

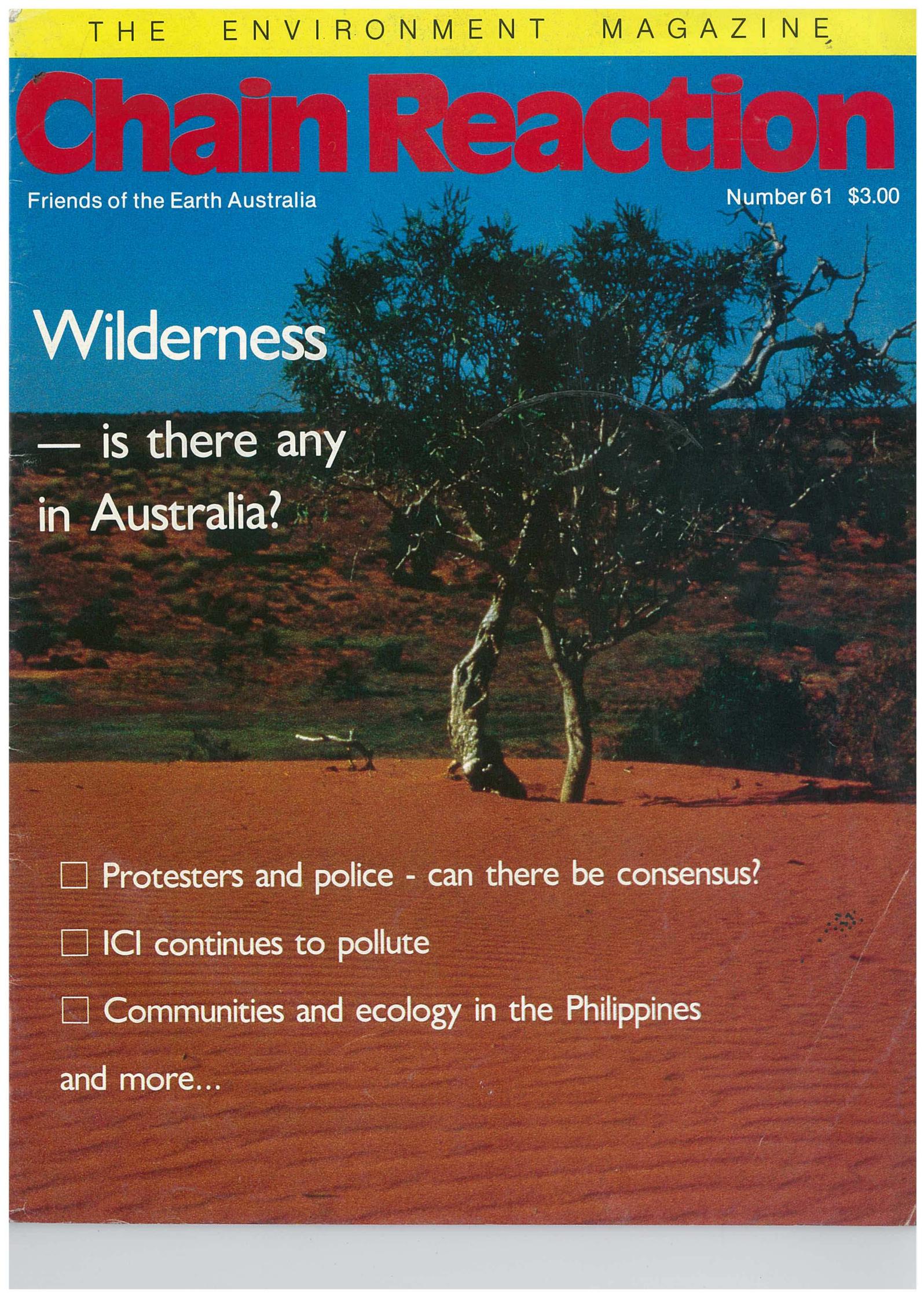
Chain Reaction

Friends of the Earth Australia

Number 61 \$3.00

Wilderness

— is there any
in Australia?

- 
- Protesters and police - can there be consensus?
 - ICI continues to pollute
 - Communities and ecology in the Philippines
- and more...

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Garry Smith

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Letters

Time to act

As a worker in the Performing Arts, specifically theatre, I was very interested in the Rainforest Action Group's approach (*Chain Reaction* 60) to the musicians at the free concert in Adelaide. In fact I watched the program on TV and noted that it was a shame it was sponsored by a car manufacturer.

The decision to get involved in the environment movement is difficult, far more so for actors, who in the early stages of their careers are likely to find themselves needing the remuneration provided by advertising. As awareness increases we can undoubtedly expect a panic reaction from those companies making unsound products, across the whole range, from washing powders to cars.

The issue of advertising as coercive and subliminal has been long debated, and the added gentle inputs of environmental information to performers and workers in the industry, for there are many more individuals "off-stage" than on, could make a great deal of difference to the pace of change. I therefore applaud any approaches to individuals and the unions representing the industry, provided — of course, they remain non-violent, with an emphasis on information.

Robyn Buschmann
Coniston, New South Wales

Confusion over land

The otherwise incisive article 'Defencing the Realm' (*Chain Reaction* 60) fails to penetrate the fundamental qualities of property, which was too loosely defined as "accrued wealth, stolen land, pilfered goods". As modern economists include land in their definition of capital, similarly this article doesn't make the distinction between land and all other forms of property.

The enclosure and misappropriation of common land (which actually began in 16th century Britain) is rightly condemned as robbery; for land should be the common wealth of all humankind. No person created it, so all should share equally in its benefits. However, let us not confuse land with goods which can only be produced by human effort and which should accrue, where no privileges exist, to the worker.

Security of land tenure is essential for most production to occur, but this need not necessarily lead to the evils of land monopoly. Exclusive possession of land should only be granted in return for site rental (sometimes incorrectly termed "land tax") which is then available to be distributed amongst the people in accordance with their needs. As the desirability of land varies according to agricultural or location advantages, so too should the site rental.

These and other universal principles were re-discovered a century ago by the great humanitarian and economist Henry George. They were fought against and muffled by such outrageously undemocratic institutions as the English

House of Lords. A small group of economists still battle to overcome the academic and political ignorance of these issues, but worldwide a number of FOE groups have recently embraced "Georgism". In particular, Shirley-Anne Hardy (of FOE Scotland) in her book *The Land Question* has elegantly developed an ecological aspect of Georgist site rent in her theory of "Maximum Sustainable Yield". For FOE to have a wider impact, such economic principles must be understood.

Karl Williams
Tecoma, Victoria

Green network resources

How can environmentalists tap into widespread public support for conservation and retain a radical agenda? I agree with Larry O'Loughlin (*Chain Reaction* 60) that environmental groups need to reconsider their involvement in parliamentary elections.

The green movement needs new directions which push for reform, but, at the same time, promote radical restructuring. Green independents are needed in

parliament, but mainly to provide greater financial, media and research resources for extra-parliamentary grass-roots groups. We need more people in local government where pioneering reforms (e.g. LETS, recycling, participatory decision making) can be tested. The green movement needs to invest more energy into sustaining itself. This means investment in information technology to assist networking and in training people.

Also urgently needed is better office resources; such as fax machines, compatible computers, desk-top publishing equipment, filing cabinets, library resources, permanent office and meeting spaces. We also need to develop training schemes to equip newcomers (and oldies!) to the movement with such skills as communication, business management, employment generation, fundraising, and of course, campaigning skills.

There is no substitute for solid foundations and good housekeeping. Radical change involves building pro-active strategies. This takes sustained effort. It is essential that we tap into the current public support

by investing in people's skills, resource centres and appropriate information technologies. All this needs to begin now, not in the lead up to the next Federal election!

Basil Schur
Denmark, Western Australia

Energy efficient?

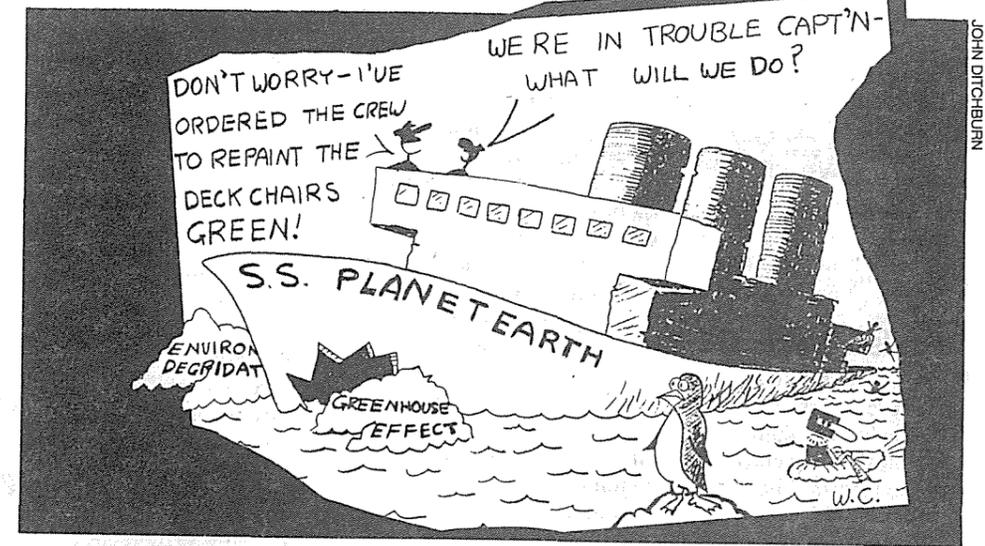
I have bought the occasional issues of *Chain Reaction* in the past, but issue 60 was terrific. Thanks for opening my eyes about Mitsubishi; I was going to buy one of their video recorders.

In a supplement that came with the English magazine *Green Magazine* they suggest that for a family of four it would be more energy efficient to have a dishwasher. For each full load an average dishwasher is said to use about 20 litres of water and 1.5 kilowatt hours of energy whereas to wash the equivalent dishes by hand would use a total of 40 - 60 litres of water and 2 - 3kwh. I had always thought the converse was true.

I thoroughly enjoyed your review of the green guides. I am also impressed with the way you are so honest by admitting that it is difficult to radically change people's lifestyles. We need to encourage people gently rather than bombard them with directives on what they should do with their lives.

Jeff Cox
Henley Beach, South Australia

Editors Note: The figures quoted do not include the energy used in the manufacture of the dishwasher or in the extraction of resources. If this was considered it is doubtful that it would compare favourably with hand washing.



Intractable waste problem

It is unfortunate and depressing that *Chain Reaction* (Number 60) should use the hackneyed device of incomplete quotation to misrepresent the work of the Intractable Waste Taskforce.

In particular I refer to your referencing the Taskforce's January 1990 Progress Report as recommending "a major community consultation program" which includes insuring that "the siting of a high temperature incinerator facility in New South Wales is carried out in line with the community interest" as evidence that the Taskforce is "still more concerned with disposal solutions than with broader hazardous waste management strategies, such as waste minimisation".

The dubious nature of that criticism is clear when the complete sentence from which the offending quotation was selectively lifted is revealed, namely:

The Phase 2 Report recommends a major community consultation program to ensure that the minimisation, management and disposal of

intractable waste, including a state-of-the-art high temperature incineration facility in New South Wales, is carried out in line with the community interest.

Moreover the 300 page report states quite categorically that "waste prevention (that is the avoidance of future waste generation) is the appropriate management process to apply to intractable waste."

Recommendation 4.3 in the Report states "it is recommended that in order to eliminate, as far as possible, the need for the proposed high temperature incinerator facility after ten years of operation, production by processes which inevitably give rise to the generation of intractable chemical waste for which there is no environmentally acceptable means of disposal other than the proposed high temperature incineration facility be prohibited from 1 January 1995."

It is a matter of public record that the Commonwealth, New South Wales and Victorian Governments have agreed to implement this recommendation. Yet we still find people determined to oppose the destruction of the non-

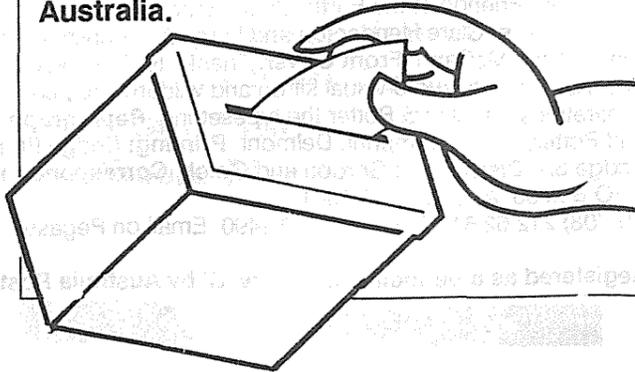
preventable stock pile of, at minimum, 93,000 tonnes of concentrated intractable waste (most of which is ozone-depleting CFCs and halons) and 45,000 tonnes of contaminated soil in a plant which would have emission standards far tighter than apply to any currently operating plant in Australia.

It would be interesting to hear of any group which has produced a more detailed prescription for preventative and participatory hazardous waste management than that contained in the Taskforce's two reports to date.

False and gratuitous criticisms and vague references to unproven future solutions (which would probably be opposed by the reductionists of that time) seem merely to enhance the prospects of our bequeathing an organochlorine body burden to our great grandchildren, provided they haven't previously been fried under that insidiously-expanding ozone hole courtesy of our unwillingness to clean up the mess once and for all.

Peter Brotherton
Elsternwick, Victoria

You are invited to write letters to *Chain Reaction* with your comments on the magazine or any other issues of interest. Write today to *Chain Reaction*, GPO Box 90, Adelaide, 5001, South Australia.



Letters

Open letter to FOE

Have you ever heard of "over there ethics"? You know, the lumber companies should stop cutting down the forests. The Japanese should stop killing whales. The oil companies should stop off-shore drilling. Industry should stop polluting the rivers, etc. All "over there". No threat to my income or my addictions. Yeah, right on, stop the polluters!

John Robbins in his book *Diet for a New America* gives us a hundred documented reasons why we must change from a meat based diet to a vegetarian lifestyle. While his book speaks to the American experience, the information has universal application where diets are meat-centered. The data shows that such diets are responsible for destruction of our environment and health and contribute to world starvation.

But, says Jonathon Porritt, UK Director of Friends of the Earth, "It's not for FOE to tell people to go vegetarian" Why not, does it perhaps tread to close to home? Are FOE people so addicted to meat that it blinds them to their own complicity in the destruction of the planet? I cannot fathom why you cannot strongly advocate that we stop our own daily involvement in the destruction of the planet by eating lower on the food chain and becoming vegetarians.

Linda McCartney in her "Animal Voice" interview said "Friends of the Earth is a great organization ... except for the fact that many of them are not vegetarians. I think to be a true Friend of the Earth, you've got to be a veggie." Right on! Linda McCartney is out there with Paul working hard to encourage people to support you. How about a little reciprocation to show that you appreciate her efforts?

So you lose a few members. You will gain ethical consistency that includes yourselves as well as everyone "over there" and make powerful statements about your personal commitments to save the earth.

Polly Strand
Berkeley, California

Economic policy

The latest balance of payments figures substantiate the view that the policy of maximising productivity and exports is a failure.

One example of this policy failure is the predicament of the wool industry where the clip cannot be sold and the flock is almost double what it should be.

Notwithstanding the support of all major political parties for this policy sooner or later there must be a reappraisal of the underlying philosophy of export or bust, of greater productivity as the only road to salvation. Else we end up with a massive unpayable overseas debt and bankrupt of both material and financial resources.

Contrary to the *Garnaut Report* we need to re-establish protective tariffs to stimulate investment in industries that will produce goods which we now import. At the same time we should assess imported items on the basis of whether they are essential.

We would then be in a position where the pressure to export would be reduced and the programme to reduce soil degradation and industrial pollution would not meet such opposition on economic grounds. Our definition of efficiency may

then move away from whether it makes a profit to whether it is beneficial to the environment.

C. Friel
Alawa, Northern Territory

Green consumer products

The article "Green Consumer Standards" (*Chain Reaction* 60,) is fine until one views the photograph and accompanying caption. It suggests that the Samuel Taylor products are going to replace an unspecified group of environmentally unfriendly products. According to an ABC Melbourne radio program on 3LO in early April 1990, the products are quite probably a foist on the community. (A three million dollar promotion can be very compelling). I cannot recall all the comments; suffice to mention two. The Down to Earth products use a petroleum-based optical brightener and a preservative, formaldehyde, which are environmentally unfriendly.

The article also points out that the Prime Minister made a "pre-election statement regarding a green labelling scheme". Just in case Bob fails to deliver, is it possible to feature an article giving us a better view of just what are or what are not environmentally friendly domestic products?

Leon Trembath
Springvale, Victoria

Editors Note: We did not intend to convey that Samuel Taylor had done anything 'environmentally friendly' but that it had made something look 'friendlier' than its other products and we meant to make a tongue in cheek comment on yet another piece of cynical 'greenwashing'.

REBEL WITHOUT A CAUSE?



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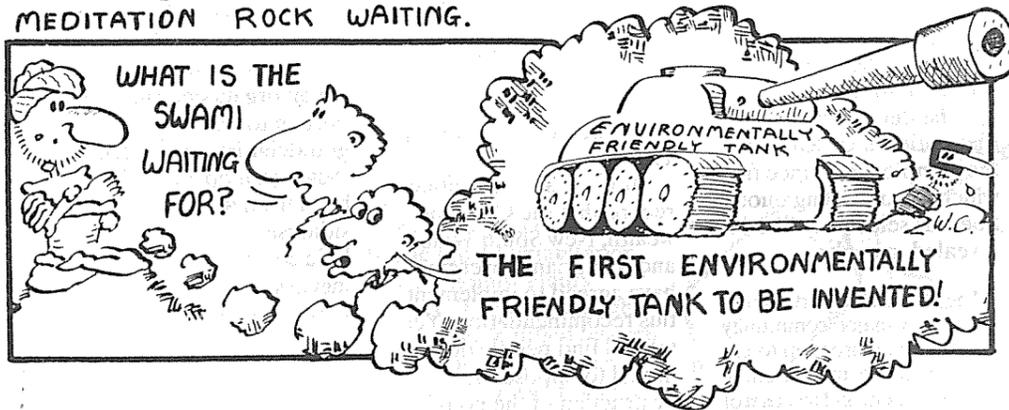
Chain Reaction is the national magazine of Friends of the Earth Australia. Since its establishment in 1975, it has covered a broad range of issues relating to the environment and has provided a resource for all those concerned to know the stories and issues ignored or hidden in other media. The best way to receive **Chain Reaction** is through a subscription. Return the completed form below, and keep in touch.

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JOHN DITCHBURN
SWAMI BADRA THE CYNIC IS SITTING ON HIS MEDITATION ROCK WAITING.



Backstage

Backstage is the occasional column by which the editors of Chain Reaction give readers a view of some of the behind-the-scenes workings.

The magazine started in 1975 as a fortnightly newsletter, with only a few hundred copies. There will be 13,000 copies of this edition, it has a full colour cover, and it is distributed nationally to newsagents (8,000), Friends of the Earth members (3,000) and subscribers (1,000). The real leap has come in the last two years (from 3,000 copies per edition in 1988). We have attempted to use the increase in environmental awareness, both to keep the environmental debate informed about the difficult questions, and to get the magazine to the point where we can pay people for their labour.

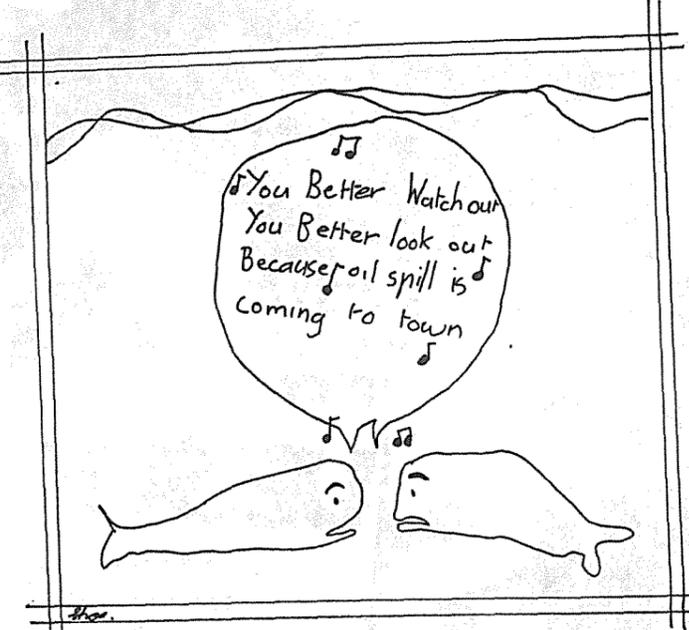
This expansion has problems. There are financial risks, but that's only money, and although we couldn't do without it, it's not the most important thing. Important questions relate to what we have to do to get money. How do we maintain some sort of environmental ethic? The magazine is printed on 80 per cent recycled paper (see CR 60) but we still use about three tonnes of it per edition. What sort of advertising should we accept? How do we avoid green consumerism? How will the magazine change as we attract a wider audience?

We keep these things in mind, along with many others, while producing the magazine, administering it, answering information requests, subscription queries and the like. In fact, there's so much work that we are behind in our schedule, and to catch up we will produce a special double issue with numbers 63 and 64, to come out at the end of 1990. It will have extra features, and use more tonnes of paper than usual. More news on this next issue.

Larry O'Loughlin



ESSIE KOSTA



KHUA NGO



CON KONTOKLITIS

These cartoons are by students in Years 8, 9 and 10 at Princes Hill Secondary College. These are part of a community arts cartoon project on the environment based at Princes Hill School Park Centre, North Carlton, Victoria. The project has employed Judy Horacek, a cartoonist, to work with local schools and community groups creating cartoons and running cartoon workshops on environmental issues. More cartoons by the students will be appearing in future editions of the magazine.

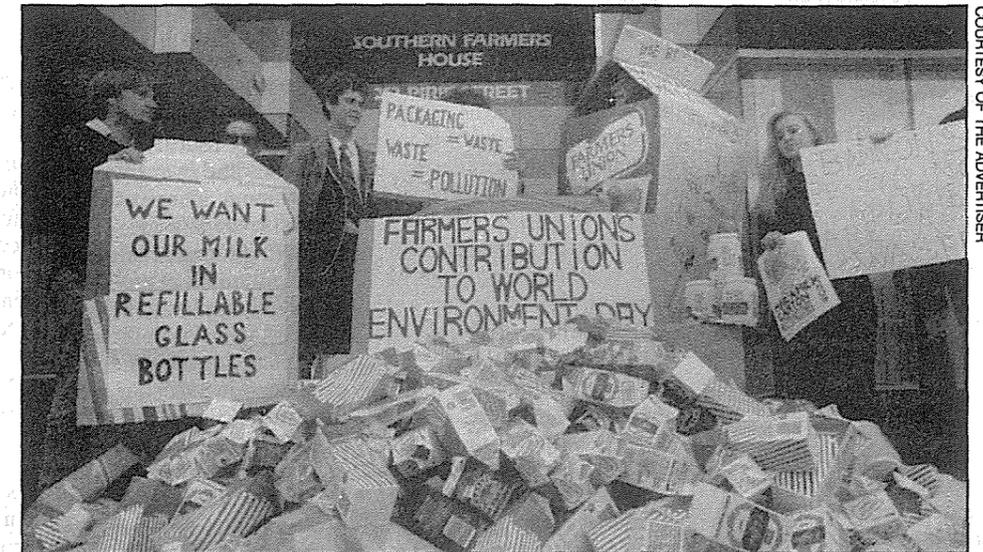
Earth News

Battle for the Milk Container

The illogic of the capitalist market place can be seen at its best in the current competition over milk containers which is being fought on the grounds of the most 'environmentally' sound option. It has involved full page newspaper advertisements by Tetra-Pak, the major producer of cartons, stating the environmental credentials of the plastic lined cardboard container. State milk producers, on World Environment day, launched cartons with extra colours carrying the message "I'm environmental as anything".

The argument goes that cardboard is better as it comes from trees, a renewable resource, whereas glass comes from mining sand which is going to be depleted as the world population increases. The carton claims to come from a wood farm, not our native forests. It is not pointed out that the pulp is imported, it is not claimed that trees are being replanted at the same rate as pulp is being used and there were no claims about the polythene lining being a renewable resource.

ACI Glass has entered the fray — it has chosen to develop a new ultra light glass bottle for the market by the end of the year. A survey conducted for ACI Glass showed that 86 per



COURTESY OF THE ADVERTISER

The Green Party of SA is encouraging people to post or deliver empty cartons back to the producers as part of the 5 Rs — Reject, Return, Re-use, Repair and Recycle.

cent of those interviewed preferred products which they knew could be easily recycled. The study also revealed consumer preference for glass packaging. Seventy seven per cent considered glass their overall preference ahead of plastic, paperboard, aluminum and steel.

However the new light weight bottles are "one-trip" bottles — used only once before being recycled. Energy-wise, they are a real step backwards. The real environmental advantage of glass is that it is reusable.

Glass is relatively energy-intensive to make, compared to plastic. But when a bottle is re-used about twenty times the total energy and materials used per litre of milk is less than

that required to make a plastic bottle or a plastic-coated cardboard carton.

The new light weight glass bottle is made of thinner glass (with a thin polymer coating to make it stronger) so is not suitable for refilling. The polymer coating is burnt off during the remelt of glass recycling.

Although recycling and reduced weight will reduce the amount of energy used to produce an individual bottle, it will not save nearly the amount of resources that the re-use and eventual recycling of heavier bottles would save. The bottles are to be marked as 'recyclable' but this is specious as all glass is recyclable.

The actual resource saving that recycling achieves depends on the

trippage rate at which the bottles are returned to the manufacturer. Unless an effective system is in place to ensure high return rates a lot of resources will be lost to the tip.

The new bottles were trialled in Canberra where milk is available in 600ml glass milk bottles. According to ACI, consumers preferred the light weight bottles and were even prepared to pay more.

This preference may have been for the new resealable lid, the new one litre size, the new look or the availability in supermarkets. All these features could be incorporated into a reusable bottle.

Source: Choice, Friends of the Earth Fitzroy; Australian Liquidpaperboard Converters

Earth News

Nuclear Explosions

Six nuclear tests occurred recently. Four: on 2, 7, and 26 June, and 4 July were French tests at Mururoa in the Pacific. China exploded a nuclear weapon on May 26 at Lop-nor. A United States test, the fourth in 1990, occurred June 21 in the desert north of Las Vegas, Nevada.

This brings to the total 1808 known nuclear explosions worldwide since the first nuclear explosion in 1945.

Source: *Peace Media Service, July 1990; American Peace Test Alerts (Nuketests)*

Spanish Nuclear Plant Shut Down

A Spanish nuclear plant has been shut down after a leak of steam.

Civil Governor, Ramon Sancheex Ramon, said no radioactivity had been released from the Vandellos II reactor near Tarragona, 93 miles from Barcelona.

He said the situation was "completely under control" and there was no risk to the surrounding population.

A turbine fire prompted the shutdown of the plant's sister reactor Vandellos I last October.

Green groups called that incident the most serious nuclear accident since Chernobyl.

Source: *Peacenet Alerts*

Trade and the Environment

Thirty Non Government Organisation (NGO) representatives from US, Europe and Japan have drawn up the 'Declaration of Geneva: Trade Policy for People'. The views came from workers in the fields of consumer protection, ecology, agriculture, and Third World development, expressing concerns about food security, export dumping, and health standards.

The General Agreement on Tariffs and Trade (GATT), established 1947, covers about 90 per cent of world trade among nearly 100 countries. It is periodically amended by complex negotiations that may span several years. The current round — the Uruguay Round — will conclude in December 1990.

Many facets of the approximately \$2.5 trillion in annual trade flowing through GATT countries have direct or indirect effects on the use of natural resources. For example, limiting restrictions on imports or exports can undermine a country's control of natural resource management.

A group of US NGOs decided to explore the implications of US policy regarding GATT, which appears to be taking on new importance in an effort to restructure trade for the next century. Of special interest is the international rules on patent rights, and their link to genetic resources in countries with rich biological diversity.

If you wish to pursue GATT's effect on the environment, write to Stewart Hudson, National Wildlife Federation, International Program, 1400 16th Street NW, Washington DC 20036.

Source: *NGO Networker*

Rainforest Plan Flawed

The official plan to halt rainforest destruction being promoted by the World Bank and the United Nations Food and Agriculture Organization (FAO) is flawed and will actually accelerate forest loss, according to a report released by the Malaysia-based World Rainforest Movement.

Seventy-four tropical countries and over twenty government agencies are involved in the World Bank/FAO mega-plan, which attempts to mobilize an \$8 billion plan to halt deforestation and promote sustainable development. Launched in 1985, Tropical Forestry Action Plan (TFAP) was intended to coordinate international financing of development projects in tropical forest countries that assembled "national forestry action plans" to ensure a rational use of resources. The national plans were meant to broadly review third world country economies to identify the main causes of forest loss and develop a coordinated package of measures to reverse this process while securing citizens' welfare.

However, the World Rainforest Movement report reveals that the

TFAP is failing to achieve its stated goals. Although the invasion of forest areas by landless settlers is commonly identified as the single largest cause of forest destruction, the national plans avoid confronting this politically delicate issue. Worse, at the same time as failing to stem the invasion of the forests, the national plans promote logging in primary forests.

In February, the World Bank approved an \$8 million loan to the African nation of Guinea that finances commercial logging in one half of the last remaining reserves of Guinean primeval forest. In March, the Bank approved an \$80 million World Bank forestry loan to the Ivory Coast, and a \$30 million forestry loan to Cameroon is slated for approval early in 1991. All plans involve road construction and logging in previously untouched primary forest areas, and do not account adequately for resettlement of the communities to be displaced by logging.

Globally, tropical forests are now disappearing at the rate of some 142,000 km² a year, while an additional 200,000 km² are being seriously degraded.

Source: *Sierra Club (US); WRM*

Australian Aid and the Environment

A Senate Inquiry has recommended major changes to ensure that Australia's overseas aid program is applied in an environmentally sensitive manner.

The report of the Senate Environment Committee on the Environmental Impact of Development Assistance (February 1990), criticised the performance of the Australian International Development Assistance Bureau (AIDAB), commenting that "the picture is disturbing".

The committee found that 45 per cent of the projects that were potentially environmentally significant, with a total value of more than \$211 million, had passed through the planning and design phase without consideration of environmental effects.

Furthermore over 30 per cent of these projects resulted in major or minor negative impacts often in areas that substantially affected the well-being of the people the projects were designed to help.

It described AIDAB's conclusion that Australian aid projects "are in general, avoiding the worst features of environmental degradation" as "self-condemning" and recommended that "AIDAB needs to improve its activities in this area very substantially".

The report makes recommendations for reform, including an increased program of Australian environmental aid, the creation of an environment section within AIDAB, improved provision of information to government on development aid proposals,

environmental impact statements in certain cases, and incorporation of advice from NGOs. While the Senate Committee took over 50 submissions its report specifically singled out Papua New Guinea which receives \$275 million of untied budget support from Australia annually. The Committee recommended that every opportunity be taken to express concern to the PNG government that this money should not contribute to environmentally damaging projects. The Committee made specific reference to the degradation of rainforests.

Facing a cut to its export income of more than one-third due to the closure of the Bougainville copper mine, PNG's economy is in a perilous position.

To exacerbate the problem, PNG's other earner, agricultural exports, is performing badly because of a slump in commodity prices. Coffee is PNG's biggest agricultural export and the price of coffee has halved on world markets in the past year.

With a population growth rate of nearly 3 per cent easily outstripping economic growth, thousands of young people each year enter an economy which has no place for them. The stresses which this creates fuel PNG's serious law and order problem and contributes to a growing political instability which is threatening to tear apart the nation of 15 years.

In such a bleak economic climate, PNG is looking for alternatives. One export which has potential is timber. PNG timbers are relatively unknown internationally, but with marketing, that could change.

Based on the experience

The Papua New Guinea environment will be threatened by the country's economic difficulties

so far and a reading of the current indicators, it is likely that international pressure for environmentally friendly development will face a tough test in developing countries such as PNG over the next few years.

The report also called for a review of Australian participation on international aid bodies, to determine how contributions can most effectively promote environmentally responsible development.

This call comes at a time when US environmental and development NGOs have finally won the support of the US Administration in their efforts to reform the activities of bodies like the International Monetary Fund (IMF) and the World Bank.

Critics have long charged that these bodies don't take into account the likely effects of their structural adjustment programs on the social and environmental conditions in recipient countries.

The meetings of the IMF

and World Bank held last September in Washington, were marked by demonstrations against the human costs of World Bank funded damming projects in India, Java and Zaire.

The breakthrough in the US position has occurred as a result of an IMF reform initiative introduced into Congress early in 1989 and signed into law by President Bush at the end of November. The legislation instructs the Treasury to pursue, through its Executive Director on the Fund, a package of policy reforms not dissimilar to those recommended by the Australian Senate Committee.

While the US has nearly 20 per cent of the voting power on the IMF, most other governments have been reluctant to support such reform initiatives. The Australian committee's recommendations, if accepted and implemented, will strike a sympathetic chord in Washington.

Source: *SPANS via Pegasus*



Earth News

Green Activists Injured by Bomb

Two Earth First! (EF!) activists were injured when their car was blown up by a bomb while stopped at traffic lights in Oakland, California on 24 May. Judi Bari's pelvis was broken, and Darryl Cherney received damage to his hearing and eyesight. On release from hospital, Darryl was jailed. Police intend to press charges against the pair for carrying the bomb. They claim that Darryl and Judi knew of the bomb because of "its position in the car".

Earth First! is calling for an investigation of police tactics in this case, to be conducted by elected representatives, say the activists, since the FBI is involved in ongoing harassment and attempts to frame the bombing victims.

Extensive raids of Earth First! activists in the San Francisco area netted "electric wiring, tape and maps and documents" (no mention was made of their link with the bombing).

Newspapers leapt to the occasion, linking Earth First! with an incident where a North California mill worker was badly hurt when a saw blade hit a spike embedded in a tree and fragments flew into his face and neck (Darryl and Judi are from north California.) Earth First! was originally blamed for the spiking, but a subsequent

inquiry found that a disgruntled mill employee had spiked the trees after being sacked. The newspapers failed to report this. Further articles linked Earth First! with a pipe bomb which was recently thrown into another north California mill. Earth First! categorically stated it had no connection with the incident.

Darryl and Judi are key organisers for a series of actions called the 'Redwood Summer', billed as the largest civil disobedience in north America since the freedom rides of the early 1960s. It is hoped that hundreds will flood into northern California to save old growth forests through direct actions such as blockades of logging roads. Since the arrival of Europeans, north America has lost 95 per cent of its Redwood forests. This summer's actions are simply attempts to preserve remnants of what was once a massive forest extending up most of the western coast of the USA. Earth First! and other groups have been working to protect these forests for many years through legal actions, blockades, occupations, tree sits and so on. Although Earth First! has been linked with tree spiking and destruction of logging equipment ('monkey wrenching'), a coalition of north coast Earth First! groups recently issued a statement disassociating themselves from the monkeywrenching, saying that they hoped to develop links with local timber workers.

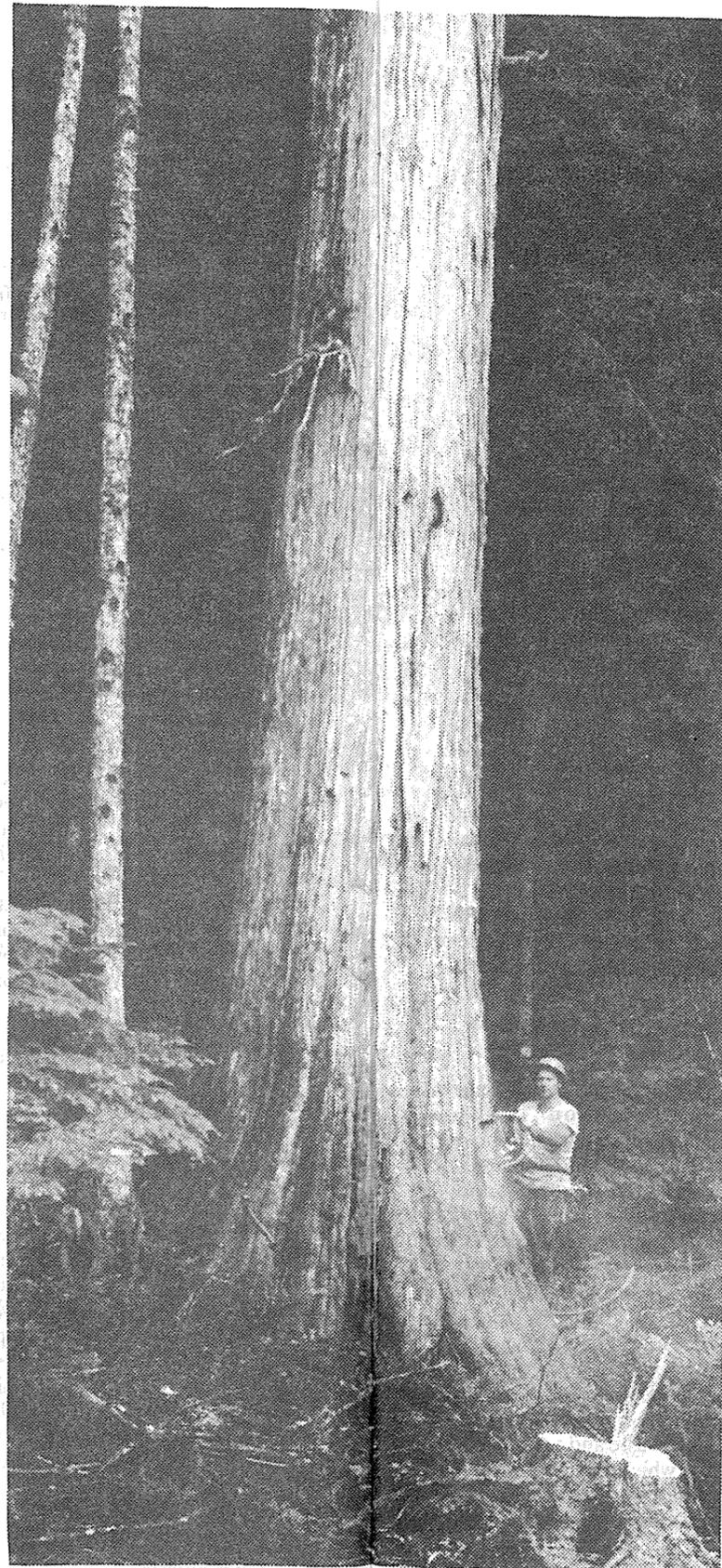
Many local timber companies who have logged in the area for generations have recently been bought by outside corporations who have no interest in making the logging sustainable as they have no ties with the region. One example

is the case of Pacific Lumber, bought out in 1985 by the huge MAXXAM group which suffered a massive loss in the process. The superannuation fund of Pacific Lumber workers was used to cover debts, and MAXXAM is clearing the forests on its lands as fast as is possible. It is currently working on the largest stand of redwoods on private land in the world.

The timber industry is clearly concerned at the protests. A few weeks before the bombing, Judi and Darryl were trailed for ten miles by a logging truck before being forced off an embankment. The three children in the car were taken to hospital with minor injuries. Police refused to press charges.

Darryl and Judi were in the San Francisco area to promote the 'Redwood Summer' — doing radio interviews and other publicity. Given that they were drawing attention to themselves, it would make no sense for them to be carrying a bomb. They had already received death threats and had consistently stated their intention to use non-violent methods to save the forests. In North America, as elsewhere, powerful movements have been infiltrated and repressed by government agencies. Earth First!, as one of the most radical and fastest growing movements in the USA, has been targeted by the FBI. The media reported the incident in usual one-dimensional style, and it seems that Judi and Darryl are joining the long list of social change activists tried and found guilty in the newspapers by those with a vested interest in the status quo.

Source: Cam Walker; Earth First!, GPO Box 1738Q, Melbourne, 3001.



Trees and the Greenhouse Effect

A recent CSIRO article makes some interesting points regarding the ability of massive tree planting programs to reduce the greenhouse effect.

Carbon dioxide (CO₂) is one of the main greenhouse gases. It is present in only low concentrations, but is very important for plants, which take it up and store it, until they are broken down by burning, decay, or the exhaled breath of animals like us who eat plants. About 80-85 per cent of the additional CO₂ that is going into the atmosphere comes from the burning of fossil fuels, which are a form of carbon store. The rate of fossil fuel burning is so large that even with the planting of huge numbers of trees, on good agricultural land, the amount of CO₂ taken up will not match that currently being released.

There are a number of advantages to planting trees, but a mature forest acts as a store of CO₂ rather than continuing to take up more than it produces from decay. A mature forest has other advantages, for example it slows the rate of oxidation of material in the soil.

The CSIRO report looks at a number of options for reducing the greenhouse effect through planting trees, but the conclusion is that we are consuming too many fossil fuels to give the trees a chance of keeping up. A number of suggestions are made: plantation timber could be harvested after it has reached maturity, and made into things with long term use (and therefore long term storage value); wood could be burned as a renewable energy source,

rather than fossil fuels which could be left in storage (although wood burning is inefficient and brings its own local air pollution problems).

Australians have the fifth highest per capita production of CO₂ in the world and although the report does not suggest that we undertake a massive reduction in fossil fuel use, it seems to be the only possible solution.

Source: *Ecology* 64, CSIRO, Winter 1990

Ozone Conference gets breath of fresh air

A delegation of nine young people from Australia attended the Montreal Protocol Conference held in London, June 1990

The delegation was organised by the Australian Conservation Foundation and followed lead-up activities around Australia (see page 14).

The delegation was given the right to speak from the podium, and took the opportunity to call for more urgent action to reduce ozone depletion than that eventually decided by the conference.

The delegation also produced a declaration in response to the conference, and made a number of media statements, as well as lobbying Ministers attending the conference.

The delegation stated that the conference had reached a compromise largely due to the intransigence of some major CFC producer nations, including the USA, Japan, the USSR and the UK. The delegation "was disappointed that the

chemical industries of these nations had undue influence on their governments, to the extent that national economic interests over-rode the global common interest.

"The chemical industry threatened to back away from the development of ozone-benign alternatives to CFCs unless they were given very long phase-out periods.

"This was a cynical attempt to blackmail the world into allowing completely unacceptable increases in the chlorine loading in the stratosphere."

The delegation called for earlier phase-outs of all categories of chemicals considered, and was disappointed that the Ministers at the meeting were not presented with up-to-date information.

The delegation also believed that the conference did not commit enough financial aid to the fund to assist developing countries to phase out and avoid the use of ozone depleting substances.

There were some positive results, according to the delegation. A fund was established, even if there was not enough in it. The Chinese and Indian delegations decided to recommend that their governments become parties to the protocol. And carbon tetrachloride and methyl chloroform were added to the the list of controlled substance.

A group of 13 countries, led by Finland and New Zealand and including CFC-producing countries Canada, The Netherlands and West Germany, agreed to a 1997 phase-out date, two years earlier than that agreed to at the meeting.

Source: ACF; Greenpeace.

Friends of the Earth News

Peak Conservation Organisation meeting

Delegates from the major environment groups meet regularly to spar with the Federal Environment Minister. The most recent meeting was the first with Ros Kelly who took this portfolio at a significant time for environmental issues in the eyes of the public, and comes at a time when the environment movement itself is changing shape in ways that affect the future role of these meetings.

Most national environment groups are represented at these meetings, totalling some 18 or so. In the past, with the agenda set by the groups, there has been a dominance of forest, wilderness and heritage issues, reflecting the priorities of most major organisations. Recently however, there has been an increase in 'smoggy' and 'demand' issues such as recycling and waste minimisation, ozone depletion and the greenhouse effect. At the Canberra meeting on June 22, the Minister herself flagged the issue of recycling and her proposal for a Federal Environmental Protection Agency (EPA) as issues to discuss.

David Vincent, FOE Sydney recycling campaigner, put the case that any Federal efforts in this area must incorporate the hierarchy that we have been promoting: reduce, reuse, recycle. David said that this is essential if we are to substantially reduce the consumption of resources in our wasteful economy. To illustrate the fact that recycling is not enough, he pointed out that the use of printing and writing paper had risen by 57 per cent in the four years to 1988/89. If consumption rises, gains from recycling are soon wiped out. As positive examples, he said that the strategy for industrial waste minimisation in Vic-

toria and the proposed recycling strategy for South Australia are approaches which encourage reduction and reuse.

The economic benefits were also stressed: Australia annually imports \$5,000 million worth of paper, glass, plastics, metals and rubber, and a large proportion ends up in landfill.

David told the Minister that industry needs strong and consistent regulation. Despite being aware of the problems, industry has not been moving in the direction of waste minimisation and high rates of reuse-recycling. Well designed regulation is important in achieving public policy goals. The lack of resources to deal with these issues within the Department of Environment was also raised by David who said that it needs to be a priority in terms of staff allocation.

The Minister is setting up a conference in mid-August to which she has invited a number of representatives of industry and environment groups. Industry efforts at recycling will be placed in the spotlight and hopefully, after the 'greenwashing' has been exposed, it may be possible to work out a framework for future action on waste minimisation. On this issue, as with others of interest to us, the extent to which Ros Kelly has the will or political strength to effect real change has yet to be seen. She projects, much more than her predecessor, the air of someone who is willing to listen and shows a keenness to move on some important areas, but we left feeling frustrated by the lack of firm commitment to any issue.

This was also the case with the discussion on the EPA proposal. Reorganisation of the Department to establish an Agency or Authority which has regulatory powers, perhaps similar to the United States EPA, has already commenced. Apart from a pressing need to ensure adequate consultation with environment groups, I raised the concern that any such body should have an overall philosophy or guiding principles that placed pollution prevention above pollution control. This could incorporate annually incremented pollution taxes, offset by incentive schemes. One of the problems is that pollution control is seen as a drain on the public purse, but with such a system this problem could be overcome. We

await the further development of the proposal by the Department.

One concrete action that Ros Kelly did mention was a planned amendment to the Commonwealth Sea Dumping Act, which at present only allows the Feds to charge dumping companies enough to barely cover administrative costs. Under changes being considered these charges may rise to more realistic levels in accordance with the 'polluter pays' principle.

On a more introspective note, it has been interesting to observe changes in process at these meetings and how they reflect the changes in the environment movement in recent times. It is clear that the larger national environment groups such as the Australian Conservation Foundation, and particularly its Executive Director Phillip Toyne, find the meetings less useful than the smaller and state-based groups. With a growing Canberra presence the better funded environment groups have more ready access to the Environment Minister (and others) and are often considered to represent the views of 'the movement'. In many instances this is not a problem as positions taken are fairly consensual. However, as the split develops between those better resourced groups and others which work at a more grassroots level or occupy a different position on the spectrum of change, this tension will need to be dealt with. Hopefully this can be achieved in an open and creative way.

Stuart White.

Recycling and Waste Minimisation Conference

Friends of the Earth held its third national conference on waste minimisation and recycling 30 June-1 July in Sydney. It was attended by representatives from FOE groups and other environment groups around Australia who are working on domestic and industrial waste issues. Only Western Australia and the ACT were not represented.

The conference developed the draft waste minimisation strategy which had grown out of the last two conferences and recommended some significant targets for reducing waste and a three part legislative plan which includes deposit legislation. Among other things, the conference recommended that:

- Australia reduce its entire waste

stream by 50 per cent by 2000

- minimum design standards be introduced to ensure that products are durable and reusable
- deposit legislation be extended to cover recyclable containers in the waste stream. This incorporates recommendations of the SA Waste Management Commission to extend the SA deposit system.

The conference discussed the need to campaign on both domestic and industrial waste issues together, the particular problem of plastic packaging and the need to create markets for secondary materials. Some very useful information was exchanged, demonstrating that waste minimisation really is energy and cost efficient.

FOE will present its final strategy to the Federal Environment Minister, Ros Kelly, who has said that she wants to make waste minimisation a priority for her Ministry, and to all State Governments for implementation.

The fourth conference will be held in Canberra 8-9 December.

Friends of the Earth in Cessnock?

A group in Cessnock, NSW has applied to become a FOE group.

The new group will be working on recycling, household ecology, chemical and pesticide awareness, tree planting and community education. For further details, contact: Jamie Derkenné, PO Box 341, Cessnock, NSW, 2325. Tel: (049) 90 2256.

... and Northern NSW?

Yes, another group is in the making. For details contact: FOE Northern NSW, PO Box 172, Lismore Heights, NSW, 2480. Tel: (066) 215 235.

Any more groups?

FOE Australia can give some assistance to groups wishing to establish as a Friends of the Earth group. For further information contact:

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Tel: (03) 419 8700
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Facs: (03) 416 2081
(also contact for FOE Australia)

Organic Fruit & Vegetable Co-op
222 Brunswick St
Fitzroy, Vic, 3065
Ph: (03) 419 9926

Southern FOE*
c/- Jilda Liddicut
16 Third St
Black Rock, Vic, 3193
Ph: (03) 589 2082

SOUTH AUSTRALIA

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

FOE Flinders University
Students' Association
Bedford Park, SA, 5042
Ph: (08) 275 2614

FOE Mt Gambier
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FOE Nouveau
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University of Adelaide
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NATIONAL

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Stanthorpe, Qld, 4377
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* indicates group not yet accredited.



Youth for Ozone — the Government Way

Recent national and international events on the depletion of the ozone layer have been designed to involve young people. However Mark Juddery and Ben Cole suggest that this involvement does not include actually listening to the concerns of young people.

Until the United Nations Montreal Protocol meetings in London in June 1990, the ozone problem seemed as bad as it could possibly be. During the meetings, however, science publicised that things weren't so bad — they were much worse.

It was like we were being shot in the arm, whilst gripping precariously to a cliff — and astonishingly, the media gave minimal coverage to the issue. For years, science and the Green movement have warned governments and corporations that halons, CFCs and other substances — while having proven short-term advantages — do long-term damage to the crucial ozone layer.

The Montreal Protocol (on Substances which Deplete the Ozone Layer) was formulated by the United Nations in 1987, but has been criticised ever since for its short-sighted and non-comprehensive mechanisms. It has also failed to encourage all nations to sign.

Nothing motivates humans more

than our instinct for personal survival, so it is the youth of the world who seem most concerned by the ozone problem. On World Environment Day this year, two weeks before the United Nations meetings, 449 youth representatives attended *Ozone — Our Future*, a video conference linking Australia's eight State and Territory capital cities by the magic of Telecom-sponsored satellite. This conference, the climax to the Australian Conservation Foundation education program *The Ozone Message*, was a lead-up to the UN meetings.

Of the 449 attendees (ranging from 25 in Darwin, to over 130 in Brisbane), one from each state was sponsored by ACF to attend the London Protocol meetings. These youth delegates participated in the decision-making process, "participate" being a strong word. Despite the apparent visionary nature of conservation, perhaps youth opinion is not valued as highly as it should be.

The Australian lead up conference, held at the ABC, greeted us with the studio atmosphere of painfully bright spotlights, intrusive cameras and a somewhat distracting production crew. There were speeches from various people — a recorded message from the Prime Minister; a phone call from Peter Garret; a closing statement from our Ambassador for the Environment, Sir Ninian Stephen. The prepared speeches from young people present were given only a few minutes altogether. "It's not just the youth of Australia who are concerned for the future," said one Melbourne girl. "It's the youth of the world." This is all very well and good — it was the topic of the conference, after all — but it is already known that, as "the future belongs to us" and all that, young people are indeed concerned for the world. Unfortunately, few youths are in charge of multinational conglomerates, or major political parties. (If we were, of course, our concern would probably lie in other directions.)

For most of the conference, that was painfully clear. Most of the output came not from the youths, but from a panel of scientists, experts and government spokesmen, who managed to speak, intelligently and expertly, in such a way as to ensure that nothing was accomplished. The Voice of Youth was channelled primarily into asking scientific and political questions to the panel, which defeated the video conference's purpose: to provide a forum for the young people of Australia to declare their thoughts on international ozone action.

At times, it might as well have been a press conference, with youths unwittingly playing reporters.

The meeting was chaired by Professor Ian Lowe, of Griffith University. "I wish the politicians and businessmen cared as much about the future as young people," he closed by saying. Dr Paul Fraser, the CSIRO's chief atmospheric research scientist, suggested the possibility (reiterated at the UN conference) of a second ozone hole opening in the Arctic — a phenomenon which, when all is said and done, would at least increase the concern necessary in the Northern Hemisphere. "Even with stricter controls, we'll have an ozone problem for a long time," he preached to the converted.

Now that science had confirmed what most of the audience already knew, ACF's Bill Hare voiced his scientific concern for the current Protocol, promoting the immediate reduction of 85 per cent and a final cessation as soon as possible. Harry Blutstein, of the Environment Protection Agency, was asked a question which got to the root of the matter: As everyone knows there is a problem, why don't industries just stop producing ozone-depleting substances?

"If you ask Montreal to put the date forward," he answered, "The reply will always be *how?*" Indeed. It is that question — and the fact that so few people are looking for answers — which is leaving us all frustrated.

Philip Toyne, ACF's national director, made a valid economical point. As he explained, it will cost industry an estimated \$27 billion to convert to the new, ozone-safe technology. If it is not done, however, the changing environment will cause losses and climatic alterations costing about \$6.5 thousand billion. Toyne, in his own straightforward manner, perhaps came closest of the panelists to representing the popular view of the youth in attendance.

The Federal Department of the Environment also had a representative in Protocol team member, Bob Dunn, who successfully illustrated the Australian Government's policies and — in trying to promote them — clearly showed their downfalls. He immediately demonstrated the Government's 'she'll be right' attitude by stating his conviction, amongst the rhetoric, that the ozone problem is "one we *can* solve". The audience was left dubious by his optimism for the Protocol mechanisms. (In the Department of the Environment in Canberra, only four people apart from Dunn are working on the ozone problem.)

Not surprisingly, this optimism was echoed by Ros Kelly, the charismatic Minister for Practically Everything (and the Environment), as she briefly called in to give her obligatory well-wishings on behalf of the Government. Here in Canberra, a press entourage — who had so far treated both youths and panelists with disinterest — accompanied her into the studio.

It is ironic that the press gave most of its attention to someone whose apparent understanding of the issue was

less than nearly everyone in attendance. Her tone indicated that we needn't worry about the ozone layer, as the Government was preparing to wave its magic wand and bring the planet into the Land of the Perfect Environment. If the Environment is such a crucial issue, why is it simply tacked on to a ministry of lesser portfolios?

Considering that the conference was arranged within the space of a month, it was in some ways an impressive piece of organisation. Unfortunately, it suffered a symptom which plagues the Green movement. *Ozone — Our Future* allowed itself to be bogged down by politics, bypassing the second part of the Green motto: 'Think globally, act locally.'

Unlike *The Ozone Message*, ACF's successful education program, it lost sight of the need for localised action — an important means of changing industrial tactics — from recognising unsafe fast-food packaging (including McDonalds, who — despite no longer using CFCs in their foam — use HCF-22, a recognised ozone depleter), to avoiding use of such products as white-out fluids (which use ozone unfriendly methyl chloroform, or 1,1,1-Trichloroethane). After all, CFCs are not the only culprits.

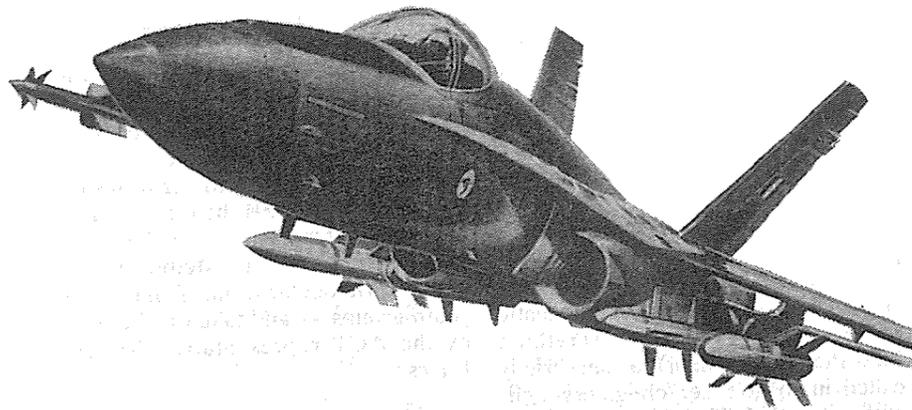
ACF — in *The Ozone Message* — promotes a global cessation of ozone-depleting chemicals by 1995. The current revision of the Protocol aims for the year 2000.)

We had ourselves, on behalf of the Wilderness Society's Green Youth Group, written a short declaration for the Protocol meeting including various proposals, ranging from the obvious ("Bring forward the deadline — to a 95 per cent cut by 1993") to our own suggestions ("Make 1991 the International Year of the Ozone Layer"). This was faxed to the ACF in Melbourne — along with declarations from other youth groups — and taken to London by the ACT representative, Kirsten Isaacs.

Mark Juddery and Ben Cole are members of the The Wilderness Society Green Youth Group in Canberra.

The New Australian Militarism

*The publication of **The New Australian Militarism — Undermining Our Future Security** has detailed the recent expansion of Australia's role as a military power, and the direction of Government policies. Bill Williams looks at this new militarism.*



"We are increasingly becoming a country alone, and we require an enormous self-hardening, economically, militarily, culturally. In every category we require a self-hardening, if we are going to be a country that's worthy of respect by the turn of this century, in the region in which we operate"

Kim Beazley, Minister for Defence, ABC Radio 8/3/90.

"... common security and just defence are ideas whose time has come. They offer Australians and others living in this region an alternative to the Defence Minister's bleak vision of a regional political map akin to that of nineteenth century Europe: shifting alliances, multipolarity (which he mentions) arms races and wars (which he omits). The Defence Minister's new militarism is a step towards the fulfillment of his dismal vision. Common security and just defence form a path away from it. Australians (and New Zealanders) have a special responsibility to take this path, because of our comparatively favourable strategic setting."

Peter D. Jones & Senator Jo Vallentine in *The New Australian Militarism*, 1990.

Our fears for the future are changing. We are steadily moving out of the shadow of Cold War rhetoric into the ozone-depleted light of day.

People organise defence strategies, and pay for them, because of concern for the future. If we are to prepare useful, sensible defences, then we need a rational assessment of potential threats. Such an assessment has been attempted in numerous studies, reports, reviews, White Papers and secret Policy Documents produced by and for the Defence Department over the past decade. None of these learned works has been able to identify a threat to the health and livelihood of my children's generation which approaches — in magnitude and tangibility — that posed by:

(i) the greenhouse effect, (ii) ozone depletion, (iii) environmental toxicity from hazardous chemicals and radioactivity, or (iv) the degradation of our forests, soils and water systems.

Could we award the Victoria Cross for great acts of heroism in the face of toxic chemicals? Can infantry-men weed blackberries, pluck oxalis? Can the Imperial Rifles protect us from rabbits and feral goats, save the wetlands from the cane toad and the buffalo? If the army must have exercises in the hinterland, let them plant mixed indigenous species from Cooma to Nimmatadel, Horsham to Kaniva, Roma to Charleville and beyond. I envisage the Australian Green berets winning world acclaim in guerrilla peacefare, in their organic struggle to liberate the arid zones from couch grass, Rosy Dock and all the other introduced species which are withering these fragile ecosystems.

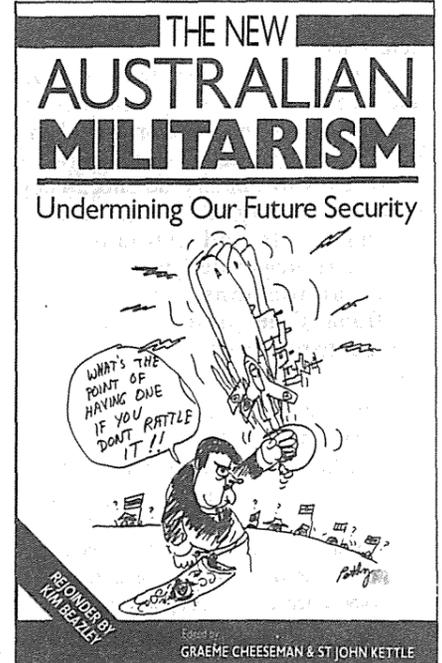
Aside from the awesome prospect of ecocide, there are of course more conventional potential threats. We do need to have sensible strategies for

dealing with, for example, poachers and smugglers. But the biggest military threat we face comes not from the northern bogeys, but from our own defence elite: the politicians, soldiers and businessmen who formulate 'defence' policy. For in response to our regional insecurities (some of which are genuine, most of which are not) and at the urging of the United States, Australia is beefing up its armed forces, expanding its role as a regional policeman, increasing its military presence, and preparing to 'defend' a huge zone of 'direct military interest'.

As we buy and build tougher, nastier killing-devices, make plans to use them in an area extending 1000 km north of the continent, provide weaponry and knowhow to governments repressing the struggles of indigenous peoples, and develop capabilities for invading small island nations, we are inevitably provoking a regional arms race. Simultaneously our newfound 'self-reliant' posture is founded on a projected major expansion in the production and export of home-grown killing machinery. Encouraged by the ghouls of economic rationalism and militaristic nationalism, we could almost forget that it is a pile of foreign corpses that Beazley and Keating are relying on to improve our balance of trade. No tears now: be a man. Self-harden.

These issues (and more!) are dealt with in great detail in an excellent new book *The New Australian Militarism*, a collection of essays edited by peace researchers Graeme Cheeseman and St John Kettle.

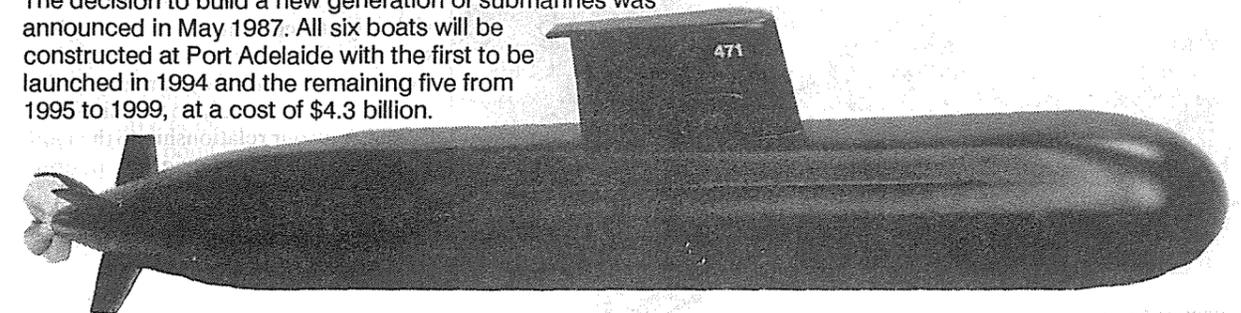
Anyone concerned about Australia's burgeoning militarization, the consequent budgetary sacrifice and the skewed vision of our leaders will find this book well worth reading.



The first five contributors take on the strategists (political, military, economic) on their own terms and argue a very convincing case for radical re-direction in our defence policies. Their position is greatly strengthened (ironically) by the publishing in the final pages of a response by ex-Defence Minister Beazley, in which he explains why the Government is erecting its virile 'defence-in-depth', 'self-reliance-within-ANZUS' program. He concludes with the depressing admission that by hosting Pine Gap and Nurrungar "we do run the risk of nuclear attack which otherwise Australia would probably be spared. But by doing so we significantly reduce the chance of nuclear war at all. I think that makes the risk worth taking". (My emphasis)

The Collins Class Submarine

The decision to build a new generation of submarines was announced in May 1987. All six boats will be constructed at Port Adelaide with the first to be launched in 1994 and the remaining five from 1995 to 1999, at a cost of \$4.3 billion.



We remain the silent sacrificial offerings in Beazley's 'acceptable-risk' delusions.

The book does more than criticize and debunk however. The chapter by Peter D. Jones and Senator Jo Vallentine provides a detailed overview of alternatives to military defence. They propose a variety of regional security arrangements and civilian-based defence strategies designed to reduce regional tensions whilst giving Australians the strategies and technologies to resist aggression. They focus on:

Transarmament ... the process by which a country like Australia can move from membership of an offensive nuclear alliance step-by-step towards the goal of non-violent rational defence based on Social Defence ... civilian-based defence ... a defence policy which utilises prepared civilian struggle to protect society's freedom, sovereignty and constitutional system against internal usurpation and external invasions and occupations. This would be done by undermining the will of the attacker — making his effective domination and control impossible, through both massive and selective non-violent non-cooperation, and through defiance by the population and its institutions.

As Jones and Vallentine stress, no community has systematically organised its members and its political, economic and technological capabilities to operate Social Defence. Examples abound, however, of the use of such

civilian-based strategies, including the oft-quoted resistance to the Kapp putsch in Germany in 1920, and the Czechoslovak campaign of non-violence in response to the Soviet invasion in 1968. Closer to home there is a long history of Social Defence type strategies being employed by people resisting militarism and authoritarianism — beginning (and continuing!) with the struggle of indigenous people to preserve their land and livelihood. Legions of Australian women and men have engaged in these strategies — Irish settlers, 'convicts' transported for the 'crimes' of organising trade unions or resisting Enclosure, miners on the goldfields, anti-conscriptionists, suffragettes, trade unionists, anti-war campaigners, and more recently, environmentalists.

As revealed at the recent Social Defence conference in Wollongong, many of us who have been involved in non-violent direct action campaigns have extrapolated from these semi-spontaneous, achilles-heel-pricking tactics to the notion of basing the defence of the nation (community) on similar ideas. There is a great opportunity for interconnections between the peace, environmental and social justice movements on the issue of Social Defence. It is, after all, the only sustainable option.

Another issue which *The New Australian Militarism* deals with is that of race and sovereignty. A brief essay by Marcia Langton discusses the potential challenges that Australia's northern redeployment poses, both to Aboriginal

land rights and to Aboriginal communities in the north. She highlights the disparity between military expenditure and what is spent on meeting the basic living needs of the aboriginal people.

The essay that most provoked me however was that by Chris Tremewan: 'The White Australian Threat to the Treaty of Waitangi'. He is a New Zealander (that is, an Aotearoan). The issues of race and land and sovereignty seem to occupy a larger patch of the peace movement consciousness in Aotearoa than in Australia — it has been forced to! Tremewan describes the various effects of Australia's drive to flog four frigates to an unenthusiastic NZ Labour government which he regards as "fundamentally a political strategy to undermine NZ's attempt at building an independent foreign and defence policy more suited to our own needs." And:

NZ is part of the Anglo-Saxon club of White Settlers. The association with the Western power bloc endows the NZ State with a legitimacy which has been thrown into crisis by both Treaty-focussed Maori activism and the Peace Movement's challenge from within White Settler consciousness ... While the anti-frigate movements have chosen not to follow the ANZUS flag, they have yet to choose the Waitangi path, and to begin to understand that this path requires justice for indigenous peoples and the honouring of the Treaty of Waitangi. They have also yet to acknowledge that the same forces that are dispossessing Maori are now dispossessing Pakeha as well.

Arguments about defence — whether military or civilian or environmental or pacifist — imply assumptions about sovereignty. Is the land — the property! — that we are arguing about defending, ours to defend? Are the invaders arguing amongst themselves about how best to maintain sovereignty over somebody else's land? How can we fight (or non-violently struggle) for 'our land' when we are still in the process of nicking it from someone else? Common security and social defence rely on us whitefellas establishing our relationship to the land in a way which Aboriginal people regard as appropriate.

Bill Williams is co-author of *Men: Sex Power and Survival*.

ICI continues to pollute

The Imperial Chemical Industries (ICI) chemical plant at Botany in New South Wales is one of the largest in Australia. Richard Gosden reports on its waste and discharge problems.



The ICI chemical complex at Botany is one of the largest in the southern hemisphere and produces over 50 synthetic chemicals. Outputs from the plant include plastics — polyvinyl chloride (PVC) and polyethylene; chlorinated solvents; and caustic soda. ICI Australia's net profit for 1987 was \$108.6 million and rose to \$174.2 million in 1988.

While the environmental and health consequences arising from the use of the outputs from the Botany plant is questionable, the production of these substances is resulting in considerable local pollution, consequently the soil and the ground-water surrounding the site are badly contaminated with synthetic chemicals.

Sewer Disposal

There are many dangerous toxic substances being discharged on a continual basis into the Pacific Ocean, via the sewer, from the Botany complex. There are twelve separate chemical plants, two of these have their own separate sewer inlets while the other ten blend their liquid waste streams before disposal down a common sewer. The Water Board measures for maximum allowable concentrations of pollutants at the entry point to the sewer rather than the exit point from each plant. This allows ICI to dilute the toxic pollutants before measurement and consequently vast quantities are allowed to be discharged. The total daily waste stream

available for dilution amounts to approximately 10 million litres.

The waste includes organochlorines and other synthetic chemicals as well as toxic metals. Two of these toxic wastes, mercury and hexachlorobenzene (HCB) are having a dramatic impact on the marine environment by contaminating the food chain.

Mercury

Mercury is discharged to sewer in the waste stream from the Chlorine Plant. This plant, built during the second world war, is the original installation on the Botany site and is long past its environmentally acceptable lifetime. Workers report regular instances of mercury residue from spills visibly contaminating the floor and being hosed to drain. Bioaccumulation studies of fish off the Malabar sewer outfall have shown consistent contamination by mercury over the past 20 years. The most recent large-scale study in 1988 showed fish along the Sydney coastline to have average accumulations of mercury above the National Health and Medical Research Council (NH & MRC) maximum residue levels.

ICI Botany is the major source of mercury contamination in Sydney. The Water Board's Trade Waste Policy, 1972-88, banned mercury from the sewers. It appears, however, that ICI throughout this period had a special dispensation to discharge mercury-contaminated waste. When the new policy

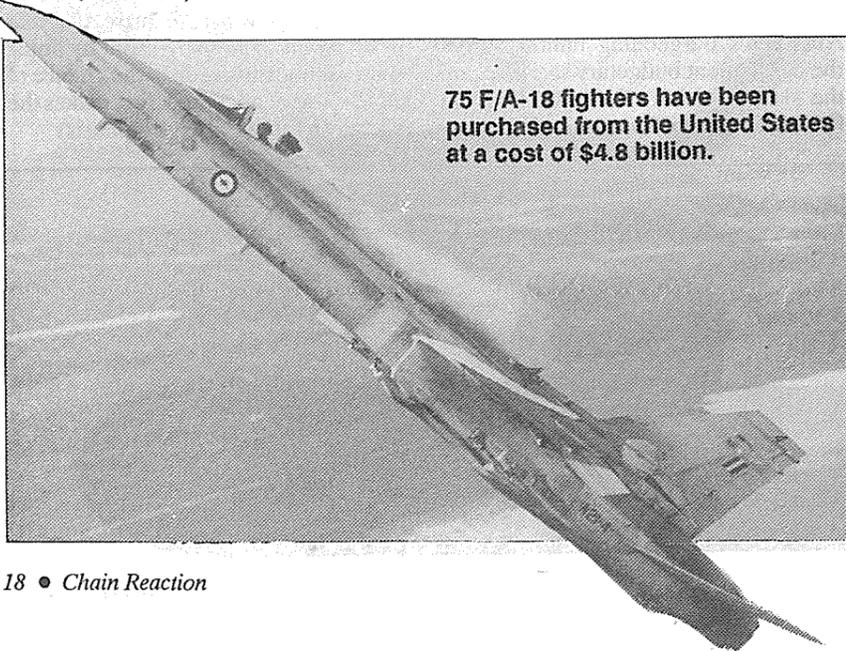
came into effect in June 1988 mercury was permitted, presumably to accommodate ICI.

Hexachlorobenzene

HCB, a waste product from the Solvents Plant, occurs in both a solid and liquid form. Solid HCB is stored, as currently there is no environmentally acceptable disposal option. Liquid HCB is discharged to the sewer. The Water Board permits this, thereby making the Pacific Ocean, via Sydney sewers, the only legal method of disposing of such wastes in Australia, despite the fact that the Board's Trade Waste Policies, both new and old, categorically exclude such disposal. Until recently the Board accommodated ICI by falsely defining HCB as an organochlorine pesticide, placing it in a category of permissible substances to be disposed of via the sewer.

In 1989 organochlorine pesticides were included in the very short list of disallowed substances; however HCB is still being discharged legally to the sewer under an unknown classification.

The 1988 study found fish along the Sydney coastline to be contaminated with HCB, on average at three times the NH & MRC maximum residue level. A Sydney doctor specialising in chronic fatigue syndrome has recently found that the average Australian has a concentration in blood samples of HCB 1000 per cent higher than the average contamination in comparable US



75 F/A-18 fighters have been purchased from the United States at a cost of \$4.8 billion.

samples. There are indications that the Australian population as a whole may be carrying extraordinary high residue levels of HCB. The NH & MRC rates HCB as a Class II carcinogen, that is, it is known to cause cancer in animals and is suspected of causing cancer in humans. ICI Botany is the only HCB producer in Australia.

ICI currently has a stockpile of approximately 8,000 tonnes of solid HCB, stored in an open-sided tin shed on the Botany site. This is added to at the rate of 400 tonnes per year. The ICI stockpile is causing a push for the construction of a large high tempera-



OLIVER STREWE/WILDLIGHT

ture incinerator, funded by public money, and perhaps costing up to \$50m.

ICI may prolong the operation of the Solvents Plant if it is assured of a waste disposal method for HCB. Or, if a legal method for disposal of organochlorine wastes via incineration is provided, it may take the opportunity to cut production costs and instead of recycling the organochlorine waste, discharge it to atmosphere via the incinerator.

There is also at least one well documented land-fill site on the Botany site which contains HCB waste. This is located beneath the raised carpark adjacent to Corish Circle, and contains some 50,000 tonnes of sandy soil and ash contaminated with HCB and other toxic chemicals. In the late 1970s, under pressure from the SPCC, ICI excavated an existing land-fill, and sealed the contaminants temporarily in a PVC lining.

The irresponsibility of ICI deliberately cutting costs by burying highly dangerous chemicals in an area of porous sandy soil with a high and mobile water table is only matched by the irresponsibility of them reburialing it. At some unknown time in the future the PVC will break down and the chemicals will be released to the water table.

The Springvale Drain

The Springvale Drain is a stormwater drain that runs through the ICI site for about 400 metres, then along the border for another 300 metres. Stormwater



The Springvale drain — discharge has been found to contain HCBs and chlorinated solvents. The drain runs from the ICI plant to Botany Bay.

run-off from the ICI site is the major contributor to the drain's flow.

ICI has a licence from the State Pollution Control Commission (SPCC) to discharge clean stormwater in wet weather only. The first flush of stormwater, which washes down the site, is supposed to be directed to interceptor pits where it is treated and then discharged to sewer. Only after continuous rain, when the interceptor pits have filled and the site is washed clean, is stormwater allowed to be directed to the Springvale Drain. In dry weather nothing should be directed to the drain.

In 1989 reports from environmentalists, employees and local residents indicated that the company was using the Springvale drain for disposal of a production waste stream in dry weather. The most obvious point for observation are the two large pipes that discharge to the Springvale from ICI near the back gate at the end of Nant Street. There is often a brown oily discharge of significant quantity, smelling of solvents and effervescing rapidly as volatile solvents evaporate when the discharge enters the Springvale.

Samples taken by the State Pollution Control Commission in May 1989 confirmed the presence of chlorinated solvents and HCB. A separate sample taken privately revealed a similar range of chemicals as well as lead and zinc.

ICI claims that the discharge is really leachate from soil contamination of the wetland area behind the Solvents Plant. But the fluctuating volume and dirtiness of the discharge, (sometimes a lot, sometimes little, sometimes dirty, sometimes clean), combined with the rapidly effervescing solvents bubbling in it, that obviously haven't leached through the soil, suggest that it is a production waste stream and not leachate.

The State Pollution Control Commission did not prosecute, having taken as evidence an ICI video which purports to be a view inside the drain showing ingress of water through cracks. There is no proof, however, that this video was filmed in this particular drain. Even if it were, ICI is still guilty of polluting a waterway, since everyone will admit that the toxic wastes, whether a deliberate production waste stream or leachate, originate from ICI.

The Springvale enters Botany Bay near a roosting area for migrating birds

that are protected by an agreement between the Governments of Australia and Japan. The chemical contamination of the drain is almost certainly causing adverse effects on the food chain to which the birds are linked and possibly affecting the birds' reproductive capabilities.

Spills

Accidents that cause unexpected release of chemicals to the atmosphere, storm-water drains and sewer are regular occurrences at the ICI Botany complex. Workers in the complex report that most accidents go unreported even to ICI management.

Those spills that are reported to management were for a time listed in monthly bulletins called *Unusual Incidents Reports*. The few of these reports that have been leaked during recent years make breathtaking reading. Accidental discharges to the atmosphere and drain of carcinogenic chemicals are sometimes measured in tonnes.

Although an interplant alarm system warns workers when dangerous chemicals are vented to atmosphere, no such system warns local residents.

One of the most dangerous and persistent discharges is chlorine gas from the Chlorine Plant. There have been a number of occasions, on record, when railway workers in the nearby railway yards have been poisoned by chlorine and required hospitalisation.

The progressive increase in chemi-

cal pollution of the underground water in the southern areas of the Botany Sand Beds and the emergence of problem areas has been well documented since the early 1960s. In 1961 the area of maximum pollution was in the Banksmeadow area and contamination was mainly due to chloride, sulphate and sodium ions. In 1966 the intensity of pollution had increased and the area of maximum pollution had migrated north about one kilometre. In 1968 a northwesterly movement of pollution became apparent from the ICI area and the contaminated area had enlarged. This northwesterly drift has increased and pollution has also spread east.

Soil samples taken privately in April 1989 from land behind the Solvents Plant showed HCB contamination of up to 2000 ppm. Workers say the practice of hosing down spills and leaks towards the vacant land is the most likely cause of contamination.

The operations at the ICI complex have progressively poisoned the soil and ground water over a vast area of Botany during the last 30 years, with the knowledge of Government authorities who appear to have taken no steps to prosecute, or even attempt to stop it.

In response to the debate on the origins of HCBs and other chemical wastes entering the Springvale the SPCC directed ICI to engage a consultant to assess the soil and water contamination around its site.

The study undertaken by A G En-

vironmental Engineers has found that "the levels of contamination of the groundwaters, sediments and biota to the south west of the ICI Botany site are high by international standards and warrant further detailed investigation..."

The study confirmed that both shallow and deep groundwater is contaminated with HCBs and other organochlorines.

International Record

The Botany site is not the only source of ICI pollution. The company has a reputation for environmental irresponsibility all over the world, not least in its home country, Britain.

Greenpeace reported in 1989 that ICI's sixteen plants in the northwest of England broke the law 92 times from June 1988 to April 1989, an increase over the 83 of the previous year. Up to 1989 ICI's offences, just in the northwest totalled 448 in less than four years.

If indeed the whole planet is heading towards a poisoned future, ICI may be one of the international companies future generations will curse.

Richard Gosden works with Stop The Ocean Pollution. This article is based on a policy paper prepared for Ian Cohen, Green Alliance Senate candidate, March 1990.

Do we really want Botany to expand?

A major portion of the output from the Botany plant is plastics. ICI produces approximately 100,000 tonnes per year of polythene, 50,000 tonnes per year of polypropylene and 90,000 tonnes per year of PVC.

The Polyethylene Plant is presently operating at full capacity and the company plans to construct a new Polyethylene Plant in the near future. This would be a major addition to the existing complex. A recent Inquiry into the proposal resulted in a recommendation for approval.

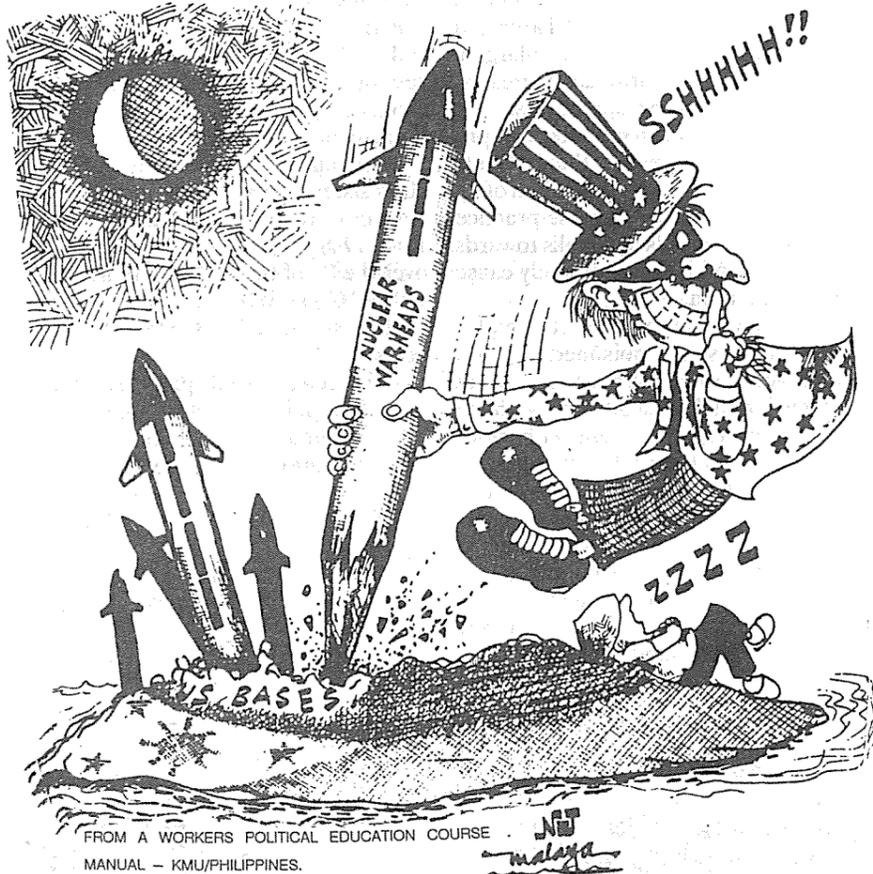
The projection for expected increased demand for polyethylene in Australia is staggering. Australians annually consume per capita approximately 2 kg of polyethylene. ICI hopes to boost that to match the current US (9 kg) and Canadian (13 kg) consumption. The company also has its eyes on the export of polyethylene pellets to the south eastern Asian market where it hopes to sell another 36,000 tonnes per year.

The new plant will add significantly to the burden on the environment with an additional large volume of liquid waste for sewer disposal, adding to deterioration of the already degraded marine environment near the Malabar sewer outfall.

Polyethylene is largely used for consumer products, packaging and plastic shopping bags which cause disposal problems in themselves. We know we can live without these products but we can't be sure how much longer we can live with them.

Bases to go?

Renegotiation of the treaty governing the US military bases in the Philippines has commenced. Andrew Nette looks at prospects for the removal of the bases.



FROM A WORKERS POLITICAL EDUCATION COURSE MANUAL - KMU/PHILIPPINES.

On the 14 May 1990, the preparatory talks between the United States and Aquino administrations over the future of the US military facilities in the Philippines started with a stirring rendition of US national anthem, *The Star Spangled Banner*. The national anthem of the Philippines, *Lupang Hinirang* followed after. Filipino government officials present hastened to explain that there was nothing symbolic in the order of songs, that it was "just protocol".

The irony was not lost however, on the two hundred local and foreign journalists who had assembled to cover the opening ceremony of the talks.

Escalating opposition to the retention of US military bases in the Philippines is challenging US political and strategic interests in the Asia Pacific region. It is for this reason the Bush administration is placing importance on the bases remaining in the Philippines, and why for the foreseeable future they will probably stay there. The impression of many people in Australia, that President Aquino wants to remove the bases, and the US are willing to withdraw, is totally inaccurate.

To ensure a favourable outcome from the Preparatory Talks, the US applied considerable pressure to the

Aquino administration. Amidst public protestations of support for Aquino preceding the talks, the media reported increasing numbers of high ranking US administration analysts were urging President Bush to 'depersonalize' his relationship with the Aquino Government and to stress that "the US supports stable Government, not just Aquino".

Similarly after the December coup, the CIA and the conservative US think tank, the Heritage Foundation, made it clear that continued US support for the Aquino regime was dependent on a new bases agreement being signed after the current one expires in September 1991.

Pressure was not restricted to official pronouncements. It is almost certain that during the last coup, as well as supporting Aquino, the US also dealt with rebel forces. Three US officials, two of whom were working at the US embassy at the time, have been linked to the coup plotters, allegedly having supplied logistical support, planning and technical advice.

These accusations have evoked strong memories among many Filipinos of US foreign policy in other Asian countries, notably the runup to the 1965 coup in Indonesia, during which the US supported Sukarno as well as backing right wing groups seeking to overthrow his Government. One week before the last coup 20,000 US combat troops were flown into Subic Naval Station and placed on 'standby', ready to intervene in the conflict.

The appointment of former US Assistant Secretary of Defense, Richard Armitage, to head US negotiations is instructive as to how the US viewed the talks. A veteran diplomat, with strong CIA links, he is alleged to have a record organising death squads, laundering drug money and arms dealing.

It is against this background, especially the effects of the December coup which have seen Aquino become even more reliant on the US, that the Philippines statement informing the US that it will no longer consider the present agreement valid after its expiry, has to be seen. It is merely a formality, the 1987 Constitution of the Philippines, categorically states the bases must be removed after the current lease expires. It sets the stage for the real process of negotiation starting in July. Yet while the last coup may have strengthened the

US hold over Aquino, it has also given a significant boost to the anti-bases movement, by strengthening popular sentiment against US interference in the nation's domestic politics.

Already the anti-bases movement has had success in mobilizing large numbers against the extension of the bases agreement. The umbrella organisation, ABACADA, is the largest, broadest coalition ever constructed around a single issue in Philippines history. It consists of political parties, student, youth, peasant and women's organisations. It has strong support among the churches, particularly the Catholic Church and organised labour. Among the nation's Congress, a majority of the 24 member Senate, and a minority of the 200 strong House of Representatives, oppose the bases. There is even an anti-bases faction in the army, the Young Officers' Union.

Many more Filipinos are undecided, or have been scared away from taking an anti-bases position by the campaign of violence and intimidation organised against those organisations considered by the army to be communist linked. Activists are regularly murdered by vigilante groups and demonstrations put down by the security forces.

With the first round of talks over, a number of propositions have already been floated by the Aquino Government which would allow the base to remain in the Philippines. There is the idea to introduce a 'Spanish-style' bases treaty. Under the treaty signed by the US and Spain in 1976, US forces are assured of the continued availability of a number of facilities in exchange for \$US1.22 billion, in compensation not aid, over a period of five years. The treaty can be renegotiated every five years, and it bans the storage of nuclear material. Other possibilities are the removal of the less valuable Clark Air base and for the strategically vital Subic, a long phase-out period, five maybe ten years, or a constitutional sidestep by declaring them Filipino, not US bases, and then opening them for US use.

Whichever one of these scenarios eventuates, two things are certain — the anti-bases movement will continue to grow in the Philippines, as will military repression as its threat increases.

Andrew Nette recently attended an anti-bases conference in the Philippines.



Communities and ecology

Robin Broad and John Cavanagh look at the responses of local communities and environment groups to increasing ecological destruction in the Philippines.

Who can forget the television images of Corazon Aquino, dressed in yellow from head to toe, leading millions of Filipinos to victory over one of the most hated dictators of this century? With her promises of land reform, social justice and an end to corruption in this land of persistent poverty, hopes for meaningful change soared.

Three and a half years later, poverty and corruption grind on, coupled with one of the fastest rates of destruction of natural resources in the world.

Disillusionment with the government is mounting, infecting even some of those once closest to President Aquino. In her own speeches, President Aquino admits to the staggering problems. In 1989, after hundreds of Filipinos died in landslides caused by overlogged hills, she added the environment to her pleas for action. Her 1989 State of the Union address highlighted

the 'years of degradation and neglect of our environment' and listed 'protection of the environment' as the first of three new priorities for immediate action.

The urgent environmental agenda, however, runs up against a system perfected by Marcos — a system where control of natural resources has been placed in the hands of a few powerful individuals who do not shy away from using force to protect their operations from perceived threats. Indeed, as Filipinos flock to any of the numerous environmental groups that have sprung up in the last year or two, they have faced harassment from big loggers, politicians and the military. Like Brazil's Chico Mendes, Filipino environmentalists have been killed.

An additional barrier, local environmentalists are discovering, is one prevalent across much of the developing world: a government growth

strategy that emphasizes export of wood products, fish, prawns, minerals and pesticide-intensive crops to earn the precious foreign exchange needed to repay staggering foreign debts.

The good news is that environmentalism has caught fire in this island nation, engulfing everyone from lawyers and other professionals to poor farmers and fishermen and there are a number of fruitful areas for co-operation with Western environmental organisations.

Nothing better illustrates both the problems and the struggles Filipino environmentalists face today than the current battle for the forests on the island of Palawan, and the issues surrounding the country's fastest growing export — prawns.

Enter almost any harbour in the Philippines' westernmost island of Palawan and you are greeted with a scene that, on first blush, appears to have changed little since Chinese traders first plied these waters centuries ago. Tall mountains, lush with trees, drop dramatically to the sea. In spots, narrow waterfalls cascade from

marbled cliffs into the transparent blue waters below.

Palawan is encircled by the nation's richest fishing grounds, and the long narrow island supports the Philippines' most extensive tropical rain forests. These forests, as one Palaweno proudly tells us, are "one of the world's last living libraries of ecology".

For centuries, Palawan's relative isolation from the rest of the archipelago spared many of its resources from the systematic exploitation practised elsewhere. As transport costs fell, however, and as the other islands were overlogged and overfished, it was only a matter of time before Palaweno was 'discovered'. Today it is the site of one of the fiercest environmental battles in southeast Asia — a battle taken up in early 1988 by the Philippines' largest and most influential environmental group, Haribon (after the endangered Philippines eagle).

It is a fight for Palawan's trees. While forests still cover an estimated 54 per cent of Palawan, at present rate of destruction the island's primary forests

will disappear by the year 2000. According to Haribon, the chief culprit is the island's biggest logging company, Pagdanan Timber Products. Pagdanan, Haribon publications claim, is tearing down the forest at a shocking rate of 47,000 acres a year. Most of the harvest is then exported to Japan, Taiwan and South Korea, nations which now carefully control the cutting of their own forests.

According to many Palawenos, the rampant logging is drying up the nation's watersheds, threatening municipal drinking water systems as well as irrigation for lowland farmers. Silt from denuded mountains is flowing into the sea, smothering coral reefs (aptly called 'fish homes' in Filipino) and hence cutting back on fish resources. And the Batacs, tribal Filipinos who live by gathering resin from 'almaciga' trees, are being driven into extinction as that giant of hardwoods (supposedly a protected tree) is hauled out of Palawan's forests.

Pagdanan and a sister timber company are controlled by Filipino

businessman Jose 'Pepito' Alvarez, a man who became rich exporting timber from Indonesia in the 1970s. The two Palawan concessions were granted to Alvarez in the early 1980s by Marcos and cover 61 per cent of Palawan's productive forest. According to Haribon calculations, they provide Alvarez annual sales of some US\$24 million. That figure by itself may not immediately convey a sense of Alvarez's power in Palawan. But two comparisons put it in better perspective: it is equivalent to three-quarters of the total income of this entire province of about 500,000 people, and it is 24 times the provincial government's annual budget of US\$1 million.

Alvarez has used his wealth to win the right friends. An exposé in the respected *Far Eastern Economic Review* presented evidence that Alvarez has cultivated close ties with Palawan's two congressmen, David Ponce de Leon and Ramon Mitra (a close Aquino ally and currently the powerful Speaker of the House of Representatives). In turn, the province's two

newspapers and single radio station are controlled by politicians close to the logger. The church hierarchy, an outspoken critic of natural resource destruction in other parts of the country, remains silent. *The Far Eastern Economic Review* reported that Palawan's bishop, Francisco San Diego, 'is alleged to receive free lumber from Alvarez'.

Alvarez is Palawan's kingmaker. His economic power dwarfs that of local political, military and environmental forces. The same could be said of most of the country's other big loggers. Also like Alvarez, many of these loggers have shifted their allegiance and economic backing from Marcos to politicians in Aquino's camp. And their exports of wood products bring the country foreign exchange. In this context, expectations that the Aquino government can and will act effectively to save the country's environment are simply unrealistic.

Timber is but one foreign-exchange earner for the Philippines. A bus ride down many coastal roads reveals

another: mile upon mile of man-made ponds nurturing different varieties of fish, shrimp, and increasingly, prawns.

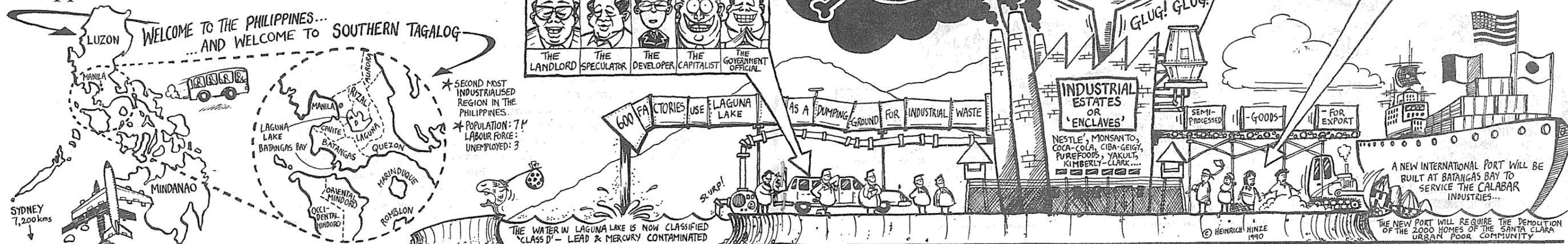
Like bananas and pineapples in the 1970s and semiconductors and garments in the mid 1980s, prawns are the current rage in Philippine exports. Owing to the seemingly insatiable Japanese appetite for this giant of the shrimp family, prawns have become one of the country's fastest growing and most lucrative export items. The overall value of Philippine prawn exports rose almost eightfold from 1980 to 1987.

As the residents of some islands have begun to discover, however, there is a most pressing ecological problem associated with prawn farming: water. Prawns require a careful mix of fresh and salt water, necessitating the location of ponds on the coast. Vast quantities of fresh water are pumped into the ponds and mixed with the salt water drawn from the sea.

Negros, in the central Philippines was the first Philippine island to enter into the prawn age in a big way, beginning in 1986. Huge turbines there can

"Imperyalismo Ibagsak"

Cartoonist Heinrich Hinze suggests that the slogan 'Down with Imperialism' of Filipino workers and peasants holds the key to both a green and economically just future for the Philippines.



pump 25,000 gallons of potable water into the ponds per minute. Coastal farmers and fishermen in Negros now complain that their own water wells are drying up as the prawn owners draw down the water table.

In one town in the heart of Negros's prawn farm region, the water supply has already been reduced 30 per cent; potable water is being rationed. In effect, as one geographer explained, "the prawn owners are privatising the water supply, depriving citizens of what was once a public resource".

After several years of prawn farming, the parched water table begins to suck in water from the sea, raising salinity levels. This inland saltwater migration has already started in parts of Negros. Left unchecked, it will eventually ruin the land for agriculture — and, ironically, for aquaculture too. Experts argue that it would take a generation after the prawn farms stop operating to flush out the salinity. Yet the prawn craze is still going strong in Negros.

When Cory Aquino came to power

in 1986, public awareness of 'ekologi' was nearly non-existent. But today, media coverage has become widespread as hundreds have died in mudslides and floods all over the country, disasters wrought by the combination of typhoons and denuded mountains. The statistics are numbing:

- The Philippines is losing nearly 500,000 acres of forest a year. Haribon estimates that only 22 per cent of the country is now covered with trees, while 54 per cent tree cover is needed for a stable ecosystem.
- Fisheries production has dropped 50 per cent in the last decade as a result of dynamite and cyanide fishing, siltation and mangrove destruction.
- Most of the country's rivers, lakes and bays are either biologically dead or rapidly dying.
- Exacerbating natural resource destruction are pressures from a population that is growing at a level unequalled in southeast Asia (2.8 per cent per year), a rate that has

propelled population density in the Philippines to the ninth highest in the developing world.

Both the ecological consciousness of Filipinos and the willingness of people from all walks of life to join in the environmental actions has been immeasurably boosted by the Catholic bishops of the Philippines who issued a strong pastoral letter on the environment entitled 'What is Happening to our Beautiful Land'. On one Sunday in early 1988, that letter was read in all Catholic churches throughout the country. In a nation where 85 per cent are catholic, the message served as a clarion call.

As scattered local communities have begun to organise themselves to fight the destruction of their forests and their fishing grounds, a debate has erupted over what actions can be taken at a national level. The starting point of that debate is the controversial question of who or what is primarily to blame for the destruction in Palawan and elsewhere.

Public debate over natural resour-

ces is currently focused on the forests. Both the Marcos government and the big loggers long placed the blame for their pillage on the 16 or 17 million poorer Filipinos who inhabit the country's upland areas. Through 'shifting' or slash-and-burn agriculture and tree-cutting for firewood, the argument goes, poorer upland farmers have been chopping down the Philippine forest.

Logger Alvarez's Pagdanan Timber Company, for instance, does not dispute that the forests of Palawan are at risk. The chief enemy of Palawan's forests, the company argues in full page advertisements in the nation's leading daily newspapers, are 'slash-and-burn farmers, settlers and illegal loggers who indiscriminately cut the trees'. Indeed, Pagdanan claims that its 120 private guards, armed with high-powered rifles, are protecting the forests from 21,000 shifting agriculturalists who cut trees to plant subsistence crops.

According to various Philippine-based environmentalists, however, it is precisely because of loggers like Al-

varez that most farmers can enter the forests in the first place. Only loggers have the equipment to build the roads into the heart of the forest; it is these logging roads that, in the words of one Philippine forester, serve as 'the arteries of forest destruction'. Once the big commercial loggers have chopped down what they want, they abandon the areas. Poor shifting agriculturalists move in.

Today, more and more development specialists and environmentalists are looking beyond small farmers for the root causes. From environmentalists in the majestic Cordillera mountains in the north to workers on the Dole and Del Monte pineapple plantations of the south, Filipinos tell us that the current environmental crisis is endemic to the Philippine development strategy. Dating as far back as the Spanish and American colonial periods, that strategy has granted a near monopoly over natural resources to a few individuals and firms.

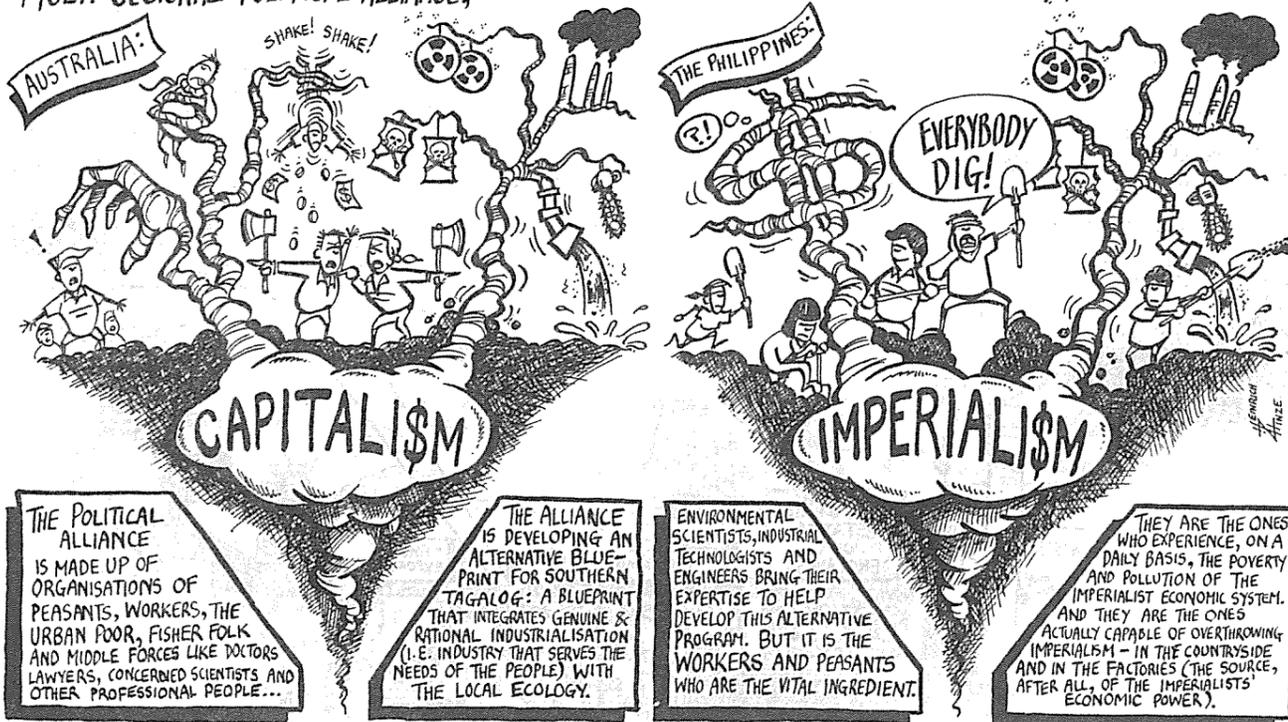
For decades, gold, copper, timber and agribusiness firms — both foreign

and more recently Filipino — have offered incentives to extract the maximum amount of resources at the minimum cost, with most of the resources earmarked for export. Facing virtually no environmental controls, firms have torn up the soil, the forests and the coral reefs with little or no regard for anything more than their own short-term profits.

Forest destruction started under American colonial rule when American lumber companies linked up with Philippine businessmen to cut trees on a few islands. Within a decade of independence, the Philippine government began a system of one to ten year concessions, wherein lumber companies were supposed to replant some of their logged-over areas. Corruption and inadequate enforcement made a joke of this requirement.

As demand for wood in Japan grew rapidly in the 1960s, Marcos transformed the concession system into a way to reward business cronies (whose concession contracts were, at times, simply handwritten notes from him). By

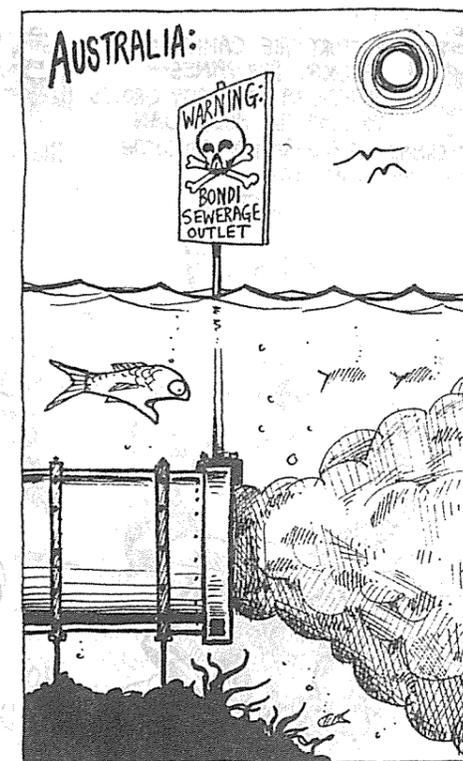
BUT HANG ON. THE GAME ISN'T OVER YET!... THE PEOPLE OF SOUTHERN TAGALOG ARE GETTING MORE ORGANISED— AND THEY AREN'T FIGHTING PROBLEMS LIKE TOXIC WASTE AND LOW WAGES AS SINGLE ISSUES. THEY HAVE FORMED A MULTI-SECTORAL POLITICAL ALLIANCE, TO TACKLE THE PROBLEMS AT THEIR ROOT...



OF COURSE, YOU CAN ALWAYS TELL WHEN PEOPLE START GETTING TO THE HEART OF THE MATTER.

THEY START DISAPPEARING.

5 UNION LEADERS ALONE HAVE BEEN KILLED IN SOUTHERN TAGALOG SINCE 1988.



STATE AUTHORITIES LITTERING THE WATERWAYS.



DITTO.

the mid-1970s, cronies like Marcos's defence minister, Juan Ponce Enrile (subsequently Aquino's first Minister of Defence), represented a large share of the 250 companies with timber leases.

Under Aquino, the Department of Environment and Natural Resources (DENR) has reduced the number of concessionaires and has pressed them to replant more forests, but the system has not changed in any significant way.

As Haribon's president, Maximino Kalaw, Jr, notes:

Our new constitution provides that natural resources belong to the state, but in our case, the state equals politicians ... not people. This ... has resulted in the unjust distribution of resources. Forest resources and land resources were given as political patronage and as a source of resources to keep people in power and to buy electoral votes. This kind of resource exploitation is facilitated by the fact that half the country's land lies in the government's control, managed by the DENR. [One consequence is that]

... in the past 15 years we have had only 470 logging concessionaires who (are allowed to exploit) all the resources of the forests ... The process created poverty for 17 million people around the forest areas.

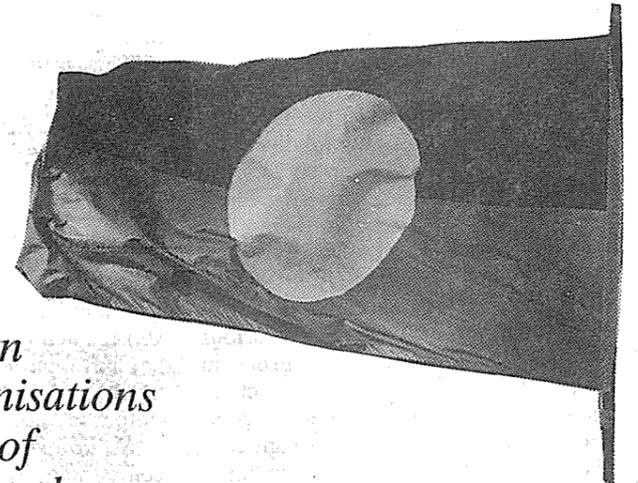
In this approach to development, the emphasis has been on exporting natural resources at minimal cost to the rich markets of the West and, more recently, Japan. The majority of Filipinos, poor in cash terms from the start, were never viewed as potential customers of these products. Hence, resource exploiting firms, in their efforts to minimise costs, have traditionally paid Filipino labour as little as possible.

These low wages, combined with the overall unequal access to land, forests, minerals and other resources, have helped to generate mass poverty. Today, 60 to 70 per cent of the population is estimated to live below the poverty line. Poverty, in turn, speeds up environmental ruin as the poor and the landless cut trees for fuel or destroy coral reefs to increase their catch.

Since the Marcos government borrowed heavily to finance this resource-destructive form of development and to pad private bank accounts, the Philippines now finds approximately two-fifths of government expenditures channelled into servicing a large domestic debt and almost US\$30 billion foreign debt. This leaves few resources for those government ministries which are supposed to look after the health and education of Filipinos, let alone for the DENR.

Robin Broad is author of Unequal Alliance: The World Bank, the International Monetary Fund, and the Philippines (Berkeley: University of California Press, 1988). John Cavanagh co-directs the world economy working group at the Institute for Policy Studies. They recently spent a year in the Philippines on a grant from the John D and Catherine T MacArthur Foundation. (Third World Network Features/Amicus Journal)

Wilderness — is it a land rights issue?



Protecting Australia's wilderness is an objective of many environment organisations but Jon Lark suggests that the rights of Aboriginal people to their land need to be addressed.

Aboriginal people have been in Australia for over 40,000 years. They have a very deep relationship with the environment, indeed they recognise themselves as being an inseparable part of it. Through the dreaming they tie the substance of their society — all their laws and beliefs systems — to the land. Everything from personal relationships to land management is linked to the creation of the environment and its ongoing existence.

On a day-to-day basis there is also responsibility for maintaining the environment and there are situations where Aboriginal people blame themselves when species of animals disappear or water holes dry up. Whilst we (whitefellas) hold a notion of owning land, Aboriginal people believe the land owns them; their relationship is personal as opposed to aesthetic and they live as part of the land whilst we 'live off the land'.

The issue of indigenous people's rights to their own lands as against conservation issues is steadily rising on the international environmental agenda. One example is the visit by representatives of Amazon Indian people from five South American countries to the United States in 1989 to meet environmentalists, World Bank officials and US Congress members to press for recognition of indigenous peoples' rights to land. American environmentalists were criticised for their singleminded devotion to preserving the environment. The visiting group said:

We are concerned that you have left us indigenous peoples and our organisations out of the political process which is determining the future of our homelands. (*Land Rights News*, November 1989)

The Penan, Inuit, and the Maoris with their treaty of Waitangi, to name a few, all raise questions as to the direction of the environment movement.

If we as environmentalists are spurred on by the very real threats to global survival then surely we cannot ignore the immediate threat to the survival of Aboriginal people when removed from or denied access to their lands.

In areas such as Central and Western Australia, Aboriginal people are faced with cultural annihilation within the next generation. The current traditional revitalization expressed in the return to homelands is seen by the older people as the final chance of cultural and physical survival. To Aboriginal people survival of the land and their own survival are the same. Similarly, environmentalists perceive environmental survival as being directly related to survival of the human race.

At present the major environmental

groups in Australia lack informed policies in areas where Aboriginal people have involvement and concerns.

This is most apparent in wilderness policy, particularly in Central and Western Australia, where traditionally oriented Aboriginal people are living or attempting to resettle.

Existing policies reveal a lack of awareness (probably through a lack of consultation with Aboriginal groups) of Aboriginal priorities with respect to the land.

Possibly the strongest and most widely representative statement of Aboriginal priorities was made at the conference 'Aboriginal Role in Nature Conservation' held at Emu Junction in the Maralinga Tjarutya lands in June 1988.

There it was clearly stated by a consensus of traditional (those who still have the law), rural and urban Aboriginal people that their priorities are "the Law, the Land and the People". Land conservation, as described by Europeans at the meeting, ran a distant second and may only have been alluded to at all out of politeness to the attending Europeans, many of whom represented State or Federal Conservation Departments and independent environmental organisations.

What does this mean? Is it a rejection of land conservation *per se*? I believe the answer lies in the fact that

SO, WHERE DO WE FIT IN?

1 FOR A START, WE CAN MAKE SOME LINKS WITH OUR COUNTERPARTS IN THE PHILIPPINES — MILITANT UNIONS, FLEDGLING ENVIRONMENT GROUPS, HUMAN RIGHTS ORGANISATIONS, STUDENT GROUPS.....

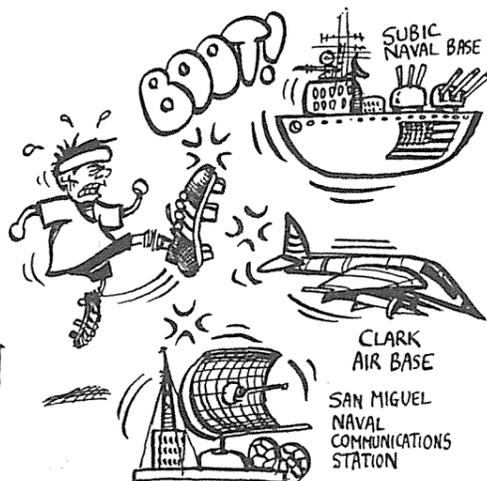


AFTER ALL... CAPITALISM IS A GLOBAL SYSTEM... THE LINKS, IN MANY WAYS, ARE ALREADY THERE...

2 SUPPORT THE CAMPAIGN OF LOCAL PHILIPPINES-AUSTRALIA SOLIDARITY GROUPS TO STOP THE AUSTRALIAN GOVERNMENT'S PROGRAM OF AID TO THE PHILIPPINES' MILITARY.....



3 SUPPORT THE STRUGGLE TO KICK OUT U.S. BASES: ONE OF THE MORE OBVIOUS SIGNS OF IMPERIALIST DOMINATION OF THE PHILIPPINES.....



NO BASES HERE! NO BASES THERE!
NO U.S. BASES ANYWHERE!!

Heinrich Hinze recently participated in a trade union study tour of the Philippines.

the Aboriginal concept of land and land usage, and therefore conservation, is so completely different from the European one which forms the basis of our policies on land conservation.

To Aboriginal people the Law, its ceremonial practice and daily living in accordance with the Law, is paramount. The Law is imprinted in the land and takes its expression and validity from the land, more strongly in some areas than others, but all are part of the whole system. Aboriginal people themselves are by direct descent (cyclical as opposed to linear) ultimately related to the creators of the Land/Law specifically in their area of birth, and to various and intricately complex degrees in other Law and kin-connected tracts of land, and inherit awesome responsibilities and obligations through this. To renege, either by design or by force of circumstances outside the individual's or group's control, is to invite catastrophe for the individual and/or kin.

As in pre-occupation times, the ob-

jective now is survival, but with a new and decidedly more dangerous set of destructive forces. To continue surviving, Law-based Aboriginal people must have non-negotiable control of their lands.

This principle is unacceptable to some interest groups, notably pastoralists and miners, and now it seems it is unacceptable to some environmental groups.

It will no doubt be difficult for environmental groups to accept that, unless they are prepared to better educate themselves through genuinely open-minded communication with the Aboriginal owners of the land in which they have conservation interests, they run the risk of being regarded as just another mob of intrusive whites.

A current example of this can be seen in the proposed wilderness legislation in South Australia. The SA Branch of The Wilderness Society (TWS) has been lobbying for wilderness legislation, separate from the National Parks and Wildlife Act, for the past three

years. During the 1989 State election campaign the Minister for the Environment, Susan Lenehan, announced that the ALP, if returned to government, would introduce wilderness legislation. It became the number one environmental selling point for the ALP during the election campaign. However, it was an ambiguous promise, for, although the Minister announced her intentions, she refused to outline the form of the legislation and gave no commitment to anything that would meet the objectives of TWS.

TWS's concept of wilderness legislation consists of a desire to 'save what's left' in terms of the nearest to 'pristine' areas in South Australia (mostly arid areas in the north and west). TWS wants these areas to be protected in a stronger way than anything the National Parks Act guarantees. This means protection from pastoralism, mining and tourism, thus creating remote, peopleless refuges for the environment. TWS's policy on wilderness management states that its primary objective "is to maximise the naturalness and remoteness of wilderness areas" and its secondary objective "to maintain opportunities for wilderness-dependent experiences such as: solitude, self-reliant recreation, and aesthetic enjoyment." The policy defines a wilderness area as:

a large tract of land remote at its core from access and settlement, substantially unmodified by modern technological society or capable of being restored to that state, and of sufficient size to make practical the long-term protection of its natural systems.

To maintain these areas TWS has developed a code of management including:

- the exclusion of construction of vehicle trails and use of motorised, wheeled or animal transport
- overflying of wilderness areas should not occur under 5000 feet
- the landing of aircraft will be prohibited, except for helicopter access for emergency and essential management operations
- prohibition of the entry and use of non-indigenous animals (horses, dogs, camels etc)
- prohibition of constructed walking tracks, signs, and track markers will

- not be used except for essential management operations
- Access by Aboriginal people to their sites of significance and protection of these sites will as far as possible be by methods compatible with wilderness quality
- traditional Aboriginal burning practices will be facilitated where traditional appropriate Aboriginal knowledge and expertise are available

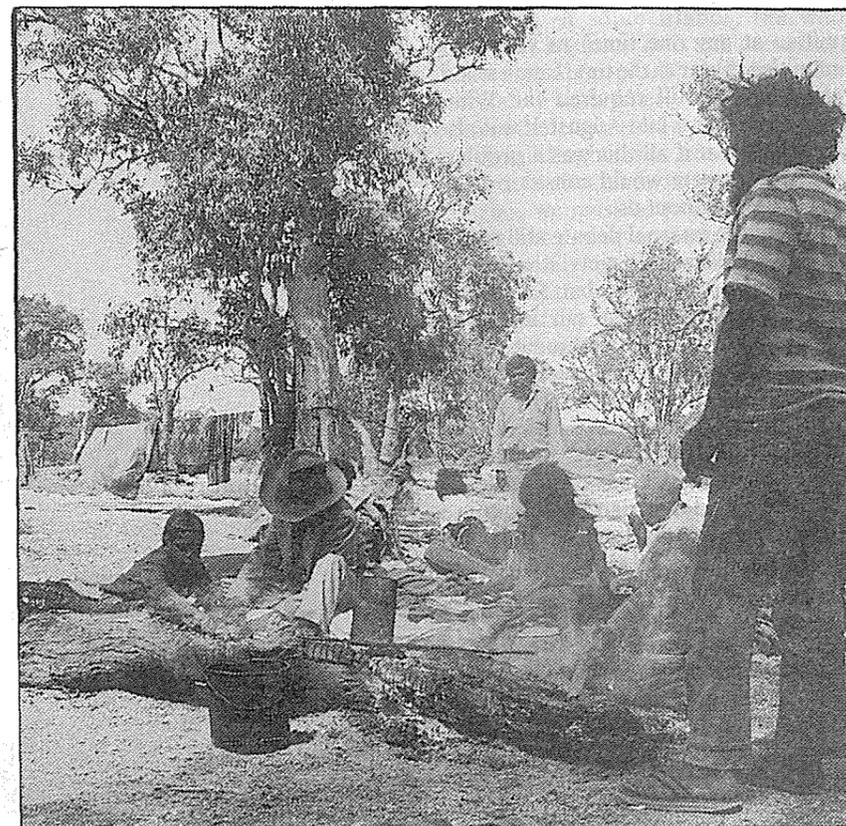
Since the ALP was returned to government in South Australia, Environment Minister Lenehan has reaffirmed her commitment to wilderness legislation and announced the formation of an 'Interim Wilderness Committee' (IWC) with the role of firstly drafting a green paper outlining the spirit of the proposed legislation to be released publicly for comment, and secondly to draft a white paper as a result of the public comment to include a draft of the bill to be presented to Cabinet.

The suggested make-up of the Committee was to include a representative of The Wilderness Society as chair, a geographer with expertise relating to work on a wilderness inventory, an environmental lawyer, and two government representatives, one of whom, suggested the Minister, was to be the head of the Aboriginal Heritage Unit within the Department of Environment and Planning.

At this point TWS became embroiled in internal debate, as some of us in TWS saw a serious problem in making a push for wilderness legislation when a majority of areas with wilderness quality in South Australia is Aboriginal land.

We began to realise that firstly, our own policies were somewhat ambiguous, if not downright exclusive of Aboriginal control and management and use of their own lands. There was a very important need for the Aboriginal community to be involved at some level in the forming of legislation with such serious implications for their lands, especially with a view to changing the concept of wilderness protection to adequately accommodate their needs, in respect of the fact that what we were coveting — in most cases land — belonged to them. Really, we had no right to be discussing their land with the Government behind closed doors.

Secondly, we realised that we had



To continue surviving Law-based Aboriginal people must have non-negotiable control of their lands

made a major mistake in not having previously made known our intentions to the Aboriginal community and that our level of communication was still, more or less, nil.

We began to debate how best to resolve this situation, somehow ensuring the Aboriginal community understood the pending legislation and were adequately represented on the IWC. This was a massive task indeed, especially when some people within TWS still saw Aboriginal people as "just another interest group" and that this complex issue posed a serious threat to the pot of gold at the end of the rainbow — wilderness legislation.

At this stage, early 1990, we felt pressure from Lenehan to speed up the process, as the ALP had an ambition to present 'some' form of wilderness legislation to the spring session of Parliament. We began to consider our options.

In February 1990 we stated our concerns to Lenehan regarding the Aboriginal issue and told her that

amongst other things it was unacceptable for the Government to nominate someone from within the Department to represent Aboriginal interests and that the Aboriginal community should themselves nominate their own form of representation, and also that the time frame offered (the White Paper to be presented by late August) was impossible to work with given the very long process of proper consultation with the 10-15 Aboriginal community organisations that have links with the lands in question. There was also the issue of resources to carry out this consultation.

By May the response from the Minister was that the Government's nominated representatives would stay and that the IWC could consult with Aboriginal communities and invite representation in the form of an advisory sub-committee — although unfortunately resources were still limited, we could have no money to bring people to town if need be. The Committee was offered the use of a light aircraft (too small to accommodate the whole com-



Definitions of wilderness areas exclude Aboriginal rights of access to their land

mittee at any one time) to visit communities. As far as the time frame stood, the Minister still required the White Paper as early as late August. It was also hinted at that if all this was a problem the Government would consider drafting the bill without us.

With the internal debate still raging in The Wilderness Society, it was painfully decided by most, that, faced with the threat of removing our input, we should accept the Government representatives and their unacceptable role, take part in the IWC on the proviso that we still press the issues of lack of time and inadequate resources. Meanwhile TWS undertook, with its own extremely limited funds, liaison with some Aboriginal organisations and recommended they try to obtain representation and input to the Committee.

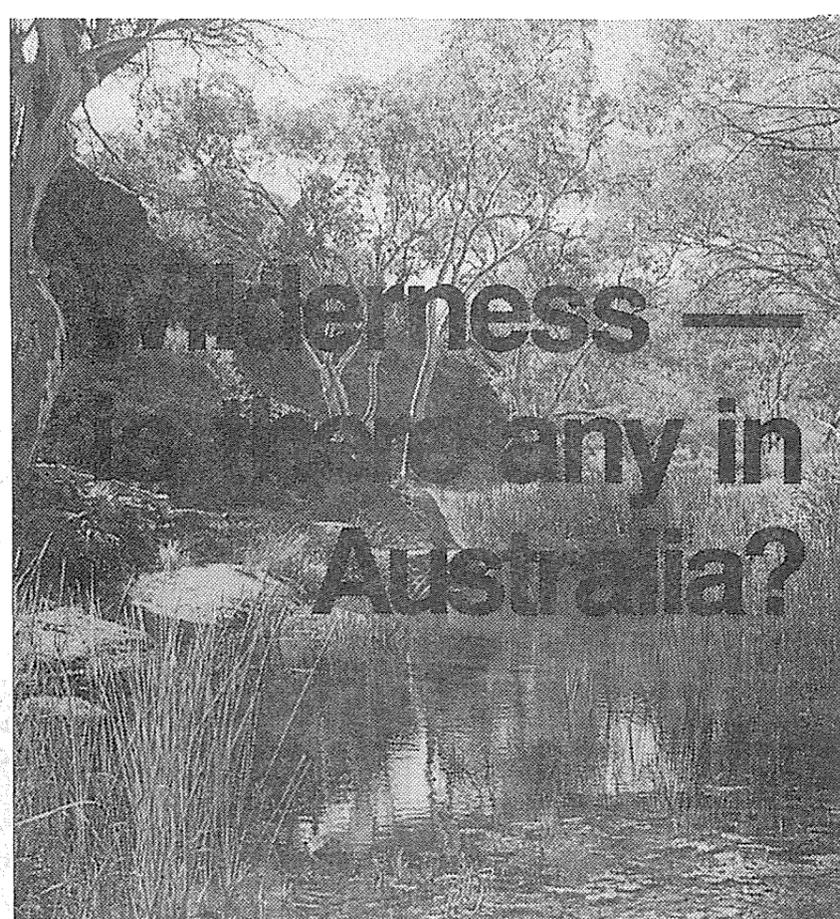
We still have not resolved the Eurocentric notions of wilderness that exist in our policies and basically our efforts amounted to a flimsy attempt at damage control. At the end of May the IWC convened its first meeting with TWS holding the chair.

In June I undertook a short period of employment with Pauplyala Tjarutja, an Aboriginal community situated in the Great Victoria Desert in Western Australia adjacent to the South Australian border. People here have direct links with the country on both sides of the WA/SA border and indeed some of the people were born in the unnamed conservation park adjacent to the Maralinga land in SA. This park is seen by TWS as having wilderness quality and is an obvious nomination under future wilderness legislation.

As of July 1, the Pauplyala Tjarutja had not had formal communication from the Committee. I wonder if yet again a piece of legislation with important implications for Aboriginal people will be enacted and the affected people informed after the event.

It is time that we environmentalists took responsibility for our actions. In trying to save the planet as a whole we may unwittingly be aiding the destruction of one of the cultures whose living environment, until degraded by colonial forces, was an example of ecological balance.

Jon Lark works for The Wilderness Society as Aboriginal Liaison Officer.



Larry O'Loughlin and Clare Henderson take a critical look at the term wilderness and its implications.

wilderness, n. a wild region, as of forest or desert; a waste; a tract of land inhabited only by wild animals.

wilderness area, n. a wilderness in which the ecology is undisturbed. (from the Macquarie Dictionary)

What is wilderness?

The concept of wilderness in European civilisation is as old as the civilisation itself, wilderness was where civilisation was not.

The wilderness of Europe has been almost entirely lost as civilisation raged across the landscape, warring, hunting and ploughing with increased mechanisation and voracity.

But in the new frontiers of North America and Australia, the colonizers were confronted and challenged by wild lands, which they saw as places to be subdued for civilisation, while they also learned some respect for it.

Yet the last year of the American Civil War made any destruction of

resources there seem justifiable, and preceded a time of rampant exploitation, unequalled until the current destruction of the Amazon rainforest.

With the diminishing quantity of wilderness, public attitudes again began to change and wilderness was seen as a scarce resource. Associations developed advocating preservation, first of the forests, then of areas of wilderness which became the world's first national parks.

Native Americans from these parks had already been generally displaced to reservations, and the US National Park Act (1916) gave these reserves their stated purpose: public enjoyment, public use without impairment.

However these parks were designed for human recreation and use; roads, kiosks, playing fields etc were built, in effect taming them — making them suitable for human use and subduing nature's chaos. It was felt that they lost their 'wilderness' characteristics.

Consequently in 1935 the US Wilderness Society was established to save what was left of wilderness and in 1964 a Wilderness Bill was enacted:

to secure for the American people of present and future generations the benefits of an enduring resource of wilderness ... federally owned areas ... for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and ... the preservation of their wilderness character.

The Act defined wilderness as:

an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation

The US definition had its problems: for one thing, the areas had to be Federal land, meaning that any other primeval area would not be wilderness. It also meant that areas with roads through them would not have wilderness status, and it precluded habitation by humans, including Native Americans who may have had claim to the areas.

Wilderness in Australia

The case of the flooding of Tasmania's Lake Pedder brought the Australian public's attention to the question of wilderness, and led to the establishment of The Wilderness Society (originally the Tasmanian Wilderness Society).

Some current Wilderness Society literature defines wilderness in terms of remoteness:

A wilderness area is a large tract of natural country. It's a place that is largely free of, and remote from, evidence of modern technological disturbances such as roads, structures and cleared land.

And, in another document:

Wilderness is a large tract of land remote at its core from access and settlement, substantially unmodified by modern technological society or capable of being restored to that state, and of sufficient size to make practical the long-term protection of its natural systems.

Why is wilderness important?

There are many arguments presented for the importance of wilderness as

against recreation areas like National Parks.

One of the prime arguments put forward for preserving areas of wilderness is for the spiritual value they offer. Bob Brown, an eloquent proponent of this view, says:

Such places, connect us with the universe ... in the stones, the trees, the skies, is a fulfillment for humanity, a contentment, without which no life can be satisfied or rested in the deepest sense.

However, given its scarcity, if wilderness is seen as a haven for human spiritual benefit, it must effectively be an elitist pursuit limited to a select few. Participation involving many people will inevitably lead to the destruction of its wilderness characteristics.

There is also support for wilderness on the basis that it is a great source of biodiversity, a gene pool for the planet, and the basis of replanting other areas with seeds of indigenous species. Again, unless the wilderness were to be allowed to spread unhindered by human intervention, the research and collection of an area's seeds would be the sort of intrusion that would mean it ceased to be a wilderness.

Some people suggest that wilderness has value in itself, intrinsic value that is not reliant on any use being found by humans for it.

The problem with wilderness preservation as an end within itself is that it is ultimately self-defeating. As argued by John Rodman:

The dilemma arises from the status of wilderness areas as isolated islands in a sea of overpopulation, economic growth, and polluting technology, and the fact that as long as these trends continue there are impacts on wilderness areas that cannot be prevented.

These definitions of wilderness, and reasons for its preservation face a number of problems. Firstly, the global nature of ozone depletion, the greenhouse effect, acid rain and pollution all have had and will continue to have an impact on natural ecosystems. Even areas remote from urban centres will continue to be under threat from damaging human impact.

Secondly, the criteria 'free of human settlement or exploitation' does not apply in Australia where, with the ex-

ception of some islands, the whole country has been or is still occupied by Aboriginal people. Thus if wilderness is to be an area free of access or settlement then we must be prepared to deny any valid rights that Aboriginal people have to the land. If we accept their rights, we must be prepared to accept that they may undertake activities potentially negating the wilderness values of the land as it has been defined.

Thirdly the act of defining 'wilderness' further separates humans from nature. Our desire to keep tracts of land as places untrammelled by humans can be seen as a continuation of the historical European definition of 'wilderness' as a wild, uncivilised place unfit for human habitation — by implication places where humans live are civilised — where nature, a wild and hostile force, has been dominated and brought under control. Focusing on preservation of wilderness exacerbates this dichotomy of our relationship to nature.

Chief Luther Standing Bear, a Native American said:

We did not think of the great open plains, the beautiful rolling hills and the winding streams with tangled growth as wild. Only to the white man was nature a wilderness and only to him was the land infested with 'wild' animals and 'savage' people. To us it was tame. There was no wilderness; since nature was not dangerous but hospitable; not forbidding but friendly.

Preserving areas currently unexploited is important but for it to be of lasting value our 'separation' from nature needs to be considered, and considered within the context of our immediate environment. The environment is more than rocks and trees and animals. Humans are also part of the environment and ultimately it is how we live within our environment that will determine the preservation of natural ecosystems.

Larry O'Loughlin and Clare Henderson are the editors of Chain Reaction.

New clear technology — is it the answer?

The nuclear power industry has received quite an amount of bad publicity in recent years, and even nuclear power supporters have recognised the need for safety improvements, and perhaps even safer designs. John Hallam casts a sceptical eye over the prospects for safe nuclear power.

We've already seen from the work of Katz and Keepin (*Chain Reaction 57*), that nuclear power is not the solution to global warming.

However, some people, especially within the nuclear power industry, haven't taken the hint, and would like the public to think that it is. They argue that a combination of greenhouse concerns and new technology will 'save' the nuclear power industry from death at the hands of the marketplace.

What are the realistic prospects for 'new generation' reactor designs, lacking all the nasty safety and economic problems nuclear critics have pointed to — reactors (in the words of the *Wall Street Journal*) 'everybody can love'?

On the one hand, within nuclear industry publications such as *Nuclear Engineering International*, one hears much gnashing of teeth, and acknowledgments that the nuclear power industry is 'dead in the water'. But there's still lots of optimism about the potential of 'new' technologies. According to Richard K. Lester, professor of nuclear engineering at MIT:

Second generation nuclear technologies ... would re-establish nuclear power as a major source of electricity for the next century.

While according to the President of the American Nuclear Energy Council:

Nuclear Energy must be revitalised in order to alleviate the greenhouse effect.

Closer to home, Senator Peter McGauran, Opposition energy spokesperson, has clearly been seduced by a generation of reactors that do not even exist yet. According to Peter, in a confidential June 1989 memo to the Coalition's environment committee:

You would know that new-generation reactors with maximum safety features are now coming into use. They are small (from 250- 400 Mw) and fully automated, and overcome the many safety problems associated with large-scale reactors of the past.

Senator McGauran has jumped the gun here: not one of the advanced reactor concepts he talks about has actually been built. Nothing more advanced than design studies has yet been done. In the same document, he rhapsodizes that:

I have been particularly impressed by the more recent trend in reactor design towards smaller, automated reactors which possess 'inherently safe' technologies ... Smaller, 250-400 Mwe reactors which are totally enclosed, or, as in the Swedish PIUS design, totally submerged in borated water, are easily operated, and have phenomenal safety advantages.

In a way, Peter is right: the anti-nuclear movement would agree that non-existent nuclear reactors do have phenomenal safety advantages.

So is new technology really the answer to the nuclear industry's prayers, or is it just grasping at straws?

The argument in favour of new reactor technologies goes, that the dominant nuclear technology until now has been the PWR and BWR, with a few dodderly magnox and AGR plants in the UK, a few surprisingly good CANDU performers in Canada, Rumania, South Korea and Argentina, and unspeakable RBMKs in the USSR. These 'old technologies', it is argued, are too big (1000-1200 Mwe) and too costly (\$2-4billion) to fit easily into third world electricity grids, or US utility budgets or planning horizons. They rely on complicated, active, 'add-on' safety systems that cannot be relied on and cost lots of money. They take a long time to build, partly because of their sheer scale, partly because of the regulatory problems that arise (mainly US, but also West Germany, and even in the UK), because each reactor is 'custom designed' and different, and thus has to have its entire design separately verified by safety authorities, and partly because engineers such as Bechtel in the US have a way of doing things like putting in 1400 electrical circuits back-to-front, like they did at the Midland plant before it was abandoned. Finally, the PWR and BWR designs are conceded to contain real inherent safety problems — at least, by engineers who are proffering alternative designs. Those who argue for 'new generation' nuclear technology in this way concede much of the safety case nuclear critics have put for years.

But, we are told, the answer isn't to opt for a conservation-oriented, low-energy society. Technology forbid! Clearly, the answer must be new technology. And so a 'new generation' of reactor technology is on the drawing-

board, whose characteristics are supposed to be:

- Relatively small size (150-400 Mwe).
- Modularity: Rather than, say, 1000 Mwe units, reactors will come in, say, 600 Mwe 'clusters' of 4 x 150 Mwe, or in lines of identical units of up to 400 Mwe.
- Standardisation: No more custom-built, monster power plants. Instead, identical units of much smaller size are to be factory-made.
- Reliance on 'passive' safety features: new reactor designs are to rely on gravity and natural circulation to get rid of heat, not on 'active' features such as pumps.
- 'Automatic' shutdown: In designs such as PIUS, borated water is supposed to flood the core and shut the reactor down if anything goes wrong, without the use of pumps.
- 'Forgiving' operating characteristics: If something goes horribly wrong, you don't have 30 seconds like at Three Mile Island, to flood the core before fuel starts to melt, or about 3 seconds, like at Chernobyl, for an emergency scram before the reactor goes prompt critical and blows up. You're supposed to be able to walk away from designs like MHTGR and PIUS for days on end before anything actually needs doing — or at least, that's the idea.

Apart from the insoluble waste problem, and still being the least cost-effective way to cut greenhouse emissions, what could possibly be wrong with these lovely new technologies — and just how will they actually affect of the nuclear industry?

Let's look at some of the new reactor technologies, and then at the state of the rest of the nuclear power industry.

High Temperature Gas-cooled Reactors

The HTGR is, or was, my favourite nuclear reactor. Unlike the PWR, BWR, or CANDU, the HTGR doesn't have a lot of water inside a breakable pressure vessel, trying to keep the fuel from melting. Instead, it has a much bigger graphite core cooled by circulating helium gas at a relatively low pressure, but a much higher temperature than the LWR design, heating water inside steam-generators to the relatively high (and much more effi-

Some Nuclear Acronyms and Terms

ABWR — Advanced Boiling Water Reactor
AGR — Advanced Gas Reactor
BWR — Boiling Water Reactor
CANDU — Canadian Deuterium Reactor
DOE — Department of Energy (US)
FBR — Fast Breeder Reactor
HTGR — High Temperature Gas Reactor
IAEA — International Atomic Energy Agency
LWR — Light Water Reactor
Magnox — A British reactor with fuel elements in magnesium alloy
MHTGR — Modular High Temperature Gas Reactor
Mw — megawatt (one million watts)
Mwe — megawatt electrical power
NEI — Nuclear Engineering International
NRC — Nuclear Regulatory Commission (US)
NUKEM — brand name of a nuclear fuel cycle company
OECD — Organisation for Economic Co-operation & Development
PIUS — Process Inherent Ultimate Safety, Swedish.
PRISM — Power Reactor Inherently Safe Module, General Electric
prompt critical — the 'prompt' neutrons increase exponentially and the whole thing goes bang
PWR — Pressurised Water Reactor
RBMK — The reactor design with a world-wide impact (USSR). Unique graphite-moderated, water-cooled design
SBWR — Simplified Boiling Water Reactor, General Electric
scram — emergency reactor shutdown. Also Scottish Campaign to Resist the Atomic Menace
SIPWR — System Integrated Pressurised Water Reactor
SIR — Safe Integral Reactor, UK
THTR — Thorium High Temperature Reactor
WOCA — World Outside Communist Areas

cient) temperatures typical of fossil-fuel generating stations.

HTGRs are actually not all that new. They are the descendants of the UK's old Magnox plants (which use CO₂ to cool a large, graphite-moderated core), the UK's AGR plants (whose performance, with a capacity factor to date of less than 50 per cent has been uniformly awful), the US's Fort St Vrain HTGR, a 300 Mwe prototype recently closed because its performance was so embarrassingly bad, and West Germany's THTR, a unique 'pebble bed' reactor, shut down before it had even been properly commissioned because after

relatively minor problems with fuel damage and snapped bolts in its gas ducts, it was felt by its operators to be a financial meltdown in the making.

With a lineage like that, why the optimism about HTGRs and MHTGRs (Modular HTGRs)? Well, it seems that General Atomics (GA), who brought us Fort St Vrain, have teamed up with Siemens and HTR-GmbH of West Germany, to build a small (80 Mwe) MHTGR prototype in the USSR at Dimitrovgrad.

Meanwhile, GA's MHTGR concept has been selected by the US Department of Energy (DOE) for one of the

two new plutonium production reactors it has persuaded Congress it needs. DOE has also increased its funding of civilian MHTGR technology.

But all is not smooth sailing for the MHTGR. For one thing, the company isn't happy that DOE wants it to put a containment on the plutonium production reactor. It says MHTGRs don't need containment because they're "inherently safe", and thinks that DOE's insistence on containment for the military one may give people the wrong idea. GA's civilian reactor designs do not have a containment vessel.

Yet according to the NRC's Advisory Committee on Reactor Safeguards, a fire in the HTGR's graphite moderator could happen if the reactor vessel or core support system failed, resulting in "severe consequences".

The HTGR will need a lot of government help. A prototype US HTGR will cost about US\$1.8-\$2.1 billion, for 400 Mwe capacity — no cheaper than the financially disastrous LWRs. GA says that if DOE meets the cost of the first (military) prototype, subsequent HTGRs will be cheaper. Robert Pollard of the Union of Concerned Scientists says that "The Nuclear Industry should join the Free Enterprise system."

The time horizons being talked about by DOE are interesting, as they indicate that the MHTGR, though the most 'advanced' of the new reactor concepts, is still very far from being a reality. A feasibility study for a 4-reactor, 500 Mwe civil plant was near completion in March 1990 [NEI, Mar 1990]. The study was done in part "to determine what government support would be necessary" to build a lead-plant for operation "after the turn of the century". DOE itself is saying that MHTGR designs should be certified "early in the next century". If DOE is correct, this means that construction won't even start till past 2000-2005, and maybe not even then. Allowing 5 years, that means no MHTGR in the US until 2010-2015.

Process Inherent Ultimate Safety (PIUS)

Meanwhile, ABB-ATOM of Sweden, and United Engineers of the US have teamed up to market the PIUS design in the US. (NEI, Aug 1989)

The PIUS design originated in Sweden, and envisages the entire reactor core being submerged in borated water, which normally prevents a nuclear reaction of any kind. Any minor deviation from normal operation allows borated water into the core, and stops the reaction. The only problem is that the whole design concept has never been tested: no-one has actually built a PIUS of any size, not even 5-10 Mwe, so there's absolutely no guarantee that the concept will work at all.

PIUS is not in fact totally immune to catastrophe. It is still possible for the vessel containing the core to rupture, and it seems likely to be very costly.

Other designs

As well as PIUS and MHTGR, a bewildering variety of other designs are floating around. DOE favours a liquid-metal cooled reactor concept called 'PRISM', which doesn't seem to be inherently safe at all, as it depends on liquid hot sodium for heat transfer — with all the potential for fireworks that implies. It has been suggested that if the sodium coolant were lost, the core could blow itself apart. About the only real safety advantage of PRISM seems to be that it takes a while to heat up if circulation pumps fail. PRISM, like MHTGR, is supposed to come in nice bite-size 150-135Mwe x 4 bundles.

Other 'new' reactor concepts are GE's SBWR, a sort of simplified BWR, which is not very radically different from other BWRs, notably the 'Advanced BWR' (ABWR) GE is developing in partnership with Toshiba and Hitachi of Japan. ABWR does seem to have a good chance of at least one plant actually being built, probably by TEPCO, a Japanese utility, but ABWR is hardly a 'new technology' design — rather, it's a development of existing BWR designs. With the slowing down of the Japanese reactor construction program, there's unlikely to be more than one ABWR built.

Another Japanese design is the 'System Integrated PWR' (SIPWR), a unique PWR with the troublesome steam-generators inside the reactor vessel. Given the trouble there has been with steam-generator leakage and replacement, this doesn't seem to be such a good idea: when the SIPWR has steam-generator problems, they'll have to replace the whole reactor. Needless

to say, no-one has built or ordered one yet. (NEI, Nov 1989)

It is interesting that, at a recent IAEA forum, former US AEC chief James Schlesinger said that while the new technologies would probably be developed, there was no guarantee that they would ever actually be employed (NEI, Nov 1989). Schlesinger said new 'evolutionary' designs (such as ABWR and maybe SIPWR), less radical in their approach, might be ready by the 1990s.

Others in the nuclear industry have also suggested caution over the new designs. At a Madrid conference in June 1989, it was suggested by the chairman of the European Nuclear Society, Hans-Henning Hennies, that what would influence public opinion on nuclear power wasn't exotic new designs, but a proven safety record, and in order for 'current levels' of performance(!) to be achieved, about 30 years of operating experience would be needed. But these speakers, while critical of new nuclear technology, were quick to minimise the problems associated with existing nuclear technology!

Meanwhile, according to Robert Pollard of the Union of Concerned Scientists, interviewed in connection with MHTGRs,

Inherent safety is the functional equivalent of 'too cheap to meter'. This enchantment with future panaceas, ignoring the problems that are out there — I guess I will never understand it. (New Scientist, 4 Nov 1989 p39)

The upshot of all this is that 'new generation' nuclear technology is being marketed with the same unjustifiable techno-optimism as was the old technology, and with even less justification.

Some of the new 'inherently safe' technologies, such as PRISM seem to be at least as inherently unsafe as their FBR cousins, but use the excuse of 'inherent safety' to dispense with containments. Others, like PIUS, or MHTGR, might have been a good idea if they'd had prototypes deployed, say, 20 years ago, so we could now build a few standardised designs on the basis of a mature operating experience — if we weren't sensible enough to opt for energy efficiency instead. As it is, if governments are foolish enough to make a substantial commitment to one

of these technologies now, we may just see the first prototypes operating by, say, 2010-2020. By that time the greenhouse problem will be a whole lot worse, not least because we will have spent money on costly new reactor technologies that could have saved 7-10 times as much CO₂ if it had been spent on energy efficiency. Peter McGauran, please take note.

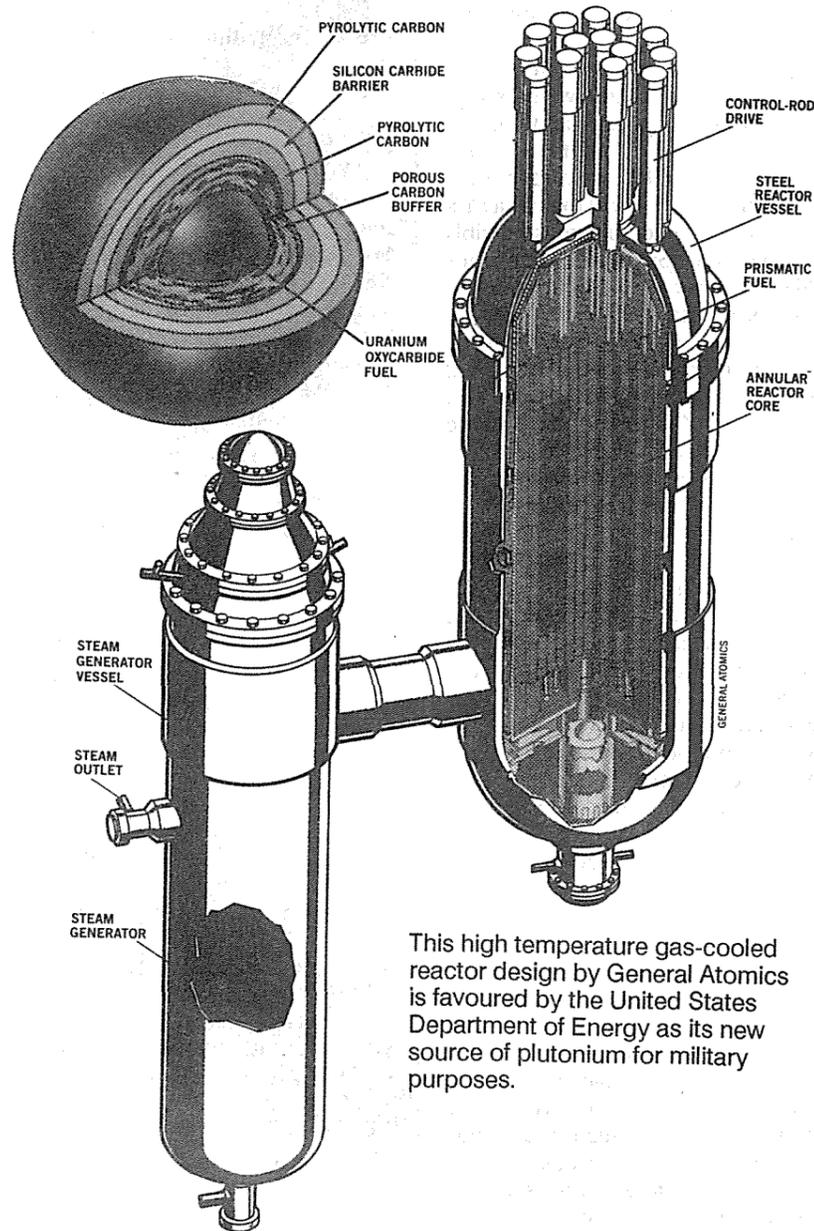
Back to the real world

Meanwhile, the nuclear power industry keeps slowing with the number of reactors under construction continuing to drop. According to industry publication *Nuclear Engineering International*, there were 109 plants under construction worldwide in Dec 1988 — 11 in the US, 9 in France, 12 in Japan, and 23 in the USSR. By December 1989, the total number of plants under construction had dropped to 97, — only 5 in the US, 8 in France, 13 in Japan, and 26 in the USSR. Since then, at least 2 USSR plants have been cancelled, bringing them down to 24. According to the latest US estimates, only 4 reactors with definite operating dates are now under construction in the US, while nothing not subsequently cancelled has been ordered since 1973.

While Canada may be thinking of ordering new CANDU plants, nuclear programs in France and Japan continue to slow, with ordering in France on the verge of a complete halt. The UK's ambitious PWR program has been completely scrapped, with construction proceeding only on Sizewell-B, the whole nuclear industry withdrawn from privatisation, and continued poor performance from the UK's AGRs.

A recent Greenpeace report says that by the year 2000 WOCA nuclear capacity will be no more than 310,000 Mwe. This compares with my own 1988 estimates of 317,000 Mwe, and 1988 OECD estimates of 341,000 Mwe. Industry consultant NUKEM has also dropped its estimates of year 2000 nuclear capacity from 347,000 Mwe in 1988, to 336,600 Mwe in Dec 1989. The interesting thing about the Greenpeace estimate however, is that by 2000, WOCA nuclear capacity will be on the way down, having peaked in 1995-96.

John Hallam researches the nuclear industry with Friends of the Earth.



This high temperature gas-cooled reactor design by General Atomics is favoured by the United States Department of Energy as its new source of plutonium for military purposes.

Protesters and police — can they be friends?

The Rainforest Action Group is a relatively large section of the Australian environment movement. Over the last year it has engaged in a number of actions, participating in the protests against the destruction of forests in eastern Australia, the Anti-bases protest at Nurrungar and regular actions against the import of rainforest timbers. Unique about its activity is a style of non-violence that involves informing and liaising with the police prior to its actions. Ian Wilson takes a critical look at its approach.



In *Chain Reaction* 59¹, we suggested that the strategies of nonviolent action espoused by the Melbourne Rainforest Action Group (RAG) at Nurrungar lacked structural analysis of the role of the security forces as the civil extension of the military threat we had come to protest against. Robert Burrowes, a RAG activist, argues that the non-violent politics of RAG is informed by an analysis which aims to undermine the State's sources of power and to build parallel institutions to supplant existing structures. According to this analysis, RAG emphasises nonviolent strategies designed to de-role state functionaries and encourage their defection.²

A structural analysis is not simply about the connections between various issues such as the US military bases and the domestic security forces that guard them. It also pays attention to the way in which material conditions and social structures affect the consciousness and activity of individuals and social groups. More specifically, a structural analysis offered by the Left seeks to identify systematic inequalities in the overall flux of social relations and to find collective means of eliminating power imbalance. In this respect, the actual source of repression is located deeply within the social structure and institutions and should not simply be taken at its face value in the actions of police, soldiers or guard dogs.

Hence, there is strong social determination of the functions of police and State security personnel that is not reducible to the personal will of the policeman or policewoman to enforce prescribed sanctions.

At Nurrungar and elsewhere, RAG argues that more revolutionary activist behaviour involves police questioning their role, and abusing and struggling with the police are inappropriate behaviours as they are not respectful of police as human beings. Whilst it would be churlish to suggest that all protesters who are not RAG members go out of their way to irritate and abuse police, there are compelling structural (and thereby, psychological) reasons why many women, squatters, Queenslanders, students and builders labourers believe that it is neither possible nor useful to befriend police officers and attempt to affirm their integrity and capacity for growth.

The RAG policy of cooperation

with the police largely contradicts any broad commitment to alleviating injustice and violence. The activity of the RAG in a number of areas such as East Gippsland, southeast forests, rainforest timber imports, the plight of the Penan and the Anti-bases issue, indicates their praiseworthy desires for broad social change. However, political analysis and strategy would indicate that the task of the State and the police to maintain order becomes harder, not easier as RAG policy would have it, as opposition rises against the continued extraction of wealth via economic and environmental exploitation.

The question of how to approach the police has no simple answer. Burrowes justifies co-operation with the police on the basis that, "over the medium term" non-violence can have revolutionary implications when it wins "the support of police and armies away from repressive governments". Australia however is not in a revolutionary situation and until it is, the police are likely to continue to side with those who arm, clothe and pay them. In the meantime there are many activists who believe that RAG is too trusting of the police and does not give enough recognition to the very definite set of power relations based on capitalism, patriarchy and racism which enmesh the police within a veritable web of systemic violence and exploitation in our society.

For example, the use of tear gas by police at Nurrungar was seen by Burrowes as a result of the ineffective briefing of police by the protest liaison group. He states:

Had police been fully briefed on the intended actions of the crowd, such breakdowns in police discipline may have been avoided and the media time wasted on the police use of mace utilised to carry our messages to the Australian public.

Would all the arbitrary exercise of police violence be avoided by better discipline and briefing?

Co-operating with the Police

The RAG policy of extreme openness with the police exaggerates a common policy of direct action organisation into a grand principle of political struggle. The good citizen approach again indicates the absence of a well developed structural analysis which can relate a

critique of the state, violence, and ram-paging multinationals to the specific demands of political protest groups. The following statement by Burrowes seems to encapsulate RAG's co-operative strategy:

There is strong support for rainforest preservation within the Police Association and many individual police have expressed their support of our cause and the way in which our campaign is being conducted.⁵

This approach fails to recognise that possibly the police themselves have decided that a policy of 'cooperation' at such demonstrations is advantageous to their interests.

Further in pursuing police cooperation RAG is losing the trust of other groupings within the peace and environment movements, as well as preventing the effective articulation of its environmental concerns to potential allies of other class and social-political standpoints. In many circumstances it is quite practical to inform the police in advance of political protests, especially if the direct action involves potential arrests. At Nurrungar, a Police Liaison group was formed to convey the broad outline of planned actions to the police, negotiate with security personnel during actions and to provide support for those arrested. Some of the

protesters were intent on action directed against the physical operation of the Nurrungar base. Undoubtedly, it was the successful entry onto the radomes that prompted Defence Minister Beazley's call for troops to be flown from Sydney to reinforce security at the base. For many activists, the public outrage evoked by the use of troops to quell an anti-nuclear demonstration constituted the major success of the Nurrungar protest because the links between police violence, military violence, nuclear violence and capitalist 'democracy' were publicly exposed.

Decision making at mass actions

Burrowes, however was critical of the decision-making structure at the Nurrungar protest because too much independence was given to the activities of affinity groups. RAG advocated centralising the camps decision-making procedure so that general meetings could discuss principles of conduct in relation to the use of secrecy, dealings with the police, and actions involving property damage and debate proposals for protest actions. Again this was based on the advantages of 'openness'.

I would argue that in relation to national protests such as Nurrungar, a restricted model of consensus, such as that offered by the affinity group structure would be more appropriate.



Particularly as in a large and relatively disparate grouping, the deployment of consensus decision-making often serves to homogenise political differences in the consensual search for a lowest common denominator and frequently creates the conditions for experts and personalities to dominate proceedings. In such a situation, openness could be used to discipline activist behaviour and curtail political expression.

In the 1970s, following the critique of the generally bureaucratic and hierarchical modes of Left party organisation, much energy went into devising new forms of decision-making which attempted to act positively to redress power imbalances within political resistance groups. Consensus was widely regarded within the new social movements as the answer to the traditional dilemmas of organisation. In the 1980s, however, many activists began to shift away from employing a pure model of consensus because it was found to only work well within groups that were small, had a high level of uniformity in skills, backgrounds and political outlooks, and that within these groups it still favoured the articulate and expert. In extreme cases it was found that the lack of recognition of the presence of factions and informal hierarchies within a consensus regime often meant that individuals could be bludgeoned into consensus and marginalised by the group in a far more personal and emotionally damaging way than if formal meeting procedure or representative voting had been employed.

At Nurrungar there was a wide variety of differences: different cultures, ages, gender, and economic class. The attempt to allow all activists full participation in planning and decision-making could have served to reproduce the current domination of the tertiary educated WASPs within the peace and environment movements. In such a situation the perspectives of the marginal can easily be swept aside in a demand for uniformity of opinion, or absorbed into an amorphous, humanistic consensus.

The New Age of Rainforest Action?

Burrowes skates onto even thinner ice by confusing an experience of contemporary ideology with nonviolent politics as historical mission, he states:

Activist politics may feel good, but

more people want it to be politically effective in a more personal way. Non-violent struggle is the politics of ordinary people. Activists who choose to fully utilise its principles and dynamics invariably feel empowered and liberated by it. And history clearly records that nonviolent politics works.

This statement may appear attractive to nonviolent activists, because: one, it relates contemporary preoccupations about personal growth to the ethic of political commitment; two, it includes a critique of dominant power relations (implicit in the terms empowerment and liberation); and, three, it wraps the lot together in the comforting appeal to an historical tradition of nonviolent practice. There are, however, a number of problems with this position.

First, by appealing to a dubious tradition of nonviolence and attaching a liberatory evocation to the politics of nonviolence, RAG theory betrays a religious aspect in which the activist/ascetic may heal his or herself and lead the forest/world to salvation. The sectarian aspect of RAG is emphasised by their adherence to the biblical volumes of Gene Sharp. In a sense, RAG represents the underside of the New Age 'movement' in that both groupings are engaged in an attempt to 'reclaim' a Western spirituality out of down-to-earth living. While the political programme of RAG has been successful in mobilising the young and disaffected via use of New Age methods, it is debatable whether RAG has escaped the many dangers associated with the wider New Age 'movement'. Briefly, the pitfalls of the New Age are: rampant and insensitive cultural appropriation; reductionist beliefs that see all social problems as being individually based; that it is wealthy, white and Anglo in composition; it maintains a rigid therapist/client division; and, similarly, that New Age practitioners help maintain the unequal property and wealth relations that are dominant in capitalist society.

Second, whilst activists do wish to be politically effective in a more personal way, RAG should be wary of showing uncritical acceptance of contemporary ideologies which foster a notion of the individual who is seemingly devoid of social grounding and apparently 'free' to construct his/her identity via choices of lifestyles and products offered on the

supermarket shelves of advanced capitalism. Increasingly, it should be observed, certain individuals are experiencing a sense of self-activity in forming their integrative bonds with the social order. This sense of personal liberation, however, is available only to the privileged few, and occurs within and as part of a global consolidation of inequality and exploitation. In this respect, the concern over the rapid rate of species extinction and wilderness destruction which has spawned resistance like RAG should be seen as a contemporary political response to a general process involving the simultaneous heightening of individual empowerment and debasement of the value of that experience. When viewed in this manner, the Rainforest Action Group may be understood as a political grouping acting in defence of the quality of life that, at present, is really only available to a particular class of wealthy Australians.

Although RAG is but a fraction within the current array of exploitations, ideologies and resistance organisations and not the bearer of a non-violent historical mission, it does embody certain radical currents. The task is to seize upon these radical currents, link up with other groups demanding social justice, economic equality and cultural autonomy and develop a broad movement capable of great social transformation. At present, RAG's adherence to Gene Sharp's non-violent philosophy invites the group to be criticised as simply the reaction of a privileged class against threats to its quality of life, and importantly prevents RAG from more fruitful cooperation with other social and labour movement activists.

Ian Wilson is active within the Melbourne anti-base affiliate, Campaign Against Militarism.

Endnotes

1. The article was developed with Kate Tempany and Andrew Nette. See "The limits to Non-violence" *Chain Reaction* 59, Spring 1989
2. R. Burrowes "Non-violence needs Discipline" in *Chain Reaction* 59, Spring 1989 and R. Burrowes and T. Weber "The Strength of Non-violence" in *Arena*, Number 90, 1990.

A National Environment Organisation?

There is no national organisation of the environment movement in Australia. There are large and influential groups, some national groupings and many smaller and local groups, all without overall co-ordination. Marcus Beresford suggests a need for co-ordination, and a way of doing it.

Industry and commerce seem to be increasingly influential perhaps because of a well funded and organised approach in publicity and lobbying. It is interesting to note that a Register of Lobbyists kept by the Department of Administrative Services contains some 290 professional lobbyists (who they are and for whom they act remains confidential). Although the conservation movement has demonstrated some influence on specific issues, it nevertheless lacks such a systematic, comprehensive or unified approach to lobbying. How influential it is as a result is unclear, although its opponents would like the public to believe it is a bogey equalled only by the unions.

Two years ago you could have said the conservation movement was a power base up for grabs, but since then one organisation has moved to centre stage — the Australian Conservation Foundation. The Wilderness Society, Greenpeace and Forest Alliances compete for national attention on particular issues, but ACF seems to be regarded as the national voice of the movement on a wider range of concerns.

Back in the individual States and Territories, Conservation Councils and

Environment Centres remain key players, but in some cases State based campaign officers of the ACF are taking more and more of the limelight, and when the ACF Director comes to town, perhaps better informed local people are trampled down as the media rush to interview the national megastar.

Organisations other than the media, including government, have started to exploit the compartmentalisation of the conservation movement, selecting 'representatives' on some topic from an individual conservation body, and ignoring other conservation groups with a more thorough long running interest in the specific area under consideration.

It has been estimated that there are some 340,000 Australians who are members of conservation groups. Of this, the Australian Conservation Foundation and Wilderness Society account for about 20,000 each, whilst the real numbers lie in the the National Trusts in each state and the myriad of smaller organisations forming under the umbrellas of State, territory or regionally based Conservation Councils. Friends of the Earth groups are sizable in Melbourne and Sydney, but relatively small in other regions. Until recently

Greenpeace had 'donors' rather than members so they are not included in the estimate, although undoubtedly a significant organisation.

There is no national federation, coalition, or even meeting, of all these different groups, let alone the increasingly numerous local and international conservation groups that are not part of State Conservation Councils or Environment Centres.

More than three years ago a loose 'Coalition' of environment conservation organisations was proposed and discussed at a Canberra meeting of representatives of the 34 Conservation Councils and Environment Centres. Everyone thought this was a good idea as a means of determining some national priorities for the movement, exploiting the huge numbers for both political and fundraising ends, doing some useful things like making annual awards for contributions to conservation, and organising a National Conservation Week.

The two obstacles to forming an 'Ecoalition' there and then were funds to set up a national secretariat, and how other nationally groups such as the Australian Conservation Foundation, The Wilderness Society, Greenpeace, Friends of the Earth, National Trust and so on would fit in.

Funding was (and is) a small but difficult obstacle. \$50-100,000 would be enough to set up a secretariat and get things running. The Federal Government grants over \$1 million to conservation groups, so 10 per cent would have to be foregone from other purposes, or a new source found.

As to how other groups already playing a national role would fit in, one of the people at the Canberra meeting spent the next two years as an Australian Conservation Foundation Councillor trying to have this discussed. Unfortunately the ACF was too pre-occupied with its own internal planning to grapple with the possible broader role.

In May 1989 the 34 Conservation Councils and Environment Centres met in Canberra to discuss the Coalition proposal again. This time representative of the Australian Council of National Trusts, The Wilderness Society, Greenpeace, Friends of the Earth, World Wildlife Fund and others had been asked to participate in discussion. While there was support for a

coalition in some quarters, including The Wilderness Society and Council of National Trusts, the Director of the Australian Conservation Foundation opposed it (although it has never been discussed and rejected by the ACF council). With opposition from such a key player, the Coalition proposal foundered.

One observer commented that it was as if an ocean liner had come into port, offering the conservation movement an opportunity to sail off towards having much greater political and social influence. Some of the passengers and crew couldn't decide whether to go aboard (some were still packing and rearranging their own suitcases), the possible helmsperson decided to jump into a dingy instead, and the liner eventually drifted off empty, like the ghost ship 'Marie Celeste'.

The possibility of a national coalition of environment conservation organisations remain viable however, and as Government and industry start to deal with conservation organisations on a selective basis it becomes increasingly necessary. An interesting example of what the future might hold occurred in South Australia during the last federal election. Senator Graham Richardson was asked if he was going to pursue a proposal for nominating parts of the Lake Eyre basin for World Heritage. His answer was that the proposal was 'new' to him and had not been put to him by the Australian Conservation Foundation or The Wilderness Society. In fact it had been put to him the previous year by the Conservation Council of SA, and to his predecessor Barry Cohen as far back as 1985. (It was even the subject of a whole

chapter in a book on World Heritage areas published by Weldon in association with the Australian Conservation Foundation in 1988.) The point was that the proposal had not come from the bodies Senator Richardson usually dealt with.

If that is how the Federal Government is going to operate, there is a clear need for some kind of parliament of the conservation movement as a whole, so that there is an opportunity to canvass concerns and priorities, and individual nationally-based groups are not left to determine the national agenda on their own.

Marcus Beresford is Executive Officer of the Conservation Council of South Australia.

How the Ecoalition might work

Concept

A loosely structured coalition of environment conservation organisations aimed at better co-ordination of the movement, in which the roles of existing organisations are better defined (so that the Coalition in no way pre-empts their activities), and which:

- promotes better exchange of information between groups;
- promotes mutually supportive actions between groups and campaigns;
- identifies national priority theme(s) each year;
- promotes a National Conservation Week in spring each year (relating to priority themes where possible);
- promotes formulation of national policies and strategies of a broad ranging, general nature on subjects of truly national impact (relating to priority themes where possible);
- promotes joint fundraising/promotional ventures;
- recognizes individual achievements in conservation.

Composition

Membership to be by application to the National Conference of Environment Conservation organisations held once a year.

A basic definition of organisations which may be admitted to membership would be given in the constitution and it might include regional, state, national, and international groups with specific or general objectives and activities relating to environment conservation.

Structure

It is proposed that a National Secretariat be established in Canberra to fill the following roles:

- Information exchange;
- Co-ordination of mutual support for campaigns of individual groups;
- Floating and implementation of joint fundraising and promotional ventures;
- Organization of details of the the National Conference each year;
- Organization and co-ordination of details of National Conservation Week, and awards.
- Performing basic financial and secretarial roles for the coalition.

A second and essential tier to the structure would be the annual National Conference. This would have the roles of: determining the priority national subject theme(s) for action; determining national policy or strategy for the theme(s) each year; planning for National Conservation Week for the year focusing on the priority theme(s); and selection of award recipients.

Reviews

KATE MCGANN



Platyctic No. 375
IN THE SERIES -
MORE OFFENSIVE WAYS
TO USE INDIGENOUS SPECIES

The End of Nature
by Bill McKibben, Viking/Penguin
1990, 212 pages, \$29.99

Reviewed by Phil Shannon

The End of Nature is a melancholy reflection by American journalist Bill McKibben on what human activity has done to nature. The "oil wells and the chain saws" of "muscular industrialism", he argues, have not only damaged the ozone layer, altered the climate and fouled the water and land but have brought about the "end of nature" existing in its own right "unaltered by man".

McKibben traces the cause to a "traditional, man-centred, anthropocentric" world view which gives rise to an arrogant disregard for the planet. This attitude peaked in the Age of Oil when cheap energy facilitated the pursuit of "endless material advancement" regardless of environmental cost. Nuclear energy, with its "capacity to overmaster nature", was a greater threat, but even more disturbing to McKibben is the "cracking of the gene".

Bio-technology (the more fashionable word for the suspicion laden 'genetic engineering') promises "total domination" of nature. Geometrically straight trees, crops that survive the greenhouse, "Arnold-Schwarzenegger trout ... a joint product of God and Dow", chicken meat units without unproductive heads and tails and kept 'alive' by nutrient tubes, human bio-cosmetics, are either happening or are conceptually viable.

McKibben believes a genetically-engineered change from "four billion years of nature to year one of artifice" will be the spiritual death of humanity if not the physical death of a species that has tried to cheat the ecological laws of nature.

McKibben sees bio-technology as the apogee (or nadir) of the anthropocentrist's scientism — the often blind and increasingly disparate faith that "the human mind, knowledge and imagination" can find a high-tech fix without changing our domination of nature and our mass consumption, hamburger-hurry civilisation.

McKibben examines alternatives to this "defiant reflex" of more and more control over nature. He sees conservation as the "liberal reflex" and that energy efficiency, reforestation, are necessary but on their own can not solve the problems. For example, a Europe sized forest must be planted to soak up the last fifty years of CO₂ emissions.

The solution is to reduce the activities that produce greenhouse emissions and this requires a 'biocentric' vision of people as a part of the world. McKibben is attracted by the United States green fundamentalist group *Earth First!* who put "the rest of creation ahead of exclusively human concerns". Although he is aware of the extremist views of some adherents who are insensitive to human suffering — such as those who argue the virtues of AIDS in reducing population — he values *Earth First!* for reminding us that "species, ecosystems, the planet" suffer too. He rejects their tactics of "sand in the petrol tanks of bulldozers" but affirms their call for humanity to live a "more humble way of life".

This doesn't mean reverting to a pre-industrial civilisation — "there's no call to forget all that's been developed" since the fossil fuelled Industrial Revolution. Fax machines which are "an advanced way to do with less" will be preserved but year round oranges will be out, for example.

McKibben sees a role for the human brain and technology to provide a soft

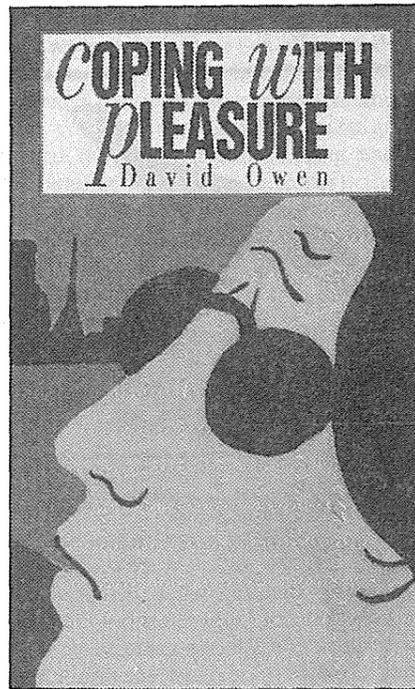
technology healing when directed to production for only essential human material needs. When society is ruled by the "economic ideals of accumulation and growth", he argues, the result has been the invention of "wills and lending at interest and Puritanism and supersonic aircraft". He asks: "Why should we come up with ideas less powerful", in an all-out race to do with less?"

McKibben's book has unsatisfactory areas. His Wordsworthian pantheism is a lesser concern than his lack of attention to the process of political change, in particular how the poor who "should not be condemned to live without while we live with" can be won to support a materially humble life.

But what he does, he does well. The reader is left with a lasting impression that a "fundamental challenge to western civilisation" is needed now, by this generation, if human and non-human nature is to survive.

Phil Shannon lives in Canberra where he claims that the attractions of staying indoors and reading are seductive.

Reviews



Coping With Pleasure
by David Owen, Allen and Unwin 209 pages, 1990, \$12.95

Reviewed by **Larry O'Loughlin**

This book is a pleasure to read. It is well written, funny and informative. That should be enough for any book, but I was left with a question. What was it about?

Pluto Hartwig lives in Williamstown, Victoria, and has the material possessions and economic circumstances to allow him to do just about anything he wants. He makes money through researching databases he accesses on his computer, and preparing reports at high hourly rates for whoever is willing to pay, and there is no shortage of work. He lives with his wife, Mintie, who has a successful craft shop in an affluent eastern suburb of Melbourne. He works from a beautiful home, has a circle of close friends with

whom he shares the best in food and alcohol, is witty, healthy and has just about everything he could want. Or has he? How does he cope with pleasure?

Well, things start to come undone for Pluto — not materially, but spiritually. By a strange set of circumstance, and the book has many strange sets, Pluto writes a PhD thesis on Theosophy in three days. Since he knew little or nothing on the subject, it is quite a feat, and may be an inspiration to students doing theses anywhere, but the client turns out to be a hoaxer, paying Pluto but actually taking the work to convert into a book for a cult following in America. This is a disappointment, but the subject matter touches Pluto, as his investigation of various religions and religious experiences opens his eyes to different searches for meaning. He despaired, left his formal work, and became obsessed with rebuilding a 1949 Norton motorcycle, and then sculpture.

The ending is ambiguous and I felt that I didn't know if Pluto's despair had been resolved, and I was left unsatisfied.

In the beginning I wondered whether anyone could really be happy with the idealised yuppie lifestyle being portrayed, and I could understand Pluto's search for meaning. The yuppiness is still there, but it is Mintie who finishes the story through a letter to the Hartwigs' close friends Steve and Caro, and she suggests that all is better because she is pregnant and that Pluto is back at work. Perhaps Pluto was not yet happy, perhaps he was happy seeking happiness.

So, what was it about? The book was to me about alienation, meaning, purpose and all those important things, and it was a highly readable, if occasionally obscure account. It also almost lovingly describes, Williamstown, rebuilding a Norton Dominator, art, wine and food, and a number of other topics that could be researched on computer or other databases.

The book is part of the Allen & Unwin fiction series, and since Allen & Unwin (Australia) was recently purchased by a management group, we can expect more Australian titles, including fiction, which I think is a good thing.

Larry O'Loughlin is co-editor of Chain Reaction and reviews books as an excuse to read and keep them.

The Last Gasp

by Trevor Hoyle, Grafton Collins, 1990, 526 pages \$12.95

Reviewed by **Phil Shannon**

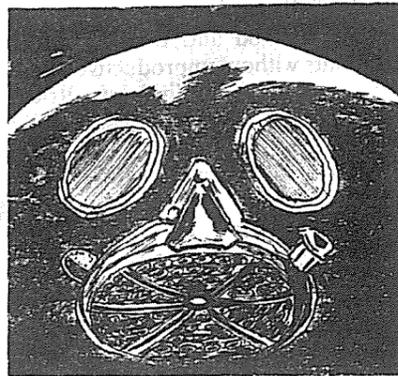
How successful can the conventional thriller be in warning against planetary eco-disaster and advancing a green politics and culture? Not very, if Trevor Hoyle's *The Last Gasp* is the best on offer.

In the future of Hoyle's novel, the greenhouse effect worsens, pollution runs rampant, the ozone layer dissipates, and oxygen depletion lays waste to natural and civilised life as we know it.

To worsen matters, it is a post-Glasnost future and America and Russia are planning environmental war. The USSR plans to warm the polar ocean by diverting its large Siberian rivers, thus flooding US coastal cities. The US fills supertankers with herbicides to destroy the oxygen-producing phytoplankton in the oceans. By the early twenty first century, however, "what the military sought to bring about, the factory furnace and automobile had already accomplished" as the air and the oceans become hostile to human life.

In response to the spread of Official Devastated Areas, the military-industrial vandals wipe out three quarters of the world's population in Asia, Africa, India and China with a manufactured virus. The US is working on a program to re-populate these countries with genetically-engineered humanoids capable of surviving on little oxygen, when they and the rest of humanity run out of time. Eventually five million survivors live happily if wistfully ever after on space islands orbiting the earth.

Whilst this plot hurtles on, Hoyle delivers some valuable, if didactic, lessons. "The biosphere doesn't owe us a



living", he says, putting humanity into its bio-global Gaian perspective. We are not special or superior but part of nature, one species amongst many, and if we screw up, other life forms will take over. Hoyle also shafts the "two centuries of unchecked industrial growth" which brought us and our oxygen-rich planet to our collective knees.

Too often, however, such reflections are overwhelmed by the orthodoxies of the thriller genre. Whilst, for example, environmental pressures are likely to see increased conflict over natural resources, Hoyle is only comfortable with Cold War stereotypes and an unchanging and unchangeable international politics.

The sexual politics are also stuck in the 1950s. Although the leading female characters (a doctor and scientist) are intelligent, they are also 'real women' ie good in bed. "Breasts pressing spongily" against hairy chests occurs regularly.

If Hoyle's weakness is cliché, his forte is plot and lots of it, increasingly however, subordinating ideas and character development. Some plot developments are bizarre and outlandish. The attack of the mutant killer homunculi makes the sci-fi cult movie *The Attack of the Killer Tomatoes*, look humdrum and could unfortunately make the book's sound ecological ideas look suspect.

The biggest dampener on the novel is Hoyle's pessimism which comes from his lack of faith in ordinary people acting to prevent species suicide. The novel's foci are 'important people' like politicians, Generals and scientists. The crusading Green scientist hero creates Earth Foundation, a people's movement to educate, change values and organise, but it runs foul e.g. human greed and fear. In place of mass change at an institutional and personal level, the novel deals mainly in individual heroics.

Unlike Marge Piercy's classic eco-sci-fi *Woman on the Edge of Time*, there is nothing arresting in Hoyle's prose to make the reader stop and savour literary morsels. Piercy's novel does everything else better too, but it is worth packing the non-demanding, and flawed, but still useful Hoyle for your next long train trip.

Phil Shannon is a Chain Reaction subscriber.

Bush Regeneration: Recovering Australian Landscapes

by Robin Buchanan, TAFE, 1989, \$24.95

Reviewed by **Tim Marshall**

Did you know that a sample of one square metre from an infected area could yield over 600 privet seedlings, that ten per cent of Australia's plant species are introduced, or that South American vines such as balloon vine and cat's claw creeper have been responsible for the complete destruction of certain rainforests in Australia?

Did you know that Norfolk Island Pine, which have graced our coastal esplanade's for many years are dying from pollution by airborne detergents, or that wetlands are severely affected by nutrients in run off and by aquatic weeds?

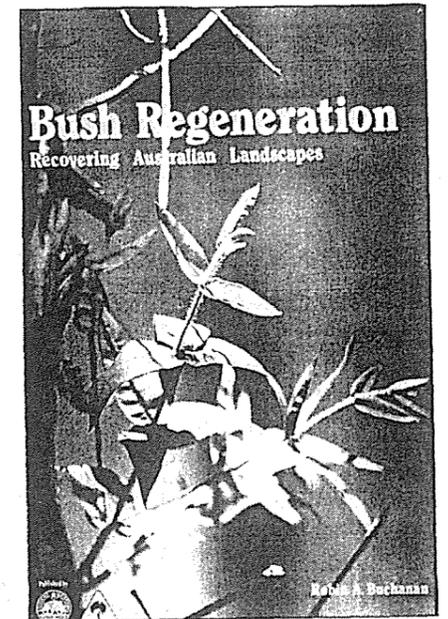
Did you also know that there is now an excellent, well referenced, liberally illustrated, low priced book available to help with the repair of degraded natural environments?

Bush regeneration as a discipline or science has grown from the work of two elderly sisters, Joan and Eileen Bradley, in the 1960s. They devised a method of weeding and long term management which required minimal intervention, left fewer opportunities for re-invasion of weeds than other methods, relied entirely on natural regeneration for recruitment of desirable plants and led to the development of formal TAFE courses and qualifications for battalions of dedicated bush-restorers.

The latest contribution to this field of knowledge is the book, *Bush Regeneration: Recovering Australian Landscapes*. The book is crammed with useful information and the colourful, descriptive graphics are suggestive of a much higher price tag. It describes in clear terms techniques for the restoration of various native Australian vegetation types, from tropical rain forest to arid lands and salt marshes.

The comprehensiveness of the material, the unambiguous instructions and the logical layout make it easily readable for both professional and novice.

The first four chapters deal with the value of bushland, basic plant science, ecology and weeds. They provide an easy introduction to the rest of the book. Readers with good botanical or en-



vironmental knowledge can start to read at chapter 5, which deals with regeneration techniques.

Other chapters deal with specific landscape types, severely degraded sites, management of bushland and project organisation.

There has been a tendency to adopt a monocultural approach to regeneration. However it is important that we develop a more sophisticated approach to regreening Australia than just 'one billion trees'. To be of more than passing usefulness and capable of genuine self-regeneration, we need the right trees, in the right place. This is best achieved by complete regeneration of trees, undergrowth and their associated fauna.

Bush Regeneration helps to emphasise the need for a diverse, healthy, dynamic, resilient natural plant community, as a functional component of how the farm, parkland, or any other land use system. It also takes a practical "how to do it" approach.

If you own or manage remnant vegetation, or intend to participate in regeneration of bushland, or if you are interested in the health of your surrounding environment, this book is an essential reference.

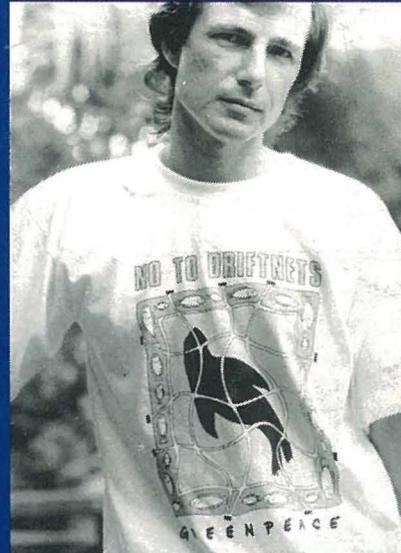
Tim Marshall is Vice President of the National Association for Sustainable Agriculture.

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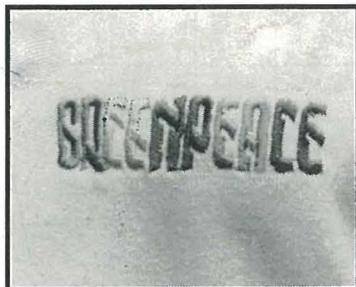
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