treaty obligation which is known to exist and also a law which is required to ensure the discharge of a treaty obligation which is reasonably apprehended to exist'. Ben Boer, senior lecturer in law at Macquarie Univer-

sity, states: 'The case represents a transparently clear statement of the Commonwealth power to fulfill its obligations under the World Heritage Convention, and it would appear that further challenges brought by the States against the Commonwealth in this area will have little chance of success'.

Commonwealth Legislation

Two of the most important Acts regulating environmental management passed by the Commonwealth are:

Australian Heritage

Commission Act 1975

This Act established the Australian Heritage Commission comprising a Chairperson and six Commissioners. The Commission and the Department of Arts, Sport, the Environment, Tourism and Territories (DASETT) are jointly responsible for carrying out Australia's obligations under the World Heritage Convention and overseeing the conservation of the national estate. The Act defines the national estate as "those places, being components of the natural environment of Australia or the cultural environment of Australia, that have aesthetic, historic, scientific or social significance or other special value for future generations as well as the present community".

The Commission has a number of functions, including advising the Minister for DASETT on the conservation, improvement and presentation of the national estate, encouraging public interest and understanding of the national estate, furthering training and education relating to conservation and organising and engaging in research and investigation which would help it in its work.

The Commission's most important function is the preparation of the Register of the National Estate. At present, there are some 8,510 places registered. The Register's value is that it offers clear information on heritage values. However, inclusion on the Register is not a land-use decision, which is a matter for the owner of the property in question or, where appropriate, the Commonwealth, State or local government.

Another major function of the Act is to constrain the Commonwealth to act responsibly towards the national estate. Section 30 of the Act states that each Commonwealth Minister shall ensure that the Department or Authority for which he or she is responsible 'does not take any action that adversely affects, as part of the national estate, a place that is in the Register unless he (sic) is satisfied that there is no feasible and prudent alternative'. In other words, the Act tries to ensure that the national estate is not unwittingly harmed by Commonwealth actions. It requires that heritage values be given the same value as other factors such as economics or land-use in the management of the environment.

The Act's drawbacks are that it only deals with Commonwealth government actions and cannot control private owners or State or local governments. The Commission is also hindered by severe funding restraints and the fact that it does not have greater power to force agencies to comply with the Act. It must also be remembered that Ministers and Departments make decisions on the national estate, not the Commission.

Environmental Protection (Impact of Proposals) Act 1974

This Act provides for the preparation of environmental impact statements (EIS) in relation to proposed activities of the Commonwealth or

which require Commonwealth approval. An EIS is a document prepared by the proponent describing the proposal and the existing environment, examining the likely effects of the proposal on the environment and the alternatives to and within the proposal and their effects and describing proposed safeguards and monitoring arrangements. Every EIS must be publicly exhibited for a certain period, the minimum being 28 days, during which time the public can make comments on the proposal. Copies of all comments from the public and the government are then forwarded to the proponent who must revise the EIS taking into account all comments and any new information. The final EIS is submitted to the Department for assessment, which examines it to ensure that the effect on the environment has been fully taken into account in the proposal, to determine whether additional data is required and to formulate recommendations in relation to the environmental impact of the proposal which may affect its approval.

The Act also provides for inquiries to be established by the Minister involved at any stage of the assessment process. Arrangements have also been made with the States to facilitate joint environmental assessment of proposals and, wherever possible, the requirements of both governments will be taken into account in the one document.

The Act has a number of deficiencies. Most importantly, its operation depends entirely on the discretion of the Minister to direct the production of an EIS or an inquiry under the Act. Many proposals regularly receive government support before an EIS is produced and only two inquiries have ever been held under the Act - Fraser Island and Ranger.

The case of *Australian Conservation*

Foundation Inc. v. The Commonwealth, in which the Foundation's case against the developers there was struck out for want of legal standing, even though it had made comments on the draft EIS in question, also shows that the Act's procedures may not be enforceable anyway.

State legislation

The Hope Committee in 1974, which recommended the Australian Heritage Commission Act, intended also to influence State and local governments to protect the national estate by providing them with national estate grants. However, due to poor funding, Australian Heritage Commission moneys tend to be spent on studies and reports and do not go as far as actual restoration or acquisition of properties.

However, the States have, to varying degrees, enacted their own heritage protection Acts, which are: Heritage Act 1977 (NSW); Historic Buildings Act 1981 (Vic); Heritage Act 1978 (SA); Cultural Record (Landscapes Queensland & Queensland Estate) Act 1987; and the Heritage Places (Western Australia) Bill 1987 which is currently before the Western Australian parliament.

These Acts vary but all provide for conservation orders or controls on development, create councils or committees to oversee heritage protection, provide financial incentives such as grants, loans and rate relief (not in Queensland), give the State government the ability to acquire property (not in South Australia or Victoria) and create a register (not in New South Wales).

Local Government's role

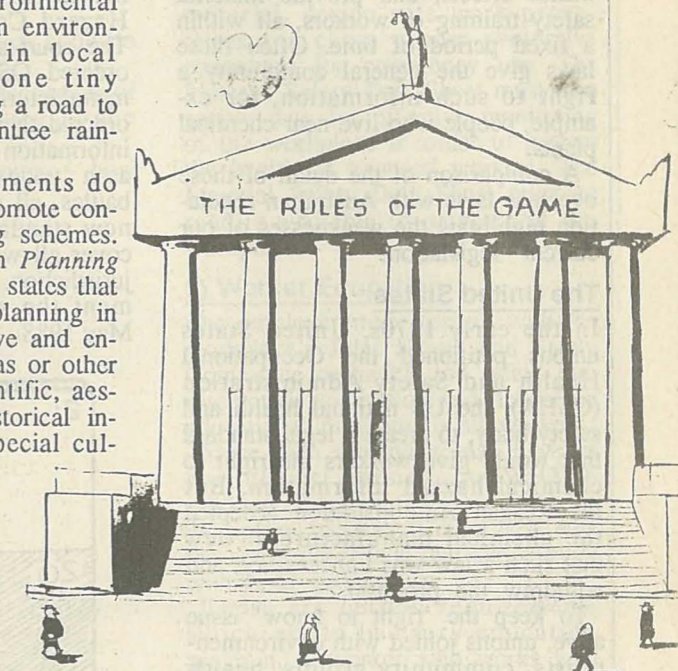
Because of their closeness to the planning and development process, local governments have a vital role to play in environmental protection. This is true for specific heritage sites and for wider environmental problems such as land degradation. The success of the Soil Conservation Districts and District Advisory Committees, grassroots community groups comprising local land-users, local government and other relevant representatives, in combating the problem of soil degradation in Western Australia is largely due to their proximity to the problem and their intimate knowledge of it.

Paradoxically, however, local governments generally have not taken up their obvious role. There tends to be a low level of awareness of heritage values and environmental concerns and expertise in environmental management in local authorities. Witness one tiny municipal council allowing a road to be built through the Daintree rainforest.

However, local governments do have the opportunity to promote conservation through planning schemes. For instance, the Victorian *Planning and Environment Act 1987* states that one of the objectives of planning in Victoria is '... to conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value'.

Sources:

Ben Boer, *Natural Resources and the National Estate*; Pat Galvin, *The Australian Heritage Commission and an overview of Australian Heritage Legislation*; Alex Gardner, *A Consensus System of Planning and Management for Land Conservation - A Grassroots Solution to a National Problem*; Lyndel Prott, *Australian Heritage Today* - papers given at the 1988 conference of the National Environmental Law Association of Australia.



THE RIGHT TO KNOW

by Workers Health Centre

Each day thousands of chemicals are being used in the workplace, in the home and being released to the environment. New chemicals and chemical products are being produced all the time. Many of these chemicals are toxic and are allowed to be used with inadequate research about their dangerous health effects. They cause health problems like cancer, reproductive problems, lung problems, allergies, dermatitis, kidney and liver damage, often even at low levels of exposure. Many of these ill health problems will only be noticed after many years of exposure.

Access to information about toxic chemicals to which people are exposed is known as the 'right to know'. It involves providing accessible information to people who are exposed to chemicals, particularly workers.

Despite the finding of the 1982 House of Representatives Standing Committee Inquiry into Hazardous Chemicals which found that controls over the import, manufacture and use of industrial chemicals in Australia were grossly inadequate we still have no adequate laws and no right to know about the chemicals we are being exposed to and their health effects.

Currently there is no Commonwealth legislation creating an obligation for employers or manufacturers

and suppliers to provide information to employees or users.

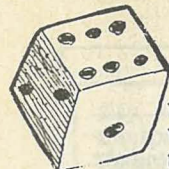
The National Occupational Health and Safety Commission (Worksafe) has a function to 'collect, interpret and disseminate information relating to occupational health' however this does not extend to having a duty to provide information at the workplace level.

The 1988 Occupational Health and Safety Commonwealth Employees Bill makes a general provision for 'information to be made available to safety representatives'.

There is no Commonwealth legislation creating community right to know.

Most of the States have introduced Occupational Health and Safety Acts





which to varying degrees gives workers right to information to ensure their health and safety. Information is supposed to be conveyed by Material Safety Data Sheets. However many Australian manufacturers and suppliers still have not produced data sheets on all their products, and often the data sheets they have produced are very poor.

New 'Right to Know' programs have recently been made law in the United States, Canada, Sweden and the European Economic Community. These laws make it mandatory for employers, manufacturers and suppliers of chemicals used in the workplace to have Material Safety Data Sheets for all chemical products, label chemicals with their health effects, and provide material safety training of workers, all within a fixed period of time. Often these laws give the general community a right to such information, for example, people who live near chemical plants.

A comparison of the detail of these overseas laws with Australian regulation highlights the weaknesses of our current legislation.

The United States

In the early 1970s, United States unions petitioned the Occupational Health and Safety Administration (OSHA), the US national health and safety body, to create a legal standard that would give workers the right to chemical hazard information. But the Reagan Administration accepted the chemical manufacturers' view that such a law was unnecessary, and withdrew the proposal.

To keep the 'right to know' issue alive, unions joined with environmentalists, community groups, health workers and others and began lobbying for State and local right to know laws and regulations. In the early 1980s American cities such as Philadelphia and Cincinnati adopted ordinances which required employers to provide chemical hazard information to workers and community residents. Fearing the spread of right to know activity and different laws from State to State, employers appealed to the Reagan Administration to reopen its consideration of a Federal standard.

In 1982, OSHA, under the control of Reagan appointees, proposed a standard which was well received by the chemical industry and employers. The new regulation was called the Hazard Communication Standard (HCS). Public hearings were held

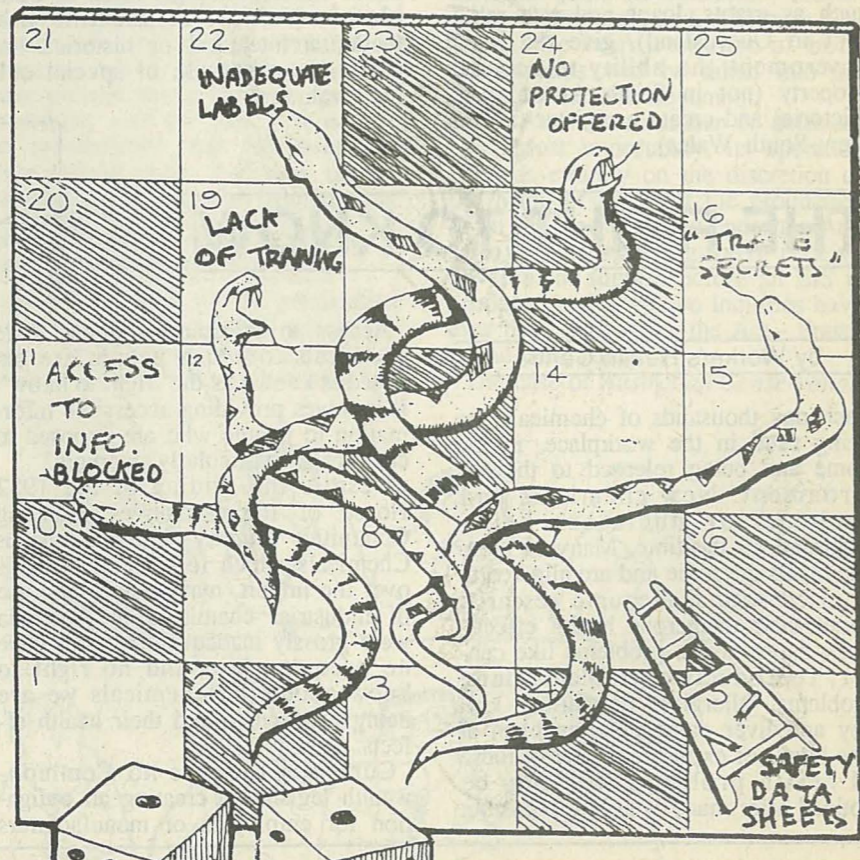
around the country and US unions provided evidence on the weaknesses of the OSHA proposal and why it should be made stronger.

As a result, several improvements were made to the final standard issued in November 1983, but it still gave chemical manufacturers and employers wide authority to hide important hazard information. The standard only applied in manufacturing, so 75 per cent of United States workers were excluded from protection. The standard also gave chemical manufacturers broad powers to deny union representatives and workers access to chemical information claimed as 'trade secrets'.

The United Steelworkers Union and other unions took OSHA to court to try to force the Reagan administration to strengthen the Hazard Communication Standard. The court sided with the unions and ordered OSHA to include the non-manufacturing sector. The court also ordered that OSHA limit the kind of information which could be claimed as a 'trade secret'. After more court battles, all of which OSHA lost, the new standard was implemented to cover all workers under the OSHA's jurisdiction. Employers had to implement the standard's provisions by May 1988.

The Hazard Communication Standard or right to know standard requires chemical manufacturers, suppliers and importers to evaluate all chemicals they produce or distribute, and to provide hazard information to employers who purchase the chemical products for use in the workplace. Employers are then responsible for providing hazard information to their employees. The purpose of the standard is to ensure that workers are informed about the hazards of chemicals and the necessary precautions to protect against accidents and disease. Information is provided in four ways:

- every employer covered by the Hazard Communication Standard must prepare a written plan, which explains the employer's right to know program;
- all containers of hazardous chemicals must carry a label which provides basic hazard information;
- each hazardous product must be accompanied by a Material Safety Data Sheet which provides detailed information on ingredients, health effects and special handling procedures;
- employers must provide train-



ing to all employees who may be exposed to chemicals on the job.

During the many years that it took OSHA to issue comprehensive chemical information standards, State and local governments developed and implemented right to know laws to provide workers and the public access to chemical hazard information. At least nineteen States and several cities adopted regulations which expanded right to know beyond the workplace to include access to information on chemical hazards for the general public and emergency officials.

The United States Congress expanded employers responsibilities to report information on chemical hazards to the public when it enacted the Emergency and Community Right to Know Act of 1986.

This law requires all manufacturing employers to provide Material Safety Data Sheets, and information on toxic chemical accidents and releases to local and State government officials, as well as members of the general public.

Canada

In 1987 the Canadian Federal and provincial (State) governments implemented the Workplace Hazardous Materials Information System (WHMIS). It is a comprehensive national program for workplace right to know on chemical hazards. The system created by WHMIS goes far beyond the United States legislation and is one of the most comprehensive systems in the world for the labelling of dangerous products.

The WHMIS system has three main features:

1) Labelling

Suppliers of hazardous materials (or controlled products as they are called under this system) must label all containers. Information on the supplier label includes,

- product identity
- hazard symbols which apply to that product
- risk phrases - a description of the hazard presented by the product
- precautionary measures - how

2) Material Safety Data Sheets

Suppliers must also develop and provide a Material Safety Data Sheet for each hazardous material they produce, distribute or import. For a hazardous material produced by an in-plant process, it is the employer's duty to prepare the Material Safety Data Sheet.

The Material Safety Data Sheet must contain enough detail so that those responsible in the workplace can provide engineering controls to prevent worker exposure to the material, design safe work procedures and choose proper protective equipment for emergency use. The Material Safety Data Sheet must also supply data for effective monitoring of the workplace in order to protect the health of exposed workers. The Material Safety Data Sheet must be readily available to workers in the workplace.

3) Worker Education

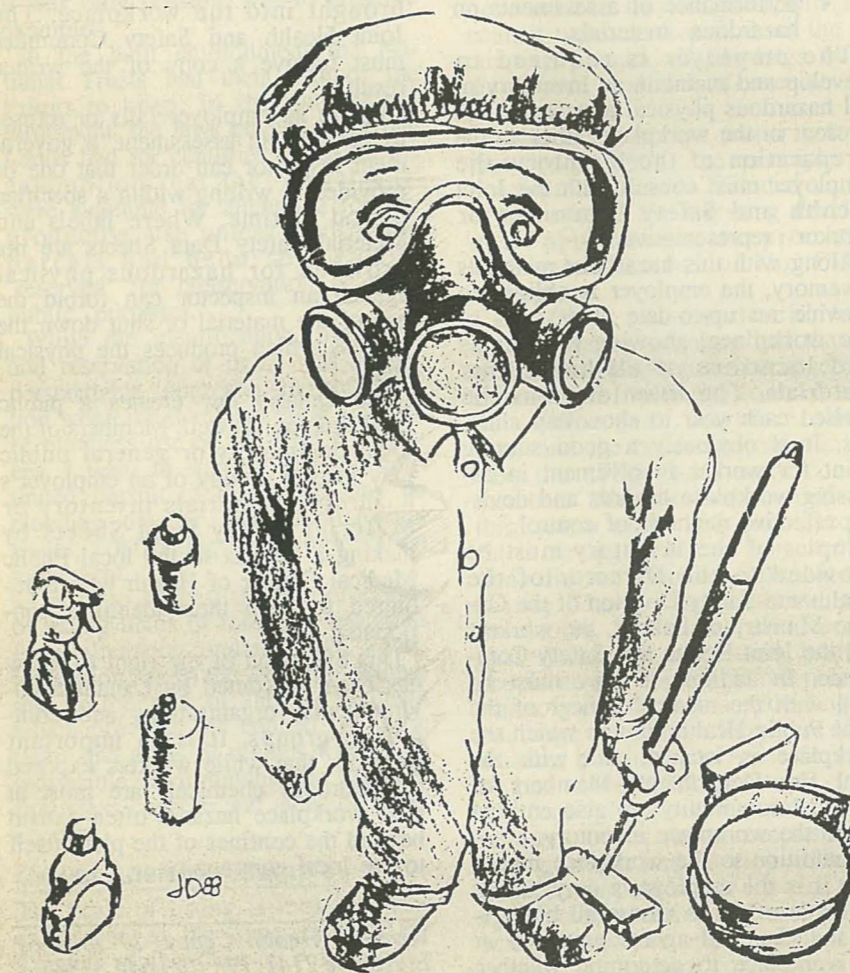
The employer must consult with the workplace's Joint Health and Safety Committee or health and safety representative to develop and deliver an educational program to all workers.

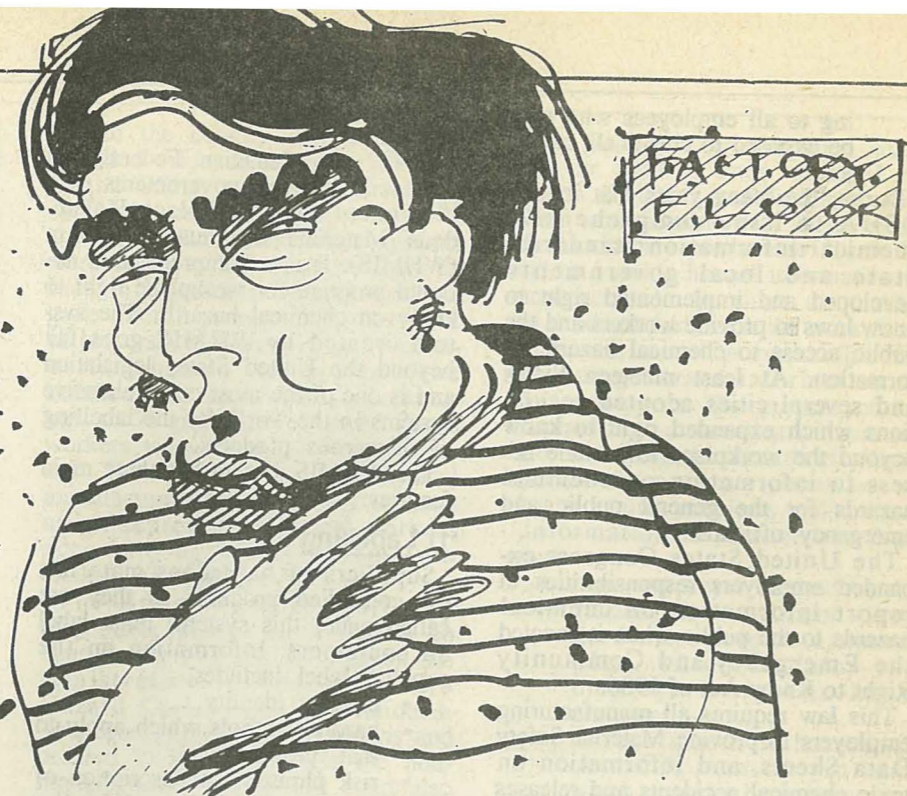
Since each workplace may have its own distinct hazards, the WHMIS workers education program must be workplace specific, it must deal with the actual hazards at that site and not with brief generalities.

There are certain requirements which apply to every education program. A worker who works with or near a hazardous material must know the meaning and importance of the information which appears on a label and of the information contained in an Material Safety Data Sheet.

Instructions must be given to the worker on procedures for the safe use, storage, handling and disposal of that material. The worker must also learn the steps to be followed where the material accidentally escapes into the workplace or where an emergency occurs.

The Worker Education program must be reviewed every year or more frequently if there is a change in work conditions or in hazard information. The program must be directly linked to the application of hazard informa-





tion to the protection of workers health and safety.

A Hazardous Materials Information Review Commission has been established to deal with 'trade secrets' claims by manufacturers and suppliers. The Commission's role is to impartially examine a producer's claim for non-disclosure to see if there really is a trade secret to be protected. If the Commission decides that a trade secret is involved, it will exempt the supplier of the product from listing the product name, the name and/or concentrations of the special ingredients, or the name of the supplier, but will guarantee that the proper hazard warnings, control, emergency and other measures are included as required on WHMIS labels and Material Safety Data Sheet for that product.

As in Australia, the major responsibility for occupational health and safety lies with the Canadian provincial governments rather than the Federal Government. As a result, different Canadian provinces have passed supplementary legislation which implements the WHMIS system in slightly different ways. In Ontario, the WHMIS information system has been interlocked with other workplace health and safety laws to ensure that it is part of a clear strategy for the prevention of chemical exposure and improvement of workplace conditions.

The Ontario Occupational Health and Safety Act gives the employer two major duties regarding

workplace hazard identification:

- preparation of workplace inventories
- performance of assessments on hazardous materials

The employer is required to develop and maintain an inventory of all hazardous physical agents that are present in the workplace. Prior to the preparation of the inventory, the employer must consult with the Joint Health and Safety Committee or worker representative.

Along with this hazardous materials inventory, the employer is obliged to provide an up-to-date floor plan of the workplace, showing the names and locations of all hazardous materials. The inventory must be revised each year to show any changes. It is obviously a good starting point for worker involvement in assessing workplace hazards and devising effective methods of control.

Copies of the inventory must be provided to the Director of the Health and Safety Division of the Ontario Ministry of Labour, the workers and the Joint Health and Safety Committee. In addition a copy must be filed with the medical officer of the local Public Health Unit in which the workplace is located, and with the local fire Department. Members of the local community are also entitled to see the workplace inventory.

In addition to the workplace inventory, it is the employer's duty, under the Ontario law to assess all biological and chemical agents produced in the workplace to determine whether

they are hazardous materials. This process is different to the identification or pretesting of materials brought into the workplace. The Joint Health and Safety Committee must receive a copy of the written results.

Where an employer fails or refuses to perform an assessment, a government inspector can order that one be provided in writing within a specified period of time. Where labels and Material Safety Data Sheets are not provided for hazardous physical agents, an inspector can forbid the use of the material or shut down the process which produces the physical agent.

The Ontario law creates a public right to know as well. Members of the local community or general public may inspect a copy of an employer's hazardous materials inventory or Material Safety Data Sheets by making a request to the local Public Medical Officer of Health who is required to keep their identities confidential.

This extension of the right to know has been welcomed by Canadian environmental organisations and community groups. It is an important reminder that while workers exposed to hazardous chemicals are most at risk, workplace hazards often extend beyond the confines of the plant itself to the local community.

Workers' Health Centre, 27 John St, Lidcombe 2141. Ph: (02) 646 3233.

THE THINGS WE WANT TO KEEP

By John Mantz

The National Estate Inquiry in 1973 had, as one of its main terms of reference, the identification of items of the National Estate. The Committee latched onto the description by a Labor Premier of Tasmania, not noted for his sympathy towards conservation, as the National Estate being 'the things we want to keep'.

Thinking back to those times one recalls that there was then an assumption that conservation had a great deal to do with identifying examples of special things and instituting procedures to protect them. Collecting items for conservation was an understandable approach for the time. There was a set of assumptions about the inevitability of 'progress' - it was only possible was to preserve examples.

In the built environment the National Trusts had their lists of the things to keep. In the natural environment, the laws governing Crown Lands had for centuries rested on the assumption that the 'wastelands' were available for alienation for any productive use unless identifiable parcels had been specifically 'reserved' for conservation or other public purposes.

While the identification, protection and reservation of items was an understandable approach to conservation when the dominant ethic was one of mindless use of the earth's resources, I want to suggest that the continued pursuit of this tactic may be clouding the far more fundamental issues confronting the conservation movement.

I want to suggest that the processes of listing items or reserving examples from alienation under Crown Lands legislation are in the long run damaging to the rest of the environment which provides the context for those items and areas. It divides what is an indivisible environment into areas of first class concern and areas of lesser concern.

City of Adelaide Example

The issue of listing is most dramatically seen in the experience of the Council of the City of Adelaide. In



Bonython Hall in the grounds of Adelaide University.

the early 1970s, interim development control was introduced across the whole of the City. All development required consent and included in the definition of 'development' was demolition.

Demolition control was imposed because the government and the council were concerned about the increasing amount of buildings being demolished and turned over to car parking.

When the City Plan proper was introduced in 1976, the principles of development control included as one of the criteria for assessing development applications, the protection and enhancement of the City's heritage.

The City's general development control system therefore had the two essential elements for a heritage control system, namely, control over demolition (and therefore alteration) and the necessary criteria.

By the 1980s there were council members who were concerned that this system which was quite successful in saving buildings from demolition, did not provide sufficient certainty for landowners and developers. There was also concern that there was a growing body of people on the Council whose policy it was to preserve such a wide range of buildings that, before long, few of the existing buildings in Adelaide could be put to the bulldozer.

Accordingly, work was put in hand to carry out a more comprehensive heritage study and develop a heritage list. The purpose of the list was *not to enable control to be imposed*, rather it was to *limit* the application of the general demolition control and the

generally worded heritage criteria in the City Plan.

Some on Council thought that the list would be about 50 or 60 buildings, mainly publicly owned. The heritage study identified over 1,500 which were worthy of consideration. After considerable discussion a list of some 400 was negotiated between the preservers and the non-preservers.

In the City of Adelaide the creation of the City Heritage List effectively has condemned those buildings which are not on the list. It is the intention of council to review the list only every five years and therefore an application to demolish a building of heritage qualities which is not on the Heritage List will almost certainly succeed. This was not the case before a list existed.

Museum Pieces, Reserves

and the Natural Environment

Issues such as whether there should be or should not be an Alpine Park are examples of the false consciousness engendered by the identification processes - processes which are inclined to take our attention away from the real and far more difficult and intractable problems of conservation such as the problems of salinity and desertification. These are the hard issues, these are the conservation issues which cannot be solved by shifting parcels of Crown Land from one reserve status to another or by adding a building to a list or even by taking on a few mountain cattlemen. These are the conservation issues which require us to move out of the museums and into the world outside. These are the issues where success

depends on major adjustments to major industries and where real political battles must be fought often for what are compromises and short-term marginal gains. Unlike the decisions about whether to reserve a parcel of land or list an item, the problems concerning salinity and desertification make poor objects for campaigns to rally the conservation troops. And for the politician, declaring a National Park is an achievement far more noticeable than setting in train land use changes which may result in, say, gradual reductions to the amount of salt flowing down the River Murray.

The Victorian Lands Bill

The *Victorian Lands Bill* is an example of a legal reform which would see a move away from the processes of reservation.

The creation in Victoria of a new Lands Department in the form of the Department of Conservation, Forests and Lands was directed at creating an organisation which could manage the third of Victoria which is Crown Land. By bringing together all the agencies which manage public land, the way was open for the introduction of a new legislative system for Crown Lands and reversing the century and a half of the museum approach to the categorising and management of Crown Land.

The proposed legislation is in draft form and has been distributed for comment.

The key to the fundamental change in the law is the division of Crown Lands into two categories, public land and government land.

'Public land' is land which should be reserved and maintained for the benefit of present and future generations because of its conservation, historic, recreational and tourist value, its natural resources, social or cultural significance (including special significance for the Aboriginal community), or because it has special strategic value for present and future generations, (whether or not a particular present or future need for the land has been identified).

'Government land' is any Crown Land that does not meet the above description. A good way of seeing government land is as 'assets presently in the form of real estate'.

The proposed legislation clearly states that included in the public land category are uncategorised Crown Lands. These are the lands which in the original colonial land system were known as the 'wastelands'.

The new legislation reverses the

major assumption which lay behind the old colonial lands legislation. The parcel by parcel reservation process is akin to the item by item listing process under Heritage Legislation. Whereas, under the old system, Crown Land was available for alienation unless it was specifically 'reserved' for a public purpose, under the new legislation parcels to be alienated will need to be specifically identified and transferred from the public land category to the government land category before they can be alienated. This will require an inquiry and report from the Land Conservation Council and at least a Governor-in-Council approval and, for land now subject to a reservation, an Act of Parliament.

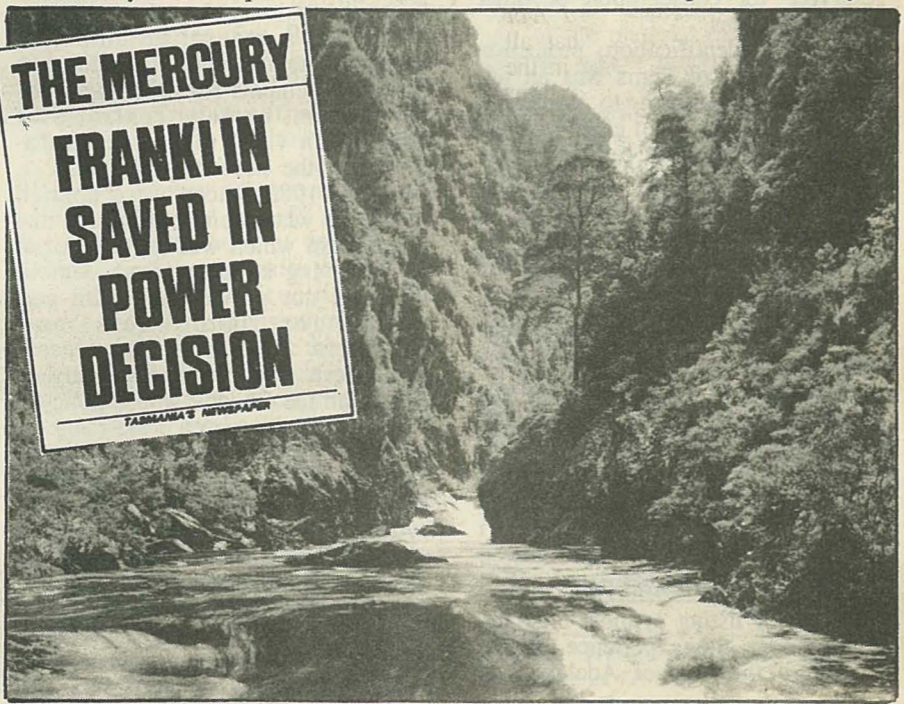
Given that the original purpose of the reservation system will no longer be needed, the legislation proposes a generalised set of categories which will establish a comprehensive system of land management objectives for individual parcels of public land. Effectively, the new legislation will identify the various types of 'areas', i.e. National Park, Wilderness Park, State Park, Nature Conservation Reserve, Marine Reserve, Marine Park, Natural Features Reserve, Cultural and Historic Features Reserves, Regional Park, Water Production Reserve, Community Use Reserve, State Forest Reserve, Coastal Waters of Victoria, Forest Plantation Reserve, Public Utility Reserve and uncategorised public land. These areas will be land use zones within which only certain specified uses are

allowed. Management objectives for each zone are laid down.

For example, the management objectives of the uncategorised public land are the 'conservation of the landscape and natural environment and limited exploitation of natural resources compatible with this primary objective'. No longer is it 'the wastelands'.

The legislation therefore will provide two protections for the public land of Victoria. The first will be constraints on alienation and a deliberate process for 'unreserving'. The second will be the description of the management objectives for the various categories of public land. A procedure for the preparation of management plans consistent with these objectives is included in the legislation. The same safeguards (such as an Act of Parliament) as presently exist will be retained if a parcel is to be moved from one category of public land to another.

The immediate practical consequences of the changes are few. What is important is the fundamental philosophical change. Instead of only some Crown Land being listed, being singled out for special protection in some form of reserve under some form of special legislation, all public land will be subject to the same legislation and will be seen as part of the heritage which is to be handed on to future generations. The public land estate will become to be recognised as an entity where there is continuum of land with different uses from wilderness to caravan park. Possibly of



more immediate importance is that the distinction between public and government land enables current value accounting disciplines to be applied to parcels of government land without those concepts being inappropriately applied to parcels of public land.

Some have resisted this change in approach. While one would understand some economic rationalists not wanting to distinguish between operational assets and land held in trust for future generations, it seems some conservationists are still fighting the battles of previous decades where the conservation objective was to preserve examples rather than tackle environmental issues overall. The museum approach underlines much of the legal and administrative systems with which we are saddled today. This approach has allowed the political response to conservation concerns to shift a bit more public land into the National Park basket thereby accommodating the slow movement towards such objectives as 5 per cent of the land of a State in the National Park category. This objective of a percentage of land in the Park category has blinded some conservationists to the much greater tasks of ensuring the environmentally sensitive management of all land in the State and especially the public land which, in Victoria, is over a third of the State. This is what the new legislation aims to do and it is, I suggest, the way we should now be heading.

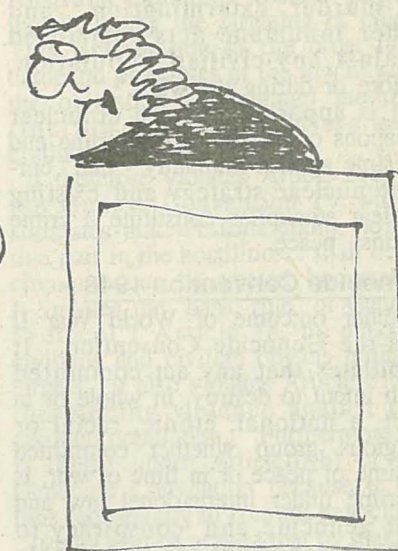
The new *Victorian Land Act* proceeds on the assumption that all public land, from the best bits in the museums to the smallest stream reserve is valuable. Instead of first class lands and the rest, it is all part of the public estate and it is all to be cared for.

In both the built and the natural environment the listing or identification of examples to be preserved and protected has played an important role in conservation mechanisms to date. It is now time to question this essentially limited approach and to move more deliberately into devising legal and administrative mechanisms to address the conservation issues affecting the totality of the earth's environment.

John Mant is a partner with Phillips Fox, Solicitors, in Sydney. This article is based on an extract from a paper delivered at the National Environmental Law Association conference, 1988

Nuclear law

GUILTY!
YOU ARE
CONDEMNED
TO THE
SLAUGHTER
OF THE
INNOCENT.



by Robert Burrowes

The legality of nuclear weapons cannot be judged by the existence or otherwise of specific treaties restricting their use. The analysis must consider all sources of international law, especially those related to war and weapons. Some of the major treaties are:

Hague Conventions 1907

Hague Convention IV is a basic source of the laws of war. The preamble contains the Martens Clause which makes 'the laws of humanity, and the dictates of the public conscience' obligatory by themselves without the formulation of a treaty specifically prohibiting a new weapon.

That nuclear weapons and warfare could be justified because of the absence of a written prohibition is closed by this Clause. So is the interpretation that what is technically possible is allowed: 'the limits of permissible violence are not set by technological potentialities'.

The Clause is complemented by several Articles of the Convention. Article 23 includes the words 'it is especially forbidden ... to cause unnecessary suffering'. Article I of Convention V declares the territory of neutral powers inviolable.

Nuclear weapons could not be used without violating the Conventions. If 'the laws of humanity, and the dictates of the public conscience' do not preclude the use of nuclear weapons then it is difficult to infer any legal or moral utility in laws of war founded

on humanitarian principles. And, obviously, radioactive fallout would cause 'unnecessary suffering' and create havoc in neutral states.

Geneva Gas Protocol 1925

Following the experience of World War I, the Geneva Gas Protocol reiterated the existing ban on the use of 'asphyxiating, poisonous or other gases'. Nagendra Singh, President of the International Court of Justice believes that nuclear weapons are poisonous. While nuclear radiation may not satisfy the definition of a 'gas', given the definition of a poison as a substance that 'when introduced into, or absorbed by, a living organism destroys life or injures health', 'nuclear radiation appears to be something which can be described as poisonous in its effects'. Finally, Singh notes, even the US government has described radioactive fallout as 'a vicious form of poison gas'.

Nuremberg Principles 1945

Following World War II, the International Military Tribunal used the Nuremberg Charter to examine complaints against German leaders. This charter was revised by the International Law Commission and adopted by the United Nations in 1950. Article VI defined the following:

(a) Crimes against peace: namely, planning, preparation, initiation or waging of a war of aggression... or participation in a common plan or conspiracy for the accomplishment of any of the foregoing;

(b) War crimes: namely, violations of the laws or customs of war. Such violations shall include ...wanton destruction of cities, towns or vil-

lages, or devastation not justified by military necessity;

(c) Crimes against humanity: namely, murder, extermination... and other inhumane acts committed against any civilian population, before or during the war...

It is apparent the use of nuclear weapons constitutes a war crime and a crime against humanity - and current nuclear strategy and existing nuclear stockpiles constitute a crime against peace.

Genocide Convention 1948

Another outcome of World War II was the Genocide Convention. It stipulates that any act committed with intent to destroy, in whole or in part, a national, ethnic, racial or religious group whether committed in time of peace or in time of war, is a crime under international law and that genocide and 'conspiracy to commit genocide' are punishable acts.

It is evident that the use of nuclear weapons would bring about the destruction 'in whole or in part' of a national group. It is also apparent that current nuclear strategies entail 'conspiracy to commit genocide'.

Geneva Conventions 1949

Perhaps the most significant to result from World War II were the Geneva Conventions. Ratified by 147 states, they reaffirm the distinction between soldiers and civilians. In particular Convention IV obliges all parties 'to ensure the essential requirements for the health, safety and sustenance of the civilian population'. American lawyer Elliott Meyrowitz argues:

The concept that the civilian population can never be regarded as a military objective is the very

basis of the whole law of war. Yet the use of nuclear weapons... would result in the indiscriminate and massive slaughter of civilian populations. To recognize the legality of nuclear weapons, given their capacity to terrorize and destroy a civilian population, would be to eliminate virtually the entire thrust and significance of the laws of war.

Environmental Modification

Convention 1976

This was designed to outlaw any 'hostile use of environmental modification techniques having widespread, long-lasting or severe effects' through 'the deliberate manipulation of natural processes'.

While there is ongoing debate whether environmental modification following the use of nuclear weapons intended or inadvertent, it is evident from the preamble that curbing the 'extremely harmful' consequences of the nuclear arms race was the reason for drafting the convention. In any case, it is clear that nuclear weapons produce the effects prohibited and their use is therefore illegal.

Geneva Protocols I and II 1977

Protocol I established or reaffirmed several important principles. Articles 35(3) and 55(1) specifically protect the environment. Article 55(1) stipulates that:

Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment...

The manufacture, testing and use of nuclear weapons clearly violate these provisions.

Weapons Convention 1981

The most recent articulation of laws of war, it reiterates several 'traditional' principles and restates the prohibition against means of warfare likely to cause environmental damage.

It is evident that nuclear weapons violate at least fourteen treaties and over 35 separate provisions of international law.

In the opinion of Professor Weeramantry: 'It is thus abundantly obvious that sufficient principles exist in the body of international law to render the manufacture, possession and use of nuclear weaponry illegal'.

This is consistent with the decision of the District Court of Tokyo on 7 December 1963 which considered the US attacks on Hiroshima and Nagasaki, the only court investigation of the legal arguments regarding the use of nuclear weapons. The court concluded that the attacks violated international law as it stood in 1945.

Does international law apply?

It has been said that the advent of nuclear weapons made the law of war obsolete. This argument is untenable. No government could free itself from treaty obligations which have become universally binding as customary laws of war.

Secondly, the pre-nuclear laws of war were confirmed and enhanced long after the advent of atomic weapons. Finally, it is scurrilous to argue that it is still forbidden to kill a single civilian with a bayonet, but that it is legitimate to kill millions with

nuclear weapons.

A related contention is that the law of war is a victim of 'abrogation by contrary practice'; that is, the principles of the law of war were invalidated during World War II because of practices such as strategic bombing which resulted in the indiscriminate slaughter of civilians. However, breaches of international law do not invalidate the rules of war any more than the occurrence of murder invalidates criminal law.

Some military personnel have claimed that in total war, even the most basic rules can be disregarded for military necessity. In the opinion of Meyrowitz 'such a view would exculpate Auschwitz. Military necessity cannot be allowed to justify barbarism'.

Is nuclear strategy legal?

It is sometimes said that while international law is valid for the first use of nuclear weapons, their manufacture and storage for deterrence may not be illegal. Ultimately, deterrence depends on nuclear capability and threat credibility and it is only successful if potential aggressors are permanently terrified into inaction. Consider the US nuclear war-fighting plan, the Single Integrated Operational Plan or SIOP.

Threatening destruction of enemy states (in order to maintain 'a credible deterrent posture') violates Article 2(4) of the UN Charter. Threats of violence to spread terror among civilian populations violates Article 51(2) of Geneva Protocol I.

Planning and preparation for a war of aggression (the SIOP 'major attack' option) is a crime against peace in violation of Nuremberg Principle VI(a). The possible first use of nuclear weapons (the 'pre-emption' option) violates the Martens Clause of Hague Convention IV. Targeting cities (as part of the economic and industrial 'target set') violates Article III(b) of the Genocide Convention.

In addition, because SIOP is a contingency plan for general nuclear war, it includes targets in allied and neutral territory as well as targeting food supplies contrary to the spirit of Article 1 of Hague Convention V and Article 54(2) of Geneva Protocol I.

Soviet nuclear strategy relies on discretionary recourse to the first use of nuclear weapons. It is clear that their use as a reprisal for any normal violation of the laws of war (such as an aggressive conventional attack) would be clearly excessive and violate the principle of 'proportionality'. Soviet

plans for nuclear retaliation against a first-strike are also illegal.

It is evident that nuclear strategy is in conflict with the laws of war. Richard Falk, Professor of International Law at Princeton University says that 'no competent international lawyer would question the conclusion that the policies being pursued by the nuclear powers violate the most fundamental respect for and minimal perceptions of international law.'

Australia's illegal

nuclear complicity

Australia provides an essential raw material for nuclear weapons - uranium - the mining and export of which violates the Geneva Gas Protocol and breaches Article 23(a) of Hague Convention IV under which Australia is bound by customary international law..

In relation to nuclear strategy, Australian defence policy entails participation in the western nuclear alliance, particularly through the ANZUS Treaty. The obvious manifestations of this alliance include the presence of US military bases, visits by nuclear warships, flights through Australian air space by nuclear bombers and the conduct of joint military exercises.

Insofar as Australian defence policy supports US nuclear strategy, particularly the SIOP first-strike option and the offensively oriented maritime strategy, it violates the Martens Clause of Hague Convention IV by ignoring the basic principles of the laws of war. It violates Article 2(4) of the UN Charter by threatening the use of force against other states. It is also a 'crime against peace' in violation of Nuremberg Principle VI(a) because activities such as intelligence collection through the bases and warship exercises entail planning and preparation for a war of aggression or for participation in a common plan or conspiracy for the accomplishment

of ... the foregoing'.

Intelligence collected at US bases in Australia enhances nuclear targeting, including the targeting of cities. This violates one of the most fundamental principles of the law of war: the obligation to maintain the distinction between soldiers and civilians.

It therefore violates Article 3(1) of the Geneva Convention IV which stipulates that 'Persons taking no active part in the hostilities... shall in all circumstances be treated humanely'. It violates the 'basic rule' of Geneva Protocol I Article 48, by making civilians and civilian objects military targets. It also violates Article 51 by threatening violence against the civilian population. Furthermore, it is illegal under Article III(b) of the Genocide Convention because it entails 'conspiracy to commit genocide'.

It may also be argued that by making Australia a nuclear target, Australian leaders are guilty of complicity in Soviet plans to commit genocide against the Australian population in breach of Article III(b) of the Genocide Convention.

From a legal viewpoint, it is evident that Australia should remove itself from the nuclear arms race by halting uranium mining, withdrawing from the ANZUS alliance, terminating the lease agreements on the US bases, and stopping nuclear warship and bomber visits. It should adopt defence policies which are consistent with the principles and tenets of international law.

Due to lack of space the extensive references that accompanied this article could not be published. The fully referenced version is available however and will be forwarded to interested persons who wish to contact Chain Reaction on (03) 419 8700. Robert Burrowes is involved with the Peace and Development Foundation.



Using the Law

by Fran MacDonald

Add the assets of all the environmental groups and the total would be equal to the assets of a fourth or fifth-rate oil company you never heard of. Environmentalists can play the political game now: lobbying, publicity, publishing. But they didn't have that power until they started suing.

- Rick Sutherland, executive director of the Sierra Club Legal Defense Fund.

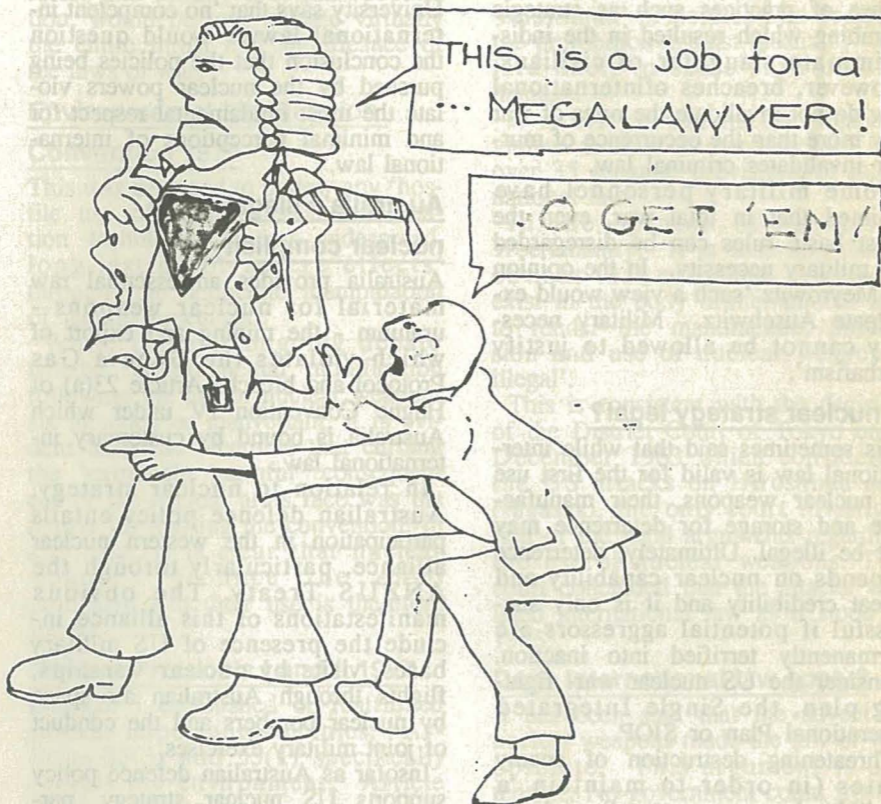
Many Australian environmentalists would argue that they have managed to play the political game fairly well without involving lawyers or the legal system. However carefully undertaken litigation could serve the environment movement. It could be used to ensure that legislative procedures are followed and discretionary powers are not abused, and to expand and entrench common law rights in relation to environmental concerns.

Environmentalists often suffer serious disadvantage in their campaigns because of poor funding and lack of direct access to the parliamentary process or the mainstream media. However, one key legal maxim is that everyone is equal in the eyes of the law; so that, once a dispute gets to court, those disadvantages are largely immaterial. As Rick Sutherland points out: '...litigation is one of the ways parties get equality of bargaining position'.

This year, the National Environmental Law Association of Australia brought out Professors Michael Axline and John Bonine from the University of Oregon Law School. Axline and Bonine spend much of their time in the United States encouraging lawyers to be idealistic and leap into public-interest litigation. In a series of talks and conferences around Australia, they carried the message that this type of work is a very successful tool in American environmental politics and were frankly inspiring to people looking at the Australian scene.

There were a number of problems which Americans had to overcome before they could start suing to protect the environment. Two major problems apply in Australia.

The first involves the question of standing to sue, the right to bring a



case to court in the first place. The traditional criterion for standing is that a certain decision will cause the claimant economic harm. However, in 1965, the United States Court of Appeals decided that an organisation called the Scenic Hudson Preservation Conference could bring a suit against the Federal Power Company over its approval for a pumped storage plant on the Hudson River, because of its 'aesthetic, conservational, and recreational' interest in the area. Shortly after, in 1972, the United States Supreme Court ruled that the Sierra Club had standing to sue to prevent a ski development at Mineral King Valley in the Sierra Nevada because some of its members would be harmed by the development in the same way as the organisation in the Scenic Hudson case. This later case established organisational standing.

Since then, American environmentalists have been able to use litigation to save the environment from power plants, oil and gas drilling, logging, roading, mining, flooding, pesticides and other hazardous chemicals. The

work has been undertaken by scores of legal practices across the country dedicated to environmental law, such as the Natural Resources Defense Council and the Sierra Club Legal Defense Fund.

This has not been the case in Australia, largely because the High Court has chosen to take a relatively narrow view of standing. The baseline case was *The Australian Conservation Foundation Inc. v The Commonwealth of Australia*. The Australian Conservation Foundation (ACF) applied to challenge the validity of decisions to approve a proposal by a Japanese company to establish a tourist resort in Central Queensland. The High Court held that, while the standing rule required that a claimant have a 'special interest' in the subject matter of the action, the interest need not be merely economic and it was not necessary that the claimant, and no-one else, had suffered damage. However, it also held that the ACF did not have a 'special interest', despite the fact that its central object of promotion of conservation of the environment had

been directly affected by the decisions of the defendants and that it had actually made submissions in relation to the resort proposal. The Australian courts have always tended to treat the standing rule conservatively in this way (although they have broadened the criteria for standing in relation to Aboriginal rights claims).

The other big problem facing environmental lawyers is their lack of ability to recover fees and costs in successful actions. To a great extent, this has been overcome in the United States under legislation which specifically provides for fee awards, although the Supreme Court has decided that claimants cannot claim fees unless the legislation under which they are suing does so provide. People like Axline and Bonine have also done much to encourage lawyers to move away from comfortable private practices and work in the public-interest realm for low fees.

In Australia, while there are lawyers who would like to specialise in this area, they are mostly obliged to undertake the work for free and so cannot devote themselves to it.

Although environmentalists are now reeling from the compromising report of the Helsham Enquiry and many are questioning their trust in lawyers as a result, it would be preemptively alarmist to suggest that the legal avenue should therefore not be explored. The prospects for environmental law are gaining credence in Australia.

One of the most exciting and constructive developments is a proposal put forward by an Adelaide lawyer,

Rob Fowler, at the National Environmental Law Association conference this year. He is advocating the establishment of a national environmental law organisation along similar lines to the Natural Resources Defense Council in the United States; a law firm dedicated to litigation in the public-interest on environmental issues, which could also act as a lobby group and influence law reform. Fowler cites the practice of allowing mining in National Parks and decisions on the use of pesticides which are recognised internationally as hazardous as examples of government actions which have contentious legal validity and which may be fodder for litigation by the proposed organisation. He adds: 'Reform of existing laws relating to standing, costs, and undertakings where injunctive relief is sought, are clearly needed in Australia and could be pursued by such an organisation. In addition, the organisation could take over the work of the Australian Conservation Foundation's Environmental Law Commission in pressing for environmental law reform generally, e.g. on matters such as constitutional reform, revision of the World Heritage Act, etc.'

There are a number of issues which need to be addressed in relation to the proposed organisation before it can be established, including the relationship between it and the environment groups around Australia, its relationship with the Environmental Defender's Offices which are beginning to operate successfully on a State-level and, of course, funding.

The organisation will definitely need a substantial 'seeding' fund and Fowler intends to approach philanthropic organisations in the United States in 1989 for the necessary grants. Once established, it is expected that the organisation will be able to fund itself.

At the National Environmental Law Association conference, the proposal received enthusiastic acclaim generally and support from the Association which indicates that there will be no shortage of lawyers wanting to pursue this type of work. Fowler is confident that the organisation will be established by 1990.

Axline and Bonine have assured us that, in the early sixties, environmental litigation had the same prospects we now face, and as David Sive, a lawyer involved in the Scenic Hudson case now says: 'In no other political and social movement has litigation played such an important and dominant role. Not even close.' So the writing is on the wall and the message clear for Australian governments and industry: look hard to your policy decisions and your environmental impact statements because, if there is anything wrong with them, we'll be seeing you in court.

Fran MacDonald is a member of FOE Fitzroy.

All at sea

by
Anna Muir

A booklet giving an up-to-date account of visits by nuclear warships to Australian Ports, the potential for catastrophe and an examination of government plans, or lack of them, to cope with a serious accident.

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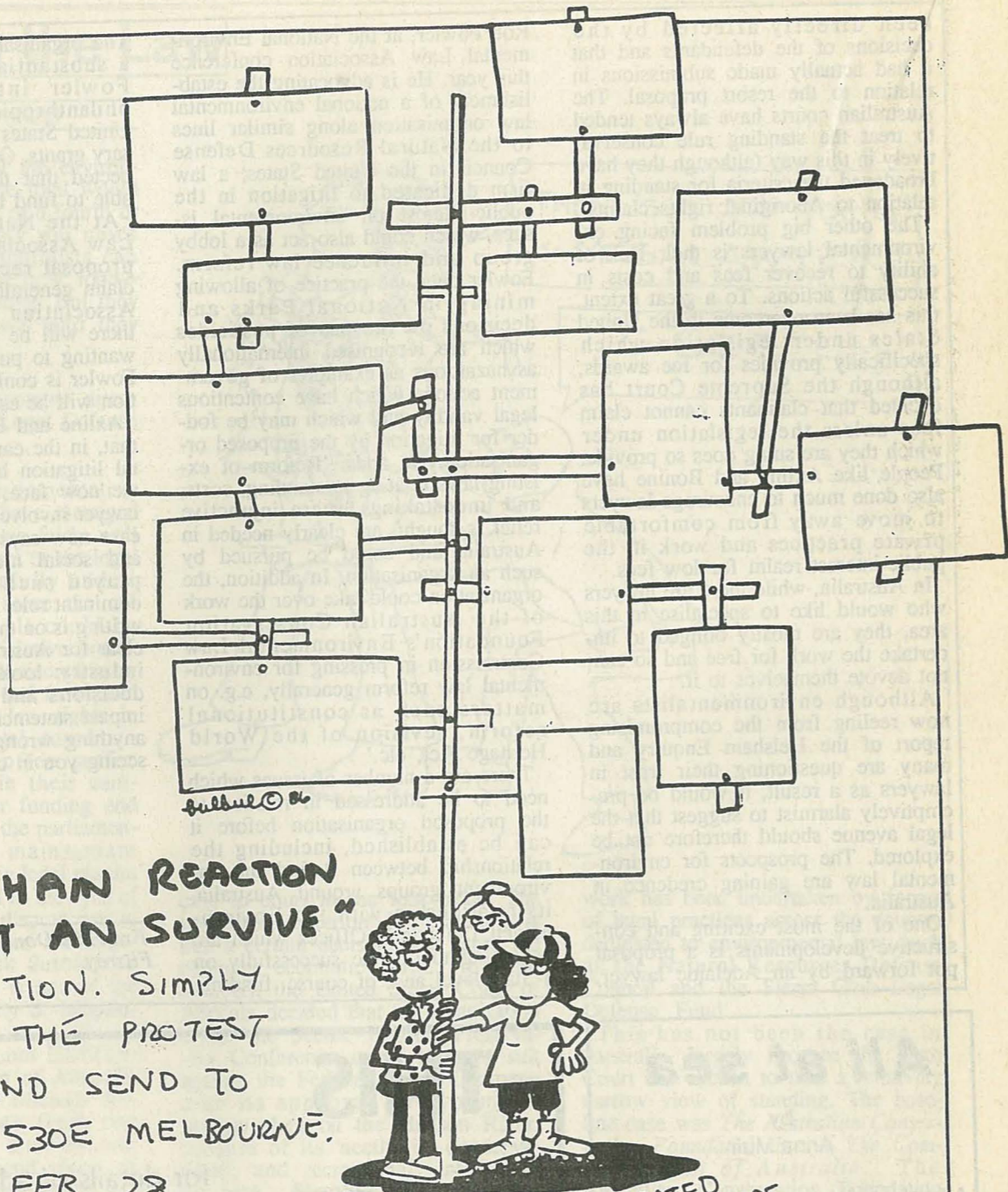
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End of mining freeze

The pressures to exploit the vast resources of Antarctica - the world's last great wilderness continent - continue to increase. The most recent evidence of this is a new convention on mineral resources regulations announced in Wellington, New Zealand in June this year known as the Convention for the regulation of Antarctic Mineral Resource Activity - CRAMRA. Despite its claims to provide environmental safeguards for any future mining activities it must be seen as a major setback for the cause of Antarctic conservation. Margaret Moore reports.

Antarctica is a unique theatre of international political, economic and scientific interests. In 1961 twelve nations, including seven which claimed territory, signed the Antarctic Treaty which dedicated the region to scientific research and cooperation and spelled out that it would be used for non-nuclear and non-military purposes. Antarctica was placed under the management of the nations with full membership of the Antarctic Treaty. At the conclusion of CRAMRA in June 1988 there were 20 consultative parties. Since 1961 a number of important protective conventions have been adopted by the member nations of the Antarctic treaty. The most important of these are the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) and the Agreed Measures for the Protection of Antarctic Flora and Fauna.

In recent years mining has emerged as a major issue and there has been an escalation of nations to join the Antarctic 'club'.

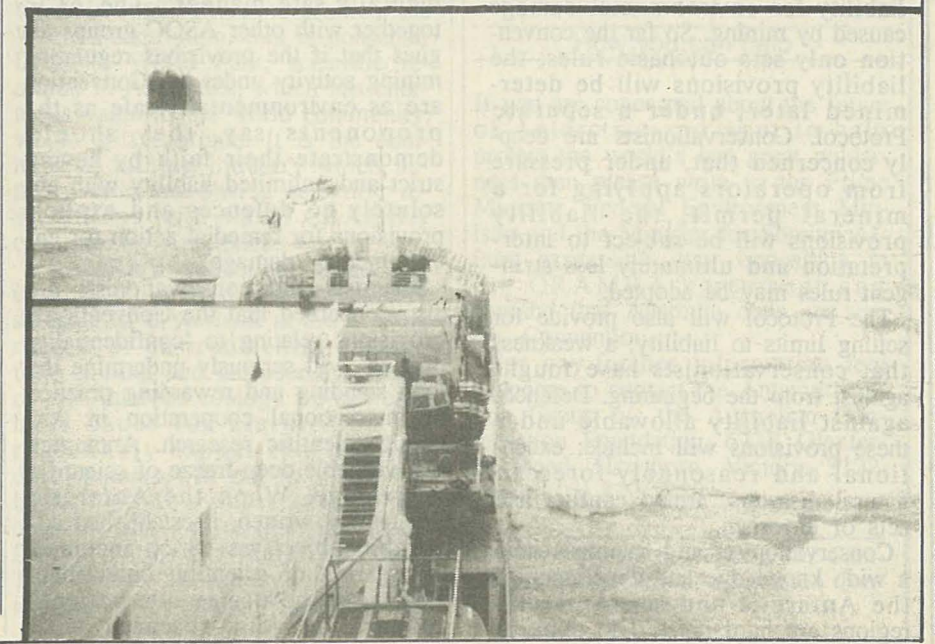
There is obviously a tremendous interest in Antarctica's mineral potential and a number of deposits have been found, though the logistics of recovering these in the extreme conditions could be prohibitive. Conservationists have consistently expressed strong concerns about the potential for environmental damage arising from any Antarctic mining activity. In 1977, the consultative members of the Treaty agreed under the policy of voluntary restraint not to proceed with any kind of commercial mineral exploration until some kind of general agreement had been reached. The consultative parties had in fact created a moratorium on minerals activity.

The 1988 CRAMRA agreement, if finally ratified will supersede the

policy of voluntary restraint and effectively open the door for mining in Antarctica under what the conservationists consider to be inadequate safeguards.

The CRAMRA document, which was formally acknowledged on 2 June 1988 will be open for signature for a one year period from 25 November 1988 after which it will be subject to ratification. If it receives the required support, the convention will be then open to ratification.

For the minerals convention the principles of consensus, which has operated throughout the Antarctic Treaty and Conventions, was dropped in favour of a complicated arrangement requiring a 75 per cent majority. This means that at least 16 of the 20 nations must sign to ratify the agreement. Of these, eleven must be developed nations and five developing nations. Finally, the sixteen must include all seven claimant nations,



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the USA and the USSR and two other developed nations.

Some of the claimant nations, that is, those who claim sovereignty over Antarctic Territory, Australia, New Zealand, Chile, Argentina and, in the last session, Norway, have argued strongly for stringent safeguards. During the CRAMRA negotiations these arguments met with strong pressure from the US, the UK, France, West Germany and Japan. In particular, the Us strongly opposed the inclusion of an anti-subsidy clause promoted by Australia, which would have at least prevented operators with a poor economic record being given inducements to mine in a region labeled the most dangerous place on earth. The Convention is clearly a victory for the mining interests.

Under CRAMRA, Australia will no longer in practice be able to prevent any mining activity from going ahead on any part of its claim. Chile and Argentina, two claimants who share a claim with the UK, which is a promising nation, are in a similar position. Remember that these two South American countries are only 800 Km from Antarctica, close enough for their coastlines and marine food-chains to feel the direct impact of any oil spills or other mishaps caused by mining.

There are many flaws in the Wellington document with regard to practical environmental safeguards. So far the convention only sets out basic principles and rules. An important issue here is the critical question of determining the extent of liability for environmental damage caused by mining. So far the convention only sets out basic rules; the liability provisions will be determined later, under a separate Protocol. Conservationists are deeply concerned that, under pressure from operators applying for a mineral permit, the liability provisions will be subject to interpretation and ultimately less stringent rules may be adopted.

The Protocol will also provide for setting limits to liability, a weakness that conservationists have fought against from the beginning. Defences against liability allowable under these provisions will include: exceptional and reasonably foreseen natural disasters, armed conflict and acts of terrorism.

Conservationists and scientists with a wide knowledge and experience of the Antarctic and sub-Antarctic regions are hard pressed to think of

any 'natural disaster' that could be classified as unforeseen or exceptional. Natural disasters occur in the region so often, that in the extremes of climate, a higher than usual incidence of superbergs breaking away

from the continent, icecap movement, iceberg scouring of seabeds, as well as pack ice capable of crushing ice-strengthened ships and bases which are cast adrift on ice which breaks away from the continent, surely most disasters natural or otherwise can be expected. as to the other two defences, it is the installation for the first time in Antarctica of a competitive commercial fishing industry which provides the cause. Industry should shoulder the burden of paying higher premium costs to cover the defences mentioned above.

Under liability, another cause for concern is the provision dealing with remedial action for environmental damage. Again, the pro-mining nation have won the day. In Wellington the US moved successfully to remove the explicit reference to remedial action from the text. The text retains the obligation to clean up and there is provision for payment if restoration isn't achieved, but this means that there is only an obligation to remove the effects and tackle the source of the problem.

The CRAMRA document has been described by the Conference chairperson, Mr Chris Beeby, as a set of 'rigorous environmental protection criteria and safeguards' which will ensure that 'if mineral activity ever takes place in Antarctica, it will proceed in a regulated and environmentally safe manner'. The ACF, together with other ASOC groups argues that if the provisions regulating mining activity under the Convention are as environmentally safe as the proponents say, they should demonstrate their faith by having strict and unlimited liability with absolutely no defences and explicit provisions for remedial action for environmental damage.

Scientists and conservationists are also concerned that the Convention's provisions relating to 'confidentiality of data' will seriously undermine the long standing and rewarding practice of international cooperation in Antarctic scientific research. Antarctica is a veritable deep-freeze of scientific knowledge. When the Antarctic Treaty was written, it established admirable objectives which included the sharing of scientific knowledge. The treaty advocates international cooperation, joint research, with

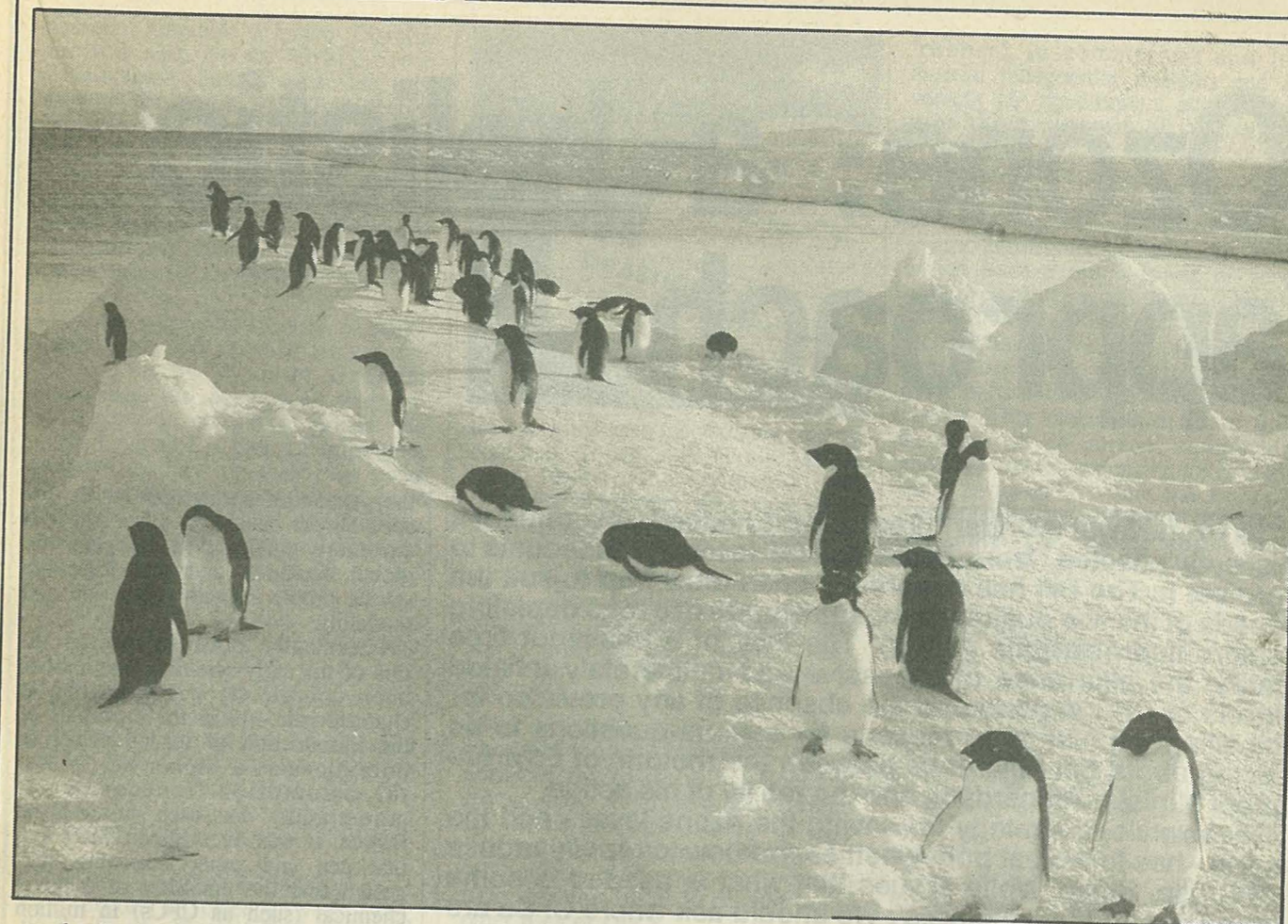
knowledge gained being freely available. This has greatly assisted the developing nations. unable to conduct full scale research programs themselves they have enjoyed opportunities to join with other nations and obtain the benefits of shared knowledge.

With the advent of the CRAMRA agreement, this will alter considerably. It is conceivable that much of science conducted in Antarctica will be directed towards mineral activity and therefore come under the confidentiality of data provisions. this information will not be shared. It will become the exclusive property of the operator and sponsoring state for many years. Much of geology could be treated in the same way.

The Commission, the presiding institution within the convention, has the responsibility for deciding whether to open an area for mining activity. This body, although ostensibly making this decision by 'consensus', is under instruction that should any members hold out against opening, the chairperson shall do everything possible to persuade them to the 'consensus' view. Considering the political and economic power of some of the nations with strong mining interests, those holding out can expect to be subjected to many forms of pressure. a country holding out, such as Australia, would find it difficult, if not impossible, to withstand the enormous pressures.

The body with the most power under the Convention is the Regulatory Committee. Its role is to examine and review management schemes tendered by operators. The ten members of the Committee will come from four claimant nations (which must include the USSR and the USA) plus an additional three developing nations. Neither the claimant whose area is affected, nor the sponsoring state have the power of veto. Decision making on key matters is by two-thirds majority and must include a simple majority of claimants and non-claimants.

The Advisory Committee, the body of 'experts' advising on the scientific, technical and environmental aspects of mining activity, by contrast, will be virtually powerless. It will not be allowed to see the whole of any mining application and will be further hindered by not being allowed to check management schemes produced after bargaining over sovereignty, economic and commercial matters in the Regulatory Committee. There is no review



mechanism and the advice offered by the Advisory Committee cannot be enforced.

During the Convention negotiations it was argued that the monitoring of mineral activities should, quite properly, be the role of this committee of experts. But this important function was appropriated by the powerful Regulatory Committee, along with any significant powers.

The ACF regards CRAMRA as a push by a handful of powerful nations to lay the foundation for the degradation of Antarctica. Many priceless values will be wasted if this Convention is allowed to proceed to ratification. There are many serious flaws and each will have a heavy impact on the Antarctic environment.

The Antarctic Treaty System has many worthy principles and objectives but it is constantly under pressure. Under CCAMLR, which is into its eighth year of operation, massive over-fishing by a handful of nations, including the USSR, has resulted in severe depletion of species. One in particular, *Notothenia rossii*, is perhaps beyond the point of recovery.

The French have recently

proceeded to build an airstrip (in violation of the Agreed Measures for the Protection of Flora and Fauna) by dynamiting through penguin rookeries and bird nesting sites.

Conservationists have been accused of trying to lock away an entire continent in their efforts to promote the World Park option. this is nonsense. Under a World Park, scientific research in Antarctica, which has enormous value to the world community, would still continue. It is the commercial mining industry which actually threatens shared scientific research and with which CRAMRA can lock up Antarctica.

CRAMRA's supporters argue that it offers sound environmental safeguards. If we look at the existing record of environmental damage from mining and consider the nature of the Antarctic ecology we can only have cause for alarm. Can we reasonably expect that mining developments will not have a major impact on the small part of the coastline that is ice-free and therefore provides the major habitats? This is, after all, the area most likely to be used for industry infrastructure.

Only 2 per cent of the entire continent is ice-free. Far from wishing to lock up the continent, conservationists are fighting to maintain international scientific cooperation and preserve a unique environment from degradation.

How you can help

If you are concerned about the future of Antarctica and want to help protect the world's last great wilderness then please write to the Prime Minister, Federal Environment Minister and the Minister for Foreign Affairs expressing your opposition to the CRAMRA agreement and demand that Australia does *not* sign the Convention.

For any further information feel welcome to contact the Antarctic Action Group c/- the Australian Conservation Foundation, 672B Glenferrie Road, Hawthorn, Victoria 3122. Phone (03) 819 2888

Margaret Moore is the Antarctic Campaign Officer with the Australian Conservation Foundation.

Ozone: a holistic approach

The ozone layer is under threat and the Federal Government's recently enacted Ozone Protection Bill is totally inadequate to protect it. The Bill has apparently been drawn up to suit the needs of the two Australian manufacturers of ozone depleting chloro-fluorocarbons (CFCs). The lack of a phaseout timetable, the allowance of excessive and deliberately inflated levels of CFC exports and the absence of any provision for labelling are just three reasons for serious questions to be asked about the difference between the rhetoric of Environment Minister Richardson and the reality of his action.

Meanwhile, a strategy for saving the ozone layer - and the earth - has to look at both whether and how to rapidly reduce CFC use. Stuart White argues that what is needed is some 'good old end use analysis'. We should ask where CFCs are used and why, apply some ecological principles and lateral thinking. We may find lasting solutions which have benefits in addition to preventing the destruction of that tenuous stratospheric layer. He points out that the emphasis on the ozone depleting potential of aerosols and polystyrene packaging has been overtaken by events. Instead, some examples are drawn from the sectors which are emerging as the the major problems: CFC exports; foam rubber use; the growth in consumption of highly processed foods, meat and animal products and the requisite need for commercial and industrial refrigeration; and the proliferation of car air conditioners.

Chlorofluorocarbons and halons are a class of chemicals which were first manufactured in the 1930s and are in widespread use in industrialised countries. In the 1970s scientists turned their attention to what happened to these chemically stable compounds and concluded that their breakdown products (principally chlorine) in the stratosphere had the potential to destroy ozone, which has since been confirmed. This layer of ozone gas is the Earth's only protective barrier against damaging ultraviolet (UV) radiation.

The possible consequences of the ozone layer depletion are the threat

of a further increase in human skin cancer (to which much publicity has been given) and immune system suppression. Potentially more serious is the damage that might be caused to phytoplankton, which are basic component of the marine food chain, and the effect on the growth and fertility of plants.

The Ozone Trends Panel, an international scientific body which reports on the latest findings suggest that as much as 3 per cent of the ozone layer has been lost over large parts of North America, Europe and Asia, with 6.2 per cent winter time losses over northern regions. Over

the Antarctic, springtime losses exceed 50 per cent. It is clear that it is extremely difficult to measure the global depletion and that there are severe problems with prediction and modeling.

Historically, political interpretation of the early scientific caution has been completely irresponsible, if characteristic. As in the examples of the introduction of leaded petrol or polychlorinated biphenyl (PCB); the assumption "innocent until proven guilty" has been shown to be flawed. It was over fifteen years ago that pen and paper reasoning suggested that the emission of a novel chemical (such as CFCs) in million tonne quantities represented a large and largely unpredictable global atmospheric chemistry experiment. That should surely warn us of the need for comprehensive technology assessment.

A great deal of attention has focussed on the Montreal Protocol, a 37 nation agreement to halve by 1999 the use of the most strongly depleting ozone CFCs and freeze the use of halons. The Protocol, which should come into force by 1989, is now regarded as insufficient to save the ozone layer.

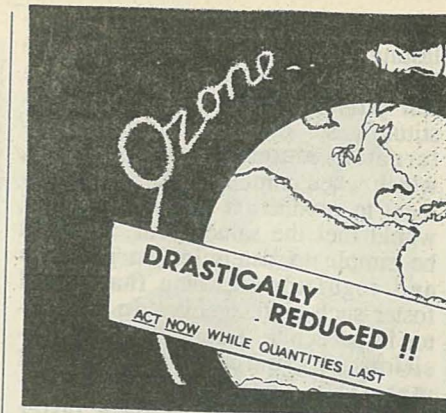
The Head of the U.S. Environment Protection Agency, Mr. Lee Thomas, and the Director General for Environment of the European Community have publicly called for a total phaseout of CFC use by 1999 following the revelation that the ozone depletion is worse than forecast. More recently, the Swedish government announced it will phaseout CFC use in their country by 1995. Even British Prime Minister Margaret Thatcher and Environment Minister Ridley voiced strong concerns about the need to go further than the Protocol and to have a

phaseout timetable in place. Dissatisfaction also exists within State governments. Shortly after the passage of the ozone Bill, Tom Roper, the Victorian Environment Minister criticised its inadequacy.

The Australian Government by contrast argued that its legislation goes further than the Montreal Protocol and that it will await the conclusions of the 1990 Review Conference.

It's not surprising the Bill is inadequate when you consider its genesis. Environment Minister Graham Richardson did not consult with environment or consumer groups. He instead pursued a path of requesting industry to draw up their own plans for achieving a mere 40 per cent reduction in domestic consumption of CFCs by 1992. An immediate 85 per cent reduction would be needed to stabilise chlorine levels in the stratosphere. In the June newsletter of the industry lobby, the Australian Fluorocarbon Consumers and Manufacturers (AFCAM), Don Roberts, the General Manager of Australian Fluorine Chemicals (AFC) and prominent spokesperson for AFCAM stated that they (industry) 'had taken the initiative' and had 'control of the process (of regulation)'.

The Bill also allows 3,800 tonnes of CFC exports in calendar year 1989, the first year of the Bill's operation. According to the Federal Minister's staff, this figure was arrived at by



taking into account existing export contracts. If we look at the exports from 1986 to the estimated 1988 figures we see that they have risen from 2,300 tonnes in 1986 to 3,200 in 1987 to 4,200 in 1988. This is an increase of over 80 per cent in just two years, clear evidence that the two companies have been 'hawking their wares' overseas in a vigorous way. This high value is now 'locked in' to the legislation.

Most attention has been paid to aerosols, but in fact CFC use in aerosols in Australia has declined from 13,000 (1983) to 4,500 (currently) tonnes per year and the industry will virtually phase out CFC use by 1990 (600 tonnes per year). Much more attention needs to be paid to the other uses of CFCs.

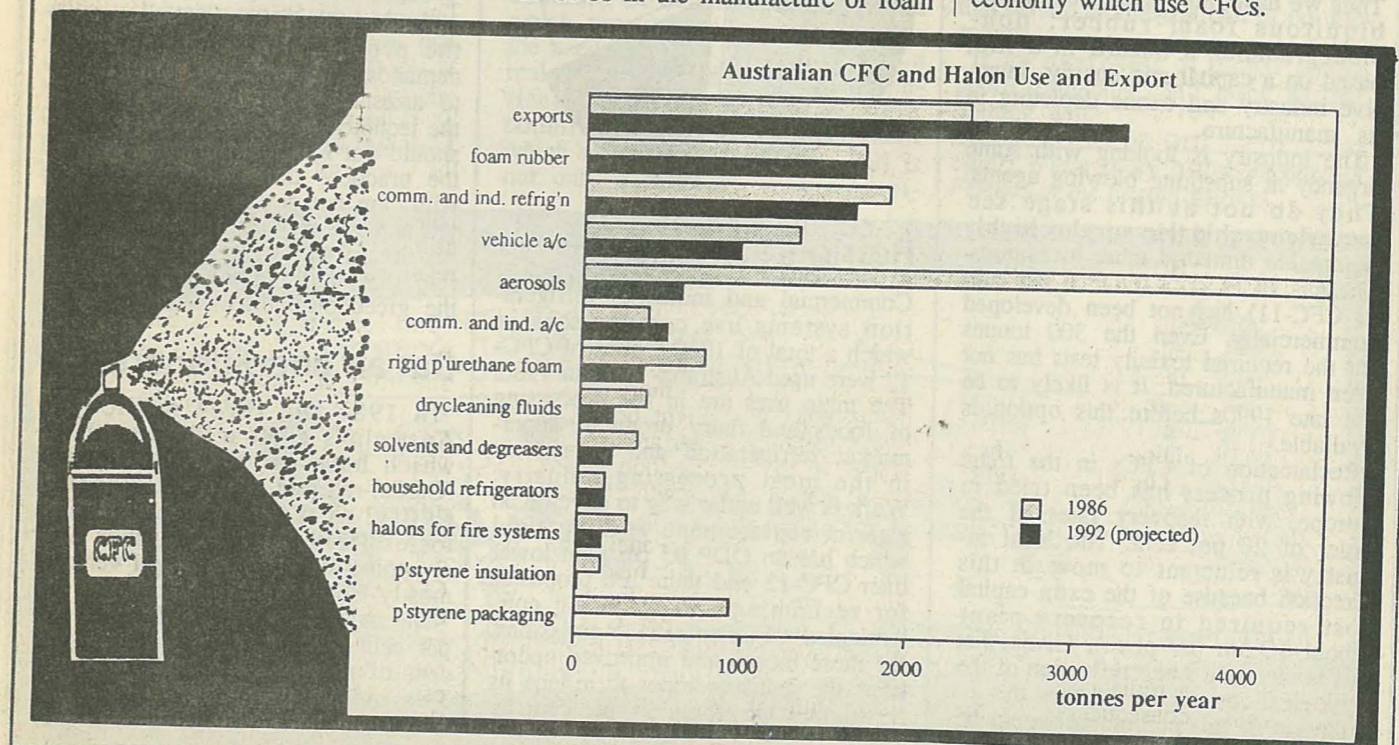
Combined with exports, which will soon be the single biggest sector, use of CFCs in the manufacture of foam

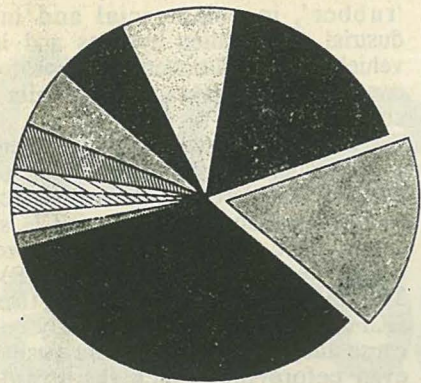
'rubber', in commercial and industrial refrigeration systems and in vehicle air conditioners account for over three quarters of Australia's contribution.

A standard response to the problem is to argue for rapid substitution of the CFC agent by, for example, hydrochlorofluorocarbons (HCFCs) which have a much lower or zero ozone depleting potential (ODP). The difficulty for industry is that HCFCs have low ODPs precisely because they break down more easily, even before they reach the stratosphere. This makes them more difficult to use in current equipment and they require extensive toxicology tests, particularly before use in food packaging and personal aerosol products. The widely applauded commitment of the US chemical giant Du Pont to phase out CFC production has been matched by vigorous development of HCFCs.

Clearly, faced with a choice between the emission of a tonne of CFC-11 and a tonne of HCFC-22 (ODP 5 per cent) or HCFC-13 (ODP zero) the best action is to substitute for the CFC. However another approach, which may achieve the same aim of rapidly reducing emissions, is to rearrange the way we do things.

Why has CFC use for some purposes risen so greatly, does our quality of life hinge on CFC consumption? To answer these questions, let's look at some sectors of our economy which use CFCs.





Foam Rubber

Foam rubber (flexible polyurethane foam) is widely used in furnishings, car seats, and packaging. The ozone depleting gas CFC-11 is used to "puff" the plastic mixture for the manufacture of lower density foams. Methylene chloride, a suspected carcinogen, is also widely used in the US for this purpose. Any suggestions that it be used here would be resisted strongly by the Australian union movement.

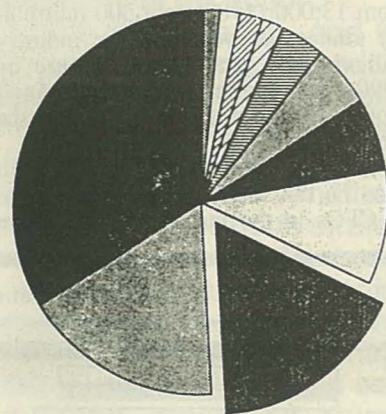
The increase in the use of foam rubber is consistent with long term structural shifts in materials use that have affected every part of our economy. These shifts can be crudely summarised as away from the use of biomass-derived materials, such as wood and cotton towards synthetic materials based on petrochemicals. Thus we have, amongst others, the ubiquitous foam rubber: non-biodegradable, a hazard in a fire, based on a capital and energy-intensive industry and ozone depleting in its manufacture.

The industry is looking with some urgency at substitute blowing agents. They do not at this stage see methylene chloride or the highly flammable dimethyl ether as options. The gas HCFC-123 (ODP 5 per cent of CFC-11) has not been developed commercially. Even the 300 tonnes for the required toxicity tests has not been manufactured. It is likely to be the late 1990s before this option is available.

Reclamation of CFCs in the foam blowing process has been tried in Europe, with recovery rates of the order of 20 per cent. The local industry is reluctant to move in this direction because of the extra capital cost required in recovery plant (about \$0.5m per plant). Given that this is merely a small reflection of the ecological cost of the industry the installation of this equipment would be the least that could be done.

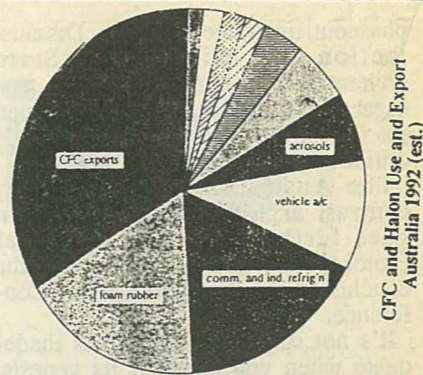
A quicker, cheaper and yet longer lasting solution is not to agonise over how long we have to wait before we can produce foam rubber with substitute gases but to consider what alternative materials we could use, which when combined with a commitment to production of durable goods, would meet the same needs. It would be simple to determine an incentive and regulatory scheme that would foster such a changeover. In this sector in particular it may be that a transition to greater use of natural materials, springs and a higher labour content would be a faster route to reducing ozone depletion than the possibly endless pursuit of appropriate replacement blowing agents.

How can we do this? If you buy a mattress or other furnishing, try to choose one which does not contain foam rubber or contains less foam rubber. Also, harder foam rubber uses less CFCs and is more durable, so you are as well to pay more for it. Write to the manufacturer and tell them why you are doing so.



Refrigeration

Commercial and industrial refrigeration systems use compressors in which a total of 1840 tonnes of CFC-12 were used Australia-wide in 1986. The main uses are in the processing of foods and dairy products, supermarket refrigeration and as chillers in the meat processing industry. Work is well under way to develop an interim replacement working fluid which has an ODP 95 per cent lower than CFC-12 and there are proposals for reclaiming and recycling contaminated CFCs to reduce emissions. By these means and improved operations the industry hopes to reduce its consumption by only 11 per cent by 1992.



CFC and Halon Use and Export Australia 1992 (est.)

Why has this industry grown? The increased consumption of processed and frozen foods, meat and other animal products has led to an increase in the need for processing and retail refrigeration. This causes other problems, including an increase in the energy used to deliver food to our table and thus a growing contribution to greenhouse gas emission. Two U.S. economists quoted in John Robbins *A Diet For A New America* (Stillpoint, Walpole NH, 1987) point out the benefits of another approach;

A nationwide [US] switch to a diet emphasising whole grains, fresh fruits and vegetables - plus limits on

exports of nonessential fatty foods - would save enough money to cut our imported oil requirements by over 60 per cent. And, the supply of renewable energy, such as wood and hydroelectric, would increase 120 to 150 percent.

The argument is simple, certainly the problem of ozone depletion demands we take action immediately to arrest the use of CFCs by using all the technical means available, but we should not lose sight of the fact that the practices that we are "tinkering with" are not sustainable in themselves and we may achieve a temporary respite in the stratosphere only to find that we continue to exacerbate the greenhouse effect.

Car air conditioners

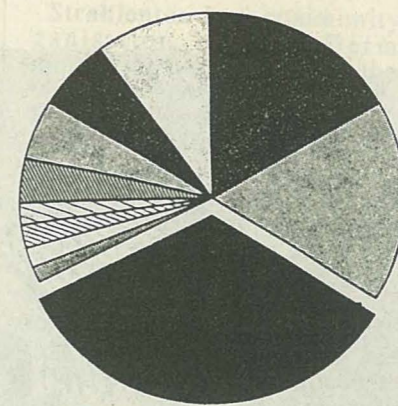
In 1986 the three million of Australia's eight million vehicles which have car air conditioners (CACs) released some 1300 tonnes of CFC-12 to the atmosphere. Leaks, losses from service, smashes and scrapping averaged 0.4kg per vehicle, mostly from passenger cars.

The industry has a growth rate of 3 per cent per year, with over 60 per cent of new cars fitted with CACs. The industry response, which of course does not question this growth

rate, is to take steps to reduce losses during service and to improve the plumbing on the unit to limit leakage. New CACs with a smaller CFC capacity will be progressively introduced. By these means the industry hopes to reduce their emissions to 840 tonnes in 1992 which will still leave CACs as the third largest sector after exports and is for comparisons 5 times as much as for domestic refrigerators.

An interim 'drop-in replacement' blend of CFC-12 and dimethyl ether has been proposed and HFC-134a as a longer term substitute, which will become increasingly available after 1993. HFC-134a has an ODP of zero, however rapid growth in its use and other HFCs could become a problem due to their greenhouse warming potential, which is some thousands of times greater than that of carbon dioxide (CO₂).

Can we afford car air conditioners? Clearly at present the ozone layer can't. For other powerful reasons the growth rate in CACs is unsustainable - they increase fuel consumption by up to 10 per cent. This leads to a corresponding increase in greenhouse gas emissions (CO₂ and nitrous oxide) and also carbon monoxide which has an indirect reinforcing effect on ozone layer depletion. If you buy a car, choose one with the simplest "air conditioning", wind down windows and a standard heater! Lobby for shade trees in parking areas and street verges, use a window sun shield when parked. Given that the efforts at reduction of CFC use in this industry are struggling against the industry growth rates, it is precisely these growth rates that need to be addressed.



Exports

Exports of CFCs will account for over 3200 tonnes in 1992, which, as mentioned earlier will be larger than any domestic industry use and will provide over a third of the market for the two CFC manufacturers. A representative of ICI (Australia) who supply feedstock for CFC manufacture was heard to claim that they had a moral responsibility not to deny CFCs to the developing world. True, we have no basis to argue for denying our per capita consumption rates to these countries, but this is an argument for reducing even further our per capita consumption and taxing the producers to assist the establishment of sustainable industries which provide needs while avoiding the need for CFCs. In fact, there is a real danger that the existence of plentiful imports will lock in these countries to the use of equipment which requires CFCs to run. This is not only undesirable, it is unnes-

sary. In Africa, for example, many refrigerators (often used for vaccines) are absorption cycle using ammonia/water rather than CFCs. This has the added advantage of making them particularly suitable for operation with a solar thermal energy source.

Exports appear to be the 'way out' that the government has offered the two companies for their decline in domestic sales.

A similar picture can be built up for other sectors. For example, use of CFCs in commercial and industrial air conditioning will actually increase by 1992 because we continue to construct buildings which are so poorly designed that they require vast energy wasting air conditioning systems, which are increasingly called into question on public health grounds. The solution is simple: building codes for energy efficiency, windows that open, and if some auxiliary heating and cooling is necessary, then absorption cycle solar thermal systems not using CFCs can be used.

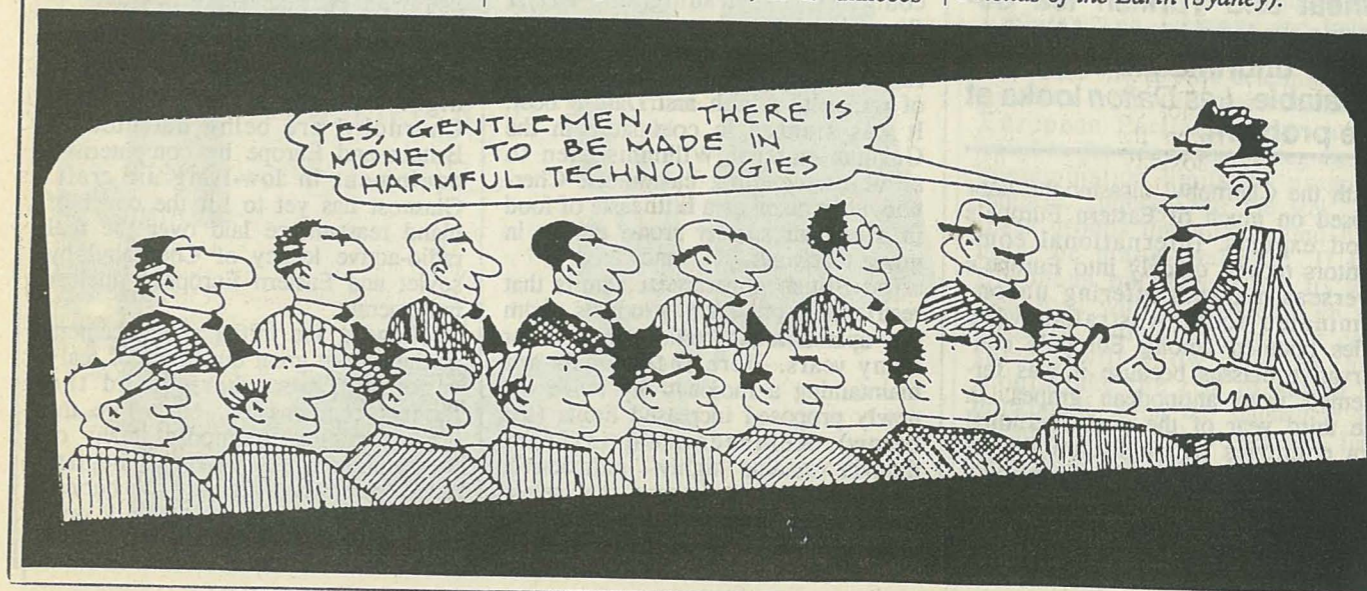
The depletion of the ozone layer is just one manifestation of a global problem of environmental degradation.

This problem is the result of a fundamental mistake.

The mistake takes the form of a commitment to maximising industrial production rather than satisfying needs in a way which recognises that we are an integral part of our biosphere.

If an awareness of global atmospheric problems can't teach us that, nothing will.

Stuart White is an active member of Friends of the Earth (Sydney).



Hot food



A lasting legacy of Chernobyl fallout is radioactively contaminated food. Overnight Irish, Scottish and Cumbrian meat, Polish potatoes, Greek wheat and Turkish tea became unmarketable. Milk became undrinkable while still palatable. Les Dalton looks at the problem.

With the Chernobyl disaster the door closed on much of Eastern Europe's food exports. International competitors moved quickly into Europe's overseas markets offering uncontaminated food. Australian wine sales boomed among Europe's conservative classes because it was fermented from antipodean grapes. In the third year of the post-Chernobyl era countries still insist on taking radiation counts on food imports from Europe as they do a dielrin test on imported Australian meat.

Radioactive food has turned up and

been impounded in the distant ports of Alexandria, Penang, Colombo, and Bangkok. Shipments of contaminated powdered milk, donated (or dumped) by the European Economic Community, have been returned by recipient Third World countries. The trading ship *Reefer Rio* sailed between atlantic ports for over a year unsuccessfully trying to find a trader willing to take it's cargo of radioactive Irish and Danish beef. It was returned to cold store in the German port of Wilhelmshaven to await unsuspecting customers. Chernobyl has given us a little taste of food in a nuclear society if we persist in going that way.

The British government admits that restrictions on farm products from it's upland areas could continue for many years. Here the animals are maintaining a radioactivity twice the newly proposed increased limits (see below). Reindeer meat in Scandinavia remains highly radioactive. Reindeer feed on lichens that selectively filter radionuclides from the environment. In mid-1988 fish

caught in a Swedish inland lake registered six times the newly proposed official limit. The especially high radioactivity of the game and fish indicate that fallout radionuclides do not stand still. With time they migrate with the natural drainage towards lower lying lakes and marshes. As the years go by some areas will become not less but more radioactive. 'Hot spots' many times higher in radioactivity than pre-Chernobyl are being detected in Britain and Europe by computerised equipment in low-lying air craft. Glasnost has yet to lift the cover of bland reassurance laid over the real radio-active legacy of Chernobyl by soviet and Eastern European nuclear bureaucrats.

Following the initial announcement of the fallout great quantities of leafy vegetables were buried and the farmers compensated, but while the organic matter decomposes many of the radionuclides live on to migrate away from wherever they are buried. For this reason no-one really welcomes radioactive rubbish in their

backyard. The Turkish government bought the highly contaminated tea harvest from it's farmers but then had trouble disposing of it. Burial in disused mines was resisted by local people who rightly feared contamination of their ground water. Turkish officials would like to dump it into the Black Sea but they face opposition from fishing people.

Radiation counting is much easier than chemically testing for insecticides. A well equipped laboratory is a help but not essential. Spurred on by mistrust of official regulation of radioactively contaminated food community groups are acquiring radiation counters, sometimes assisted by home computers, to do their own monitoring. Relatively inexpensive counters measure not only the radiation levels but the actual radionuclides present in food. We can know whether we are eating radioactive cesium, strontium, iodine or whatever.

Strahlentex is a community organisation in West Germany monitoring radioactivity in the environment and food. It is part of a European network of community groups monitoring not only fallout in food but routine releases of nuclear plants. Strahlentex have revealed a not unexpected practice to dispose of stocks of highly contaminated food by mixing them with less contaminated food. This simply means the public's radioactive intake is protracted and the risk spread over a greater number of people. The consequences for public health remain the same. Greek officials want 6000,000tonnes of highly contaminated durum wheat processed onto pasta products which would be below the permissible levels. Japanese medical students found cesium-134 and cesium-137 present in Italian spaghetti and other pasta. The Italian government has failed to set up monitoring stations promised environmental groups.

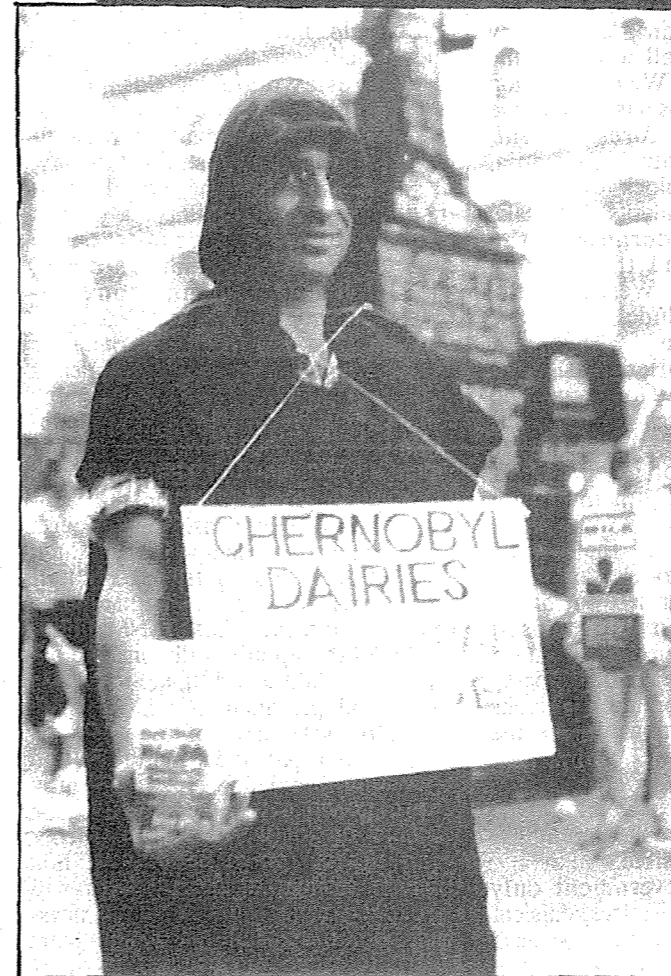
Radionuclide	Radioactivity (Becquerels/kilogram)	
	Pre-Chern	Post-Chern
In Milk		
Cesium-137/Cesium-137	370	1000(100)
Iodine-131		500(130)
In other food		
Cesium-137/Cesium-134	600	1,250(125)
Plutonium		80(8)

Comparison of the European limits to radioactivity in food set before and after Chernobyl by the European Commission. The lower figures in brackets are those proposed by the European Parliament.

For European officialdom the most troublesome problem is how to convince Europeans to accept more generous limits in their diet in the aftermath of the next Chernobyl. The European Commission has been wrestling with how to deal with food distribution where it is assumed that 40 per cent of all food in the European Community will be contaminated. The answer is not unexpected: raise the limits of contamination of food, drinking water and feed-stuffs for an emergency period of three months after an accident (see table). The new post Chernobyl 'tolerance' limits are to be two to three times higher than the pre-Chernobyl limits and are intended to take effect in the event of another nuclear accident or within two years.

The last stand of nuclear industry in it's losing battle for survival will probably be on the food front. Certainly the nuclear industry if losing friends over what it is doing to their food. Denmark, Germany and Ireland want stricter limits imposed. The new 'tolerance' limits face determined opposition from the majority in the European Parliament which has voted to provide special categories of contamination limits for pregnant mothers, children and the sick. For these groups uncontaminated food must be made available. If the European parliament has its way then food will be labelled with the levels of radioactivity so that consumers will know whether they should take the risk of eating or drinking it. Even the staunchest advocates of nuclear power will find their loyalty severely tested in their own kitchens.

Les Dalton is a member of the Movement against Uranium Mining



Trees fall in deal

A deal between the Federal and Tasmanian Governments has followed the Helsham Report and these two developments have further threatened the unique Tasmanian forests. Greg Sargent of the Wilderness Society describes the areas, the threats they face, and some actions that might save them.

The best of Tasmania's forests, about 14 per cent of the State's forestry resource, have been accepted for inclusion on the Register of the National Estate as having natural values of national importance.

National Estate forests in Tasmania include the Douglas-Apsley on the east coast (Tasmania's largest remaining area of unlogged dry sclerophyll forest), the Savage River area (Australia's largest block of pristine rainforest), and the mountains, rivers and tall forests of Western Tasmania.

But what does the term "tall forests" convey?

Imagine a tree with its roots planted in Sydney harbour, growing through the Harbour bridge. The first branches leave the main trunk at the level of the roadway, and the flags on the top of the arch are lost in its foliage.

Now imagine if you can, forests made of thousands of trees like this, stretching for thousands of hectares, forests that have never seen an axe, let alone bulldozers and chainsaws, and you might get a picture of the forests of Western Tasmania.

These forests are an important part of the Wilderness Society's proposal for Stage 2 of Western Tasmania's World Heritage Area. The whole of Stage 2 has been recognised as having World Heritage significance by both the Australian Heritage Commission (AHC), the Federal Government's

advisers in such matters, and the International Union for the Conservation of Nature and Natural Resources (IUCN), the advisers to the World Heritage Bureau itself.

The Federal government sought and gained the agreement of the Tasmanian government on the boundaries for a World Heritage nomination that would give international recognition and protection to much of the mountains and treeless plains of Western Tasmania, but at the cost of some of the tallest flowering plants on Earth, and the increased destruction of Australia's wildest forests.

The agreed area contains a mere 3 per cent of Tasmania's forestry resource. Important tall forests in the valleys of the Picton, Weld, and Huon have been excluded, as has most of the 13,000 hectare tall forest around Wylds Craig in Central Tasmania, Australia's largest block of wilderness old growth eucalypts. The lake studded alpine wilderness of the Central Plateau, and the fringing forests of the Great Western Tiers, have also been excluded from the proposed nomination.

In 1982, the World Heritage Bureau urged the Australian Government to add the Denison Spire region to the existing World Heritage Area. It is a spectacular region of glacial lakes, rugged river gorges and mountain peaks.

This area was part of the Federal Cabinet's decision on Helsham, but now the area has been left out of the Federal Government's proposed World Heritage nomination. Instead it is to become a state "national park" but with provision for mining, dams and mineral exploration within the area.

In fact, the Federal Government has offered Australian taxpayers' money to assist with funding a geological survey as soon as possible.

The Tasmanian government only acquiesced to even this lackadaisical World Heritage nomination because it is part of a total industry package

that guarantees the accelerated destruction of National Estate forests outside of the nomination area. Elements of that package include:

- An undertaking that the Federal government will not act to protect Tasmania's National Estate forests, breaking the promise Bob Hawke made in June 1986 that it would "use all of its powers to protect National Estate values" in Tasmania's forests.
- Massive tax incentives for mining giant North Broken Hill to build a billion dollar pulp mill on prime cropping land near the small village of Wesley Vale on Tasmania's North West coast. The mill will be the largest single private investment in Australia's history, and will consume some 1.8 million tonnes of timber a year. It will have a drastic effect on the forests of Tasmania's north, threatening the Douglas-Apsley and Great Western Tiers. There are provisions within the State Government's enabling legislation for logging of Protected Areas and rainforests to ensure adequacy of resource for the mill.
- The go ahead for the construction of Tasmania's fourth export woodchip mill by Huon Forest Products (HFP), half owned by Australian Newsprint Mills (ANM).

The HFP chip mill will consume between 350,000 and 400,000 tonnes of pulpwood per annum. It is designed to strip those parts of the Southern Forests not protected by the World Heritage nomination. It will destroy most of the forests that Senator Richardson flew over on the helicopter flight that allegedly turned him into a "born-again greenie." It will result in the ANM and APM concessions being linked to form a giant concession under the control of

ANM. Most of the logging will be carried out using cable-logging techniques - used on steep slopes.

- * An increase in the annual forest cut of some 790,000 tonnes in forests that are, according to the woodchipping industry itself, already being overcut.

This represents an increase of about 20 per cent on the current levels. Premier Gray sought this increase as he had over-committed the state's timber resource by allowing HFP and Wesley Vale both to go ahead, while making promises to existing chip mills that they would not be affected.

- * Logging to be allowed within some of the World Heritage Areas, including "the northern parts" of the Lemonthyme Forest - a World Heritage Area as defined by the Helsham majority report. No boundary has yet been released to the public defining just what this

means, and how far the logging can go.

The decision also allows for logging and quarrying in the Exit Cave Area - Australia's longest cave system and a World Heritage Area as defined by the Helsham majority report.

The federal government has not only reneged on its commitment to protect National estate in Tasmania, it has paved the way for the hand over of areas of World Heritage significance to some of Australia's largest corporate concerns.

These magnificent wilderness areas need your active involvement. If you can come to Tasmania this summer, get in touch with the Wilderness Society and help us in the protest actions planned this summer. If you can't, join or create a Tasmanian Wilderness Action Group in your own town or city to lend support to those protest actions. Write a letter to Hawke urging him to honour that promise he made. Get vocal, today.

Contacts:

TWS - Tasmanian Campaign
130 Davey St
Hobart 7000
Tel: (002) 349 366

TWAG
57 Liverpool St.
Sydney 2000

TWAG
49 Hardware Lane
Melbourne Vic 3000
Tel: (03) 670 5229

Greg Sargent is Coordinator of the Wilderness Society's Tasmanian Wilderness Campaign.



1989 Green Cartoon Calendar

Roxby sells...

The event of the first yellowcake exports from Roxby Downs was a time for action and comment from a number of groups. *Larry O'Loughlin* compiled this report.

The first shipment of uranium ore from the Olympic Dam copper and uranium mine at Roxby Downs occurred on 29 November 1987 and about 100 people opposed to the mining and export of uranium protested at the wharves at Port Adelaide as the ten truck convoy came through in the early hours of the morning.

The police were also there in strength, and seemed to have had instructions not to make any arrests. However, they did not seem to use any other restraint, other than respecting media attention, when they moved the protesters from the road where they briefly stopped the trucks.

A number of conservation groups throughout Australia made comment on the shipment, which carried a total of about 120 tonnes of yellowcake bound for Sweden.

The South Australian Nuclear Issues Network, which organised the protest, attempted to draw attention to the inherent dangers associated with uranium mining, and some unanswered questions about the Roxby project.

"If the project is perfectly safe, why have the Government and Roxby Management Services refused to make public the full details of environmental, transport, health and safety plans which are required under the Roxby Downs Indenture Ratification Act?", said Marcus Beresford, spokesperson for the group.

The Indenture required the joint venturers (BP Australia and the Western Mining Corporation) to supply to the Government by the end of 1987:

- an 'environment management programme';
- details on disposal of radioactive tailings at the mine;
- measures for protection of Aboriginal and historical sites at Roxby;
- safety measures for the workforce and town's population;
- safety measures for transport, storage and shipment of radioactive ores;
- details of water supply (millions of litres will be required to leach ores, and this is an arid area).

Mr Beresford went on to say, 'The effects of Roxby mining operations on the underground waters of the Great Artesian Basin are unclear and may result in the drying up of Mound Springs, unique areas believed to be of World Heritage significance'.



John Bannon, ALP President, as a small fire burns at Roxby Downs shortly after he opened the mine.

Photo: The Age

The Australian Conservation Foundation congratulated the anti-uranium activists in South Australia for their efforts to keep Australians informed about the largest and most secretive of Australia's uranium mines.

Noting that all information about the mine is subject to secrecy provisions under the terms of the indenture legislation, the ACF Director Mr Phillip Toyne said, "If the recent Ranger accident, where radioactive materials were dumped off-site, had occurred at Roxby Downs, no-one except the company would know about it. The company is only required to report such 'minor' accidents in its annual reports to the South Australian Department of Mines and Energy.

"There is no independent monitoring body overseeing the operations at Roxby Downs. This is an environmental scandal of the highest order and places the environment, and people, of South Australia at risk."

Mr Toyne called on the Federal Government to extend the operations of the Supervising Scientist, and its associated bodies, to cover the operations at Roxby.

A spokesperson for the Anti-Uranium Campaign (TAUC), a coalition of Victorian organisations, Eric Miller, said, "It is a sad irony that the first shipment of uranium from Roxby Downs is destined from Sweden. The Swedish people recently voted by referendum to close down their nuclear energy industry because

of the environmental and health risks inherent in nuclear technology.

"Furthermore, news of the first Roxby shipment comes on the very day we have learnt of another example of mismanagement at the Ranger uranium mine."

Mr Miller also went on to say that while Ranger was monitored, the agreement between the South Australian Government and the Roxby Joint Venturers (the Indenture Act) ensures that accidents at Roxby will be hidden from the public.

"The Australian public has a right to decide whether Australia mines and exports uranium. TAUC calls on the Federal Government to hold a referendum on this issue," he concluded.

Friends of the Earth (Fitzroy) had a letter to the editor in *the Age*, which listed some of the problems associated with the mining and export of uranium. The letter also noted the irony that the greenhouse effect has taken over from the fallout from the Chernobyl disaster as the focus of environmental attention, and was being used as an argument for increased nuclear power generation. The Friends of the Earth letter concluded:

"The isolation and beautiful surroundings of the Roxby Downs area help us ignore the folly beneath the surface. The mining and export of uranium does not help solve today's environmental problems, it adds to tomorrow's."

For further information and action:

Nuclear Issues Network
120 Wakefield St
Adelaide SA 5000
Tel: (08) 223 5155

Australian Conservation Foundation
672B Glenferrie Rd
Hawthorn Vic 3122
Tel: (03) 819 2888

The Anti-Uranium Campaign
c/- Movement Against Uranium Mining
247 Flinders Lane
Melbourne Vic 3000
Tel: (03) 650 5252

Friends of the Earth (Fitzroy)
222 Brunswick St
Fitzroy Vic 3065
Tel: (03) 419 8700

Larry O'Loughlin is a member of the Chain Reaction collective.

... military takes

The threat of nuclear fuel exported for 'peaceful purposes' being used in nuclear weapons has become much more real following a recent decree by President Reagan in the last days of his Presidency, and only two weeks after the election of George Bush as his successor. *Richard Bolt* reports on the decision and some of its implications, especially for Australian uranium exports to the US.

On Friday 18 November 1988, President Reagan signed an Executive Order. Some of its clauses give Federal Officials the power to override local or State opposition to ensure the licensing of nuclear power plants. This aspect of the order received some coverage in Australia, but the Order contains many other provisions which were not reported in Australia. Some of them specify procedures to prepare for, and cope with, 'national security emergencies'.

One of these, Part 21, gives the Nuclear Regulatory Commission (NRC) the power to enter civilian nuclear plants to seize plutonium and

enriched uranium for use in nuclear weapons.

Part 21 also directs the NRC to prepare plans for such seizure, and to take over the operation of the plants concerned.

The New York Times described this new power as a 'major departure from 40 years of US nuclear regulatory policy'. It quoted Dr Glenn Seaborg, chairman of the NRC (then the Atomic Energy Commission) from 1961 to 1971, as saying:

"If plans are prepared and actually used...it would obliterate the line between peaceful uses of atomic energy and military uses."

Mainstream non-government groups, the Federation of American Scientists (FAS) and the Natural Resources Defence Council (NRDC), were critical of this move. The NRDC wants to be kept informed of Australian reaction.

Although denied by an energy Department spokesperson, Part 21 is clearly an attempt to overcome the current crisis in the US nuclear weapons industry.

Several military nuclear plants in the US have been closed, because of severe severe environmental and health and safety problems. Amongst these are the mainstays of military plutonium production, the Savannah River and Hanford plants.

Attempts are being made to bring

Savannah River back on line, but any future operations will be hampered by continuing safety problems associated with the aging reactors.

Attempts are also being made to find funds for a new military reactor. However, the first priority for funding is the enormous cost of cleaning up the existing plants, which the US General Accounting Office estimates as at least \$175 billion.

Non-proliferation specialist David Albright of the FAS has speculated that Reagan's Order is related to the proposed new military reactor. He said:

'I have to wonder if this is part of a game plan to get new facilities built as quickly as possible. And you can convince Congress to build them if you see a national emergency lurking out there.'

In 1981, the Australian Government signed an agreement with the United States "concerning the Peaceful Uses of Nuclear Energy". It is one of a series of Bilateral safeguards agreements Australia has concluded with its uranium customers.

Article 8 of the Agreement prohibits the use of Australian uranium by the US for military purposes. Article 11 gives Australia the right to cancel uranium shipments if the US violates this provision; Australia can also require the return of previously exported uranium.

The US is a major buyer of uranium from the Ranger mine in the Northern Territory.

If the NRC were to seize nuclear material from a plant containing Australian origin nuclear material, as allowed by Part 21, this would violate the Agreement.

In fact, once the NRC formulates the plans to seize civilian nuclear fuel, as directed by Part 21, all Australian uranium exported to the US will be potential fuel for nuclear weapons.

It is arguable that the letter of the Agreement will be violated once the plans come into force.

In any case, it is clear that the spirit of the Agreement will be violated by the plans. It is clearly nonsense to continue exports until the threat to seize civilian materials for military use is actually carried out.

Given the crisis in the US nuclear weapons industry, such seizure could happen in the near future.

Richard Bolt is a researcher with Senator Norm Sanders (Dem, Tas).

Solar 88

The Solar 88 Conference was held for three days at Melbourne University in November 1988, attended by 192 delegates, and 80 papers were presented. Bert King attended and presents this report.

Delegates were mainly from three areas - academics, Government departments, and private enterprise involved in the newly-emerging solar field. To this could be added a sprinkling of environmentalists from organisations such as Friends of the Earth (FOE). Few women were present, and other than some New Zealanders, there were few people from overseas. The proceedings of the conference are a weighty volume, a mass of material.

From all this, what can be said? It was stimulating, yet somewhat disappointing. Funding for renewable energy sources is poor in Australia, with Victoria leading the field and other States doing little. It was a slightly elitist conference, the main performers acting like members of a club. It was a conference dealing with the problems of an affluent society, there was little in it for the developing world. Government statements on energy policy tend to be full of rhetoric, but short on action - rather like something from 'Yes, Minister'. Development of photovoltaics tends to be in the field of consumer products; this is hardly grappling with the problem.

On the positive side, the greenhouse effect is on us - yes; conservation of energy is the first, most necessary step - yes: unanimous agreement. Nuclear energy is not an option - no. All this is good. But a lot of esoteric research is being conducted, not enough is action-oriented. Our wind energy advances are really very small - a wind farm at Esperance WA, and the 65 kw wind generator at Breamlea, Victoria, Malabar, NSW and Flinders Island, Tasmania and one at the Mars factory in Ballarat, Victoria.

FOE had a worthwhile presence. The new solar video, *Energy at the Crossroad*, produced by the FOE Soft Energy group had its premiere and

received a good deal of exposure. Bob Fuller, a FOE member, presented a paper, *Drying Grapes with Solar Energy*.

Mick Harris from the Alternative Technology Association gave a paper on the solar workshop at CERES in Brunswick, Victoria - an example of a community in action. And on Saturday lunchtime FOE had a stall in the open air, along with exhibitions of solar equipment, such as a solar water pumping unit.

One area that is doing poorly is solar domestic hot water services. These are being frozen out by low tariffs for gas, and artificially low tariffs for off-peak electricity.

Steve Kenef of the Australian National University is one of the leading people in the Australian solar energy field. In his paper, *Can Solar Energy Reduce Significantly the CO₂ and other Environmental Problems?* he wrote,

Although it is already too late to change many aspects of the greenhouse situation, it is certain that the overall cost in both real environmental as well as economists terms would be far lower if a more benign sustainable energy future were introduced as a matter of urgency. Since solar energy is such an alternative, it should be rapidly introduced. For this to happen, certain profound philosophical and practical aspects should be taken aboard by society urgently, as a matter of basic policy

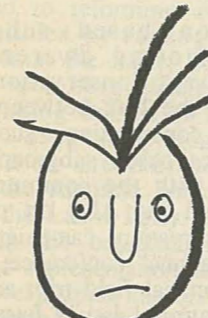
One of the papers listed but not presented did have relevance to the third world. It is still under wraps, patents pending. A solar-operated, portable medical sterilizer is being developed by a group at the Physics Department, Sydney University, under Dr David Mills. This is soon to be exhibited by the World Health Organisation in Geneva. Countries already interested in its use include China, Zimbabwe and Cuba.

The 80 papers take some digesting. But they represent the latest trends in alternative energies - photovoltaics, solar, thermal, wood, biomass, wind, hydro. Even if the Australian picture is not very encouraging, the proceedings volume is worthy of study. A copy is available for perusal at FOE Fitzroy.

Bert King is a retired engineer and active member of FOE Fitzroy.



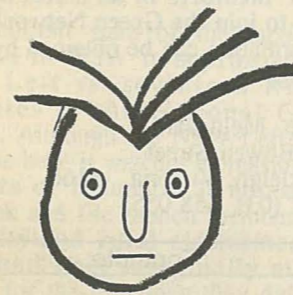
I DON'T KNOW WHAT'S WRONG WITH PEOPLE TODAY



THEY DON'T SEEM TO CARE ABOUT URANIUM MINING, LOGGING OUR UNTOUCHED FORESTS, MINING IN NATIONAL PARKS...



OR THE THINGS WE CAN DO TO CHANGE ALL THIS



LIKE, WHY DON'T THEY JOIN THE ALP?

ALP turning green?

The Australian Labor Party (ALP) has been widely criticised by many groups, including environmentalists, for its pragmatic approach to problems, especially since its election to Federal Government in 1983. Many people have left the Party, seeing that their energies would achieve better results elsewhere.

However, some people see that the ALP in power has a good chance to achieve some change, and have decided to focus on changing the Party from within. *Chain Reaction* asked two groups active within the ALP to provide material explaining their approach. We invite reader comment on these articles, as we do for all *Chain Reaction* articles.



ALP Green Network
WORKING FOR CONSERVATION

Established in Victoria in 1986, the ALP Green Network set out to fill a vacuum in the conservation movement and within the Australian Labor Party. Some of the problems we saw included:

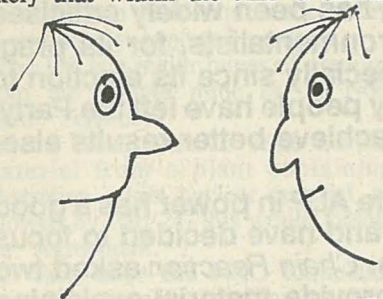
- the apparent gulf separating the labour and conservation movements (despite a short-lived romance in the mid-70s);
- a general lack of understanding of the conservation movement within the ALP;

- a general lack of ALP Branch involvement in effectively targeting their lobbying of the ALP (due to lack of understanding of party processes and structures);
- lack of active ALP rank and file support for some courageous Government initiatives in the conservation area; and
- problems associated with some lack of implementation of ALP policy particularly at the

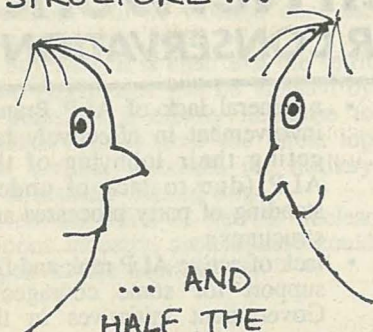
federal level, and problems with implementation of Government strategies at the State level.

The aims of the ALP Green Network were formed to address these problems and our strategies evolved over a period of two years. Research done in 1985 showed that some 10 per cent of the Victorian ALP membership belonged to some form of conservation organisation: this meant that there were many hundreds of people in the party whose energies and talents could potentially be called upon.

The same research had also show that 'conservation' covered an enormous range of issues (e.g. peace, pollution, animal welfare, some forms of recreation, nature conservation, conservation of energy and resources, transport, Aboriginal land rights, population policy, agricultural methods, historic heritage), but that there was a lack of general awareness that this was the case. It was therefore felt to be important that the Green Network take on the task of addressing this problem as well. The membership of the conservation movement was, furthermore, found to be composed of people from the entire political spectrum, so it was thought likely that within the ALP a similar



AT THE LAST MEETING
WE AGREED TO
SUPPORT A BRANCH
STRUCTURE...



... AND
HALF THE
MEMBERS RUSHED
AWAY TO SAVE TREES!

situation would be found. Finally, a comprehensive study of research done in England, the USA and Australia showed that the most sophisticated sectors of the conservation movement made the link between economic structures, social justice policies and conservation strategies, to give a certain set of interlinked values: for example, there is a direct relationship between social injustice and the treatment of both people and ecosystems as commodities to be exploited.

Structure and Aims

Based on this research, and certain pragmatic considerations, the Green Network took the shape of an activist organisation that is neither a faction nor a policy formulating body, and which complements existing ALP structures rather than competing with them. The aims are highly ambitious and of an essentially radical nature based on long term strategies. From the outset the Green Network intended to expand its activities beyond Victoria, current membership in Victoria is about 225, with regional subgroups in about one third of the federal electorates.

The structure of the Green Network was designed to reflect the aims, regional logistics (such as the difficulties faced by country members in attending meetings), social considerations (such as the need to develop trust and mutual respect amongst the membership), and the values adopted by sophisticated sectors of the conservation movement. To take these 'values' first, the membership decided that there would not be elected positions or voting on decisions and that subgroups of the Network would be as autonomous as possible. Organisational models such as this one, which use modern community development principles, are frequently referred to as 'collective', using non-hierarchical structures and consensus decision-making. These structures promote maximum organisational flexibility, and allow rapid response to imaginative and creative approaches to problem solving. A pragmatic reason for adopting this model related to the perceived counter-productivity of adopting a factional approach, with its associated number crunching processes aimed at policy making rather than implementation of policy.

The final result was:

- a Co-ordinating Committee composed of anyone taking on

an active role, meeting at six weekly intervals in various parts of Melbourne and once a year in a semi-rural location, summaries of which meetings are sent to all members;

- a six weekly strategic newsletter sent to State and Federal Members of Parliament, affiliated trade unions and the membership, and which is designed to assist Network members in conducting conservation campaigns;
- locality based subgroups working on local issues in cooperation with community organisations;
- union based subgroups promoting awareness of relevant conservation issues and the link between labour and conservation issues;
- issues based subgroups working with the community and within the ALP on particular conservation campaigns;
- an annual conference;
- an annual field trip; and
- an annual issues based/social Labor delegates from around Australia would change the balance of power at National Conference and consequently ALP policies. We see this as the only way to effective political change, since the ALP is the only party capable of winning seats in the House of Representatives and forming a Government with sane conservation and nuclear issues.

Some of our achievements to date are the inclusion of conservation as a major part of the recent Victorian election platform, a large increase in the profile of the Conservation and Environment Policy Committee report at Victorian State Conferences, an active working organisation, the prevention of the Japanese company - Harris Daishowa - from gaining a 100,000 tonne woodchip licence in Victoria, the legitimisation of conservation as an issue area relevant to ALP Branches throughout many parts of Victoria, and some initial gains in terms of more meaningful and constructive relationships with some half dozen major trade unions over relevant conservation issues.

ALP members in all states are invited to join the Green Network

Information can be obtained by contacting:

Inge Meldgaard
46 Bowen Street
Oakleigh, Victoria, 3166
Tel: (03) 568 0553

Footnote:

1. I. Meldgaard, 'A Demographic and Political Profile of Victorian Conservationists', Swinburne Institute of Technology, 1985.

GREEN LABOR

Green Labor is a group of 300-500 ALP members, led by Drs Helen and Bill Caldicott, who feel that although ALP policy is superior to the other major parties, it has major weaknesses in the very important areas of conservation and the nuclear problem. The consequences of these inadequacies are that not only are future generations of Australians threatened, so too is the survival of the planet. Therefore Green Labor is committed to reforming a range of ALP policies by raising them in debate within the Party, and by getting its members elected to the policy-making bodies of the ALP. This will eventually mean representation at the National Conference, the supreme policy making body of the Labor Party, as well as success in the preselection process leading to representation in caucus.

A relatively small number of Green Labor delegates from around Australia would change the balance of power at National Conference and consequently ALP policies. We see this as the only way to effective political change, since the ALP is the only party capable of winning seats in the House of Representatives and forming a Government with sane conservation and nuclear issues.

The internal policies of the ALP can be democratic, so our aims can be achieved if sufficient people are prepared to work for them as a cohesive group.

Background

The NSW Right Wing of the ALP has long had a stranglehold over the Party's National Conference. They have also had incredible power at caucus level, because of their near monopoly of the NSW pre-selection process.

The current state of the factional strength in NSW is approximately seven Left vs. seventeen Right delegates to the National Conference. Although the NSW Left was doing its best, it was not increasing its numbers or influence. It appeared that rank and file branch members in both city and rural electorates in NSW had only marginally more respect for the Left than they did for the Right.

As the Left was struggling just to maintain its poor position, it became obvious that a fresh approach was

needed. It would take the form of a new grouping, neither Left nor Right, that was committed to reforming the Party's nuclear and conservation policies. These are the issues closest to the hearts of ordinary ALP members. This group would be similar to Victoria's Green Network with the main difference being that Green Labor would stand its own candidates at all levels of the Party.

The problem was leadership in the initial, difficult stages, but when the Caldicotts moved back to live in Australia, they were approached and were eager to support the scheme and it was decided to launch Green Labor in NSW in June 1988.

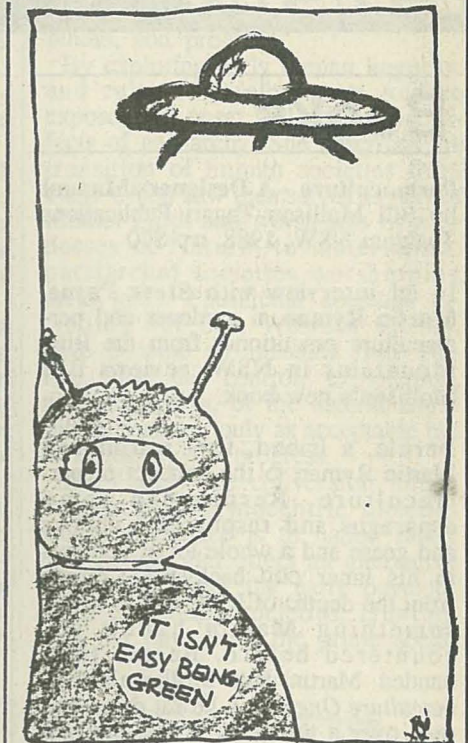
Information was sent to conservation and peace groups throughout Australia to give all interested people the option of joining us, or at least knowing what we were doing. Letters were also sent to all ALP Branch Secretaries and the project received wide media coverage and it soon spread beyond the borders of NSW. Having had to go national, our next priority after NSW was the 'Centre Left' States, in order, Queensland, WA, SA, and Tasmania.

Structure and Aims

It is early days yet, and current plans will change if the membership of Green Labor decide on alternatives. Our interim aims include the promotion of nuclear and conservation issues within the ALP; gaining the balance of power at National and State Conference levels; having Green Labor members elected to Parliament; and encouraging discontented ALP members to remain with the Party, as well as attracting new and past members, especially women and young people, who are currently under-represented.

Our structure will be based on the support we receive in each State and may not be identical in each. Current plans are for Green Labor members in each State to elect an executive and a convenor. There would be a National Executive comprising our national convenors, a National Secretary and the convenor from each State. States could share their position on the Executive between two or three people. Voting would mostly be by postal ballot.

We considered the question of whether Green Labor should have



candidates standing for State and National Conferences, or whether it should be a cross factional network. We decided it was necessary to have representation at National Conference level, because the Left were continually being beaten by the Right/Centre Left coalition when it came to the policies we cared about most. An input of Green Labor delegates could eventually alter the balance of power and consequently be able to improve the Party's policies on nuclear and conservation issues.

We believe that Green Labor should operate as an independent entity to be effective in its attempts to change ALP policy. Networks can play a valuable role within the Party, but unless they get their own people elected to the policy making bodies, they are reliant on the factions to represent them.

Green Labor is now active in each State and you can join by joining the ALP and contacting Green Labor.

For further information:

Gordon McQuilten
National Secretary
Green Labor
Post Office, Maldon, Vic, 3463
Tel: (054) 752 339

REVIEWS

Books

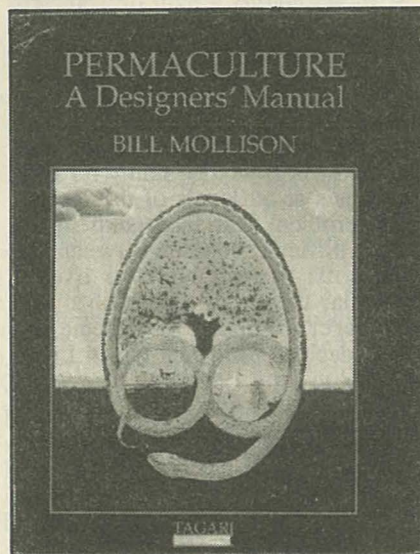
Permaculture - A Designers Manual
by Bill Mollison Tagari Publications
Tyalgum NSW, 1988. rrp \$70

In an interview with Steve Payne, Martin Ryman, a gardener and permaculture practitioner from the Blue Mountains in NSW, reviews Bill Mollison's new book.

Bernie, a friend, first introduced Martin Ryman to the concept of permaculture. Bernie had some asparagus and raspberries, chooks and geese and a whole lot of compost in his inner city backyard. Coming from the depths of Kings Cross it was something Martin hadn't encountered before. Bernie then handed Martin Bill Mollison's *Permaculture One* which he sat down and read over a weekend. It was the first gardening book Martin had ever read and to his surprise he found it tremendously entertaining. It was commonsensical about the whole of life, as is the new book.

To Martin it all made sense. The details were there, the philosophy of creating patterns and systems which largely looked after themselves appealed in the sense that, here was something you didn't have to spend years pulling up weeds to manage. Although permaculture takes time and energy to set up, once established, it requires minimum energy to maintain and harvest. So *Permaculture One* was Martin's inspiration, and after buying an old sheep paddock in Hazelbrook in 1980, building a home and having a child, he began to turn it into a permaculture garden.

Martin - I think the Designer's Manual is the ultimate permaculture book. It is universal in all senses of the word. *Permaculture One* was written much more from the perspective of south east Australia and Tasmania - the cooler climates. In *Permaculture Two* there was a lot on arid environments and Aboriginality, but it was still Australia bound within a European context. The thing that impresses about this Manual is that it is 'everywhere'. You could take it to



South America or Alaska and it would be a useful book, as long as you could talk to the locals.

Steve - Is it practical as well as universal? Does it give guides as to how to create a sustainable future?

Martin - Yes. But in five hundred odd pages what you cannot have is a complete answer to the situation the world is in. What it does give is guides and signposts to every person who has access to some land, to every person or community that is involved with some land and can work on systems relevant to their area, guides that promote universal peace and sustainable ecosystems.

It's a very subversive book. It advocates a tax on lawns, and what should be more subversive than to advocate that we dig up lawns in Australia. It attacks the whole petro-chemical, pesticide industry. It points out how unnecessary they are and it attacks the economic foundations of our political consciousness because it attacks the whole concept of the growth economy. Bill Mollison is talking about sustainable systems and growth economies are not sustainable systems - they either go bust or they do as they are now, that is eating up the whole world until there is nothing left.

There is only one problem I have with this book. I believe that people have the ability to stop the present

destruction of the environment but I don't believe they can stop the climatic changes that are occurring. In *Permaculture - A Designer's Manual* there is no direct mention of the greenhouse effect, and I think that one thing permaculture people have to ask themselves is how the systems they have in place, or will have, are going to maximise the benefits for them of the greenhouse effect, for the changes in some areas can be beneficial. I don't think the world will survive the greenhouse effect unless people start looking at permaculture systems as ways of feeding the world.

Ultimately this is a designer's manual, not necessarily a manual for practitioners, and that should be borne in mind. At my first book I felt a level of frustration because I am not a designer that sets up systems for other people and communities. I am just doing it in my own valley, and as a practitioner I'm concerned with specifics. This book at least gives me the frame work for finding solutions and gives a new sense of direction. So it is practical in the sense that it still leaves the responsibility with the individual to find the answers.

Steve - Is it a positive book?

Martin - I'll be digging my pond because of it. I'm a converted aquaculturist. What was going to be a pretty garden pond with lilies and ducks will now be part of my overall permaculture system and actually provide food to the household and be of benefit to the environment. I could build the pond just from the information found in this book and there are signposts to tell me where I can get more.

I think what Bill Mollison has done is to take elements from all over the world, from varieties of cultures and societies, and bring them together in this book with a philosophy that is positive and inspirational.

Steve - What did you enjoy most about the Manual?

Martin - I love the illustrations - they are continually leading me in search of more information. The section on 'patterning' is particularly interesting. For example, it brings together all the discussion on energy centres, the way the Aborigines view the landscape or express themselves in the land, and the relationship they have with specific places.

As I travel about the world I find tribal peoples using an enormous variety of traditional patterns. These decorate weapons, houses, skin, and woven textiles or baskets. Many patterns have sophisticated meaning, and almost all have a series of songs or chants associated with them. tribal

art, including the forms of Celtic and ancient engraving, have a pattern complexity that may have had important meanings to their peoples. We may call such people illiterate only if we ignore their patterns, songs and dances as a valid literature and as an accurate recording system.

Steve - You said earlier you thought *The Designer's Manual* was subversive. Could you talk about that more?

Martin - In terms of food production, does without the bits that humans add in, those bits being chemical fertilizers, hybrid plant varieties that have to be introduced over and over again, and pesticides and fungicides to control the insect population and diseases. Anything that says those three things are not of use in the system denies a major sector of our economy. There are all these false economies that have been created, and Bill Mollison is saying get rid of them. Anything that says that is an attack on the capitalist system.

Steve - Will people outside of permaculture discover this book?

Martin - Well I think this is where permaculturists have to reach out and let other people reach out and let other people know what they are doing and showing the benefits to people. There are places now, after nearly a decade of permaculture in Australia, where people can come and see - this is a permaculture garden, they can see that there are spiders catching insects, food being produced without chemicals. There is a willingness on the part of the people to learn about things like permaculture. Whenever there is a television or radio program that deals with permaculture, seed savers, or things such as bio-dynamic gardening, there is a huge response from the public.

Steve - Why is there such a huge interest in these things?

Martin - Because people are concerned about what they eat, how it was produced, and where it came from. Permaculture needs to be popularised.

Steve - And this can happen through what you create in your garden and then share?

Martin - I'm always giving food away. In permaculture there is always excess. The garden appeals to people's senses. People look at it and enjoy it, to touch and smell and feel a sense of peace.

Steve Payne is a free-lance writer who has written for *New Age Times* and *Work Matters*.

Rape of the Wild by Andree Collard with Joyce Contrucci, Women's Press, 1988, \$21.95

Reviewed by Linden Gillbank

How brave of the authors to dare to challenge the very basis of our materialistic and exploitative Western society. How refreshing to have some of my own heartfelt attitudes examined and explored in ways I'd never considered.

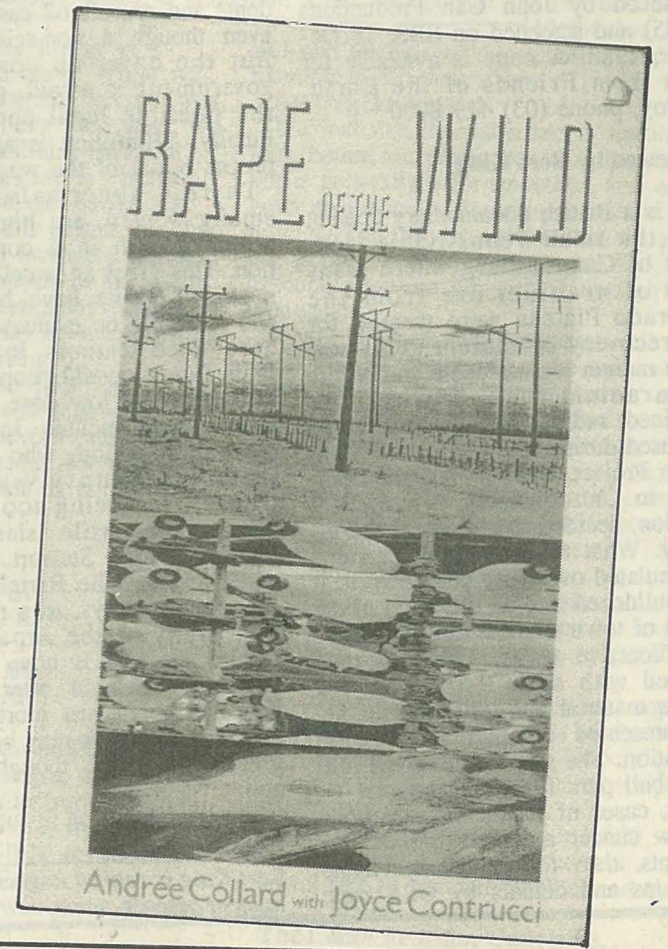
Andree Collard was a farmer and beekeeper, a professor of romance languages and comparative literature at Brandeis University, USA, and a women's rights activist. Drawing on her passionate love of living creatures, and her diverse interests and activities, she wove feelings and facts into *Rape of the Wild*. Following her death from cancer before completing the book, Joyce Contrucci, helped by numerous other friends, managed to bring to fruition this labour of love.

While much has been written in academic journals and in the popular press about feminism and about ecology, few attempts have been made to link the two. By focusing on various aspects of Western society, *Rape of*

the Wild attempts not only to reveal the links between feminism and ecology, but to put ecology back into feminism... Otherwise the supremacist mentality that rules the affairs of our planet will continue to run its destructive course and annihilate us all in the name of health, happiness, and progress.

By exploring early human linguistic and cultural developments Andree exposes the onset and destructive effects of patriarchy. She describes the transition of human societies from those which saw themselves as part of Mother Earth and worshipers of goddesses of Nature, to materialistic patriarchal societies worshipping male gods. Patriarchal societies including our own Western society, have become so alienated from Nature, that the control, exploitation, and destruction, of the natural world can be seen not only as acceptable but as necessary for progress.

She charts the conversion under patriarchy of gynocentric societies whose allegiance is to nation rather than nature, and offers an alternative guestimate about the early development of human societies. Hunting may not have been the prime social



REVIEWS

mover. Ancient artifacts, which Leaky interprets as weapons, may instead have been tools for the collection and processing of roots or fruit. Perhaps strong family and kinship bonds, held together primarily by women, directed the development of early gathering, rather than male-dominated hunting societies. The cruelty and inappropriateness

of animal experiments is explored and condemned. Both animals and women are exploited. While animals are exploited often so inhumanely in experiments, women are too often the targets for the marketing of the products of that research - for example, dietetic foods, youthful make-up, deodorising sprays and cleansers. While I applaud the exposure of the

Video

Cannonsburg: Twenty years' on. Produced by John Gan Productions (1985) and screened on SBS, 18 October, 1988. A copy is available for loan from Friends of the Earth, Fitzroy, phone (03) 419 8700

Reviewed by Bert King

This is a British documentary dealing with the small Pennsylvania USA town of Cannonsburg where many tons of uranium ore from the Colorado Plateau were treated for the recovery of radium. This was when radium was valuable and before the uranium rush. The residue remained radioactive. In fact some was used during the war for the Manhattan Project. But in 1965 the company in Cannonsburg, Victo Corporation, decided to get out of the industry. What to do with the residue accumulated over fifty years? Well, it was bulldozed into an old pond in the centre of town - half a million tonnes of radioactive waste. This was then covered with shale - 'red dog' - a porous material and quite unsuitable. It represented no barrier to radon emanation. The site then evolved into a baseball park for young people.

Now, cases of leukaemia and bone marrow cancer are worrying the inhabitants. then follow the inevitable cover-ups and denials by USA state

and federal energy agencies. No worries! A Catholic school is moved - the sisters considered it too dangerous to stay.

Janis Dunn becomes a local activist, she does her own survey of the residents and reveals 67 cases of cancer, even though a non-scientific study. But the cover-up continues, the government is afraid, doubtless, of the possible legal consequences. Finally, \$30million is allocated to a proper burial of the waste.

Thyroid abnormalities, mainly among women, are higher in Cannonsburg than in a control population. This gives an excellent basis for a study; people have been exposed and it should be evaluated.

the video features, in addition to Janis Dunn, several people notable in the science of low dose radiation effects. These include John Gofman, Gordán McLeod, who was sacked from the Pennsylvania Health Depart, for being too concerned about Three Mile Island, Edward Radford, Alice Stewart, Robert Alvarez and Rosalie Bertell.

As Radford says, as a result of further study of the Japanese bomb results, the risk is now greater than previously thought after looking at new cases, not just mortalities. Low dose radiation risk may be 8-10 times greater than was thought a decade ago.

Excellent viewing - highly recommended.

Bert King is retired engineer and anti-nuclear activist

unnecessary cruelty behind the cosmetics industry, in the field of medical research I feel that the authors are too severe. Cruelty is not a necessary component of animal experimentation. As long as there remain areas of medical research in which live animals cannot be replaced by tissue culture or some other alternative, are medical questions in these areas, such as diet and cardiovascular problems, to be denied scientific investigation?

Two Australians rate a mention in the book, Peter Singer for his discussions of animal liberation and the immorality of animal experimentation and intensive farming, and Helen Caldicott for her persuasive anti-nuclear stance.

While the examples of societies that have not lost their kinship with the earth are American, those of the American Indian, Australian Aboriginal societies would provide equally good examples. How long will the power brokers of American and Australian Western societies continue to ignore or belittle the traditional sensitive and non-exploitative relationships with the land of these peoples?

I enjoyed reading this challenging book and recommend it to anyone interested in the ways that men and women live in Western society. It could provide a springboard for the discussion of many of the issues considered in the book - the power of language, human evolution, hunting, animal experimentation, eugenics, reproductive technology, and conservation.

If Rachel Carson's *Silent Spring* was pivotal in the expansion of environmental awareness, perhaps *Rape of the Wild* will do likewise for eco-feminism. According to Andree and Joyce:

Historically, our destiny as women and the destiny of nature are inseparable. It began within earth/goddess-worshipping societies which celebrated the life-giving and life-sustaining powers of woman and nature, and it remains despite our brutal negation and violation in the present. Women must re-member and re-claim our biophilic power. Drawing upon it we must make the choices that will affirm and foster life, directing the future away from the nowhere of the fathers for the somewhere that is ours - on this planet - now.

Linden Gillbank is a contributor to the 3CR Science show.

LETTERS

From page 2

also one 'breeder' with liquid sodium as coolant. Despite protests from all quarters the Government is going ahead with plans for twelve more nukes in the coming years.

They also plan to import one from the USSR and the work for the same is already started at a small fishing village at Koodankulam. Here the information on nukes, uranium mining, thorium mining, reprocessing facilities etc will be useful. We also export a lot of 'sea and sand' which contains some rare earth, to Japan. this is done by 'Indian Rare Earths Ltd'.

There is one plant coming up near a virgin patch of rainforest in Kaiga in the nearby state of Karnataka. Despite vigorous protests the Department of Atomic Energy has started work on this site, clearing some 2,500 acres of pristine rainforest.

In this country it is very difficult to convince people about the nature of radiation etc. because most are illiterate. A good movie would be very useful. Does the video reviewed in *Chain Reaction 53, Cold Comfort*, have anything to do with reactors? If you think it is relevant to the anti-nuke campaign please let me know so that I can get it. Suggest ant other worthwhile film.

I look forward to the back issues which cover the 'nuke industry'. Kindly let me know the cost of these too.

Kannan Raveendran
Tamil Nadu, India.

New Prices

The last time *Chain Reaction* raised its prices was mid 1986 when there was an adjustment to provide for a six issue subscription, changing from four issues.

We have now decided to convert to four or eight issues per subscription, and to raise our prices to go some way to covering costs. The decision to have six issues per subscription was based on the option of bringing out *Chain Reaction* six times in one year. While we have found that there is enough material for six issues a year, it is too much for our current resources.

So rather than have subscriptions which are effectively for eighteen months, we want to move to having one or two year subs. This is easier for most people and institutions to organise, and does not involve too much extra subs handling for us.

We are also raising our prices in recognition of increased costs. While we have been able to reduce production costs, printing and materials have increased. We also have an ongoing difficult financial situation where the magazine is effectively subsidised by Friends of the Earth. The new prices will reduce this deficit, but we are really relying on an increased number of subscriptions and Friends of the Earth members to make the magazine financially viable. Meanwhile we may have to do some fundraising to reduce the gap.

The new rates will take effect in February 1989, and we will renew all current subscribers at the old rate even if their subscription is not due for renewal, provided that they contact us before the end of February.

New rates:
Cover price \$3
one year (four issues) \$12
two year (eight issues) \$21
Concession rates
one year (four issues) \$9
two year (eight issues) \$17

A New Era

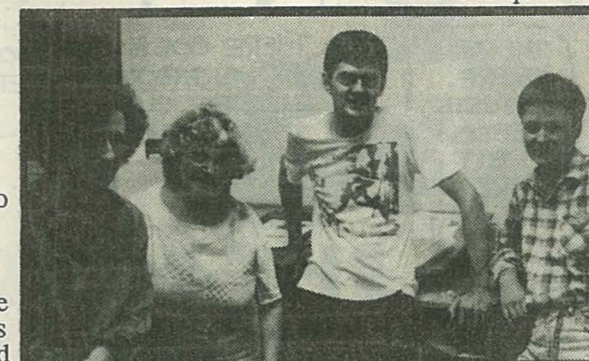
Chain Reaction has been based in Melbourne ever since it began in 1975, but will be located in Adelaide from the end of January 1989. The move is only for one year at this stage, and will be reviewed later by Friends of the Earth.

The current collective was going to have

to break up, as Clare and Larry decided to move to Adelaide for Clare's studies. Eileen was looking forward to having a break from *Chain Reaction*, having worked on it for over six years as a volunteer, and Ian is going to take advantage of the opportunity to get some well paid work. The proposal was put to other Friends of the Earth groups around Australia, and so far there has been no objection, other than from a few non-Friends of the Earth Adelaide people who think we may stir things up.

The move is quite exciting, as there has been good support already from people in Adelaide, and although many in Melbourne will miss having *Chain Reaction* in their backyard, there have been promises of articles and regular contact.

We will maintain our postal address at GPO Box 530E, Melbourne, 3001



The collective that produced *Chain Reaction* April 1986-January 1989: Ian Foletta, Eileen Goodfield, Larry O'Loughlin, Clare Henderson

and will tell you of our actual Adelaide location in the next issue.

An Urgent Appeal

We feel that the magazine is starting to look better, its production still has bumps but is generally a lot smoother, and we have no difficulty getting promises for articles. The only trouble is that we are not getting enough subscribers, and especially we are not getting enough renewals.

If you don't like the magazine, tell us. Then we can adjust and make sure we produce a magazine people want to read.

If you can't afford a subscription, consider a concessional rate. We don't put any conditions on eligibility, you decide. And since we have now reverted to one and two year subscriptions (see above) you can actually be paying out less of a lump of money to get a subscription.

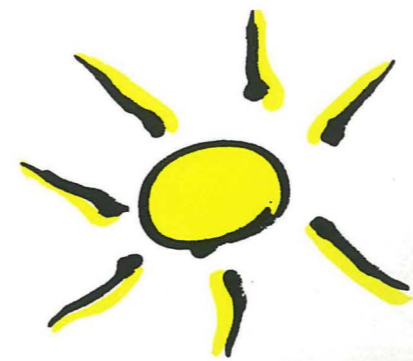
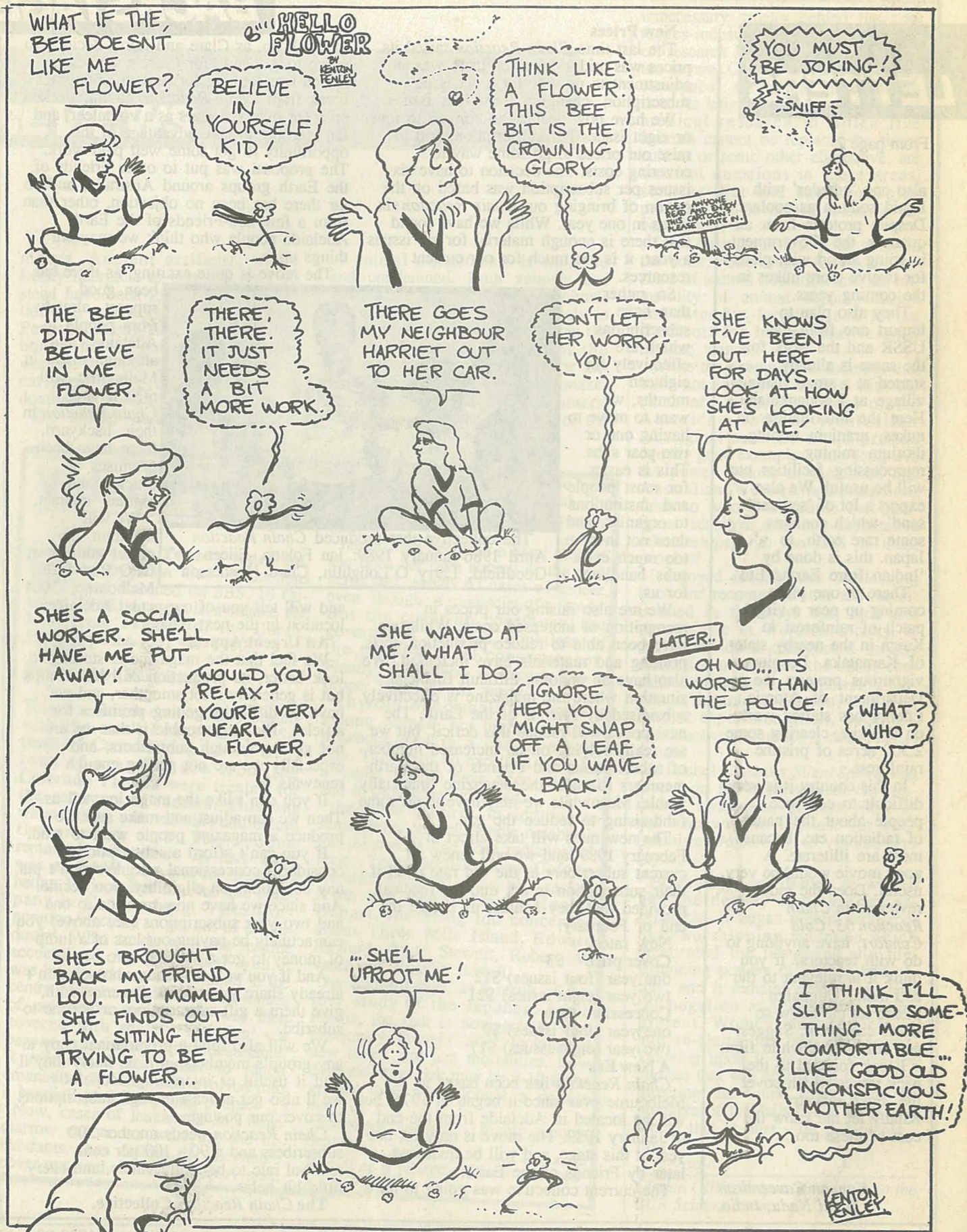
And if you've got friends who you don't already share your *Chain Reaction* with, give them a gift subscription, or get the to subscribe.

We will also send a promotional copy to any group's membership if its likely they'll find it useful or interesting. Hopefully we'll also get at least enough subscriptions to cover our postage.

Chain Reaction needs another 500 subscribers and a 90 - 100 per cent renewal rate to be really viable, and every little bit helps.

The *Chain Reaction* Collective.

Photo: Simon Kohane



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Organic Fruit and Vegetable Co-op: 222 Brunswick St, Fitzroy 3065, Ph (03) 419 9926
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 Adelaide: 120 Wakefield St, Adelaide 5000
Adelaide University: C/- Clubs Association, Adelaide University, 5000 Ph (08) 228 5852
 Willunga: PO Box 438, Willunga, 5172
 Williamstown: C/- Post Office, Williamstown 5351
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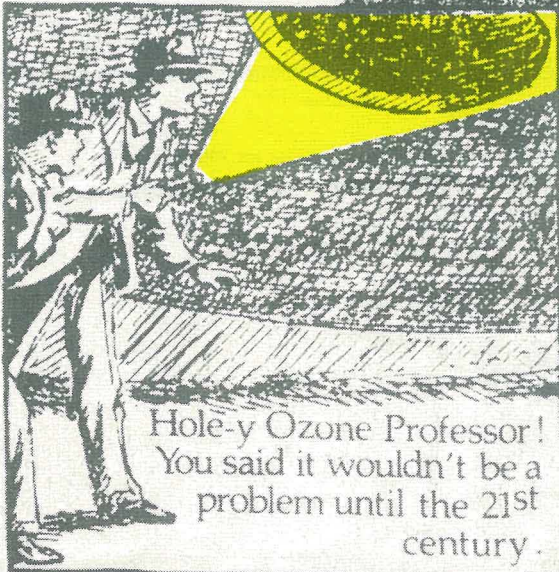
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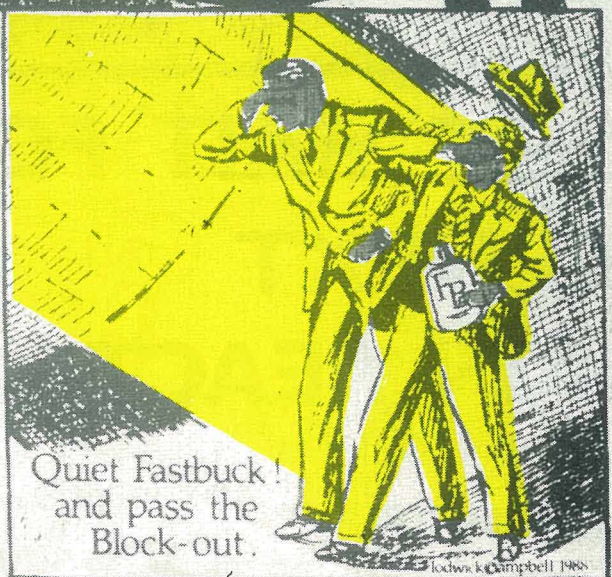
THE HOLE STORY

By the year 2060 you won't be able to go out of doors AT ALL!

cut out cfc's



Hole-y Ozone Professor!
You said it wouldn't be a
problem until the 21st
century.



Quiet Fastbuck!
and pass the
Block-out.

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