Chain Reaction

Friends of the Earth Australia

Number 26 Summer 1981:2 \$2:00*

Buy now while stocks last.

100 000 elephants killed every year.

10 million wild birds traded world-wide.

1 million spotted cats skins enter the trade annually.

ATHUM & MASON

WRTLE SOUP

2 million crocodiles killed every year.

Untold millions of snakes and lizards traded annually

300,000 turtles killed every year.

Endangered species • Rainforest • The ALP's Stewart West

TRANGIA

ALL-WEATHER FIE COOKING

Made in Sweden from high quality materials, the Trangia stove is a complete cooking system suitable for indoor or outdoor use. Its unique design makes it ideal for outdoor use even in the worst weather conditions: it goes faster outside: all other existing stoves go slower.

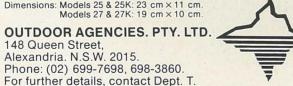


- Being fueled by Methylated Spirits there is no need for priming hence faster starting and minimal cleaning/maintenance. Meths on hands cleans them - unlike other fuels which are often
- · Assembly is fast and simple. Wilderness travellers have no need to fear parts failures or the lack of spares. Trangia has almost no
- The Trangia cooking system is extremely stable. Because the main saucepans, or kettle, sit so low inside the stove, it is possible to move to different positions with little risk of spillage. It is impossible (almost) to kick over - great for youth groups
- · Being both lightweight and compact, the Trangia stove is a most practical choice for all outdoor recreational uses

Note: There are four Trangia models, reference numbers 25, 25K (with kettle), 27 and 27K (with kettle). Model 25K is illustrated.

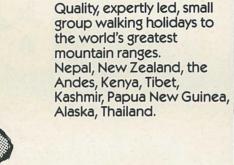
Dimensions: Models 25 & 25K: 23 cm × 11 cm

148 Queen Street, Alexandria. N.S.W. 2015.



tr 1





Graded to suit all levels of fitness. For free 48 page colour catalogue contact us soon: AUSTRALIAN HIMALAYAN EXPEDITIONS 3rd Floor, 28-34 O'Connell Street SYDNEY

Phone (02) 233 7033 (Mon-Fri)

Down to Earth Co-op Victoria ALTERNATIVES CONFERENCE FESTIVAL EXPLORE SHARE LEARN ALTERNATIVES 5 DAYS

AUSTRALIA DAY WEEKEND Thursday January 28 to Monday February 1 Glenlyon near Daylesford, Victoria

Workshops, Talks. Films. Alternate technology. Environmental issues. Permaculture. Yoga. Meditation. Personal growth. Massage. Alternative medicine and diet. Networking. Life games. Community politics village. Children's activities Healing village, Market, Music, Dancing, Swimming. Good food and drinks. Free spa water

Book now and save \$5 Pre-registration:\$15.00 before December 15. At the gate: \$20.00 adults. \$15.00 unemployed, students, pensioners with proof. Free under 16.

No pets please. Come as self-sufficient as possible. DTE: 2 Stephenson Street, Richmond 3121. Telephone: (03) 428 6866.

Chain Reaction

Established in 1975 Number 26 Summer 1981-82 Publisher Friends of the Earth (Australia) Editors Mark Carter, Leigh Holloway Acting Editors Peter Browne, Marie Claire-Cohn Letters, Backstage Tim Darling Earth News Richard Shelton Reviews Lesley Instone Editorial Karen Alexander, David Allworth, Jeff Angel, Stephanie Bunbury, Mark Cole, Marilu Coupe, Phil Danaher, Kate Dempsey, Lee Dennis, Louise Duxbury, Margaret Gillespie, Michael Gordon, Peter Gravier, Roger

Halley, Chris Harris, Margaret Hay, Kerry Hennigan, Prue Lamont, Nic Maclellan, Paul Marshall, Judy McDougall, Frank Muller, Jenny Quealy, Jasmine Payget, David Roberts, Jan Roberts, Bess Secomb, Jill Taylor, Ben Witham

Sharon Callahan, Daryl Dellora, Andrew Jeffrey, Fiona Kyle, Rob Pardy, Janet Secomb | innell Secomb, Charles Secrett. Chris Tolhurst, Lowana Veal Thanks

to the Fund for the Animals

Accountant Candy Strahan Distribution **Bruce Scates** Subscriptions Robyn Carter Advertising Leigh Holloway (Telephone 03 63 5995 for rates and bookings) Reprographics Melbourne Media Services Typesetting SRC, La Trobe University Printing Waterwheel Press 159-165 High Street Shepparton, Victoria

Correspondence & enquiries Chain Reaction, Room 14. Floor 4, 37 Swanston Street. Melbourne, Victoria, Australia, 3000, Telephone (03) 63 5995 or 101 Cleveland Street, Chippendale, New South Wales, Australia, 2008, Telephone (02) 698 4114

CONTENTS

1982



A look at what will be happening around Australia on environmental, energy and food issues.

USA RULES, OK?

The United Nations Conference on New and Renewable Sources of Energy

RAINFOREST

An extensive report on the world's rainforests and a close look at the situation in Cape York, Australia.

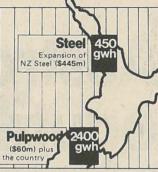
FOR WHOM DO **BOOMS TOLL?**

Socialists consider responses to projects which are bringing fundamental changes in the structure of the Australian economy.

EAST GIPPSLAND: FORESTS OR WOODCHIPS

A Chain Reaction supplement

THINK BIG IN NZ



The resources boom takes off in New Zealand.

PLASTIC CONTAINED

Success Tough for Coca-Cola and the packaging companies. Juice next?

EARTH NEWS LETTERS BACKSTAGE REMS REVIEWS ACTION GUIDE FOE GROUPS

THE BIG ONE IN BRITAIN



Take down flammable curtains, fill the bath with water, stock up with food and batteries. Or join the Anti-Nuclear Campaign.

GOING, GOING, GONE

A look at the world situation of endangered animals, and Australia's share of the problem.

TOURISM TRAPS

Read this before you leave for overseas travel, preferably before you plan your trip.

THE ALP'S STEWART WEST

Chain Reaction interviews the federal Labor spokesperson on the environment

34

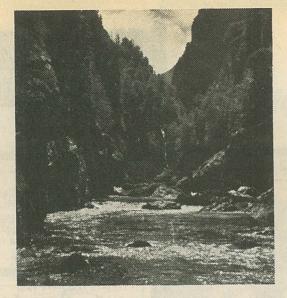
35

39

Cover - Endangered species. Photo: Friends of the Earth (London). Design Mark Carter.

*\$2.00 recommended retail price. ISSN 0312 - 1372. All material in Chain Reaction is copyright. Chain Reaction, 1981, for the authors, designers, photographers and illustrators. All rights reserved. For permission to reprint articles or graphics please write to the Editors, who will give all possible assistance.

Contributions to Chain Reaction are invited. Please try to send items typed, on one side of the page, double spaced and with wide margins. Keep a copy. We do not have sufficient resources and people to return manuscripts. These few guidelines help in bringing out the magazine better and faster. The Autumn edition will appear in early March 1982



For Australia's most beautiful river, time is running out.

Tasmania's Franklin River is in danger of disappearing under tonnes of water - but you could help to turn the tide.

The Australian conservation movement is convinced that the proposed flooding of the South-West wilderness is simply not needed

There are several safe, cheap alternatives to hydro-electric power - but there are no alternatives to the beauty and the majesty of the South-West wilderness.

Please help save the Franklin River from needless destruction. Your money will be used to cover the costs of mounting a campaign for its survival. It's our last chance.

Send your donation to the Tasmanian Wilderness Society, 129 Bathurst Street, Hobart 7000.
My name is
Address
If you would like to claim tax deductibility for your donation send it to the Australian Conservation Foundation, 672B Glenferrie Road, Hawthorn 3122, indicating a preference that the funds be granted to the Tasmanian Wilderness Society.

EARTH NEWS

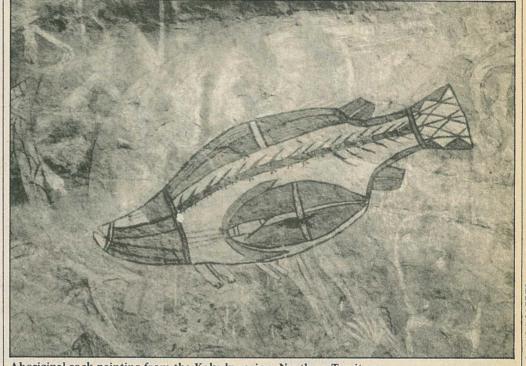
Kakadu hullabaloo

A series of four documentary films on the Kakadu region are soon to be released despite delays brought about by the Federal Environment Department.

The four films, two on the environmental monitoring of the area surrounding the Ranger Uranium Mine, one on the trainee Aboriginal park rangers for the Kakadu National Park, and one on the Aboriginal rock paintings in the region were produced by Film Australia and directed by freelance director David Roberts who has some ten years experience in the region.

The films commissioned in 1978 by the Office of the Supervising Scientist which is the government authority responsible for setting standards and controlling environmental impact by the uranium mines in association with Northern Territory government authorities. Although the films were approved by the Supervising Scientist himself, a preview screening to the then Minister for Science and Environment David Thomson resulted in the films being banned. David Roberts commented that he had been told, 'Thomson hit the roof claiming that the films could cost him his job and could even bring the government down'.

The problems were that Ranger had updated its 'release of effluent plan'



Aboriginal rock painting from the Kakadu region, Northern Territory

since the film had been edited | official from the department | area. and statements by some of who went through the script the scientists were thought to asking for changes, the be too worrying for the director was asked if the public and the Minister word effluent could be wanted them removed. David changed to water. Other Roberts agreed to include information about Rangers requested to be deleted now in distribution at an intention to build an ad- concerned the possible spread extremely significant time ditional retention pond but of contaminents from the as Kakadu has been included argued against changes to the | tailings dam, and the impact | on the World Heritage Comscientists' statements. In the on the environment from the course of discussions with an increased population in the environments.

films was sent to the department which failed to approve them for ten months.

mission's list of protected

BP boycott begins



South Australia's Campaign Against Nuclear Energy has launched a national boycott of British Petroleum. BP has a 49% share in the Olympic dam, Roxby Downs mining project. The SA parliament will soon deal with controversial legislation detailing services and facilities to be provided in the mine area.

The mine area has been found to contain copper, gold, rare earths and uranium. Underground mining pro- here will be 'in-situ'. This

cesses will be used which will | involves leaching the uranium release radioactive radon gas into the working environment.

The Western Mining Corporation has the other 51% share in the project. BP was chosen for the boycott because of their income from petrol sales.

Another uranium mining project commencing in South Australia is at Honeymoon, 75 km north-west of Broken Hill. The mining process used

out of the ground, by pumping a strong chemical solution through underground aqui-This process had disastrous

results in Wyoming, USA, where solution mining contaminated millions of gallons of water in the Wyoming

Contact: For more informa-tion or to offer help for CANE's campaigns write to: CANE, 310

EARTH NEWS

Union bans U shelters

The New South Wales Building Workers Industrial Union has black-banned the construction of nuclear shelters.

The union secretary called the marketing of shelters a 'blatant confidence trick which specifically seeks to exploit for profit, the current nuclear arms race'. He said the only real protection for people was the application of the United Nations' policy of out-lawing nuclear weapons.

This is an extremely constructive move by the building union. Recently, shelters have been advertised increasingly in newspapers, and their building makes people accept that nuclear war is inevitable rather than avoidable if people unite against the arms race.

Source: Campaign Against polear Power Newsletter Nuclear Power September 1981.

Tasmania hots up

On 12 December Tasmanians vote in a referendum between a dam on the Gordon River below its junction with the Franklin River or above the Gordon's confluence with the Olga.

The poll seeks to legitamise yet another assault upon the wilderness. Conservationists are urging people to vote 'no dams' by writing those words on their ballot paper.

The argument increasingly moving to economic and employment questions. Research has shown that Tasmania could build a small thermal station at much less cost, create more iobs in the long term and have power sooner than with another dam.



Big business vs babies

Multinational marketing baby food in the Third World will soon find restrictions placed on their marketing practices under plans being drawn up by the European Economic Community

Studies by the World Health Organisation in Geneva have put the cost of developing countries, sales infeeding a child in Ethiopia centives to marketing for six months on the multinational products as high as \$110, equivalent to 140% European

The European Commission is planning to introduce legis- that break the ban. lation which will make binding the WHO voluntary | 25 October 1981.

companies code approved by 180 countries in May this year. This applies to 20 companies involved in the sector with annual sales of over \$1.56 billion. code currently The

imposes a ban on advertising or other forms of promotion to the general public in personnel and a wide range of other controls. A number of parliament of the percapita GNP. ministers would like to see fines imposed on companies

Source: The Guardian Weekly



State's tourism

Eating the cake

There are no surprises for Chain Reaction Food Politics Primer readers in a report from the United Nations Centre on transnational corporations which describes how fewer than 200 large companies control the food-processing world's industry. They do so, the report claims, at the expense of the interests of Third World countries. Companies include: Unilever, Nestle, Cadbury-Schweppes, British Imperial Group, Philip Morris, Proctor and Gamble. Colgate-Palmolive, General Foods, Brooke Bond-Leibig, Del Monte, Castle and Cook, United Brands, Coca-Cola and Pensico

The UN report shows that two-thirds of all food processing by multinational companies is controlled by 25 firms. The corporations, backed up by their governments at home, originally secured their foothold through control over trade in raw materials and exports.

In addition, since the operations of the companies are so diverse, they are able, the report says, to indulge in transfer-pricing, switching profits from one sector to another - nominally less profitable - sector. A large proportion of profits are sent back to head offices. 'Few developing countries', the report says, 'have been able to implement effective monitoring of transnational corporations'

The main advice for Third World countries, according to the report, if they want to challenge their growing dependence on foreign food companies, is to invest in food production under its own control and at the same time co-operate among themselves to fight Western-based firms which do not share their priorities.

Source: The Guardian Weekly 25 October 1981.

The report Transnational Corporations in Food and Beverage Processing is available from United Nations Sales Offices

Chemical workers strike

Nearly 50 chemical workers at the Coates Vanadium plant at Wundowie, east of Perth, struck in October after suffering severe health effects from chemicals used in production. Workers say 40 workers had left the plant since March.

Management introduced sodium oxylate, which is similar to caustic soda, into the plant without warning workers of the dangers, the workers say. Some workers were ordered to shovel the oxylate in powder form and were not told to take precautions. The workers say management denied the powder was sodium oxylate. But workers sent a sample to Perth for independent analysis after one of them developed severe eye irritation and skin ulceration. The analysis showed it was sodium oxylate.

A spokesperson for Agnew Clough Limited (of which Coates Vanadium is a subsidiary) said sodium oxylate mittently on a trial basis.

Hey Bob, Can you see my tongue going green? Not really.... I can't seem to see anything much coloured their tongues and measures are also needed. testicles green. 'Every time we put in claims

representative Peter Ford says company says the plant is was only introduced inter- a 24 hour medical service losing money and can't afis needed at the plant. Only ford them', he said. Earlier this year workers day-shift workers currently complained of vanadium have access to medical poisoning which, they say, services. Proper safety Source: Tribune 21 October 1981.

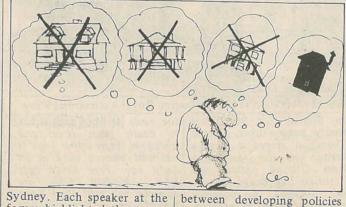
Australian Workers Union about safety measures, the

Trans Nationals

In the last week of October our shores were graced by a visit from David Rockefeller Henry Kissinger and other members of the International Advisory Committee of the Chase Manhattan Bank. They were here to 'review resource development projects in the 1980s', with special emphasis on Australia.

During their four day stay, they visited resource projects in the Hunter Valley, and met with Joh Bjelke Petersen and a number of corporate leaders

In response to these private gatherings, a public forum on the power of big business was organised by the TransNational Co-operative: a co-op of 22 federal and



of corporate penetration in key sectors of the economy. Questions from the audience focused on the ways that business infringes on peoples' daily lives.

However, around possible labor movement responses to corporate power raised two in this CR's 'Transition' column, state unions, based in new issues: the contradiction page 6.

forum highlighted the extent on the environment, on foreign control and on managing resource development, and actually implementing the policies; and conflicting interests between groups mobilising discussion against the problems of the 'hoom'

Contact: TNC's new address is

Asbestos

Former asbestos workers at Raybestos-Manhattan plant in the USA will share a \$9.4 million compensation fund. The agreed settlement is expected to be a precedent for similar cases throughout the USA. The plant closed in 1973 but some diseases contracted from substances used in the plant do not show up for years. The fund to be divided between 680 workers will probably involve a scale based on exposure to dangerous materials and severity of the disease

In Australia the proasbestos lobby strenuously fought any and every case seeking health damages against asbestos companies.

Source: Tribune 21 October

Grassroots defiance

Perhaps you'll find interest in an activity being planned for early 1982 called the 'Co-operative Effort Against Uranium'. It is promoted as 'an avalanche of decentralised and autonomous actions against the uranium industry Proponents of the idea, which grew from the Atom-Free Embassy protest in Canberra, claim that more will be achieved if people are encouraged to plan and carry out their own ideas. They are therefore promoting the household, the collective and the individual action group as the primary level of organisation; but suggesting at the same time the value of combined action.

The CEAU month is planned for 26 January through to 26 February 1982, so the initial focus is one of Aboriginal Land Rights (26 January being Australia Day).

Action: Lists of possible actions for one person through to twenty people will be produced by Friends of the Earth Sydney as a primer for ideas. Further information can be obtained from FOE, 101 Cleveland Street, Chippendale 2008, or from your local FOE group.

4 Chain Reaction

The 'World Bikeride' is sponsored by the Atom Free Embassy.

Contact: If you want further information, can offer a sup-port vehicle for a leg of the ride, can provide facilities along the route, finance, or advice, AFE would be pleased to hear from you. Write to: World Bikeride for a Nuclear Free Future, c/ Friends of the Earth, 101 Cleveland Street, Chippendale, NSW 2008. Telephone (02) 698 4114.

Transition

Australian Conservation Foundation has opened a Brisbane office to work on the rainforest issue. It's at: Wildlife House, 8 Clifton Street, Petrie Terrace. Queensland 4000. Telephone (07) 36 4586.

North Coast Environment Council has moved. Their new postal address is Post Office Box 29, Kendall, New South Wales 2439.

Tasmanian Wilderness Society now has a national lobbying office in Canberra at the Environment Centre, PO Box 1875, Canberra City, Australian Capital Territory 2601. Telephone (062) 47 3064.

TransNational Co-operative has moved office. Their postal address remains GPO Box 161, Sydney, NSW 2001. Their office is situated at: 2nd floor, Sunderland House, Corner Bathurst and Sussex Street, Sydney, NSW 2000. Telephone (02) 264 3330.

Impact statement

members of the Australian barrassing for her to tell Foundation realise who they voted for at the last election of their Council representatives in October? As a result of their voting patterns, one Diana Gibbs has been made an ACF councillor.

Diana Gibbs described herself in her statement of support for her candidature as one who, 'works as a consulting economist, is professionally and personally concerned about the total impact of resource development projects on the environment and the distribution of benefits and costs associated with these pro-

She works for the consulting firm WD Scott & to mention in her candidature statement. Perhaps it

Do the New South Wales would have been too em-ACF members that she worked with Scott's preparing Environmental Impact Statements for three woodchip schemes at: Eden in southern NSW, northcoast NSW, and East Gippsland.

The East Gippsland EIS gave the green light for woodchipping there. ACF however, is totally opposed to woodchipping in East Gippsland. In fact it regards the export woodchipping industry as it currently operates in Australia as being both environmentally and economically unsound.

We now have two years to watch how Diana Gibbs performs in relation to ACF's established policies and de-Company; a fact she failed cide if their vote was well spent.

Animal rights



Animal Liberation at the Melbourne Royal Agricultural Show

Show Ground outside the Victorian Egg Board display protest on the cruel and unnecessary way that eggs are produced in this country.

The group distributed leaflets with the following information:

Chickens in Australia are forced to live out their shortened life span crammed four or five in wire cages smaller than the size of a page of a daily newspaper. To prevent | for them'

On Sunday 20 September | the birds pecking each other twenty people from Animal to death from stress and Liberation staged a demon- boredom, their upper beak is stration at the Melbourne cut and burned back at an early age. Free range eggs from chickens who are and focused a peaceful allowed to fulfil their basic instincts are readily available.

The Show authorities decided to have police escort the protest group out of the grounds. The demonstration continued outside the front

spokesperson Animal Liberation said, 'For as long as the chickens are locked up, we will speak out

Nabarleak

Serious leaks of radioactive waste have been occurring this year at the Nabarlek uranium mine in the Northern Territory. This fact has been kept secret until the 'leaking' of confidential reports.

One of these reports showed that levels of radium in a safety holding pond had been as high as 2500 picocuries per litre. This is more than 40 times the standard promised by Queensland Mines in their Environmental Impact Statement. Following Cyclone Max, last March, this pond overflowed during heavy rain and contaminated water ran into Cooper's Creek. The pond was designed to catch run off from the minesite.

Government officials knew of the accident but it was not publicised until the report was leaked to the media.

The monitoring system at Nabarlek has also been criticised. Only two shallow bores have been drilled to monitor seepage of radioactive water from the safety pond. Both bores were to the east of the pond and seepage of contaminated water towards nearby Cooper's Creek could not have been detected. Friends of the Earth in Darwin asked for the release of monitoring reports collected over the duration of Oueensland Mines' operations.

Queensland Mines last year made a profit of \$44.2 million

Source: Campaign Against Power Newsletter Nuclear September 1981.

U plant payoff

People in the Japanese town of Ikhata will receive \$22 per month per household as 'compensation' for the installation of a third nuclear power plant nearby. Opponents of the plant are outraged by the deal which will operate for ten years, describing it as a bribe. The Japanese government isn't too keen either, fearing it will set a precedent for other areas

Source: Tribune 28 October 1981.

Toxic shock marketed

While the cause of Toxic | considered 'essential advice' amongst found that 70%, of TSS World

With Rely off the market, Tampax moved in with a massive advertising campaign. 'Your health is important to continue to put profits before us,' it claimed in one ad. In women's health and the FDA the same ad, Tampax encouraged women to change tampons frequently and to wear napkins at times, but it | threatened by TSS. ignored what the Food and

Shock Syndrome remains un- that women could reduce clear little is being done to their risk of getting TSS by reduce the incidence of TSS not using tampons at all. menstruating | As a result the FDA wrote women. In the USA, Proctor to Tampax, 'Your advertise-& Gamble, the producers of ment by emphasising the role Rely tampons were forced to of Rely tampons inaccurately withdraw Rely from stores downplays the role of after government researchers | Tampax and other tampon brands'. Furthermore, patients in one study had Tampax refused to put on the been using that brand outside of its packages the However, P & G is ware-voluntary TSS warning label housing 898,000 packets of that the FDA had requested Rely tampons. It is unlikely as an interim measure. Subsethat P & G would attempt | quently Johnson & Johnson to sell these on the USA removed their voluntary label market but possibly they plan as it believed that the implidumping them on the Third | cation for shoppers was that Tampax was safer than other brands still on the market

While the manufacturers of menstrual products recommends ineffective voluntary warning labels women's lives remain

Source: National Watchdog Administration 10 October and 24 October 1981.

PENICILLIN

25 CAPSOLE

Will your organization be brave enough to take up the matter? I am a member of the Anti-Fluoride Association and an ordinary housewife and mother, and I am horrified at what goes on in our so called civilized free society. I believe in speaking up. If you want more information (and there is plenty) ring the president of the Association, Mr Walker

South Oakleigh, Vic.

Women in development

invest in menstruation

groups have been established in Sydney, Canberra and Melbourne to 'consider the position of women in (aid) agencies, the status of women in Australia and overseas and the effects of aid on women' The group states that 'Overwhelmingly, women who work in Australian aid agencies hold positions which have low status and little power. We believe that while this blatant injustice exists within these agencies, the same injustice will be re-

Women in Development | flected in their aid programmes to Third World communities.

> The group is producing a quarterly newsletter. Subscription is \$5 per year.

Contact: For more information write Women Chairperson, Development Interim Management Committee, C/-C199, Clarence Street PO, Sydney, NSW 2000.

Source: Women in Development Newsletter October 1981.

FLUORIDATION

I am a Friends of the Earth member and I think Chain Reaction is very good for information on various issues. I have just ordered a number of copies of the Food Politics Primer to lend to farmer friends.

While you are very keen on curbing aluminium smelters and their pollution. (and I am all for stopping them) I have often wondered why you have not mentioned the pollution of our drinking water with toxic waste like fluoride and chloride. The Hamer government enquiry on fluoridation was 'rigged' as is the whole fluoride business. There is soon to be published a 250 page book on the enquiry, which will go into greater detail of this scandalous affair. Many countries who had fluoride have dropped it and many never allowed it but Australia seems to be last (as usual) to do the right thing.

Well known TV and radio talk-back show personalities will not handle the affair, they say it is 'too big' to

on (03) 592 5088.

J P Miles

ALP AND SOCIALISM

Your feature 'Labor and environment in Victoria' in Chain Reaction No 25 (Spring 1981) refers to increased awareness by some sections of the Victorian ALP of the need to introduce social costing into policy. But by and large the writers are concerned at the slow increase in policy areas reflecting this awareness, at the difficulties involved in arousing the whole of the ALP, and in translating the policy into successful action. The present debate about 'the

socialist objective' of the ALP is a particularly striking and unfortunate example of the party's timidity and poverty of insight.

The party members whose views on the socialist objective have been reported, whether for or against, appear to have no notion of socialism other than the centralised, state-run version exhibited in eastern Europe

Let me make it quite clear. The basic issue is power, but not for its own sake. We should not be struggling as much against lead pollution, public transport cutbacks, or the loss of Leadbeater's Possum. as much as for real power in our lives and in the decisions that affect our lives.

When the ALP says it wants power to make the present system work better. it seems to forget that this system is immoral.

'Community participation' and 'small is beautiful' can not be just tactics if they are to achieve anything worthwhile. They need to arouse a personally-felt concern wider than oneself as a creative and responsible person, and a sense of crisis. The substance of these things is not achieved overnight. The ethics of libertarian ecology involve greater complexity in technology. in life-forms, and in social organisation. Paradoxically this diversity can be obtained, can be enjoyed, and can be used productively if individuals slow down, insist on personal contact and involvement, and refuse the simplistic tinkerings of present ALP policy as

> Bob James Moonee Ponds Vic

LETTERS

dangerously inadequate.

Write today to, The Editors Chain Reaction, Room 14, Floor 4, 37 Swanston Street, Melbourne, Victoria, Australia, 3000.

BELBOURIE

We are back in the wine business, after an intense personal commitment of over two years to the protection of the environment of the Lower Hunter Valley, I am now concentrating all my time and energy to my vines and wines, with similar success assured to our 'quality of life' and ecological issues. As individuals and community groups we examined and contested the Lochinvar smelter issue with great vigour and undoubtedly without our efforts approval would have been automatic and much earlier

There is now considerable doubt that the smelter project will proceed and we return to our vineyards and wineries with optimism. The fundamental lesson for us all is determination, courage and a well researched case will afford the individual strength to contest immense government. industrial and bureaucratic opposition.

Jim Roberts

Belbourie Private Mail Bag Pokolbin Delivery P.O. Maitland 2320 Phone: (049) 38 1556 Winery (049) 30 7313 Private



Your community group can support her struggle for justice by distributing World Development Tea.



or further nformation contact WORLD DEVELOPMENT

NSW: 262 Pitt Street, Sydney 2000 VIC: 85 Helene St, Bulleen 3105 QLD: 39 Fleetway St, Morningside 4170 SA: 59 Park Ave, Roslyn Park 5072 WA: 306 Murray St, Perth TAS: Third World Shop, Centreway Arcade, Launceston 7250 ACT: 17 de Burgh St, Lyneham 2602



MASTER OF ENVIRONMENTAL SCIENCE BY COURSE WORK & MINOR THESIS

Two year full time, five year part time for graduates from any field. Programme allows considerable flexibility with emphasis on interdisciplinary team research leading to a consultant type report and minor thesis. Encouragement and special assistance for applicants from the humanities, law and

Application forms, prerequisites, courses and scholarship details may be obtained from: The Director.

Graduate School of Environmental Science, Monash University, Wellington Road, Clayton, Vic 3168 Phone (03) 541 0811 ext. 3840, 3839 or 3841 Applications close — SEPTEMBER 30, 1981 for scholarship applicants - OCTOBER 31, 1981 for others

Sydney CR collective

For the past couple of months there's been a Chain Reaction collective in Sydney. From a group of people with little experience in magazine operation, we have moved a long way in establish ing ourselves as an important part of the operations of Chain Reaction. As with any new collective there've been problems, but we're finding, as we sort the group and its activities out, that things are running more smoothly. We've had to do things like: organise Chain Reaction space at FOE's Sydney office, e.g. a few folders in a drawer and a box in the corner of a room where papers can be kept to work on.

bank and cheque accounts specifically for Chain Reaction use, which enables us to work autonomously, using that together ideas and activities that each of collective in Melbourne. It seems to me us has been working on.

going; but satisfying. Basically the do things, and working on Chain it to be, how much each can put into use experience. it, where specific interests lie. There's no demands to attend every meeting in each state, such as the one we've (although that's better for contact with | begun in Sydney, would build a neteach other), and while some only want work of workers/supporters which to do a little, others want to tackle could and would make the magazine more. Most of us work in full-time jobs more productive, enable more people but, I don't think that has made much to work in a positive way through the difference to the effectiveness of the magazine on specific interests and build collective. (At the moment the group is | Chain Reaction to a stronger national small, three people in full-time jobs and magazine. Jenny Quealy, office co-ordinator for If people in other states are also

FOE Sydney, who has done a lot with the collective.)

We drop into FOE's office when we can, work on various things in our spare time (????) and meet collectively to discuss and work things out.

What we have been involved in and what we can be involved in depends, I think, on getting more people interested. The range of things to do covers; working towards putting together a radio ad, finding books/ films to review and people to review them, finding people to work on. suggest, write or research articles, finding people to do photography and or graphic work for the magazine contacting groups, bookshops, institutions to encourage subscription, collecting items for regular features, e.g. Earth News, Action Guide, and mailing out Chain Reaction in Sydney It was necessary to arrange setting up | quarterly, to members (we've done mailout so far without too many problems). We are also looking towards producing parts of Chain Reaction money to buy whatever we need. We've usually met fortnightly; bringing encouragement of the Chain Reaction important to remember that the only It's been hard work to get things way to gain experience is to get in and collective is whatever the members want | Reaction is a good way to gain or to

Building Chain Reaction collectives



Mariln Coupe, Jasmine Payget and Lorraine Jones of the Chain Reaction Sydney collective

BACKSTAGE

interested in starting up . . . great. I'm willing to talk to anyone about it and Chain Reaction in Melbourne can give help, support. Just as importantly, if anyone in Sydney is interested in any of the above or has any suggestions or help, activity or involvement is really needed and would enable the Chain Reaction collective in Sydney to move into a stronger, more effective role. Move with us . . . ring Sydney 698 4114. Lorraine Jones

Xmas bonus

People choose various ways of giving support to Friends of Earth and Chain Reaction.

One donor to FOE stipulated that her \$10 000 a year for five years be used for 'cutting edge', radical projects to stop uranium mining. It has sustained many an idea into reality.

We sought sponsorship supplements and photo covers and environmental groups, unions and other community groups have provided finance.

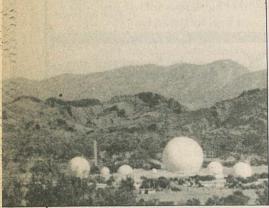
But, sales are not rising fast enough and our financial position remains tenuous. So, we are sending members and subscribers a cheeky leaflet inviting readers to cut *Chain Reaction* in on their Christmas end-of-year splurge. Why should Myers and Waltons get all the benefit from this festive season? We are inviting readers to give Chain Reaction subscriptions so the magazine reaches your friends, relatives, etc. We are even suggesting that you divert a present to the magazine, in the form of a donation to our appeal for special investigations, to promote the magazine and generally keep Chain Reaction growing. Excuse our immodesty, but other new ideas for the magazine have met with success and, if these work, they too will be a great help. You expect us to be honest, Leigh Holloway

Next edition

Deadline for Autumn Chain Reaction. For both editorial and advertising please send material to Chain Reaction by 10 January 1981. Enquiries: Telephone Melbourne (03) 63 5995 or Sydney (02) 698 4114.

Reaction gives you a brief rundown of the plans of a selection We will continue to focus our work on Australia for 1982.

FRIENDS OF THE EARTH, DARWIN



Pine Gap, Northern Territory

Monitoring of the uranium industry in the Territory, gathering information for distribution to southern-based groups. Support of trade union yellowcake bans and Land Rights issues; monitoring of the aluminium industry at Gove; liaison with the Northern Territory Peace environment by feral animals and and environmental impact of growing monitoring of the fishing industry of Japanese and other foreign investment in the Environment Council's FM radio

Contact: FOE, PO Box 2120 Darwin 5794, (089) 81 6222

What's on next year? Chain INTERNATIONAL DEVELOPMENT ACTION, MELBOURNE

of activist groups from around the island countries of the south Pacific. Foreign investment, aid, tourism, nuclear testing and waste dumping are all bringing great changes to Pacific island societies. We will ally ourselves with local people who are concerned about the negative effects of this change.

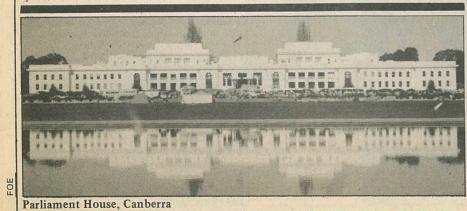
The women's group will continue researching issues of concern to women in Pacific island countries, including the impact on women of Australian aid projects. Nuclear-free Pacific campaign work has funding for a part-time worker to consolidate the international contacts established in past years and, in line



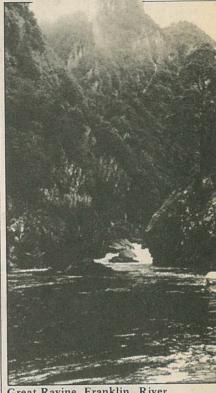
Council on opposition to B52's and Pine | with the views of island people, to link Gap. Work on foreshore development in independence and nuclear-free Pacific the Darwin area, destruction of the struggles. Documentation of the social the Territory. Continued participation in the region and, where appropriate, assist local people seeking redress from

the companies involved.

Contact: IDA, 73 Little George
Street, Fitzroy 3065, (03) 41 6898.



SOUTH WEST TASMANIA CAMPAIGN



Great Ravine, Franklin River

Whatever the referendum result, South West Tasmania's wilderness will be the subject of a heightened campaign.

There is a high probability that early in 1982 the Tasmanian Government will seek to begin building a dam on the Gordon River in the South West. Chain Reaction will extensively report on the

A bike ride around Tasmania starting in Hobart on 8 January will finish at Strahan, on the west coast, on 22 January at the 3 day Festival for the Wilderness.

The efforts of mainland Australians will be crucial as the conservation movement campaigns to pressure the federal government to veto funds for dams on the Gordon River. Lobbying will be vital in all states and territories. The Senate Select Committee inquiry into the South West will hold hearings issue a report which may recommend federal intervention to protect the South West. The Loans Council meeting in June may consider funding for a new dam.

CALENDAR

1982 World Youth Congress on Food and Development, Jakarta, Indonesia 20-24 January Friends of the Earth National meeting, Melbourne

Late February Autumn session of Australian Parliament starts (to May)
25-27 February Women and Food – Feminist

Perspectives Conference, Sydney (School of Sociology, University of NSW, PO Box 1, Kensington 2033)

1 March Nuclear Free Pacific Day 27 March Chemicals and Food Seminar. Melbourne (Food Justice Centre) 28 March-2 April International Association o Economy Students Conference on Energy 15 April Campaign for a Nuclear Free
Australia Peace Rallies, around Australia
May United Nations Special Session on

Disarmament, New York May Stockholm Ten Year After Conference, Nairobi Kenya

May Antarctic Southern Oceans Commission First Meeting, Hobart Tasmania
May Antarctic Mineral Resources Meeting, New Zealand

12-14 June New South Wales ALP Annual Conference

Late July ALP National Conference 17 August Budget session of Australian Parliament starts (to November)

16 October World Food Day (UN Food and Agricultural Organisation)

MELBOURNE

MELBOURNE

adult education courses, publications (including a newsletter), production of an audio-visual kit and lobbying of poli ticians on the hazards of chemicals in food, the role of transnational corporations in food systems, the politics and practicalities of food co-operatives, the causes of world hunger and plant patenting legislation.

Contact: Ben Witham, Friends of the

FOOD JUSTICE CENTRE.

Organisation of seminars, film nights, Slender Tree Frog

Earth, 366 Smith Street, Collingwood 3066, (03) 419 8700

BROWN COAL STUDY GROUP

Victorian Parliamentary Public Works resources. Production of a teacher's Inquiry into the proposed Driffield kit for Fuel for Unrest, a booklet on the power station. Production of a kit on accelerating exploitation of Victoria's oil-from-coal, a new industrial concern in the Latrobe Valley, looking at the made about the Latrobe Valley. profitability and practicality of the oil-from-coal schemes, their effects on the environment and worker's health, wood 3066, (03) 419 8700

Continued representations to the and the long-term viability of our coal coal resources. Advising on a film to be

Contact: Stephanie Bunbury, Friends of the Earth, 366 Smith Street, Colling-



Open cut, Latrobe Valley

GREENPEACE AUSTRALIA

Continuation of the campaign directed against all nuclear tests and for a nuclearfree Australia, begun in late 1981 with the voyage of the Greenpeace III to Mururoa atoll. Continuing work with Australia's commissioner to the International Whaling Commission to bring an end to worldwide whaling. Continued monitoring of the well-being of all marine mammals in Australian waters. Pressuring the federal government for greater protection for all marine mammals and for a ban on the importation of any products of the Newfoundland harp and hooded seal

Contact: 223 Hutt Street, Adelaide 5000, (08) 223 3578; 399 Pitt Street, Sydney 2000, (02) 267 7722

NEW SOUTH WALES RAINFORESTS

The crunch is coming on Forbes River rainforests there is enough forest to make an important addition to the Werrikimbe National Park. The mills have only a few years' timber left, according to the EIS released in early October 1981. Conservationists have proposed the Jounama Pine Plantation as a source of alternative timbers. Washpool - the major park proposal in NSW and the largest area of undisturbed rainforest left in NSW. Reportedly a decision will be made in six months. Alternatives to logging include use of regrowth, pines and upgrading of the industry. Murray Scrub and Grady's Creek Flora Reserve - some of the best subtropical rainforest left in NSW. Logging is proposed to start in 1982. Environmental groups are demanding an EIS and are prepared to go the Land and Environment Court to get it.

Contact: Jeff Angel, Total Environment Centre, 18 Argyle Street, Sydney 2000,(02) 27 4714

What do readers think of this article? How useful have you found it? Send us your comments and notes on events Chain Reaction readers should know about.

USA rules.OK?

Five heads of state, four thousand official national delegates. and over a thousand representa- for its 'effective development' tives of specialist agencies, intergovernmental and non-govern- from a widespread fear that a continumental organizations attended the ation of current global and, in particu-United Nations Conference on New and Renewable Sources of supplies, forcing real prices of conven-Energy (UNCNRSE) in Nairobi tional fuels upwards. Although in August. Australia was repre- increased oil bills have affected the sented by Sir Philip Lynch and ability of traditionally wealthy counfour middle-level public servants from Foreign Affairs and the Department of National Development and Energy. The object of the conference, according to its Secretary General, Enrique Iglesais, was to 'create a worldwide climate of opinion that will pave the way for accelerated ing by \$US 100 billion a year according development of alternatives to fossil fuels'. What happened? Alastair Machin reports.

Fourteen new and renewable sources of energy (NRSE) were considered at the United Nations NRSE Conference in Nairobi: hydro, solar, wind, fuelwood, charcoal, biogas, geothermal, oil shale, tar sands, ocean energy thermal conversion, wave, tidal, draught animals and peat. The major effort of the conference was to adopt the Nairobi Plan, a programme to:

1. examine the technical and economic viability of various new and renewable energy sources, identify the constraints on their development and the measures necessary to overcome these constraints; 2. establish priorities for action;

. promote amongst countries an exchange of information, technology, training programmes, energy assessment and planning, and indigenous research and development facilities;

4. establish an effective and appropriate international agency which would promote, co-ordinate and monitor all of these activities; and

5. stimulate the mobilisation of adequate financial resources, substantial enough to meet the requirements identified at the Conference by the participating countries.

It should be noted here that the

Alistair Machin works with the Fund for Animals in Sydney

Australian delegation distinguished itself | role in ultimately determining whether by joining with the USA, during the or not soft energy options will be conference, in introducing nuclear energy into the Programme with a call

The idea of the Conference was born lar, Western energy consumption patterns would lead to uncertain oil tries to manage their economies, the position for most Third World economies is especially acute.

A World Bank projection says the oil import bill of developing countries could rise from \$US 29 billion in 1978 to \$US 200 billion by 1990.

These nations' ability to pay is diminishing every day. Third World debts are expected to keep increasto International Monetary Fund estimates. In some countries, Brazil and Peru for example, debt servicing commitments account for 50% or more of export earnings.

It was against this background that

many Third World countries approached the Conference with enthusiasm and a determination to get some results. They gained few.

Efforts to get efficiency improvetechnologies and energy conservation on the agenda were thwarted within the Third World caucus by the Organisawould provide an 'OPEC-bashing' opportunity to the industrialised countries on the question of oil pricing. Their fears were not unfounded given that at other international forums the member countries of the Organisations for Economic Co-operation and Development have done precisely that.

However the fact that energy efficiency measures and not solar. cost effective role in the transition from oil dependency to a sustainable energy policy means that its exclusion from the agenda was a critical omission.

A second important omission from people and not Western capital. the agenda was any discussion about the need to discuss Conference issues OPEC countries before it landed on the in the context of the prevailing conditions under which capital is made expected to peak in the mid-1990s available to the Third World. Capital and oil reserves diminishing, producing

adopted.

For most if not all developing countries there are usually three sources of institutional finance: the International Monetary Fund for credits to correct balance-of-payments deficits, and both the World Bank and the transnational banks for project development loans. The historical record of these organisations clearly reveals that payments and loans to developing countries are only made on terms which favour the developed nations or at least private enterprises that blossom within developed and developing nations. The developing nations have become trapped in a system of continuous debt payments.

With the magnitude of and difficulties posed by these debt servicing arrangements, many Third World countries may find themselves with no other option than to default on their repayments. Such a possibility, now being seriously discussed international banking journals, would cause severe problems for the large banks; a crash by any one of them could set off a domino effect rippling through the whole banking community tipping Western capitalism into a tailspin and a plunging depression far more devastating and prolonged than that of

In such a sensitive climate it is ments in conventional energy-using highly unlikely that loans for investment in 'risky' new and renewable technologies will be extended to developing countries unless they are tion of Petroleum Exporting Countries (OPEC) who feared that such discussion industries (e.g. hydropower dams for aluminium smelters) which can guarantee some capital returns. Loans for energy sources that provide enough self-sufficiency to free developing countries from economic dependency on the West will be out.

Together with non-government delegates, several countries including Tanzania, India, Egypt and Mauritius energy can play the most immediate and proposed that a Third World Bank be set up using OPEC funds and having representative voting rights that would adopt lending criteria aimed at benefiting the needs of Third World

The proposal was squashed by the Conference floor. With production funds will play the central and critical | countries see their future revenue

coming from the interest earned by funds | efforts, opposed the establishment of deposited in US and European banks. any new United Nations agency to co-Diverting substantial sums to the Third ordinate NRSE programmes, and flatly World forfeits this plan. In the words rejected commitments of additional of one delegate from Nigeria, an OPEC funds, preferring instead a redistribumember, 'We flatly reject the proposal.
Funding is the responsibility of the industrialised world, not OPEC's.'

The Third World, on the other hand, emphasised international co-operation,

US President, Ronald Reagan.

repelling access to renewable energy sources

Hammering out the final draft of arguing that the developed world had the Nairobi Plan of Action caused un- a responsibility to alleviate the radical resolvable disputes. The USA and divisions of wealth which now separated Europe, with support, barring minor them by fulfilling point 3 (above) of amendments, from Japan, Australia, the Nairobi Plan of Action. In adand New Zealand, emphasised individual dition it pressed for increased capital responsibility and international planning | funds to finance energy programmes

A World Bank estimate has put the total capital requirements for commercial energy in all oil importing. developing countries during 1980-90 at about \$US 450 billion. Other estimates by the UN put it much higher - \$US 4000 billion by 2000, 40% of which will be required for renewable sources if NRSE are to meet 20% of total energy input by then. By the end of the Conference pledged commitments amounted to roughly \$US 500 million. The developing countries also sought a new world institution with increased powers and funds 'that met frequently enough to give it real authority'. (The existing Committee on Natural Resources, the UN body recommended by the West, does not report directly to the General Assembly. provides for representation by only 58 states, has very few resources, and meets only twice a year.)

Clearly the underlying conflicts were not about the viability of the technologies but issues of control, political authority and effectiveness of the nominated agency. The result was a stale-mate. The West didn't get its Committee on Natural Resources but then the Third World didn't get its new institutions. Instead an Interim Intergovernmental Body has been 'entrusted with guiding and monitoring the implementation of the Nairobi Plan of Action.' It will meet only once in 1982 and report to the General Assembly next year through the Economic and Social Council, a less representative body, 'which may transmit to the Assembly such comments as it thinks necessary' (emphasis added).

In addition the Secretary General of the United Nations is to have made recommendations to the General Assembly in October this year on the appointment of a Secretariat 'using the resources available in the UN' to provide the necessary administrative services required by the Interim

Most importantly the US was successful in blocking the Third World compromise proposal (after OPEC silenced the Third World Bank idea) for a World Bank Energy Affiliate.

Despite these shortcomings, nongovernmental efforts were successful in getting environmental considerations written into the final plan. More importantly new and renewable sources of energy, once viewed as the province of cranks and eccentrics, have now been elevated to a central role in the political dialogue between North and South.

A detailed analysis of the Conference is available as a paper for non-government organizations working or wishing to work in the area of new and renewable sources of energy from Alastair Machin at \$2.00 each (postage included). Write to Alastair at the Fund for Animals, PO 371, Manly, 2095.



Clear felling Chire Chire

The dangers of continued depletion of the world's rainforests are now rarely disputed. Peasant farmers in tropical areas are coming under fire as significant contributors to the threat to the forests. But a closer look at the situation in Latin America, South East Asia and Africa soon reveals other, far more destructive forces at work. Val Plumwood, co-author of The Fight for the Forests, looks at the worldwide assault on the rainforests and finds some not altogether unexpected culprits.

On page 18 John McCabe, the Australian Conservation Foundation's rainforests project officer at Cairns, reports on the invasion of the Mount Windsor Tableland by five large logging companies. Present estimates see the Tableland's virgin forest totally logged out within five years.

THE DESTRUCTION OF THE forests is increasingly seen as perhaps the most serious environmental problem facing the world. Particularly serious is the progressive loss of tropical rainforest, the richest and most diverse of the Earth's ecosystems. Its destruction could lead to the extinction of up to one-eighth of the world's biota, resulting in drastic world biological impoverishment.

For many Third World communities, this is particularly serious. Gone with this genetic and natural diversity will be much of the potential for development and improvement of many of the world's crops, especially tropical and tree crops important for feeding the underdeveloped world. Rainforests in tropical areas are critical, too, in

preventing soil deterioration and flooding. They often make a vital contribution to local economies, providing the main source of energy and materials for building.

For many indigenous peoples in Africa, South America and South East Asia, the loss of their forest means, at a minimum, destruction of their culture and way of life, and at worst, physical extinction.

Developed countries, the main consumers of tropical hardwood timber, are also likely to suffer from massive tropical deforestation, Scientists now take seriously the possibility of world climatic change following on tropical deforestation. Among its consequences could be the destabilisation of agricultural areas, including drying up of the American

The tragedy is compounded by the fact that most of the destruction is unnecessary and wasteful, as most areas being deforested are unsuited to permanent agriculture. Many such areas, stripped of their ancient cover of forest, will become 'red deserts' of laterite, as has already happened in parts of Amazonia, or wastelands of eroded soil or of useless 'alang-alang' and 'kunai' grass, as has already occurred in many parts of SE Asia.

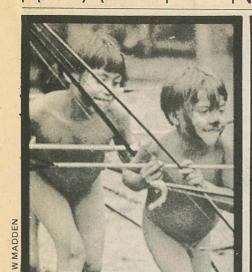
WHY IS IT ALL HAPPENING? THE conventional answer is simple overpopulation. There is excellent reason to question this explanation. The real factors behind the loss of the tropical rainforests appear to be not biological but social.

Suspicion of the population explanation is initially aroused by the fact that the rainforest is increasingly threatened even in areas where there is no serious population pressure on the forest. The bulk of the west African rainforest for example, is found in the Cameroons, the Congo, Zaire and

According to the World Bank these 'are all timber-rich countries with comparatively low population densities' In Papua New Guinea, despite absence of any serious population pressure on the forests, the PNG Office of Forests states that a number of large-scale export-oriented forestry projects are likely to eliminate lowland rainforest there by the year 2000. There is evidence too that much of west and central Africa and the Amazonian region had higher populations in the sixteenth century than they have today.

In the case of Brazilian Amazonia, which has something like half the tropical evergreen rainforest in the world, much attention has been paid to Brazil's high rate of population growth and to its peasant shifting cultivators These landiess people clear areas of forest for short-term crops, moving on after a few years when the soil is exhausted to clear more forest. However the real destroyers of the Amazon in recent years have been the highway builders and large cattle ranchers whose activities are encouraged by large fiscal incentives, and not the peasant colonists upon whom so much attention has been lavished. According to official figures issued for the years 1966-75, the state colonisation program involving peasants cleared 17.6% of the total area deforested, whereas deforestation by large-scale cattle-raising projects and the highway construction program of the Brazilian government accounted for more than 60% of the total. Even this probably overstates the level of peasant responsibility, for the colonisation program has been wound down, and large corporate ranch activity has stepped up, partly due to successful efforts to lay the blame for deforestation on the peasants.

The peasant colonists in the Amazon are in any case not there because of population growth. Most shifting cultivators are in fact peasants who have been expelled, often by violent or fraudulent means, and who move in a wave of dispossession before the advancing latifundia. The peasants are not forced to clear land because there is insufficient land to go round elsewhere, but because for social reasons they do not have access to it. With a ratio of 2.3 acres of already cropped land per person — a better ratio than

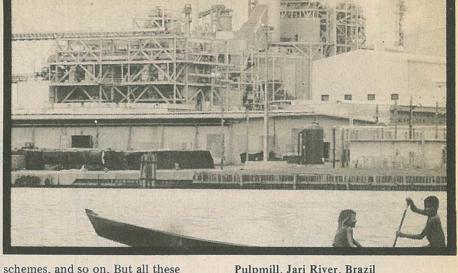


Yanamamo children. The Yanomamo Indians of southern Venezuala are threatened by, amongst other things, logging of tropical rainforests.

that of the world's largest agricultural exporter, the USA — and potentially 10 acres of cultivatible land per family, Brazil has no need for the destruction of the Amazon in order to feed its people. Shifting cultivation and colonisation or resettlement schemes are both frequently products of highly unequal land distribution. In Brazil 1% of the farms take up over 43% of the total farmland, including the best land. In contrast 50% of the farms have less than 3% of the farmland, and 7 million families have no land at all.

In SE Asia logging companies and allied governments have been equally successful in turning attention onto deforestation caused by the landless and away from their own activities. In Indonesia, the other main area of current tropical rainforest destruction, it is common to hear appeals by logging industry spokesmen for protection of their' forests from shifting cultivation. However botanists and others who know the forest situation well believe that the logging carried out and planned by the government-logging industry nexus does far more damage than shifting cultivation, which is a relatively moderate cause of damage, FAO figures confirm this assessment, estimating that shifting cultivation in Indonesia affects yearly only about one-quarter of the area affected by logging.

IF SHIFTING CULTIVATION AND population pressure are not the real explanations for most of the accelerating destruction of the rainforests, what is the real reason? The factors at work appear to be complex and diverse shifting cultivation, logging and land clearance by agribusiness, resettlement



apparently separate factors spring from

intensified in application in the last two

decades, those which have seen the main

areas generally arises from the fact that

onslaught on the tropical forests. The

problem of the forests in temperate

they and the wealth of species and

environmental values they protect

economic and social system which

provides no adequate means for the

expression of collective needs or for

control and protection of collective

assets. Rapidly turning any available

exportable commodities to create

maintains it in power (via arms

ownership exclude many from

natural resources, such as forests, into

private capital accumulation and a type

of development which enriches an elite,

spending) and provides an appropriate

to cash crops for export, rather than to

providing for the basic needs of local

people, especially poor people. Highly concentrated patterns of land

agricultural production and force them

to become 'marginal people' who have

to clear new, often unsuitable, land for

marginal agriculture. There is pressure

to clear the forests for 'resettlement'.

Most technology and capital for

often as a means of avoiding the

resource exploitation is imported.

favourably to foreign investment, a

mode of development subservient to

and closely connected with domestic

capital and international corporations,

who have almost unhindered access to

redistribution of existing land.

Governments, usually strongly

repressive in character, respond

westernised lifestyle. The production

of much of the best land is oriented

provide a collective good in an

emphasises private interests and

a particular kind of social situation

underdeveloped world - which in

some cases may have roots in the

colonial past but in all cases has

and development model in the

Pulpmill, Jari River, Brazil

exploit profitable natural resources. Internal inequality and resistance and the repressive and militaristic character of the national governments concerned creates an obsession with 'national security' considerations (which favour removing large natural areas which could serve as a base for organised resistance) and also increases emphasis on the exploitation and subjugation of

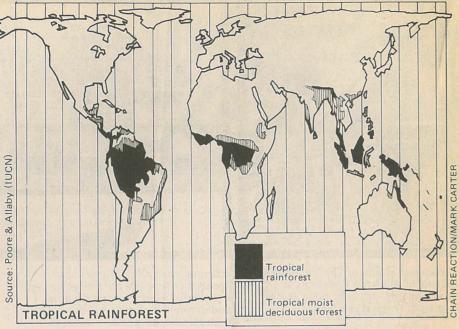
THESE FACTORS ARE AT WORK in most parts of the world where the tropical forests lie, but vary in importance in different areas. Many of them are perhaps most vividly illustrated in the case of Indonesia. where the destruction of the forests by foreign concessionairies (replacing earlier small-scale logging) began in earnest after the 1965 coup brought to power a government which has closely followed this development model. Concession areas for timber extraction cover nearly all the accessible primary forest of Sumatra, West Irian and of Kalimantan (Indonesian Borneo), which latter, despite extremely poor soils, carried the best and tallest forest in SE Asia. The cutting cycle is envisaged as 35 years, which itself is far less than is needed for sustained yield, but concession agreements are set for 20 years and observers believe they will have been largely exhausted well before that. There are very few nature reserves, despite the genetic importance of the areas subject to logging, and those there are tend to be in the less valuable mountain areas; their best forested parts are subject to logging on the order of 'the highest authorities'.

The timber industry relies almost entirely upon foreign capital, and concessions have been awarded amidst

RAINFORES

widespread reports of political favouritism and bribery. One major operator is the US timber giant Weverhaeuser, They moved to Kalimantan after the exhaustion of the Philippines forest resource and their Sabah concession, and their 1.5 million acre concession in Kalimantan is estimated to be almost their most profitable, returning 33% on capital invested. To fulfil local partnership requirements Weyerhaeuser took as partner an Indonesian company, which is in turn owned by a foundation created by the Indonesian army. (The 'partnership' privilege was reportedly granted by Suharto to 73 army generals to maintain their continued loyalty.) Since the partners brought no capital or expertise to the venture — indeed they appear even to have been provided with money by the company to buy in - but syphon off 35% of the profits, the 'partnership' is in effect a form of payoff to the military elite. Other concessionaires also have such local 'partners'. For example, Georgia Pacific (also active in Amazonian deforestation) has as its local partner a Chinese businessman who is reported to be a close friend of Suharto's. Other large concessionaires utilise the capital of wealthy local Chinese and include Jayanti Jayi, a big timber company reportedly closely connected with forestry and other high ranking officials, which has a 2 million hectare concession in central Kalimantan.

The devastation of the forests has. obviously been very advantageous to many foreign companies and to many in the military and governing elite of Indonesia, both through 'joint ventures' and through the sale of licences and concessions, a fact which makes any serious attempt to control it or scale it down to sustainable levels unlikely, despite mounting criticism. But how has it helped the local people? In Kalimantan nearly half the local population of 6 million people are classed as Dyaks, who practise hunting and gathering as well as some shifting agriculture for gardens. In 1977 and again in 1979, exceptional flooding followed the denuding by big logging



firms of the catchments of the Barito and Kahayan Rivers, flooding rice fields and resulting in disaster for tens of thousands of local inhabitants on each occasion. As well as destroying forests whose 'minor' products involve such an important contribution to traditional economies, logging firms have abrogated traditional rights to collect rattan, honey, bamboo and ironwood for house tiles, to use customary land for gardens and rice paddies, and have even tried to evict local tribespeople whose traditional agricultural areas were within their concessions. Fishermen have complained of siltation and pollution from sawmills and bark dumps polluting rivers and killing their stock.

Although logging has disrupted traditional economies and destroyed traditional labour-intensive industries, it appears to have provided little alternative employment for local populations in Kalimantan. Many workers are imported and their presence has created conflict with local populations. Working conditions also are reported to be poor, with reports of wages collected only after a successful shipment, and evidence also of non-voluntary labour using political prisoners (tapols) in remote areas.

LOGGING IN SUCH RAINFOREST areas appears to be an excellent example of a type of resource exploitation which enriches a few at the expense of further impoverishing the bulk of the local inhabitants and provides no permanent useful social development. What are the prospects for recovery of the rain-forests from this onslaught? Many

scientists believe that they are poor. Many primary rainforest species have poor dispersal mechanisms, short lifetimes for seed, and a very long period to reach seeding, and there is a vast number of poorly understood interdependence relationships between plants, insects and pollinators. They are not equipped to regenerate adequately after widespread disturbance such as logging, especially when this amounts to clearfelling. Spokesmen for forest industries and closely allied agencies such as FAO attempt to play down the role of logging, arguing that logging is selective and that only a small proportion of the forest is taken. However not only is selection logging often not practised, but the argument rests on a fallacy, since several studies have shown that extraction of even 10% of the trees results in loss of a further 55% of the canopy, leaving only 35% remaining. Much of the remainder then dies due to exposure, and the resulting forest, if forest returns at all, is quite different and much impoverished in character. Most of the wildlife and the wealth of species depart with the primary forest, which requires many hundreds of years without disturbance to reappear. Soothing talk of 'forest regeneration' is a euphemism, which at best covers plantation of a small part of the cut-over area with high-yielding species, large areas of land denuded of the many-layered forest cover so essential to maintain soils in areas of intense climatic activity, and huge monocultural problems concentrating on a few exotic species which can probably be maintained for only a few decades before rotational decline

RAINFOREST



Three million acres of tropical rainforest bought by Daniel K Ludwig along the Jari River, in Brazil have been destroyed and replaced with fast-growing pine and Gmelina trees to feed a 750 tonne-aday wood pulpmill.

in poor soil areas and other problems cause their eventual abandonment. All this in place of the rich, diverse and balanced forests which existed before logging 'cleaned' them.

Neither theory nor practice suggest good ground for faith in the ability of the cut-over rainforests to regenerate and if long-term investment is the criterion, few of the logging companies have that faith, whatever their public pronouncements about 'sustainability' and 'regeneration' may suggest. One sinister recent development apparently designed to cope with forest depletion and poor regeneration within commercial time-spans - one which threatens even their ability to regenerate in the longer term — is the increasing development of the woodchip industry ('integrated logging') in SE Asia. Indonesia for example plans some five major pulp mill projects in the next

five years, both for the internal market and for export. Rotations will apparently be very short, and materials will be drawn mainly from the tropical hardwood forests of Kalimantan, Sumatra and West Irian although there will be some use of material from short-term monocultural plantations of pine to provide the desired mix. There are plans for a number of similar plants in Sabah, Malaya and Papua New Guinea and some have already started production. Foreign participation (including Australian) is being sought. Such ventures will enable the loggers, for a few decades anyway, to employ to an even greater extent large-scale clearcutting of the rainforests and also to use the secondary growth and non-commercial species ('the run-of-the-bush' mixture) left after the first extraction of sawlogs. But in the poor soils and extreme climatic conditions of these areas such projects seem likely to result in the oss within a few decades of most forest cover, and to spell eventual disaster for both the natural and human communities dependant on the forest. The devastation of their forests has already been the subject of protest and, in some cases direct confrontation, on the part of local people and independence movements in Kalimantan, Sumatra, West Irian and Papua New Guinea and other parts of Melanesia. Investors in pulp projects will doubtless demand that their investment security be protected by appropriate government measures to exclude local populations from their concession areas and to repress further opposition.

MEANWHILE, AMONG WESTERN analysts and especially in the USA, attention continues to focus on the role of population growth and the shifting cultivator. The more major and controllable contribution to deforestation resulting from the social structure or made by large-scale corporate activity tends to be either ignored or glossed over, and there is little realisation of the responsibility of the USA and its allies and associated

agencies for supporting deforesting regimes, spreading the destructive development model, and for direct contributions to deforestation.

In the Global 2000 report to the US President, for example, the ecological and social consequences of the loss of the forests are in the main well assessed and there are many excellent statements of the disastrous effects tropical deforestation is likely to produce globally and in the underdeveloped world. However it is remarkable that in a report which is designed to help determine policy and actions and serve as a basis for planning there is no serious attempt to assess the causal factors at work in deforestation or the role of the USA and its allies and associated agencies in them. Without evidence or indeed any real examination of the issue, the main problem is simply attributed to agricultural clearance resulting from population growth. Other factors, such as logging and corporate development, are occasionally mentioned, but no systematic attempt is made to assess their relative importance in different areas although this is vitally important for any determination of what can and should be done, especially by the USA.

The advantages of the population explanation are many. The problem can be seen as serious enough, but the population of the Third World countries involved can be seen as inflicting these damaging consequences on themselves ('the poor are literally destroying their own future'). Social alternatives can be ignored and there is no need to ask uncomfortable questions like: Why are the governments of so many Third World nations allowing the devastation of their forested areas and selling off or destroying resources which local people often need desperately (far more than those in the affluent sections to whom they are sold) questions which would require facing the issue of the nature of these governments and of their relations with their populations and with the industrialised world. There is no need either to face the awkward

Continued on page 38

INFORES Clear felling Liear felling Hae Cope

The Peninsula Development Road, running north from the Atherton Tableland to Cape York Peninsula, passes through dry, dusty woodland. Only stunted, crooked trees grow in the rain shadow of the Great Dividing

It comes as a surprise for travellers on the road to be confronted by large timber trucks roaring south loaded with giant rainforest logs. Probably fewer than several hundred people have ever been to the source of the logs, the 1200 metre high rainforest-clad Mount Windsor Tableland which lies at the western extremity of the Daintree rainforests between Cairns and Cooktown.

Even fewer people know that the Mount Windsor Tableland is now the major source of timber for the largest logging companies in North Queensland. The area has been sacrificed to commercial interests because all accessible rainforest areas are substantially depleted as a result of decades of over-cutting.

Five years ago the 20 km by 25 km Tableland was part of the major wilderness area covering the upper Daintree River. Since that time the Queensland Forestry Department has carved a road up onto the Tableland at a cost to the Queensland taxpayer of over \$11/2 million. Five timber companies now log the virgin rainforest, producing over one-third of all the timber used annually by North Queensland sawmills.

The fact that so much timber is coming from this one, relatively small. area of rainforest, gives some indication of the Forestry Department's gross mismanagement of rainforest and highlights the fact that unlogged, high quality, primary rainforest has almost disappeared in North Queensland.

The Forestry Department admits that the Mount Windsor Tableland was opened up for logging to give other rainforests time to recover from logging. It admits that in five years the virgin rainforest will be logged out and timber companies will then have to depend on secondary growth forests for logs. These forests will not have the giant centuries-old kauris, maples and black walnuts which the yirgin rainforests

have yielded. There are serious doubts that the timber industry will survive when it is forced to recut forests.

A Forestry Department report tabled in the Queensland parliament on 8th October 1981 highlights the inappropriate management procedures used by Forestry and suggests that the department has once again succumbed to heavy political pressure from the timber lobby. Despite a number of internal reports which are severely critical of the timber quota levels set in North Queensland, the department will maintain the level at the present 145,000 cubic metres for another 12 months and then drop it by only 10% to a level which will be maintained until 1986. By that time all virgin rainforest will be logged.

The Forestry Department claims that computer studies have shown that the northern rainforests can be logged on a sustained yield basis of 80,000 cubic metres per annum and say that timber quotas will be dropped to that level after 1986. The report justifies the cutting of rainforests at greater than the sustainable level with the strange argument that, otherwise, '... it would take a very long period to work through the virgin forest and convert the area to a "normal" forest.'

The secondary growth forests as 'normal' indicates how far the Queensland Forestry Department is from an ecological understanding of the humid tropical rainforest.

The inability to manage rainforests even for wood production is highlighted by the fact that in 1975, official departmental papers suggested that a sustained yield of 200,000 cubic metres per annum was possible, and six years later this has been dropped to 80 000 cubic metres.

Regardless of the level of exploitation finally decided upon, any continuation of rainforest logging will result in considerable degradation of the forest structure, wildlife, soils, and aesthetic values,

Besides the Mount Windsor Tableland, a number of other areas containing high quality rainforest have avoided commercial exploitation to

RAINFOREST IN FAR NORTH QUEENSLAND

Totally unprotected

Within state forests

Protected

Within timber reserves

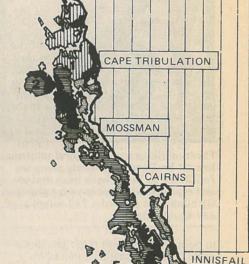
(within National Parks)

(freehold, leasehold, vacant)

(can be alienated for other uses:

grazing, agriculture, urban development)

managed and exploited as a timber resource)



1 TIMBER RESERVE

2 MOUNT WINDSOR TABLELAND

3 MOUNT CARBINE TABLELAND 4 BELLENDEN KER

NATIONAL PARK 5 ATHERTON

TABLELAND 6 PALMERSTON NATIONAL PARK

7 DOWNEY CREEK 8 CARDWELL RANGE

After Tracy & Webb

For whom do booms toll?

date but are under immediate threat

from logging.

The most important of these is relatively clear forest floor.

The inaccessible ranges north of the Daintree River contain the largest area of undisturbed rainforest in Australia. The area is currently not economically feasible for logging and only a sketchy assessment has been made of the timber resource. Much of the area has little value for timber production but this has not stopped the Forestry Department recommending logging of all commercial forest areas if access is provided.

the area with the use of a barge and is cutting timber from the forests without the usual Forestry Department treemarking and supervision.

Foundation has proposed a major over the area which would include a large part of the existing rainforest.

Downey Creek in the Innisfail hinterland. This area is noteworthy because it contains one of the last areas of rainforest growing on basalt soils. Most basalt areas were cleared for agriculture because of the inherent fertility of these soils and undisturbed rainforests growing on these soils have become a rarity. Rainforests reach their most complex structural development on these soils and the Downey Creek basin contains an impressive forest of giant trees and vines growing above a

One sawmiller has gained access to

The Australian Conservation national park of some 200,000 hectares

The Australian Conservation Council's Rescue the Rainforests campaign can be contacted at:

Queensland Wildlife House, 8 Clifton Street, Petrie Terrace, 4000 Telephone

New South Wales Total Environment Centre, 18 Argyle Street, Sydney, 2000 Telephone (02) 27 1497.

Victoria Australian Conservation Foundation, 672B Glenferrie Road, Hawthorn, 3122 Telephone (03) 819 2888.

By Hugh Saddler

On the weekend of 17-18 October parts of Australia got together in Canberra to discuss socialist responses to the 'resources boom'. In advance structure of the economy.) publicity for the conference, the organisers had expressed a desire to move beyond analysis and concentrate on strategy. While that did happen, the conference certainly did not divergence between those who produce any coherent, documented

This was hardly surprising. No written draft was put to the gathering and local community initiative. and the intention to circulate in advance a number of short topic papers was largely frustrated by the late withdrawal of several of the key speakers. Nearly half of the conference was spent in small group discussion. This certainly was effective in clarifying views and identifying points of agreement and disagreement, and seemed to be appreciated by most who attended. However. the process of reaching coherent conclusions by this means is a long one, needing considerably more than two half-days. Nevertheless, there seemed to be a widespread feeling among like control of technology and levels participants that new ideas and perspectives had been gained and that contacts made over the weekend could well provide the basis of future cooperation in various areas.

Perhaps the most fundamental disagreement between people at the conference was whether the 'boom' was wanted at all, that is whether political struggle should be directed towards trying to stop all large resource-based projects, or towards stopping only certain ones, while modifying others so as to harness the expected benefits for the whole Australian community. (It is worth noting that the question of whether a 'resources boom' is actually occurring - which seems to be preoccupying business leaders, financial commentators and conservative politicians - was not a source of disagreement at the conference. The consensus was that although the amount of new

Hugh Saddler works at the Centre for Resource and Environmental Studies at the Australian National University

investment was uncertain and may not truly constitute a boom, there was no doubt that most investment occurring nearly a hundred people from most in Australia was going into natural resource-based activities which would bring about fundamental changes in the

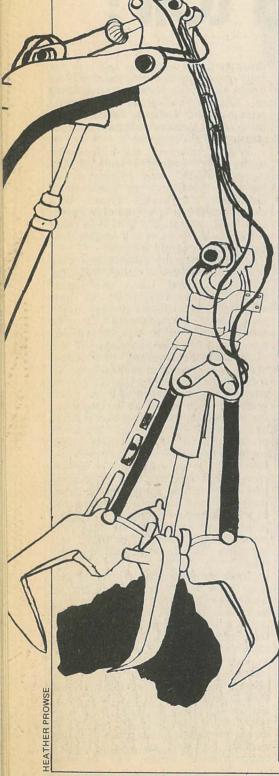
Perhaps underlying the difference of opinion over whether a boom of any sort was wanted, were different definitions of 'socialism', in particular a emphasise the role of the state, particularly at the national level, and those whose main focus is self-management

Another clearcut disagreement concerned the type of policy response which a federal Labor government should pursue. One point of view suggested that the flow of private investment into resource-based activities should be allowed to proceed and that policy should concentrate on the use of taxation measures and other instruments of economic management to redistribute the benefits. The alternative stressed the importance of direct intervention in new industrial development. of employment, and by taking public equity in certain projects and industries. Readers may be aware that a debate along these lines has been in progress within the federal parliamentary Labor Party for some months. Closely related to this particular argument is disagreement over whether or not the manufacturing sector as a whole will inevitably be disadvantaged by the 'boom'

Some people at the conference saw wage gains as the principal means by which the benefits could be redistributed and regarded workplace struggle as the most important or even the only focus of political activity. However, the more widespread view was expressed by Stewart West (federal opposition spokesperson on the environment) in opening the conference. He commented that a period of bitterness and polarisation was likely to result from high wage claims agreed to by companies during the construction phase of major resource projects, and argued for a comprehensive prices and incomes

important components of a compreincomes and taxation reform - would | by government, but that a mass movebe very difficult to achieve.

One consistent theme in discussions was the need for new forms of public ownership and, more generally, new approaches to the problem of control-



be widespread support for the view that hensive policy - controls on non-wage this control would have to be exercised ment based on political action in the workplace was essential to bolster the resolve of any ALP government in tackling this problem. This in turn raises the question of whether or how closely activists should work with the ALP.

One session of the conference was devoted to discussing the role and modes of action of local action groups. The question was posed: Can such groups effect real change by themselves or do their efforts merely achieve a small redistribution of costs and benefits? One unfortunate aspect of the conference was the almost complete absence of manual workers and active trade unionists. Many participants were aware of the dangers of divisions between 'middle class' intellectual workers and environmental activists on the one hand and manual workers on the other. The exploitation by sawmilling companies of just such a split over forests along the New South Wales north coast was raised, as was the apparent mass support (at least for the present) which Hunter Valley residents are giving to the coal and aluminium smelting developments. Some people also saw a potential conflict within local action groups themselves between short-term and long-term goals. While recognising that such groups can be most important in politicising those who take part and in persuading bystanders that ordinary citizens are not necessarily totally powerless, the danger of disillusionment was acknowledged. In some cases there may be a conflict affecting, for example, the choice of tactics - between winning on the particular issue and winning in the long run by building a more equal, just and environmentally sensitive society.

Another issue that came up in many discussions was the significance of nationalism as a potentially progressive political force. Some people questioned whether in Australia today nationalism is necessarily progressive and expressed concern that it might lend itself to xenophobia or even fascism. A related issue is that of national against international capital. Is it the foreign-ness of them so undesirable (if they are undesirable)? Is BHP preferable to Esso, if so why?

The final session of the conference sessions can degenerate into acrimony

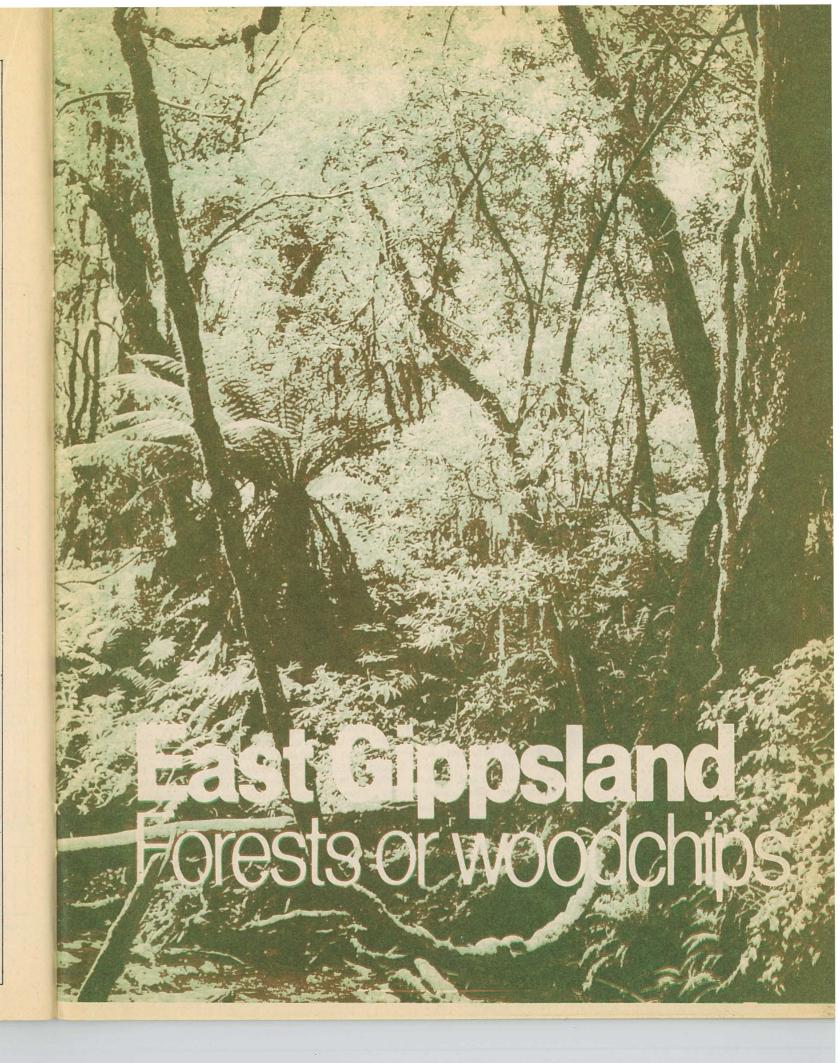
example, some concluded from the intellectual workers?

policy. He acknowledged that the most | ling large enterprises. There seemed to | discussion of local action groups (and their personal experiences as activists) that these groups have little power by themselves; the political task of building alliances with the industrial movement is therefore essential for any campaign. Of course this conclusion is not new, but its continuing importance is obvious to most. A conclusion which did seem to open up new political ground in Australia was that much wider and more intense discussion of of workers' control and public ownership would be essential to build public support for nationalisation. This obviously assumes that greater nationalisation of economic activity is an desirable and important goal, a view which, as I have noted, not everyone at the conference shared.

There probably was wider support for a related, but more concrete proposal to initiate a national campaign on public utilities. This seems to be a most valuable suggestion, as it would be able to build on the extensive experience in this area already gained by people in Victoria and harness a rising tide of concern in the general community, most obviously in Tas-

Another proposal, for an organised mass education campaign along the lines adopted a few years ago by MAUM. seems to me to have some inherent problems. Few could doubt that any response to the 'resources boom' must be more complex than mere opposition; as someone said during the weekend, what is needed is a vision of an alternative future, and this must be accompanied by detailed alternative proposals (some of which are now being produced). Some at the conference with long memories and given to nostalgia recalled the 1975 Radical Ecology Conference, which in retrospect seems to have been most important in launching a great range of activity. Would a similar exercise, including, most importantly prior local discussions, circulation of articles etc be equally effective if devoted to, say, citizens confronting the resources boom?

Perhaps the most practical suggestion of all that emerged was the plea, originating in this case from the Northern Territory, for networks of transnational corporations that makes people able to support campaigns with research and analysis. This seems to chime rather oddly with the plaintive query from one of the discussion groups about what the role of the intelwas a fairly informal plenary. Such lectual worker is or should be. Maybe the most politically useful action and legalism if attempts are made to intellectual workers, particularly acapass resolutions and reach formal demics, could take would be to commit consensus, so this approach was delib- themselves to devoting a small fraction erately avoided. Instead, a number of of their working time, say 5%, to resparticipants said what conclusions they ponding to requests for assistance from had reached and put forward proposals. hard-pressed activist organisations. Some of the conclusions flowed Would the pages of Chain Reaction be directly from the discussion of issues a good place from which to launch an which had previously occurred. For appeal for volunteers from the ranks of



20 Chain Reaction

East Gippsland is the only forest area of any size in Victoria which is not already covered by a large scale woodchipping scheme. It is a beautiful place where two different rainforest types come together. with an amazing variety of plants, animals, birds and 'jungles', But it is threatened. Linda Parlane and Chris Day introduce this Chain Reaction special report.

Setting the stage

Chain Reaction

SUPPLEMENT

East Gippsland Forests or woodchips

Editors Peter Brann, Chris Day Editorial Peter Browne, Richard Jones, Vince. Mahon, Neil Pearce, Liz Wardle. Mark Carter

Thanks to the Native Forests Action Council and the Sunday Ebbott bequest of the Australian Conservation Foundation.





The beauty and national signficance | sions on the draft guidelines were duly of the place appears to have no impact ignored by the FCV. upon the state government who, hell bent on implementing their "new commenced EES, the FCV engaged direction" policies of high energy consultants (W D Scott and Company) consumption, and environmental to "polish up" the EES. This polishing destruction have now commenced a up process involved engaging the pilot woodchipping scheme on these National Museum to do a two week magnificent forests. This pilot scheme, survey of literature on the effects of which the government, through their woodchipping on wildlife in a someagents, the Forests Commission of what futile attempt to plug some of the Victoria (FCV), euphemistically call a gaps. 'trial scheme', is merely the tip of a Whilst the public still awaited the massive 800,000 tonnes per annum publication of the EES, the FCV in woodchip iceberg.

examine the implications of the long-

been forgotten.

vironment Effects Statement on wood- effects of pulpwood harvesting' chipping in East Gippsland for public
Two weeks before publication of the

Before publication of the already

January 1981 invited proposals for the This Chain Reaction supplement will use of pulpwood from East Gippsland.

The EES was finally released in mid term woodchip scheme. It discusses 1981. By this time the area under the ecology of the area, the company consideration had more than doubled most likely to be responsible for the (without the public being informed) destruction of it, Tasmania's experience and the FCV had still not examined with woodchipping, the effects on any alternatives to a woodchipping local economies and employment, some scheme (contrary to Ministry for Conlocal opinions, the stances of the servation regulations) or any associated various political parties and what you developments. In fact one is left can do to help save East Gippsland's wondering what the FCV did in the way forests from being converted to waste, of research for the EES. For the most The political intrigue surrounding the part it is merely a re-hash of tired proposed woodchipping scheme for East forestry cliches and well worn Gippsland appears to be an indication information. We are still in the posiof the determination of the government tion of knowing very little about the and the FCV to satisfy the desires likely effects of woodchipping East of the woodchipping companies. Any Gippsland, as the EES freely admits: semblance of openness and honesty in 'For many aspects of this study no government appears to have long since detailed evidence was available. This points out the need for more basic In October 1980, the FCV issued ecological and taxonomic studies on draft guidelines for the planned En- which to base the assessment of the

comment, However parliamentary cor- miserable EES the government respondence clearly shows that the EES seemingly determined not to be slowed was commenced months before the by its own bureaucracy announced that guidelines were even issued. These a pilot woodchipping scheme would be guidelines were ridiculously restrictive established in East Gippsland almost in their scope as they didn't allow immediately. The scheme is to involve examination of any alternatives to a a total of 100,000 tonnes of woodchips woodchipping mill, pulpmill, electricity offered to the sawmillers of East Gippsand water supply, etc. As we have come land in proportion to their sawlog to expect, major conservation submis- allocations, over a period of 6-12

Linda Parlane works with the Native Forests Action Council, Chris Day is organiser of the Victorian Environment Centre.

months. Whilst the government and twisted charade is that over the past |

woodchipping scheme. This sort of copies were made available to environclosed.

scheme) with its greedy eyes now firmly | documents.

Another deplorable aspect of this Gippsland EES.

FCV insist on calling this a 'trial 2-5 years the Ministry for Conserscheme' it appears that the only thing vation has been preparing reports on on trial is public opinion as there are no the botanical, zoological and geomonitoring procedures associated with morphic significance of East Gippsland. These reports contain the only compre-Investigations indicate that in hensive baseline data available and thus January 1981 State Cabinet chose to are critical to any assessment of environput aside previous commitments that no mental impact. Sources tell us that these woodchipping would begin in East were made available to W D Scott in Gippsland until after the assessment February 1981 but they chose not to ensure the existence, in perpetuity, of of an EES and secretly gave the wood- use them. Further, these reports have chippers the go-ahead for the pilot still not been published. Pre-publication nounced that the pilot scheme had ment groups in the week before subcommenced on 10 October, just one missions on the EES closed. Cynics may day after submissions on the EES had regard this as a clever move by the government as they could then say that Harris-Daishowa (the wholly the reports were made available to Japanese owned company, which environmentalists, even though we had National Park operates the notorious Eden woodchip no time to read these voluminous

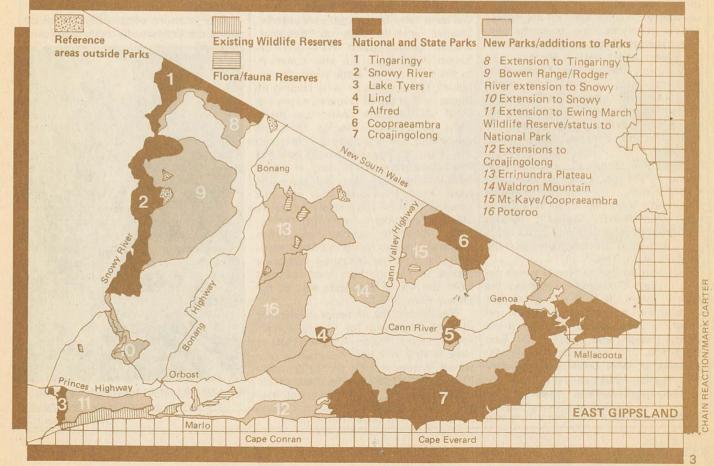
set on East Gippsland forests recently In the light of all this back-room put in an application to the Federal manoeuvoring, and in protest at con-Department of Primary Industry (DPI) tinued disregard of lawful procedures to export 100,000 tonnes of chips from and lack of information in the EES it Victoria. It appears that the DPI, in is hardly surprising that many environconsultation with the Department of ment groups such as the Native Forests | public throughout Australia need to Home Affairs and the Environment have | Action Council, the Australian Condecided to waive the need for Environ- servation Foundation, the Conservation proposals to ensure the long term ment Impact Assessment for the pilot Council of Victoria, the Concerned scheme, thus allowing Harris-Daishowa Residents of East Gippsland and the to start its encroachment into Victorian | South Gippsland Conservation Society

It is our view that given the biological diversity of the East Gippsland forests and their fauna and their national significance the Government should be considering and declaring large true National Parks with no logging, grazing or mining in them. These National Parks should have nature conservation as their first priority. As such they must be large enough to the plants and animals contained within them

Conservation groups have put forward proposals for such parks in the following areas (see map for details of boundaries)

- (i) Errinundra Plateau/Mt Ellery
- (ii) An extension to the Croajingalong
- (iii) Mt Kaye Coopracambra Upper Genoa River
- (iv) Mt Tingaringy Snowy Gorge Bowen Range
- (v) The range of the Long-footed Potoroo

The environment movement and the throw their weight behind such survival of East Gippsland. We must show this morally bankrupt government that we will not allow East Gippsland have publicly boycotted the East to become another wasteland like the inappropriately named, Eden,



Pulped Potoroos

Forests are not only composed of trees. | lowland rainforest is the lilly-pilly. | ation has come about because commu-They also contain an incredible variety Other features are the various species of other plants - shrubs, herbs and of vines and flowering epiphytes, grasses - and of course an equally including the beautiful fieldia with its impressive array of animals, from the pendant cream bell-shaped flowers. lowliest insect to the ubiquitous kangaroo. These elements do not just is known as a forest community,

In East Gippsland, the forest commufrom the mountains to the sea.

species. For example, the rainforest the woodchippers. tree sassafras is one component of wet mountain forests. Errinundra Plateau is Melbourne catchments. The Errinundra | blossoms and sap of favoured eucalypts. Plateau contains species which are not found further west and is importance.

Blue Mountain Tree Frog.

curs in East Gippsland is more like the from the 4% of the state east of the typical jungle. It is the southernmost | Snowy River. extension of subtropical rainforest, and occurs in small pockets throughout the of East Gippsland for nature consercoastal region and foothills of East vation, several major community types Gippsland. The largest stand covers 80 have to date not been adequately prohectares at Jones Creek, and was only | tected in reserves. Of the 1432 native discovered in 1973.

Most of East Gippsland forests however are dominated by eucalypts. East fit together like a jigsaw puzzle, but are | Gippsland is noted for the amount of related by a complex series of relation- old eucalypt forest that still remains ships. Together they all add up to what | intact, and this is part of the reason for the importance of the region,

There are many different eucalypt nities are remarkably varied, and in species - 44 of Victoria's 94 occur in contrast to the rest of Victoria, they | East Gippsland. Silvertop is one of the have so far remained relatively intact more common ones. It often occurs Potoroos, Rat Kangaroos) have shown with other stringybark species such as Each different community has its messmate and yellow stringybark and all own characteristic plant and animal these species are potential targets for

Animal species found in these drier forest environments include the treethe stronghold of these forests, which dwelling Common Brushtail Possum and must surely rate amongst the most | Sugar Glider, while Grey Kangaroos and beautiful in the world. Sassafras can Red-necked Wallabies graze on the occur as a pure rainforest, together with forest floor. Where the understorey other tree species such as the black vegetation becomes dense, Black oliveberry. In other areas on the Plateau Wallabies are frequently encountered. various eucalypts rise above the rain- Smaller animals such as Echidnas, forest species. These forests are some of Garden Skinks, Bush Rats and the the oldest and tallest in Victoria. The Brown Antechinus are also common. only other extensive area of mature wet | In the taller forests along rivers Yelloweucalypt forest in Victoria is in the bellied Gliders can be seen feeding on

In all there are twenty-one major plant associations, ranging from the therefore of major conservation rainforests, the tall mountain forests to the dryer stringybark forests and the Mountain Brushtail Possums are low woodlands which can be found found in the wet eucalypt forest, to- both in the high alps and along the gether with the small mammal coast. From this wide range of forest Swainson's Antechinus. Birds such as types, a total of 1432 species of native the black-faced Monarch, Brown plants have been recorded. Forty-Gerygone and Large-billed Scrub-wrens, eight different species of native are a feature of the wet gullies, as is the mammals are also found in these forests, and over half the terrestrial vertebrate Another sort of rainforest which oc- species in Victoria have been recorded

Yet despite the immense significance plants, 180 (13%) are excluded from The most common tree in the existing reserves. This disgraceful situ-

nities such as the wet mountain forests of the Errinundra Plateau also have a high commercial value

One animal species of particular interest is the Long-footed Potoroo which was first described only last year. The species has a worldwide range that extends from the Bonang Highway to Yalmy Road and southward to Bellbird. The entire range is within an area threatened by woodchipping and current forestry operations. As a group, the small macropods (Pademelons, themselves to be highly susceptible to range decreases and extinctions. It is deplorable that no reserve exists for the Long-footed Potoroo.

The harvesting technique used in East Gippsland forest is called clearfelling. Clearfelling removes most of the trees, crushing, uprooting and severing understorey vegetation. The once forested area is virtually laid bare of

Regeneration of a dense crop of young seedlings usually takes place over



Stringybark: target for woodchippers

Michael Lockwood is project officer with the Conservation Council of Victoria.

adequate regeneration on compacted forest. The nutrient-rich leaves, bark the original forest. The first colonisers may be soon crowded out by larger shade-tolerant species to follow. The vegetation thus undergoes a series of changes in a process known as succession. It may take a forest several hundred years to pass through all stages of succession, and each state is important because it provides habitat for different species.

Woodchipping will mean that East Gippsland forests will be cut down every 80 years or less, and so mature forests will no longer exist over most of present throughout the system. the region. This will have grave consequences for species which depend on such features of mature forest as hollow trees.

The Greater Glider, an arboreal mammal, and the White-throated Treecreeper are two examples of such species. They are very sensitive to in young regrowth forest. They do not survive clearfelling operations.

Large animals are not the only ones



Feather tailed Glider: forty eight species of native mammals are found in East Gippsland's forests

most of the clearfelled area. However | affected. The removal of vegetation has | difficulty is often experienced in gaining | an effect on all the fauna inhabiting the areas such as log landings and snig and twigs which form the first level of tracks. The regrowth does not have most forest food chains are no longer the same composition of plant species available in the same location or as the original forest. Most (but not quantity. This affects some of the less necessarily all) of the plant species obvious forest inhabitants. The fauna of originally present have been observed dry forests is dominated by the numbers to regenerate, but at very different and variety of insects present, and each levels of abundance from those found in plant species has its own series of insect species feeding on flowers, foliage, bark etc. Alteration of insect fast-growing species, which allow more populations can affect everything from flower pollination to populations of insectiverous birds.

> The long-term survival of forest communities after clearfelling is further jeopardised by changes in the physical environment.

Clearfelling of a forest disturbs the complex interactions that occur between the soil which supports the

There is ample evidence to show that clearfelling promotes erosion. Loss of soil means that significant quantities of nutrients are removed from the forest, and this can have adverse effects on growth rates. Nutrients are also lost through a variety of other mechanisms. including removal of trees or parts of habitat disturbance, and cannot exist trees which contain nutrients, leaching through the soil into streams, and losses due to the regeneration burn which follows clearfelling.

The impact of soil and nutrient loss is not only felt by the forest ecosystem, but is often significant at large distances from the cleared site. Streams become turbid with the high sediment loadings. and the light penetration which is essential for growth of aquatic plants and algae is reduced. These plants and algae provide shelter and food for a myriad of aquatic organisms, which in turn form links in a food chain, often culminating in higher animals such as

Current and projected forestry operations, including woodchipping, will therefore not only maintain the forests in an artificial state of early succession, but also facilitate their rapid degradation after each harvesting rotation. Growth conditions will be rendered less favourable by the physical changes induced by clearfelling, and the living components of the ecosystem will also forest, the nutrients in the soil and be altered in such a way as to induce vegetation, and the water which is a progressive decline in the overall health of the forest.

> As a consequence wildlife values are being severely threatened. Rare species and important communities are inadequately protected by the present reserve system, and many species at present regarded as common will have the extent of habitat available to them drastically reduced. The only way to remedy this situation is for the government to immediately proclaim massive extensions to the National Park network in East Gippsland.



The harvesting technique used in East Gippsland forest is called clear-felling, Clearfelling removes most of the trees, crushing, uprooting and severing understory vegetation. The once forested area is virtually laid bare of vegetation

Been there, done that The Tasmanian experience

There once was a time when a state- | 100,000 tonnes of 'waste' timber in a | mill at Triabunna and blockaded the ment on the subject of saving trees long ago when so-called 'primitive' people lived in the land. Australian value of trees and everything else in generation costs. their world.

it is necessary to speak out and explain | mental effects statement. that when the trees die, we will die too.

homeland. Until very recently, the the industry is so marginal economically after buying a block of land was to and that means saw logs. remove the despised bush.

a scarce resource in Australia. When forests entirely. As the cancer spreads, Captain Cook sailed into Botany Bay, it also kills off the sawmillers who have Buckland Firing Range. Tasmanian 15% of Australia was forested. That made a living in the forests for two Pulp and Forest Holdings moved into figure has now been whittled down to centuries. 6%. In contrast China, a land not renowned for tree cover, has 9% of its land mass under forests, Iran 11%, India 22% and Japan has over 60%. sponsible, Tasmanian newspapers. From contract and tossed them out. The Japanese revere their trees and the Launceston Examiner, Monday would not dream of committing the 1 June, 1981 'Forest Companies to build a road right through the middle atrocities we inflict upon our land- Blasted'. Who is blasting them - is it of the firing range. The army scape. However, they politely hold their those terrible environmentalists? No, complained, 'We don't want a road. This revulsion in check as they haul away it is members of the Tasmanian Logging is supposed to be unbroken bush' entire Australian forests for bargainbasement rovalties

year. Harris-Diashowa, a 100% Japa- plant. They complained they were not would have been met with open- nese owned company, has plans to mouthed astonishment. That time was export 400,000 tonnes per annum of woodchip from East Gippsland. This firm already operates a woodchipping Aborigines, American Indians, Canadian plant at Eden which has caused the Eskimos and all the other human groups | decimation of NSW's forests and the | Head'. which had existed on this planet for a loss of millions of dollars annually to million and a half years or so knew the the NSW Forestry Commission in re-

The Forests Commission of Victoria Only in the last two hundred years | welcomes the project and has bullhave we lost track of our dependence | dozed over any objections by preparing on our environment to the extent that | a very optimistic and uncritical environ-

In theory, if we lived in the best of Contemporary Australians are less all possible worlds, woodchipping would appreciative of trees than anyone on be a good way of utilising waste timber earth. The attitude dates to the first such as mill ends and sawdust. We settlers, who loathed the alien eucalypts | create 700,000 tonnes of that type of as constant reminders of the harsh waste yearly in Tasmania from the differences between Antipodean life and | woodchipping and saw log industries. the soft green pleasures of a distant However, the woodchippers claim that inevitable first action of an Australian | that they must chip only the best wood,

Woodchipping is a cancer, feeding on Trees, of course, have always been its host and ultimately destroying

Now, so that I can't be accused of from our very conservative, if not recommenced a pilot woodchipping loaded rigs outside the entrance to the through, much less a tank. scheme which includes the removal of Tasmanian Pulp and Forest Holdings

getting enough money to pay off their rigs or even make a living wage.

Another article reads: 'Council Seeks Compensation for Log hauling Damage - Threat to Close Roads in Circular

Tasmanian car drivers take their lives in their hands every time they venture onto what used to be public roads. Even harder hit are the unsuspecting tourists. Tasmania is advertised as a tourist state, but that affluent animal is rapidly becoming an endangered species. Tourists stand around airport departure lounges muttering about kamikaze truck drivers and cratered roadways. Tasmania's road system is literally crumbling under the assault of the woodchip trucks.

Woodchipping has angered the councils, the tourist industry and the logging contractors. Even the Australian Army is critical of the woodchipper's

During my tenure as a reporter on This Day Tonight I did a story with the Army about a large patch of bush they have near Triabunna known as the Triabunna, and started to devour the Buckland Range. When they were halfmaking things up, I'm going to quote way through their proposed chipping operation, the Army tore up the

First of all the woodchippers tried Association who are attacking the But the woodchippers kept building woodchippers because they cannot get their road despite all protests. The Victoria's East Gippsland is the next enough sawlogs and because the price Army also found the woodchippers area scheduled for destruction. The they are paid for hauling woodchips is were taking the best trees and leaving Victorian Government, through the too low. They are upset, so upset that everything else. It became practically Forests Commission of Victoria, has last year, 70 truckers parked their impossible for infrantry to move

I interviewed an Army officer who

went on air saving 'I've been through the Vietnam War; I went through the Korean War, but I've never seen devastation like that caused by woodchipping. If they try to come back, we'll keep them away by force'

Here's another item: 'Chips Firm Costing State Millions'. This was the Forestry Commission complaining that they were not getting enough in royalties to cover regeneration. The loss amounts to \$185 per hectare. In other words, Tasmanians are paying the Japanese to carry their forests away!

According to the Australian Bureau of Statistics, in 1967-68 there were 275 sawlog and plywood mills in Tasmania. Ten years later there were only 153 mills. Why have they closed down? Because the woodchippers are exporting 4 million tonnes of woodchips annually to Japan. They're simply not leaving enough sawlogs for the mills that have operated for generations.

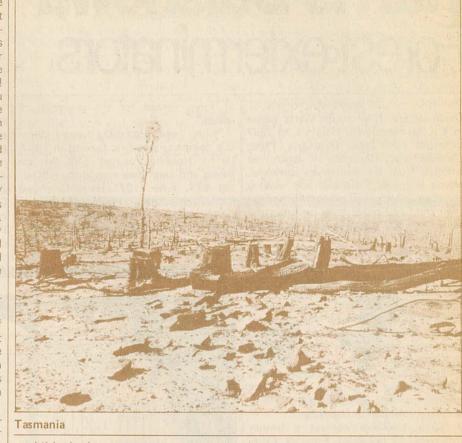
I once took a sawmiller called Ashley Page into a woodchip area. He pointed at 6 foot diameter logs lying in burned piles, and said 'Those were once sawlogs'

I asked 'Why don't the Forest Commission let you get them out?'

'If I took them it would be proof that the woodchippers aren't just knocking over waste', he replied. 'The Forest Commission won't let me touch them, instead they just burn what's left after the woodchippers have been

Members of the Tasmanian Wilderness Society accompanied a sawmiller to the Geeveston Mill of APM. He went through the stack in front of the chipper and pointed out dozens of sawlogs. Yet, the Forestry Commission vehemently denies that sawlogs are pulped and chipped.

The export woodchip industry is holding a gun at our heads. The our prices, they will take their business to Oregon, New Guinea, Brazil or Canada. Our woodchip exporters mean 'If we lower our price it means we'll have to have better timber. We can't muck around with all this slash, all these tops and branches - we've got to have top quality timber which we can run about such time-wasting distractions as knots and burned places.' The Forestry Commission and Government enthusiastically support the woodchippers' view. The Tasmanian Forestry Commission is



established, they constantly chant 'We | \$100 million over 10 years to regenerate have what we want those people are of Tasmania's shattered forest resources. going to be out of work.' To a politician the thought of losing one job

A Canadian economist David Young, Japanese are saying that unless we lower brought in by the Tasmanian Government to appraise Tasmania's economic | intensive industries which they created future, had this to say about the forests in his report:

'To a foreign observer, the waste seen as a biological loss is deplorable. The adjective 'obscene' suggests itself.' 'From an economic point of view, the policy of leaving lands derelict and Victorian politicians will not be able to straight through without worrying desolate is, to say the least, imprudent take refuge under the same rock. The 'and improvident.'

He called for a complete end to is there for all to see. export woodchipping. He said that it was ruining the forests and that nothing more than a wholly-owned forest industry in the future if wood- the Otways, the Melbourne Catchment It is blackmail. Once the chippers are the damage, he estimated, would cost wastelands of Tasmania.

employ 150 people, if you don't let us an area of 750,000 hectares - a fraction

In Tasmania, we are proving the wisdom of the Aborigines the hard way. makes them act faster than Pavlov's We have discovered that modern people are just as dependent on their environment as any hunter-gatherer society, We have lost our forests and the labourthrough short-sighted commercial greed and political stupidity.

> Our loss is bad enough, but it will be absolutely criminal if the Victorian Government repeats our mistake, Tasmanian leaders can claim ignorance. tragic situation of the Tasmanian forests

Once again, the people are years ahead of their 'leaders'. Citizens groups Tasmania would have no basis for a must stop the politicians from reducing subsidiary of the woodchip companies. chipping continued. To begin to repair and East Gippsland to the derelict

Dr Norman Sanders is a Tasmanian parliamentarian and Australian Democrat national spokesperson on energy,

The Japanese-owned Harris-Daishowa company, already woodchipping at Eden in New South Wales, is keen to commence operations in East Gippsland's forests. Tim Gilley describes this company's activities in Australia since 1967.

Harris-Daishowa Forest exterminators

south-eastern New South Wales began Japan. at a social function in Malaysia. In 1967 officials from the Daishowa Paper Manufacturing Company of Japan met officials from the Australian company, shares and Daishowa owned the remain-

In November of that same year the other 37.5%. NSW Ministry for Conservation gave approval for a woodchipping scheme to go ahead in the south-east region of the state.1 This approval was for the Forestry Commission of NSW to enter into an agreement with Harris-Daishowa for timber rights in the Eden, Bombala and Bega state forests.

This amazing democratic process is worth looking at in more detail. The following events all happened in 1967:

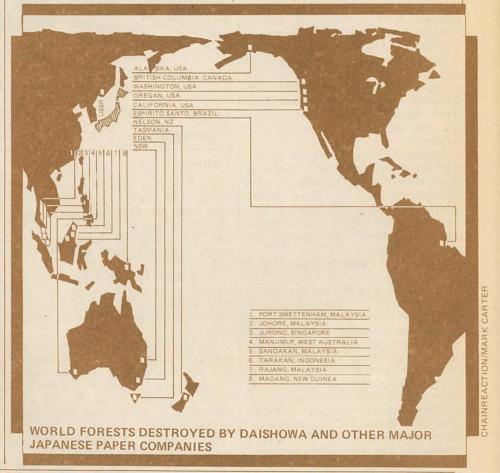
- Social function in Malaysia
- Harris Holdings contact a former employee of the NSW Forestry Commission for advice on woodchip
- Former Forestry Commission worker employed by Harris Holdings to send a submission to Japan
- Daishowa rush out a team of senior executives and experts to have a look for themselves
- After several meetings the NSW government agrees to a woodchipping scheme in the south-east region, and immediately calls for public tenders.
- The Harris-Daishowa company is formed and applies for the woodchipping concession
- Approval from the NSW Ministry for Conservation

By 1969 a woodchip mill had been established at Eden and had begun chipping wood. In January 1971 the first shiploads left the company wharf

The plan to cut down the forests of | at Eden bound for the pulpmills of |

Who owns Harris-Daishowa? When the company was first formed in 1967, Harris Holdings owned 51% of the ment was for Harris-Daishowa to use Harris Holdings. Daishowa was looking ing 49%. Since 1971 Harris-Daishowa for cheap supplies of woodchips to feed has been totally Japanese owned. their pulp and paper mills in Japan and Daishowa has the controlling interest of come from the Eden state forests, asked Harris if there were any to be had | 62.5% of the shares and C. Itoh and Co. the Japanese trading giant, owns the

In 1968 the NSW Forestry Commission issued the company with a special licence stretching from December 1969 to December 1989. The agree-450 000 tonnes of timber a year from 317 300 hectares of state forest in the licence area. The bulk of their wood has though substantial amounts have also come from the Bega and Bombala state forests. By 1975 some 60-65%



Harris-Daishowa (Australia) Pty Ltd is an international Japanese company in Australian forests.

This paper is a summary of a longer research paper. Copies of the research paper are available from the Native Forest Action Council, 118 Errol Street, North Melbourne Ph 329 5519. Australian dollar equivalents have been used throughout.

Tim Gilley works with the Native Forests Action Council.

8 Chain Reaction

of the company's wood was coming I from NSW state forests, with about East Gippsland forests are threatened by taken out, attempts to regenerate and 20% coming from sawmill wastes in the woodchipping scheme proposed by manage areas after the trees have been NSW and Victoria, and about 15% from Harris-Daishowa, the Victorian Forests cut down, and the share of central

encouraged Harris-Daishowa to take environmental report, an Environmental timber from state forests outside the Effects Statement. The current director taining local offices and staff in the licence area. Known examples are the of the Victorian Ministry of Conser- region (in 1976, for example, there Dampier state forest.³ Narooma state forests, and Tallaganda state forests4 (which the Forestry Commission has Manufacturers. destroyed to make into a pine plantation). The company has also gained supplies from public land in Victoria and their operations are being heavily in the early 70 s.5 The wood for a recent 200 thousand tonne increase in In the south-east region the royalties have set their royalties 'at less than the export licence is to come from land paid by Harris-Daishowa do not keep up market could bear, much less than for outside the licence area - mainly from public land in NSW.6

State and private forests in southeastern NSW are harvested by clearfelling. Private contractors have gone into selected areas and cut most of the trees down. In what is known as an integrated operation, the better quality logs go to the sawmills and the rest goes to the chipmill at Eden. As has happened in woodchipping in Tasmania, substantial numbers of potential sawlogs have been chipped for pulp.

To clearfell an area of forest is to largely destroy that fauna and flora habitat. Not surprisingly, no attempt was made to assess environmental damage until several years after the woodchipping scheme began. Studies since then have all pointed to extensive damage,7 but have had only minor effects on forestry policy.

Severe environment problems have not been confined to Australia. They have also happened in Japan at the pulp and paper mills where Australian chips are processed. As early as 1972, Dai showa and other paper manufacturers were under attack by the Jishu-Koza Citizen's Movement in Japan for causing massive pollution. They reported that the pulp and paper industry is destroying the natural environment and with it the lives of human beings' 8. They singled out Fuji City on Suruga Bay where Daishowa owns four out of the ten

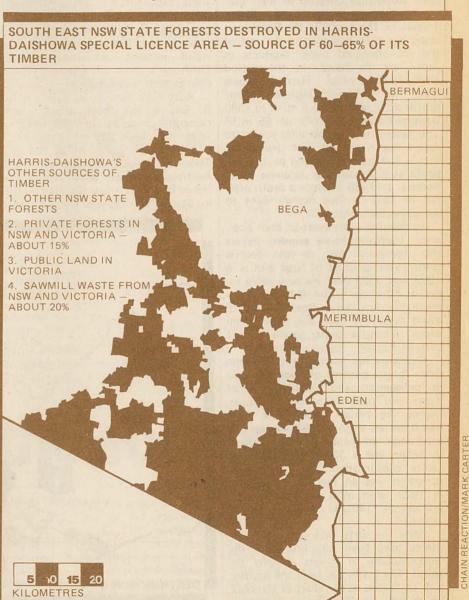
In Australia, state and federalenvironmental legislation has been no deterrent to Harris-Daishowa. They employed W D Scott and Co to prepare the required environmental reports. W D Scott is a consultancy company that had already handled most of the senior management appointments for Harris-Daishowa. A former director of Scotts has been a director of Harris-Daishowa since 1976.

In Victoria, where the beautiful into state forests so the wood can be private forests in NSW and Victoria.² Commission has paid this same W D office costs attributable to the region The Forestry Commission has also | Scott company to prepare the required | vation has served as a director of both were 50 Commission staff in Eden Harris-Daishowa and Australian Paper

> losing millions of dollars every year, subsidised by Australian taxpavers.9 tures are mainly the building of roads | cost of growing the wood' .13

(total expenditure in 1976/77 was \$39,7m):10 and the cost of mainalone).11 From 1969 to 1979 the Forestry Commission made losses of In NSW the Forestry Commission is over \$20m in the south-east region. 12

A recent report from the federal Bureau of Agricultural Economics concluded that Australian forestry services with the Commission's expenditure on similar materials in some overseas counbehalf of the company. These expendi- tries and in some cases, at less than the



East Gippsland supplement 9

The Forestry Commission of NSW | and Siberia. In 1979 Japan relied on exports woodchips to Japan from the have also given other special assistance to Harris-Daishowa. When the company complained about the cost of building their own road from the chipmill at Jews Head to the Princes Highway, they were given a rebate on their royalty payments. The company benefited by \$366 601.14 When they protested about an increase in royalties in 1976 they were given until the beginning of 1980 to pay the extra cost involved. 15 The NSW Department of Decentralisation also provided the company with a \$125 000 grant and some housing assistance for their employees.16

Where have the profits gone? The profits have of course gone to Japan. This has happened in two ways. The first has been by Harris-Daishowa selling their woodchips cheaply to their own parent company in Japan (about \$23 m a year). 17 The profit of the Eden operation has then occurred in the sale of the manufactured paper products in Japan by Daishowa. In the period 1971-1978, when Harris-Daishowa chip exports is about 25%. made no profits, Daishowa made profits after tax of \$25.5 m.18 In 1980 Daishowa made a profit of \$5 m.19 Japan has happened with Harris-Daishowa making a profit and paying that profit as a dividend to Japanese shareholders. In 1980 it made a profit after tax of \$2.3 m. This money went to Japanese shareholders.20

In the first eight years of their operation Harris-Daishowa avoided paying any company tax to the federal government. Because of large profits in 1979 and 1980 they are now liable for tax of \$3.4 m.21 The federal government has not only allowed them to avoid tax, they have also given them export incentive grants totalling more than \$1.1 m.22

Daishowa has been operating in the Eden forests because of huge increases in production and consumption of paper and paper products in Japan. During the period 1960-1979 there has been an almost 400% increase in production of paper and paperboards in Japan, and a 325% increase in per capita consumption. Per capita consumption was an incredible 153.7 kg in 1979, with most of Japan's paper production (96.3%) being used in Japan,23

Since the early 60 s Japanese companies have been responsible for the woodchipping of forests all over the world. The result has been the destruction of forests as far apart as Malaysia, South America, New Guinea, Indonesia,

overseas forests for 46% of its pulp- north coast of NSW. They have their wood supplies compared with only own trading company, C. Itoh and Co 1.7% in 1960.24

producer of paper and paperboards in Japan, is very much a part of this ex- Australia.28 ploitation of the world's forests. It has gained supplies of wood from the USA, Canada, South America, and the USSR, It is directly involved in woodchip production at Port Swettenham and 203 000 tonnes of woodchip in 1971 Johore in Malaysia, in British Columbia (also pulp production) and Brazil tonnes. Since then they have been (as part of a group of companies), as well as in Australia at Eden, 25

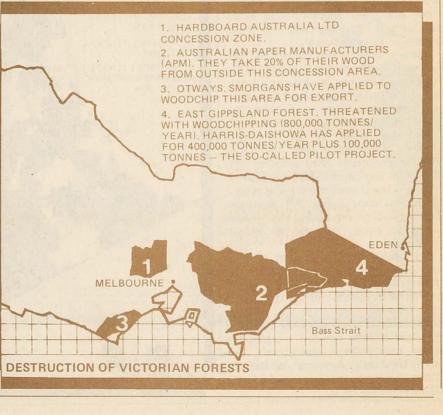
duction fit into this international also applied to export 400 000 tonnes scene? Australian hardwood forests are a year from the East Gippsland vital to the Japanese paper manufact forests, 31 and are a contender for turers. In 1977/78 financial year Aust the so called trial scheme of a 100 000 tralia exported 3.1 million tonnes of tonnes recently announced by the hardwood pulpwood to Japan; 26 this Victorian government. was 60% of Japanese hardwood chip imports and 18% of their total pulpwood imports. At present Harris- Japanese paper market is still expand-Daishowa's share of Australian wood- ing, Depressions of this market in the

in Sawmillers Exports Pty Ltd which 1977 to 1987.32

(Australia) with \$A6.25 m capital Daishowa, as the third largest (established 1957), and are part owners in another seven businesses in

What about the future of Harris-Daishowa's operations in Australia? The whole trend so far has been for them to expand. They began exporting and by 1979 were exporting 852 000 granted increases in their export licence of 50 000 tonnes (1980),29 and How does Australian woodchip pro- 200 000 tonnes (1981).30 They have

Harris-Daishowa is pushing for extra supplies of woodchips because the 70s were only temporary with overall Australia's partner at Eden C. Itoh increases in production and consump-& Co, is the third largest trading tion. It can be expected that the paper company in Japan. In 1980 they had market in Japan will get no smaller in The second way of sending profits to sales of \$A31.325 m, a profit of the 80s and will probably increase. \$18.6 m, and assets of \$9 705 m.27 Predictions from the Food and Agri-They are heavily entrenched in the cultural Organisation of the United Australian business world. Apart from Nations was for a 3.6% growth a year in Harris-Daishowa, they are also partners | world paper consumption for the period



Harris-Daishowa is also likely to be exporting softwood chips in the near future following a successful experiment in 1980,33 The supply would be from the Forestry Commission pine plantations at Bombala and Queanbeyan which are currently up for tender (210 000 tonnes a year),34

Australian and overseas experience is that international woodchipping companies are very hard to stop. They have a proven ability to get support and huge subsidies from the governments of the countries they are in. The only serious opposition lies with the efforts of conservation groups and concerned individuals to raise public opposition to this rape of our forests. Soon it will be too late.

References

- 1. Senate standing Committee on Science and the Environment, Proceedings of the Enquiry on Woodchipping 1976, Page 1138 2. W D Scott & Co, A study of the environmental and sociological consequences of the woodchip operations in Eden NSW (July 1975), page, 16.
- Op cit 1, page 1140.
- Imlay Magnet, HDA agrees to pulpwood 24/12/1980, page 2
- 5. Op cit 1, page 1140.
- Letter from A R L Gordon, Minister for orests (NSW) to J E Hatton MP, member or South Coast, dated 5/3/1981.
- Dr Harry Recher (Australian Museum) Dr Peter Smith, Mr Wyn-Rohan-Jones, Effects of the Eden Woodchip Industry on Terrestrial Vertebrates (Research Paper NSW Forestry Commission 1980). Other environmental reports are listed in longer research paper.
- Report by members of the Jishu-Koza Citizens' Movement, Polluted Japan, Tokyo,
- 9. Ray Hammond, NSW Forestry Commission - An Uneconomic Concern, (The National Parks Journal, February/ March 1979, Vol 23 No 1, pages 12–14. 10. NSW Forestry Commission, Annual Report 1976/77.
- 11. Harris-Daishowa (Australia) Pty Ltd, An 22. Ibid 1978 and 1980. environmental impact statement for the 23. Japan Paper Assoication, Pulp and Paper | Applications close 21 November 1981.

Woodchip mill, Eden, New South Wales

Eden (NSW) export woodchip operation, | Statistics 1980. March 1977, page 67. 12 This figure is based on Forestry Commission fi

gures for SE Region, Expenditure is doubled to nclude costs not included in Forestry Commission figures. See research papers for more detail 13. Dr Neil Byron, The Pricing of Wood in Australia, Forestry Research Section, Burea of Agricultural Economics, Canberra, 1979

- 14. Op cit 1, Forestry Commission (NSW) submission to the enquiry, page 1151.
- Ibid page 1259.
- Special Survey, Japanese Overseas Invest ments - Australia, Oriental Economist, Apri 1980, page 36.
- 8 Japan Company Handbook 1971.
- 20. Annual Report lodged with the NSW Corporate Affairs Commission, Harris Daishowa (Australia) Pty Ltd, 1980, page 6. 21. Ibid 1979 and 1980

- 25 Ibid
- 26 Australia/Japan Joint Study Group Or Raw Materials Processing, Overview Report on Australian and Japanese Woodpulp Industries, Future Development and Relationship, (AGPS Canberra 1980). 27. Op cit 18, 1980.
- 28. Op cit 17
- 29. Letter from A G Hanson, Assistant Secretary, Forestry Branch, Dept of Primary Industry, to Dr J G Mosley, Director, Austra-lian Conservation Foundation, dated 27/6/1980, R80/58.
- Op cit 29.
- 33. Imlay Magnet, Encouraging results from
- pine chips trial 7/8/1980, page 2. 34. Forestry Commission of NSW, Brochure of preliminary information and application for regulation of tenderer. Softwood timber for Bombala and Queanbeyan Forestry District & Kapunda Development Company.

A woodchipping industry is seen by some people as the economic saviour of East Gippsland. But can we expect balanced economic growth if the region becomes dependent on one major industry? And how many jobs is the woodchipping industry likely to generate? Peter Brann and Leonie Cameron report.

Chipping the economy

The East Gippsland woodchip scheme | elsewhere in Australia, a single industry | forested land will be at the very heart surroundings without any real oppor- operations amongst local inhabitants. tunities to oppose. As we have seen Orbost Shire with its large tracts of bankruptcy for the past 40 years. The

is yet another manifestation of the is being embraced as the economic of the scheme. The shire is one of the economic undercurrents running saviour of an area. The woodchip largest and least populated areas in the through our society. Once again, scheme is being introduced into the area state. Consequently the council has to ordinary people are being asked to by external forces and mostly with service a vast area that has a high proaccept major changes to their life and | total ignorance concerning the planned |

portion of unrateable land. The shire has been bankrupt or on the verge of

Leonie Cameron is a resident of Cann River in East Gippsland. Peter Brann works with the Native Forests Action Council.



Loggers huts, Errinundra Plateau

the shire's own admission there has been park.

are farming (vegetable growing, dairy parallels can be found between the decline in the dairying and vegetable present ill-health. growing industries and the proposed woodchip scheme. Orbost began as a dustry too will become monopolised dairying community

Although dairying has experienced an Australia-wide decline not too many buyers for woodchips. the situation was exacerbated by the Even with these warning signs the marmonopoly gained by Murray-Goulburn riage of the shire's economy and Trading Pty Ltd in 1972. Subsequent environment to a single market to the closure of the butter factories, renowned for its fluctuations is still they are now charging freight costs for | not questioned by 'authorities'. cartage to their nearest factory at Maffra, approximately 150 km west of feature of the shire for the past 20 Orbost. Paradoxically, the dairying industry which is suited for the area, is shire's population. There are 25 saw-

Errinundra Road from Combienbar Valley

becoming an increasingly unattractive rate charges are constantly rising. By proposition. During the sixties, vegetable growing was promoted on the an 87% increase in dollar terms in rates | rich river flats. A co-operative was collected over the last five years. Over formed and later contracted to a large 40% of the revenue raised comes from food-processing company. The potential the East Riding which contains the was enormous and the industry showed Mallacoota, Bemm and Cann River every sign of flourishing. In the midareas. A large proportion of this revenue seventies, however, flood and transcomes from the Mallacoota caravan portation problems compounded with the sole buyer's claim that there was an The main industries of Orbost Shire over-supply contributed to that industry's decline. Like the dairying and beef cattle), the timber industry and | industry, vegetables are still viable given tourism. Consonant with the Australian | the proper encouragement. Undoubttrend, the shire's rural sector has dete- ably the monopoly held by single riorated. In fact, many structural companies over produce in each industry has contributed to their

The possibility that the timber inis frighteningly real with the introduction of a woodchip scheme. There are

The sawlog industry has been a years. It directly employs 11% of the mills producing 350,000 cubic metres growing and sawlog production could

of sawlogs each year. During this time. though, there has still been a steady decline in the vitality of the area. As many mills have absentee owners, much of the profits accrued have been invested and spent outside the shire. The low-quality housing and industrial sites are not only aesthetically repugnant but they must be serviced by the shire. Compounding this, repairs to roads and bridges necessitated by logtruck usage is a major economic problem for the council. This problem is unlikely to disappear with the increased impact of a woodchip scheme. Will the residents of Orbost Shire have to suffer further rate increases to subsidise the infrastructure required for the removal of our forests?

The council and chamber of commerce quite rightly claim to be concerned with unemployment. There is a large degree of migration out of the shire by school leavers. The problem with the woodchipping industry is that any employment created (which is not filled from within the sawlog industry) will be inappropriate for unskilled females and males who constitute the shire's largest unemployed group. The employment situation is not to be rectified with a single industry.

The stability of the shire will be further destroyed by the large commitment of natural areas and council expenditure that the woodchipping industry would entail. Given the past developments of the shire, it seems clear that its economy can only become stable if it has a diversity of industries. This will enable it to be buffered against the market fluctuations of any particular industry. The important point is that no single industry alone can revitalize the area. Given certain structural adjustments, dairying, vegetable make substantial contributions and the fishing and honey production industries are already well established, Interestingly, tourism provides a vast amount of revenue for the shire yet the forests are basically under-publicised by the relevant tourist authorities. While this list is not exhaustive, all of these industries will be affected by a woodchipping scheme.

The growing opposition to woodchipping is not just on environmental grounds but also from people who can see other developments less damaging to the environment being ousted by a short-term, self-destructing scheme. The absence of a detailed economic plan for an ailing region is no excuse for grasping at the first chip that comes

Local concern at proposals to woodchip East Gippsland's forests has led to the formation of Concerned Residents of East Gippsland (CROEG). Debbie McIlroy outlines how she became involved in local action as a member of CROEG.

A local opinion

I go to Melbourne less and less these I tions and some hard arithmetic about days. Family commitments draw me the average life of a tree under the prothere and, of course, there are lots of posed scheme confirmed our fears for things that can't be done elsewhere. But I like best the feeling of heading home, driving east through the miles and miles the breaths shallow, seeing so many people so unaware of each other. The I take in my first deep breath. It is six hours of driving before one enters the life-giving air of the forests.

I have become a forest watcher. I forest and understand something of so those to be affected were informed area who are doing the same thing. Not only locals but the increasing number of tourists who seem to be drawn to the region. The landscape entrances them as it does us. Next thing they are visiting real estate agents in the area to find land for sale. If not, they are becoming an oversupply of chips on the world regular visitors, returning in search of market. However this is no cause for environments and the experiences that a sense of security. We have the sinking are to be had there: a quality of experience that is rapidly becoming would proceed with a large-scale woodunattainable even in imagination for most Victorians. There is no doubt that there is a resurgence of interest in the area. Furthermore people are now returning to the forests with a different sort of value system, one far more timber - clearfelling. The FCV has concerned with the delicate interrelationships found there than with the imposition of self

the headlines 'Scandalous waste' in the local press, led to a group of about
More research before a method with thirty people getting together in September 1981. Pooling our knowledge we formulated questions that seemed East Gippsland remaining a source of desperately in need of answers and sent high quality hardwood building timbers. have the resources to know. What we received was consistent vagueness, perhaps even righteous indignation that locals could question the benevolent future that had been planned for them and for the environment.

Research from other areas, the ex-

the region's future.

It was clear where the sentiments of the local newspapers lay, as they proof tense suburbia remembering to keep, claim the arrival of Gippsland's 'economic redeemer', with letters from conservationists being tucked in the Latrobe Valley seems to lengthen each | back, if they were lucky enough to be time, and it is not until Rosedale that printed. We (Concerned Residents of East Gippsland) researched a broadsheet, specifically for locals who all depend either directly or indirectly upon the bush for their survival. This am learning to observe events in the was printed in the Snowy River Mail, their significance. There are others in the of the employment effects in other states, the planned short-term rotation times, and the scheme's effect on the long-term viability of the sawmilling industry.

Recently production has been drastically cut at the Eden chipmill, due to feeling that the Forests Commission chip scheme even without a market. The scandalous waste of timber used to justify a woodchip scheme is only occurring as a result of the Forests Commissions method of harvesting never bothered to feign impartiality in regard to woodchipping, nor is it anything but singleminded in its What some of us saw, combined with approach to forest management.

We would like to see:

such hard-hitting environmental impact is used as general practice.

- these to anyone who might conceivably | The small sawmiller thriving, rather than the large city-based companies, because the smaller operator has more interest in maintaining the quality of the forest. The larger and further away the central base of the company, the less we can expect it to care for the long-term prospects of the area it affects.
- perience of Eden, economic predic- The sale of timber paying for and



Leonie Cameron resident of Cann River East Gippsland and member of the local opposition to woodchipping

ensuring its replacement and manage ment, guaranteeing the continuity of the forests.

- The investigation, seriously, of other possible uses of the timber, less demanding on the resources and employing more local people, e.g. furniture making, veneers, split palings, shingles
- Areas being classified according to their sensitivity or unique nature, and managed accordingly. More than the skin along the highways should be left for those who sometimes get out of their cars.
- The Forests Commission being less defensive, and more open to public discussion about its policies.

Debbie McIlroy is a resident of Bonang in East Gippsland.

The Sassafras Declaration

East Gippsland features two distinct | ensure the development of diverse | 7. The use of wasteful woodchip/ types of rainforest. It has the southernalso cold temperate rainforests, in which SASSAFRAS is the dominant tree.

A magnificent, shimmering tree, the appearance of Sassafras heralds the changeover of a mature eucalypt forest | should be a high priority.

The Sassafras Declaration, launched in June this year, is one of the major thrusts of the Native Forests Action Council's campaign to save East Gippsland's native forests, and has a target of collecting 50 000 signatures by next World Environment Day, June 5

It was made a declaration rather than a petition in order to avoid the humble, bent-knee approach associated with petitions. The Sassafras Declaration is a definite, positive statement of the feelings of the signatories.

It, is intended as a means of raising the awareness of the media, politicians, and the general public of the threat to East Gippsland's forests.

The declaration is being backed by a number of materials such as leaflets providing background information, posters advertising it and postcards for people to send to politicians, media, etc, stating that they've signed the declaration, as a constant reminder of the declarations' progress. Signaturecollecting kits are also available which include information enabling collectors to answer the most likely questions people would ask them.

The seven main principles of the Sassafras Declaration are:

1. The proposed woodchip/pulpmill scheme in East Gippsland should not proceed in any form what-so-ever. 2. Clearfelling should cease because it is destroying East Gippsland's unique

3. There should be an expansion of the East Gippsland National Park system, where nature conservation is the

4. Urgent action must be taken to

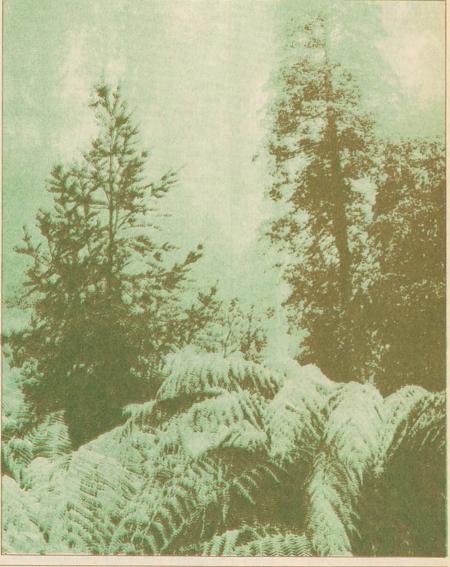
employment opportunities which will most warm temperate rainforests, and provide jobs for all sections of the East | tising and tissue papers) should be Gippsland community.

5. To reduce commercial pressures on native forests, the growing of tree crops on presently cleared, marginal farmland

East Gippsland.

pulpmill products (e.g. packaging, adverreduced, and recycling schemes should

The Native Forests Action Council urges everyone to assist in the campaign by signing and distributing Sassafras to a rainforest. And it is in honour of 6. No public monies should be used to Declarations as well as collecting signathe Sassafras that a declaration has been subsidize, directly or indirectly, the tures. If you are interested in helping proposed woodchip/pulpmill scheme in please contact NFAC on Tel: 329 5519.



Gayle Morrow works with the Native Forests Action Council

Native Forests Action Council

Our native forests are under seige Right throughout Australia forests are being destroyed for logging, pines or woodchips. Virtually every forest area within Victoria is threatened. In northeast Victoria the forests industry and Commission, want to clear native forests to plant pines; in the Otways both pines and woodchipping are threatening the native forests; Ballarat and Daylesford are experiencing more pine plantings at the expense of their native forests; the timber industry and the FCV proposed opening up Melbourne's protected water catchments to clearfelling; the industry, with FCV encouragement, plans to clearfell 90% of the 'economic' ash forests of the Alpine area; woodchipping and pines threaten still more forests in Gippsland; and in East Gippsland, the Forests an organisation which could provide Commission has been clearfelling under the guise of sawlog harvesting, and now propose clearing 75% of the available act quickly when necessary. The struca proposed pulpmill.

The government, the Forests Commission and the industry are pushing our native forests to extinction. Every year species of plants and animals are being made extinct due to forest broadsheets, displays, public meetings, destruction.

To turn this tide of destruction the public has formed citizen-based organisations to protect our native forests and their inhabitants.

Native Forests Action Council

Leading up to late 1976, a major environmental campaign centred on East Gippsland's native forests. A loose coalition of some ten different organithe government, through the Forests sations, some from the East Gippsland area, some suburban, some statewide, some national, staged a large-scale effort to halt the woodchip scheme proposed for East Gippsland, Pressure was so strong that the then Premier, Hamer, issued a directive that no trees were to be harvested for woodchips. The conservationists claimed a victory.

In August 1976, those same organi sations formed the Native Forests Action Council (NFAC). East Gippsland had taught them at least one thing: that there was an urgent need for a specialist organisation to protect native forests, continuity over many years, could be a focus for research, and which could public forest area for woodchipping and | ture adopted for the organisation was action oriented and the style was

> Over the next few years, the NFAC campaigned on Victoria's alpine area and on Leadbeater's Possum, using TV announcements, tours and street stalls. NFAC has published books -Woodchipping in Victoria and What State is the Garden In? - and tens of thousands of broadsheets on woodchipping in Victoria. A turbulent and

effective five years.

Back in 1976, the NFAC founders didn't know how right they were, Early in 1980, the East Gippsland scheme, which they defeated in 1976, re-emerged. This time, however, the industry and government were better prepared. Luckily so was the Native Forests Action Coucil. Five years had taught NFAC a lot about campaigning. The result is the present East Gippsland

Right throughout the campaign, NFAC has taken the initiative. Instead of only reacting to government and industry plans and actions, NFAC took the first step and exposed the proposals long before the government's schedule to make them public, NFAC exposed the step-by-step approach being taken - the attempts at isolating segments of the scheme and justifying them separately. NFAC countered the distortions and misleading statements by industry and the government, NFAC lobbied MPs, local councillors and other environment groups. And as a high priority throughout, NFAC alerted the public to this onslaught to their native forests and provided an avenue for actions: 30 000 broadsheets have been produced and distributed, a full-colour poster printed, and the Sassafras Declaration launched, with its leaflets, postcards, stalls, public events and posters.

The Native Forests Action Council works as a membership-based organisation, relying on membership dues, donations and the voluntary work of members and supporters to carry out campaigns. NFAC membership provides the activists. Active members either work generally as individuals, or form into collectives as the mainstay of the

Collectives to date include Negotiations (lobbying MPs, councils and industry), Suburban Campaigns (looks after and co-ordinates campaigns in Melbourne suburbs), Pines (worked on NE pines planting), Bush Telegraph (produces fortnightly news service and



Adrian Donkers works with the Native Forests Action Council.

Sassafras Declaration, liaison with other branches are many other groups who, displays, photo library, treasurer and financial records, resources, liaison with East Gippsland groups, training and so whole.

wishes to establish collectives, or working groups, to lessen the load presently taken by one person.

Tuesday morning, special strategy or full time on the campaign also meet or by assisting in the office in North

As well as the statewide structure, NFAC also has regional branches at Individuals also take on specific Frankston, Monash University and La responsibility such as co-ordinating the Trobe University. Along with the organisations, general co-ordination, although not actually branches, work very closely with NFAC.

Communication is achieved by two regular publications: Bush Telegraph on, Media work and general decision which is sent to all members every making falls to the organisation as a fortnight, and carries the latest notices of events, news and action suggestions; In each of these activities there is and Gumleaves, which is sent to all plenty of room for more people and members, media and various other members are encouraged to become people, and carries more in-depth active. In quite a number of cases NFAC articles, analysis and news, Gumleaves is issued every three months.

Membership costs \$10 pa for individuals, \$3 pa for students, unemployed Co-ordination is carried out through and pensioners, and \$15 pa for groups, weekly general meetings (every Tuesday | and is open to anyone who would like at 7.30 pm at 118 Errol St, North Mel- to see our native forests saved from bourne). Negotiations Collective meets clearfelling for woodchipping or pines.

Members are encouraged to become weekends, and campaign training active immediately, either by working weekends. Activists who work part from their homes and in their local areas,

Melbourne, or in one of the collectives. New members are offered training in campaign building, group processes and analysis and strategies, and given background information briefing at special

If you are concerned about how our native forests are being treated, then join NFAC today, and become active in one of the ways outlined above.

Other ways to help financially

If you can't be an activist yourself, then support the people who are.

- Become a member and give a dona-
- Contribute to the Sustenance fund. ■ Give an interest-free loan to the

Sustenance payments (subsistance wage) are a drain on regular funds, so NFAC operates a Sustenance Fund, which is made up of pledges of regular payments by members and supporters, and by lump sum donations. If you feel you can pledge an amount weekly, monthly or quarterly, please do so today.

organisation such as NFAC, there is always the need for awareness raisers, such as badges, T-shirts, full-colour posters, stickers, booklets and so on. To have these items manufactured at a reasonable cost, we have to produce them in large quantities.

extra money needed above the regular running costs. To get over this capital shortage NFAC has established a Loan

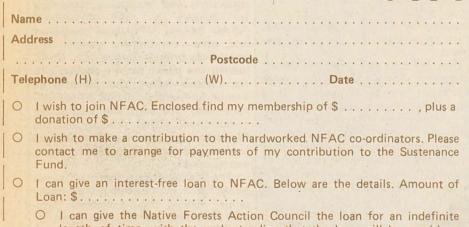
The Loan Fund is made up of short and long term, interest-free loans from members and supporters. Moneys in the Loan Fund will only be used as capital outlays. By only using the money to fund projects that bring back the capital outlayed, plus a surplus, the fund will maintain its value, and also for campaigns.

So if you want to help put NFAC

NATIVE FORESTS ACTION COUNCIL

Membership fees: \$10 pa Individuals \$ 3 pa Students, Unemployed, Pensioners \$15 pa Groups





- length of time, with the understanding that the loan will be repaid on demand after a minimum of six (6) months has elapsed from the date on
- O I can give the Native Forests Action Council the loan for a period of months/years from the date on this form.
- O I understand that the loan is interest-free and payable as nominated above.

Send, along with cheque, to: Native Forests Action Council

118 Errol Street, North Melbourne, 3051

Telephone (03) 329 5519

weekends organised every two months.

Three ways to help are:

- tion whenever you can.
- NFAC.

Sustenance Fund To co-ordinate a campaign of the complexity and magnitude of the East Gippsland campaign needs full-time activists.

Loan Fund In a grass-roots campaign

Usually NFAC does not have the

provide much-needed income to NFAC

on an even more stable financial footing, and you have surplus money you could spare for a while, please consider lending it to NFAC, interest-free. A receipt will be sent when NFAC receives your loan, and the Loan Fund will operate from a separate bank account. Please consider how much you could loan on this basis; \$50 to \$10 000 could be productively used.

Think

You need a passport to visit New Zealand now. The traditional ties between Australia and its southern neighbour have been strained by Muldoon's antics over the Springbok tour and Fraser's CHOGM posturing. But new ties are emerging. New Zealand business and government are anxiously pushing for a formal Closer Economic Relationship between the two countries. More importantly, the Australian boom in resource investment is echoing loud and clear in New Zealand, Don Siemon reports after a recent visit.

For a decade the New Zealand economy has declined. Working people have seen unemployment leap, their living standards nosedive, and their famed social services dismantled. Looking across the Tasman, no New Zealander can doubt that Australians are on average better off.

But now a growing number of New Zealanders are wondering if the pronounced cure for their country's ills is worse than the disease.

road, pinning its hopes for recovery on the rapid development of its energy resources. While Lynch and his Canberra Cabinet fellows have (until re-Silicon-carbide 300

cently) proudly Plant near Bluff publicised the (\$60m) large investments scheduled Aluminium for Australia, Third potline for Comalco

New Zealand is heading

along the Australian

Don Siemon works with International Development Action in Melbourne.

mining act, and related changes have been made to laws controlling petroleum facilities. Of most strategic interest is the Maui natural gas field. Proposals abound for the use of the gas, but the government's priority is to develop petrol substitutes. Synthetic petrol is to be produced, via methanol, by Mobil, while other fractions of the gas can be used directly in cars as LPG and compressed. natural gas. The opposition Labor Party has its own ideas about how Maui gas should be used, which has prompted Mobil to opt out of signing any agreement until after the elections later this year.

ordinary planning procedures to be

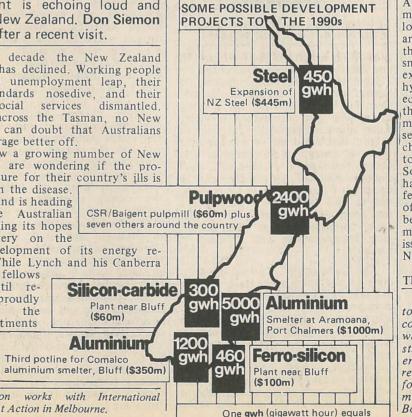
bypassed for major projects. This idea

of a 'fast track' to development is

also likely to be embodied in a new

deems progress.

A major argument over Maui gas has been the extent to which output should be exported, and in what form. Naturally, overseas interests look to overseas markets as well as domestic uses. But the country has no oil of its own, and even the Muldoon government is reluctant to directly export. New Zealand's only other major fuel resources are coal. Today these too are being examined as an export commodity Trial shipments have already left Buller.



NZ government has gone even further. | The surge in mineral exploration now It has formally sworn allegiance to a flooding Australia is spilling over into 'Think Big Strategy' for growth, and New Zealand. Attracted by high gold adopted new ways of ensuring that no barriers stand in the path of what it few mineral products – the companies few mineral products - the companies are also looking for coal and base In 1980 the government passed the metals. Most are based in Australia National Development Act, allowing Of the nearly nine hundred applicants up to early 1981 for prospecting or mining licences, five companies (notably CRA and Amax) are after almost three-quarters of the total area.

Areas of interest to the mining companies read like a catalogue of NZ scenic attractions: Northland, the Bay of Islands, Nelson Lakes, major rivers on the west coast, all of the South Island's major National Parks . the North Island exploration is concentrated on the Coromandel Peninsula, on which a major mine run by Amax is proceeding, despite objections by residents. CRA, for its part, has run into opposition by Maori people of the Peninsula over its desire to prospect offshore.

Maori land is again involved in the proposals to expand an existing NZ export industry: timber. Large areas of Maori land are leased to the Forest Service for commercial forest. The first of a new generation of export pulp mills is being built by CSR and a local partner near Nelson.

CSR is again involved in the largest, and most controversial, of new industrial projects. With the giant NZ conglomerate Fletcher-Challenge, CSR is planning to build New Zealand's second aluminium smelter at Aramoana, near Dunedin. The \$600 million plant has provoked not only local, but national, opposition, People are acutely conscious of the debate through the 1970s over the Comalco smelter (currently, and quietly, being expanded) and of the costs of further hydro development. In 1981 two noted economists publicly came out against the Aramoana smelter, and their arguments at a time of widespread public sensitivity to mounting electricity charges have added a valuable dimension to the strong case against the smelter. Some local power supply authorities have resisted increased prices, while a few consumers have refused to pay part of their electricity bills. The smelter has become the centre for a debate over much more than local environmental issues. The issue is the future path of New Zealand.

As one headline put it: 'Think Big? Think Again!'

New Zealand organisations are keen to receive advice or background on companies or developments in Australia which might aid them in future struggles. The body co-ordinating environment groups in NZ, ECO, has recently written to a number of groups for information on mining across ments. Any information to ECO, PO Z Box 11057, Wellington, New Zealand.

Plastic contained

By Ian Grosser

During recent months South Australian conservationists have won a victory over PET (polyethelyne terephthalate) bottles, the 2 litre plastic monsters that Coca Cola and other soft drink manufacturers introduced throughout

Australia in 1979-80.

The introduction of PET bottles in SA was more eventful than in other states because the Beverage Containers Act requires all soft drink containers (as defined under the Act) to be returnable and sold with a deposit, and because PET bottles can't be recycled as the heat needed for cleaning would collapse them. The Act was passed in 1977 after years of lobbying by environmentalists in opposition to container manufacturers, who prefer nonreturnable bottles because they increase turnover and profits, and by soft drink manufacturers, breweries and supermarkets, who dislike the inconvenience of handling used bottles. It has been a successful law, reducing litter from cans and bottles (only 6% of SA's roadside litter, compared to 34% in WA), and causing an 85% recycling rate for cans, but it is unpopular with those who have a vested interest in non-returnables. ACI'S 1980 annual report said:

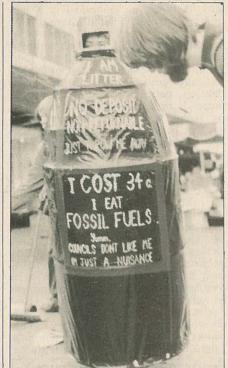
Looking ahead, there is a potential and unnecessary problem that could seriously jeopardise sound economic growth of our Packaging Products Group. I refer to the possibility of various forms of legislation being passed by State Governments relating to compulsory deposits being imposed on beverage containers

We do not wish to see an Australia wide re-occurance of the South Australia scene.

After intensive negotiations, Coca Cola and ACI won exemptions from the Act for PET bottles for a trial period of 12 months ending July 31st 1981; they expected the amendment to become permanent and the Act to be gradually weakened until it became meaningless. Other companies also marketed PET bottles in Adelaide.

However, conservationists had other ideas. A small Community Aid Abroad group planned a campaign up to the expiry of the 12-month trial period. They integrated with the SA Conservation Council, and worked closely with

in Adelaide.



The biggest and last PET bottle seen in the Rundle Street Mall, Adelaide

the SA Department of the Environment; and the SA Consumers Association and Friends of the Earth added support. The bottles were opposed on the grounds that they would: destroy the Beverage Containers Act, discourage recycling, waste resources especially energy (PET is fossil-fuel based and on average three times as energy consumptive as glass bottles), increase litter, be a solid waste disposal problem, cost more, and increase air pollution. The price increases due to PET bottles were publicised they cost 34c and can only be used once, compared to less than 40c for glass bottles which can be used 12

The Conservation Council wrote to every local council in the state, pointing out that PET bottles entail problems of increased litter and garbage disposal, which councils must pay for. Nineteen letters of support and seven seeking desperately needed. Public pressure is further information were received in reply. And the Local Government their optimistic predictions (made Association, which had resolved to before this setback) that by 1990 total maintain SA's bottle legislation, plastic production for soft drinks, Ian Grosser works with Friends of the Earth organized a supportive and widely re- beer, and wine will rise dramatically ported seminar on the issue just before | displacing glass and cans.

the expiry of the 12-month trial period.

The crucial support of several government back-benchers, some from marginal country seats where the councils were suffering severe PET litter problems, was also won. Further pressure was brought by petition collectors delivering the filled forms to their local MP rather than making a mass presentation to parliament.

The campaign received widespread media coverage, and the public responded well. A Flinders University report found that 77% of South Australians oppose non-recyclable bottles. The manufacturers found themselves isolated on the issue. The Minister for the Environment finally announced that the bottles must be sold under the conditions of the Beverage Containers Act with a 5c deposit. The bottles must be returned via bottle depots to the manufacturers, who will then dump them, a ludicrous procedure which Coca Cola claims will add 18c to the product price and probably lead to its withdrawal from the market. The new sales tax of 17.5% on non-returnable bottles has already added up to 16 cents to the retail price of drinks in PET containers and halved their sales in South Australia. Whilst a higher deposit would have been better, it was a pleasing result given the conservative nature of SA's government. Coca Cola's Corporate Affairs Manager, Mr Hall said 'I think it stinks'.

From here, South Australian conservationists may push to include fruit juices and mineral waters under the Act. For the rest of Australia, there is the possibility of legislation similar to South Australia's now exists. Environment departments from other states watched the South Australian battle with interest. A recent meeting of the Australian Environment Council (composed of federal and state Environment Ministers) announced that beverage container legislation may be considered in all states if the industry does not voluntarily adopt environmental guidelines.

Local research into the effects on unemployment and energy and into the environmental costs of throwaways is also needed. Otherwise ACI may realise

The Big One in Britain

acceleration of anti-nuclear camgovernment's proposed defence at least 48 hours after detonation. commitments, particularly a desoil. The programme makes mobilisation of 50,000 on one occasion. Britain the biggest concentration of US firepower overseas, a counter-role in nuclear resisters? sitting target for thermonuclear attack.

Kay Salleh reports on the many organisations mobilising in revived with a second generation opposition to the conservative following. The new public face of this government's defence policies.

A British Broadcasting Commission opinion poll held at the end of 1980 which followed it. CND, in true liberal showed roughly half the population form, defines itself as an open alliance, opposed to the Trident submarine and outside 'ideology and politics'. Its Cruise missile programmes, and con-programme is reflected in the aims of vinced that they would see nuclear war almost all nuclear opposition groups: in their own lifetime. But a solid a British foreign policy based on peace majority were still not in favour of and co-operation, unilateral disarmadisarmament. Even so, opposition is ment, the dissolution of NATO and now impressive and continues to grow, Warsaw Pacts, domestic review of the

The mobilising effect of the British government's fraudulent 'do-it-vourself' survival guide Protect and Survive cannot be overestimated. When officials education. CND is also working with the concede that 30 million must inevi- Lucas Aerospace shop stewards on a tably perish in the event of nuclear war, to propagate the notion of 'correct, proper and responsible' civil prepared- production. ness is bureaucratic criminality in the

While parliamentarians, local councillors and militia use public moneys to furnish bomb shelters for themselves, ordinary people are coolly advised not to head for the hills if they expect government 'assistance with essentials' to be forthcoming. Instead, you are told to stay and make a fallout room at home. Instructions include constructing an inner refuge of sand bags, doors, tables, heaped clothes and books as radioactivity barriers - if you are able-bodied enough to haul these

Kay Salleh lectures in sociology at the University of Wollongong.

around, that is. Take down flammable This year has seen an astonishing curtains and paint windows over with an opaque emulsion. Fill the bath with about 3½ gallons of water each, stock up paigning in Britain. Most of this 14 days' food, first aid kits, transistor dissent is focused on the Tory with spare batteries; and stay inside for

Yes, people react against nonsense like this. They have come together in cision to allow 160 Cruise missile huge rallies — London, Bradford, Nottingham, Bristol, Manchester, a

> What is this remarkable human counter-force made of? Who are the

Since its heyday 20 years back and the lull when support was drawn off into the Vietnam struggle, the Campaign for Nuclear Disarmament (CND) has peace movement grew as a result of the UN Special Session on Disarmament in 1978 and the Geneva Commission current defence budget (40% of government expenditure) and restitution of funds to welfare, housing, health and strategy to turn arms manufacture over to socially useful employment and

The core CND push is educated, humanist and older, an economically privileged and culturally protected group, along with a sprinkling of younger counter-culturals. Meanwhile, Youth CND puts up a concerted drive to capture the third generation with broadsheet messages from 'Ron Raygun', 'Olivia Neutron Bomb', zippy t-shirts, folk concerts, school petitions and recruitment nights in Wimpy bars.

A second group is historian E.P. Thompson's new campaign for a Nuclear Free Zone across Europe, set up as a series of lateral committees to develop a European network of trade unionists academics, parliamentarians and church



A third general disarmament body, launched in 1980 by the fragile but impassioned 91-year-old ex-cabinet minister, Olympic medalist and Nobel prize winning Lord Noel-Baker, is the World Disarmament Campaign (WDC).



On the road to Trafalgar Square,

They are hoping to organise a world convention at the Moscow Stadium, possibly preceded by a European peace walk under the auspices of War Resisters International, and are well on the way in the collection of 1,000 million signatures (the Japanese already have 25 million) to go to the next UN Special Session on Disarmament in 1982. The group wants to see arms spending channelled into development aid. With a global military expenditure of \$1 million per minute, a mere 12 hours of this would cover the whole World Health Organisation malaria eradication project.

Among the churches, Ouaker Peace and Service provides consistent stalwart opposition. They estimate that £12 per week per family goes towards the arms build-up, so are trying to get this amount itemised on income tax forms with option for tax to be payable into a National Peace Making Fund. This new affirmative activism reverses their traditional passive resistance.

As for the Church of England, the Archbishop of Canterbury is on side, but the spouse of the titular head of the Church, the Duke, in contrast to his movement-lionised uncle Mountbatten, has come out with a pro-deterrent statement

The Methodist Division of Social Responsibility inspired by Lord Soper, another patriarch from the Upper House, is giving the issue a lot of publicity, but the mass of true believers are strung out on a line that stretches all the way from red terror to sympathetic Encyclicals such as Vatican II. Pax Christi is working hard to establish overseas links. The British Council of Churches treads a cautious and thoughtful 'realist' path. The Student Christian Movement, meanwhile, puts out a nuclear information kit.

behind disarmament as we Australians might expect. The Transport and General Workers' Union, Tobacco Workers, and the National Union of Mine Workers are affiliates of WDC, but while activities such as Manchester Against the Missiles Conference and the East Anglia Signature Drive show a committed force in some areas, trade union rights and security in the nuclear industry.



Heavily guarded Falsane Submarine Base in the Firth of Clyde, Scotland, home of the Polaris fleet and, if Thatcher and Reagan get their way, of Trident too.

'non-political', watching carefully who it works with although its loose structure of local branches allows some variation. FOE pursues well organised collective projects for insulation, waste salvage, cycle safety and, like SERA, concentrates on nuclear power rather than arms. But while FOE's offensive against technology celebrates autonomy SERA activities fall clearly within the ethos that drives the wheels of production and the worker bodies under them.

The 1980 Labor Party Conference endorsed the CND platform, but a motion for the gradual phasing out of nuclear energy in Britain was lost. The party as usual is divided. The breakaway Social Democrats are favouring British trade unions are not as solidly Polaris and refurbishing the conventional force. The pro-Soviet CP and Young Communist League, firmly pitted against the 'mighty militaryindustrial complex' are whole-heartedly unilateral

A singular turn in the growing momentum is the appearance of many women's groups. WDC names the Co-operative Womens' Guild, Women attempts to organise regional discussions for World Disarmament, Womens' among union councils have met inside International League for Peace and resistance. A major difficulty is the fact | Freedom and the National Assembly of that American dollars let workers at Women among its subscribers; wellnuclear sites earn a wage far beyond the heeled reformist organisations, largely normal British means. A London based | consisting of older people. The emergent independent labour group called second generation, however, advances its Socialist Environment and Resources action as critique of patriarchal culture Association, SERA, runs a union itself. This informal coalition of women education programme looking at things are from the Feminist Anti-Nuclear like job creation through alternative Group, the Feminism and Non-Violence energy projects and the conflict between | Collective at Manchester, Feminists Against Nuclear Power, a caucus which formed at the Women and Science Friends of the Earth is much bigger | Conference at Imperial College, London, than SERA with some 200 active and from the 1980 East Anglia Womens' centres in Britain and very deliberately | Liberation Conference, Women Oppose |

Nuclear Threat (WONT). This wave of resistance coincides with an international swell of feminist concern over militarism and violence in all its forms. Some of these people have considerable experience in political campaigning and are now convinced that if they are to get anything done at all, they must organise separately from men's groups where they continue to be set back by intimidation and trivialisation, Many assert as well the need to make a radical break from the socialist terms of reference. WONT specifically demands an end to the manufacture of weapons for mass destruction; of arms spending at the expense of domestic programmes; no conscription for either women or

Another development alongside CND

is a grouping of skilled scientific workers fighting the proliferation of nuclear arms. The British Society for Social Responsibility in Science, BSSRS, has joined CND, but if its last conference is any indication of its priorities, these centre more on the job question - 'scientists and the slump', 'women and the new technology' than on the threat of imminent annihilation. One perceptive BSSRS blurb ties the nuclear crisis to the division of labour between those who design. those who implement, and those who kill, the constant shift of personal responsibility. In a move to overcome this, Prof. Michael Pentz at the Open University has started a briefing group of technicians, engineers and even social scientists called Scientists Against Nuclear Arms.

SANA plans to demystify the technical jargon of deterrence which produces the public sense of impotence and alienation. A look at Pentz's early efforts, however, suggests that if the medium is part of the message at all, these aims may well backfire. The pamphlet is not so much a critical examination of the language, premises and unintended social consequences of instrumental rationality as a spontaneous exercise in more and 'better scientific management' an escalation of glamorous expertise and intensification of the gap between specialist and mass.

A Medical Campaign Against Nuclear Weapons is tackling the government's absurd civil preparedness strategy and concept of 'limited' war head on. There is no possible medical response to nuclear attack. A Health Service circular tacitly acknowledges this, advising that deployment of staff in high radiation areas is pointless; hospitals should accept only casualties with a chance of recovery in the long term.

There are local pockets of antinuclear dissent. The University of Sussex is one, heavily involved in the movement through the presence of its Arms and Disarmament Information Unit, similarly Bradford University

through its School of Peace Studies Oxfordshire, and hence Oxford University, is directly threatened by the proposed Cruise missile programme, and so is East Anglia and Cambridge University. In addition Cambridge is the home of the original Cavendish Laboratories and half of all academic military research still goes on there. Cambridge, whose local council has now refused to co-operate with the Emergency Planning Authority for Civil Defence, is full of retired historians, scientists and military personnel, a competent articulate leadership for a conventional political campaign. The university colleges, town and surrounding villages have some 35 anti-nuclear groups. The National Union of Students is officially attached to CND and there is also a body of Students Against Nuclear Energy, SANE, but some of the smaller universities are not much involved.

Throughout Britain there are local groups working with the Sheffield based umbrella Anti-Nuclear Campaign, ANC The Severnside Anti-Nuclear Alliance in Wales and the South West runs films and is trying to stop military recruitment in schools. The Lothians Against the War Drive, LAWD, sustains marches and festivals directed at the proposed Torness nuclear power plant, and the Scottish Campaign to Resist the Atomic Menace, SCRAM, held its first huge peace conference in Edinburgh earlier this year.

Only the farmers don't seem to be represented in this vast movement for common sense and survival. Perhaps they are taking the Protect and Survive recommendations seriously: cows should be milked before the holocaust and post-devastation agriculture geared up to meet a grain diet.

The disarmament campaign does seem to be making some political headway. Within a mere 6 months of fran! tic movement activity the government is re-examining its whole defence outlay and a joint party House of Commons Defence Committee is split over the advisability of Trident. According to a mid-year Guardian survey most people in Britain do reject Trident now. compared to only half last year. Yet culturally, there is much less awareness of the deforming effect of the prevalent technological assumptions on social relations here than there was during the high point of the Australian anti-nuclear campaign. Alternative groups in Britain are putting most of their energies into practical civil projects leaving the peace campaign to established productive forces and self legitimating professionals. It is plain that each arm of it is partial, and ambivalent in its opposition to the status quo. Labour, peace groups, the churches, women . . . each group has different aims and different tactics. Their combined impact can be expected to reflect their collective ambivalence.

Chain Reaction

EDITORS and ADVERTISING MANAGER

Applications/proposals are invited for the positions of Editors* and Advertising Manager of Chain Reaction, the national magazine of Friends of the Earth Australia (* Currently there are two people working as Editors, one of whom handles advertising. Other arrangements may be proposed by the applicants.)

The magazine, published

quarterly, goes to all members of Friends of the Earth in Australia, other subscribers (including schools, unions, community groups, libraries and individuals) and is on sale at community centres and various retail outlets. Chain Reaction covers a wide range of environmental, energy and food issues in Australia - emphasising the work of community groups.

The Editors work with Collective of volunteers in Melbourne and Sydney, with FOE and other community groups around Australia. The magazine has been based in Melbourne since it was established in 1975. The Editors' responsibilities include ensuring continued operation of the Collectives, encouraging people to work on the magazine. determining content of the editions, organisation of production, managing the finances of CR, distribution and promotion of the magazine. The present Editors have had a two year appointment.

The Advertising Manager sells advertising space in the magazine. Remuneration - negotiable. Applications close on 31 December 1981.

Applicants may be required to attend interviews in mid or late January 1982 at a Friends of the Earth Australia meeting in Victoria. The new Editors and Advertising

Manager would commence work on

Applicants are welcome to discuss the magazine and obtain further information from the present Editors and Melbourne and Sydney Collectives - telephone (03) 63 5995 or (02) 698 4114.

Send written applications/proposals and enquiries to the Selection Committee, C/- Chain Reaction, Room 14 Floor 4, 37 Swanston Street, Melbourne, 3000



Activities: Fund raising; CR distribution; co-ordinate meetings; correspondence; Preferably someone who is prepared to work in a co-operative group based on consensus decision making. Applications stating relevant experience Applications stating relevant experience and interests to be submitted by about 12 January 1982. Send to: FOE (Brisbane), PO Box 667 South Brisbane, Queensland 4101.



We know government and big business are secretive but don't let working in there get you down. Pass information on to us so Chain Reaction can let the public know. Our address is Chain Reaction Room 14, Floor 4, 37 Swanston Street, Melbourne 3000 and our telephone number (03) 63 5995.

GOING, GOING,

At the Convention on International The list of species mentioned by CITES runs Trade in Endangered Species of Wild Fauna and Flora (CITES) in India earlier this year the Australian delegation a few case studies, but some insight can be proposed important initiatives for increased regulation of trade in vul- lists. Lists in themselves don't help the species nerable species. Despite this, the Fund a great deal, but do serve as indications as they for Animals sees Australia's record in implementing CITES as 'extremely of species has been rather more than significant. dismal'. In this feature, Michael In his exceptional book The Sinking Ark Kennedy, Campaign Director at Fund for Animals, looks at the world situation of endangered species, and Australia's share of the problem.

The Global 2000 Report to the President of the USA had this to say about species extinctions:

the world faces an urgent problem of loss of plant and animal genetic resources. An estimate prepared for the Global 2000 Study suggests that between half a million and 2 million species - 15 to 20 per cent of all species on Earth - could be extinguished by 2000, mainly because of loss of wild habitat but also in part because of pollution. Extinction of species on this scale is without precedent in human history.'

The report proceeded to point out that onehalf to two-thirds of the extinctions projected | an eye in evolutionary terms.'

to occur by 2000 would result directly from massive destruction of the world's rainforests, many of them unclassified and unexamined by

The loss of living quarters for both plant and animal species is ultimately an irreversible threat. Yet coupled with such habitat destruction are less visible but equally dangerous threats.

In Australia for instance, a combination of introduced diseases, predatory and competitive introduced species, hunting and gathering, industrial pollution, and trafficking in live animals and their products has pushed our national list of endangered and vulnerable species well into the hundreds. Again, the Global 2000 Report highlights the problem, in this case with marine species:

'Current trends also threaten freshwater and marine species. Physical alterations - damming, channelization, siltation - and pollution by salts, acid rain, pesticides, and other toxic chemicals are profoundly affecting freshwater ecosystems throughout the world. At present 274 freshwater vertebrate taxa are threatened with extinction, and by the year 2000 many may have been lost.'

A threat of particular concern is the world trade in endangered fauna and flora. It is a devastating trade, cruel and destructive, a flow of natural resources - a one-way flow - from the developing world to the developed. At a recent meeting of the parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Third World nations were at great pains to express their chagrin at the Western world for depleting their wildlife resource for the sake of a luxury trade. into thousands, while many millions of plants and animals are traded every year.

Room does not permit examination of even gained from the following endangered species either lengthen or decrease:

The impact of people on the extinction rates Norman Myers puts clearly into perspective this impact: 'To reduce the history of species on earth to manageable proportions, suppose the whole existence of the planet is compressed into a single year. Conditions suitable for life do not develop for certain until May, and plants and animals do not become abundant (mostly in the seas) until the end of October. In mid-December, dinosaurs and other reptiles dominate the scene. Mammals, with hairy covering and suckling their young, appear in large numbers only a little before Christmas. On New Year's Eve, at about five minutes to midnight, man [sic] emerges. Of these few moments of man's existence, recorded history represents about the time the clock takes to strike twelve. The period since A.D. 1600. when man-induced extinctions have rapidly increased, amounts to 3 seconds, and the quarter-century just begun, when the fall-out of species looks likely to be far greater than all mass extinctions of the past put together, takes one-eighth of a second - a twinkling of

AUSTRALIAN RARE **FNDANGERED** VULNERABLE

Mammals

Dibbler Antechinus Leo Atherton Antechinus ygmy Antechinus Red-tailed Phascogale Vulgara Western Quall Eastern Quoll White-tailed Dunnart Hairy-footed Dunnart ong-tailed Dunnart Sandhill Dunnart Julia Creek Dunnart Scally-tailed Possum Grey Cuscus Little Pygmy Possum _eadbeater's Possum Mountain Pygmy Possum Green Ringtailed Possum Striped Possum Long Footed Potoroo Tasmanian Bettong Burrowing Bettong Brush-tailed Bettong Desert Bettong Yellow-footed Rock

Wallaby Spectacled Hair Wallaby Rufus Hare Wallaby Eastern Hare Wallaby Banded Hair Wallaby Tammar Wallaby oolache Wallaby Bridled Nail-tailed Wallaby Darma Wallaby Crescent Nail-tailed

Wallaby Lumholtz Tree Kangaroo Bennet's Tree Kangaroo Northern Hairy-nosed

Wombat Honey Possum alse Water Rat ight Footed Melomy Alice Springs Mouse Hastings River Mouse Western Mouse Shark Bay Mouse Lakeland Downs Mouse Short-tailed Hopping Mouse

Northern Hopping Mouse ong-tailed Hopping

Big-eared Hopping Mouse Darling Downs Hopping Mouse

Rabbit-eared Tree Rat Golden-backed Tree Rat Lesser Stick Nest Rat Greater Stick Nest Rat Central Rock Rat rehensile-tailed Tree Mouse

Thylacine Western Barred Bandicoot Desert Bandicoot Golden Bandicoot Pig-footed Bandicoot Greater Bilby Lesser Bilby Koala Ghost Bat Bent-winged Bat ittle Bent-winged Bat Timor Pipistrell Hughendon Broad-nosed

Rat Dome-headed Bat Small-footed Myotis Little Territory Longeared Bat Fawn Horseshoe Bat

esser Warty-nosed · Horseshoe Bat Orange Horseshoe Bat Throughton's Sheath-

tailed Bat Large-eared Horseshoe

Naked-rumped Sheath tailed Bat North Eastern Sheath tailed Bat Bare-backed Fruit Bat Northern Blossom Bat

Rusty Numbat Blue Whale Humpback Whale Dugong

Sperm Whale Southern Right Whale Sei Whale



Freckled Duck Radjah Shelduck Cotton Pygmy Goose Red Goshawk Peregrine Falcon Grey Falcon

Spotted Bowerbird

Fawn Breasted Bowerbird Lord Howe Island Currawong Black Winged Currawong Capentarian Wren



Black Breasted Button Plains Wanderer Lord Howe Island Wood

Hen Australian Bustard Bush Stone Curlew Pied Oystercatcher Little Tern Lesser Noddy Banded Fruit Dove Squatter Pigeon Palm Cockatoo Glossy Black Cockatoo Long Billed Copella Pink Cockatoo Double Eyed Fig Parrot Alexandra's Parrot

Grey Grass Wren Thick Rilled Grass Wren Fastern Bristlebird Western Bristlebird Rufous Bristlebird Atherton Scrub Wren Black Eared Minor Helmeted Honeyeater Green Backed Honeveater

Reptiles

Reticulated Velet Gecko Phyllodactylus guentheri (Gecko) Boyd's Forest Dragon



Rainforest Dragon

Ground Parrot Night Parrot Golden Shouldered Parrot Hooded Parrot Paradise Parrot Blue Bonnet Orange Bellied Parrot Flatback Turtle Hawksbill Turtle Green Turtle Pacific Ridley Turtle Leathery Turtle
Pitted Shelled Turtle Western Swamp Tortoise Saltwater Crocodile



Gould's Petrel Abbott's Booby Christmas Island Frigate Bird Yellow Chat

Drange Footed Scrub

Forty Spotted Pardalote Norfolk Island Silver Eye Red Eared Fire Tail Balck Faced Finch Norfolk Island Starling Golden Bowerbird

Turquoise Parrot Scarlet Chested Parrot Norfolk Island Boobook Owl Christmas Island Hawk Owl

Eastern Grass Owl Sooty Owl Marbled Frogmouth Albert's Lyrebird Rufous Scrub Bird

Adelaide Bluetongue Aprasia aurita (Legless Lizard) Aprasia parapulchella (Legless Lizard) Bronze-backed Legless

Freshwater Water

Lalicelin Island Striped

Lord Howe Island Skink

Pseudomoiea palfreymani

Lerista lineata (Skink)

Crocodile

Skink

(Skink)

Lizard Paradelma orientalis (Legless Lizard) Green Python Diamond Python Denpelli Python Broad-headed Snake

Stephen's Banded Snake Western Black Striped Snake

Birds

Dwarf Emu Southern Cassowary Providence Petrel Noisy Scrub Bird

Catcher Red Loped Whistler Western Whipbird Purple Crowned Fairy Wren White Winged Fairy

Black Grass Wren

List provided by the Total Environment Centre's Endangered Species Committee, 18 Argyle Street, Sydney, from their forthcoming book

Due to limited space, only common names have been used, unless none exist, and it has been impossible to list the hundreds of endangered plants to be found in Australia

Australian Lunfish Northern Spotted Barramundi Spotted Barramundi Native Trout Scaled Galaxias Derwent Whitebait Australian Grayling reshwater Catfish River Blackfish Tasmanian Blackfish Silver Barramundi Murray Cod Golden Perch Macquarie Perch Freshwater Perch Estuarine Perch Jungle Perch

Amphibians

Arenophryne rotunda (Frog) Pouched Frog Geocrinia laevis Limnodynastes depressus Baw Baw Frog Philoria kundagungan Loveridge's Frog Sphagnum Frog Rheobatrachus silus Litoria longirostris Cophixalus concinnus

Invertebrates

Cophixalus saxatilis

Crustaceans

Murray River Lobster

Insects

Lord Howe Island Phasmids Austrocordulia sp. 't' (Dragonfly) Hemigomphus sp. 'm' (Dragonfly) Nososticta pilbora (Dragonfly) Ictinogomphus dolison (Dragonfly) Antipodogomphus hedgkini (Dragonfly) Austrolestes sp. 'm (Dragonfly) Orthetrum sp. 'b Achuvimima sp. (Grasshopper) Kegocris scurra (Grasshopper) Richmond Birdwing Butterfly

of half a miliion to two million species by the turn of the century. Myers essentially agreed, quoting 1 million as a likely a figure as any. From what we know of past extinction rates, we've lost perhaps one species per year from 1900 onwards, though this reflects only the cuddly-cum-glamour species we know of leaving us to ponder what has been lost from the other 99% of the stock of Earth's species.

Myers points out that, with 1 million as a late out at over 100 per day. One species per day now could so easily turn into one species per hour by the beginning of the 1990s.

Chain Reaction could quite easily devote an entire issue to discussing why species should be saved. Aesthetic arguments, questions of ethics, morality, ecological diversity and stability genetic resources, economic and utilitarian benefits - all provide reasons for wanting to save endangered species.

It all rather depends on which part of the world you live in as to which argument fits best, or which is more likely to convince the public and authorities of such a need. The World Conservation Strategy prepared by IUCN/WWF and UNEP harks more on the genetic resource and economic utilisation of species as a prime reason for their continued existence. While this can be understood in relation to 'selling' conservation of species to the developing world, any national conservation strategy developed for Australia cannot and must not promote such 'rational use' arguments as the sole reasoning for saving species. Australia has little or no excuse for its growing list of endangered species, and in comparing its commitment to the job of conservation of species with other nations, shapes up very poorly indeed. India has an outstanding record in the protection of very spectacular species despite almost incomprehensible food and population problems.

We do have an immense moral and ethical responsibility towards our fellow inhabitants of Earth, though it also cannot be denied that as a genetic resource with potential benefit for humankind, plant and animal species are a veritable gold mine. As any good greenie will tell you, continual environmental damage on the scale that our community now indulges, will consequently have dire ramifications for humankind itself. Whichever way you look at it, we need the Earth's wild species, and they need us. We are locked together on a common path to either survival or oblivion.

Individuals, organisations and governments, in that order, need to openly acknowledge the latter fact. To a certain extent this is already happening, reflected in the Global 2000 Report, the Brandt Report, the World Conservation Strategy and others. Implementation of the recommendations, assuming their suitability, by governments, is of course another

The concern of nations for the plight of endangered species is particularly manifested through CITES. CITES now has 72 signatory nations and is dominated by developing countries. Controls are continually being tightened in an effort to curb this immense threat to endangered species, and the application of CITES regulations is certainly

The Global 2000 Report estimated the loss being taken more seriously. Australia has foreshadowed new legislation in this area. But trade problems tell but a small part of the story. How do we combat habitat destruction?

Stopping wholesale obliteration of rainforest, swamps, heaths and other precious habitats is one matter, but is also closely couples with the question of habitat requirements of specific species. In many cases the setting aside of vast areas does not necessarily ensure the survival of endangered species, 'reasonable working figure', extinctions calcu- and there is therefore an urgent need to research their peculiar requirements. This would need to be followed by the protection of suitable habitat and the development of sound management plans.

Legislation that can directly benefit endangered species is sadly lacking, and Australia is no exception. The USA has a punchy Endangered Species Act, though it has been watered down by various Congressional reviews. While legislation exists in Australia at the federal level and in some states requiring the production of environmental impact statements, it is either unused or not generally applied to such specific problems as endangered species, if indeed the legislation is capable of coping with these situations.

There is also a need for a change of emphasis, and a change of attitude by the scientific community. While CITES is now steering towards blanket bans to give species the benefit of the doubt, within Australia scientists require definite proof of a species endangered status. To illustrate, CONCOM (Council of Nature Conservation Ministers) has produced its own national list of endangered species which is far shorter for instance than that produced by the Total Environment Centre, TEC gives many more species the benefit of the doubt. The onus of proof must be reversed. If scientists are worried for their credibility and standing, then let them work at proving that a species is not endangered. Waiting until a species is near extinction before offering a helping hand would have to be the ultimate folly.

Norman Myers in *The Sinking Ark* refers to a 'triage strategy' for species. Briefly, the resources and energy available to secure a stable future for the increasing lists of endangered species simply are not and will not be available. Many species 'are' going to disappear, and since we are 'intervening in the evolutionary process with all the impact of a major glaciation, [we] should do it with as much conscious awareness of what [we are] about as [we] can muster'. In other words, we should select the species to be

The term 'triage' derives from a French medical practice in World War I, when doctors assigned wounded soldiers to one of three categories: those that needed urgent medical attention and would be helped by such, those that would survive without medical attention. and those that would die despite treatment,

Application of such a strategy to endangered species is controversial to say the least, and raises innumerable sticky questions. Who gets to play God, is one. How ever we solve the coming problems, and we must, there is little doubt that disappearing species is looming as one of the issues of the coming decade.

Tourism traps

by Peter Holden

When your hand has stopped shaking from writing .that big cheque you've just given your travel agent to pay for your well earned holiday on an exotic tropical island, you probably think that's the end of the paying part of it: all you need to do is buy a few travel cheques and take off for a carefree holiday. And so you can. It's as simple

But there are other, hidden costs, and you as the holiday maker are not paying them, someone else is. And that someone else can afford it even less than

It seems like a good idea for a 'developing' country to foster tourism. Tourists come and spend their money and earn foreign exchange for the host country, which uses the dollars for its peoples' development. That's the theory of it, but it doesn't work. What really happens is that the tourist comes and spends money in a foreign-owned hotel or buying imported food or paying directly or indirectly for the services of other expatriates. What money is left after that stays in the host country, but it's not much and it's badly distributed, invariably in favour of the privileged.

Furthermore, in order for tourism to happen, the host country has to spend gigantic sums of money on roads, airports, sewerage treatment plants, electricity generators and modern communications systems. Often people who lack the very basics in food, education and health care have to sit back and watch their own money being spent to provide recreational amenities for the

In some cases, whole communities of people have been moved off their farming lands and traditional fishing places so that luxury hotels or golf courses or wildlife parks can be established. Even if they've been compensated with a few dollars for their land, rising food prices (inflated by the demand of tourists), seasonal unem-ployment, the loss of productive land and new, uneven competition for survival needs lead self-sufficient communities into dependency and poverty.

The new market established by tourism for cultural artifacts and performances does more to erode cultural traditions than it does to preserve

Peter Holden is Secretary of the South Australian Council of Churches.

have developed over centuries very complex and sophisticated expressions of their culture in the form of paintings, carvings and dances. Confronted by tourists, the Balinese 'artists' learn that their paintings can be turned into money and so they become producers of what the tourist asks for. This emphasis on production is quite foreign to Balinese tradition where for centuries the central value has been the process of creating rather than the product which is created.

By cheapening culture for a quick show or for sale, the tourist experience tends to destroy what it claims to enhance but worse than that, it deludes people into believing that what is destroyed is still alive and they are forced to act out a culture which no longer exists.

The economic power of the traveller as compared with the people who live in the host countries makes people only too aware of who it is who controls much of their life. Demands for security and comfort and entertainment change the employment patterns of villages and towns. Good farmers become poor tour guides, young men become security guards and not fishermen, young women become hotel maids or waitresses or prostitutes. Peasant farmers, street beggars and children become tourist attractions and are not seen as people with their own dignity and importance.

Somehow the dream has become a nightmare. One person's dreams have become someone else's nightmare. The reasons for this are not hard to find, concerned.

them. For example, the people of Bali | they all stem from the powerlessness of some people against the power of those who can afford to pay for what they want. The person who writes the cheque to pay for a holiday in the Third World is also writing a bill which other people are forced to pay.

Some efforts are being made to humanise the travel experience.

The genuine alternative is one in which the traveller and the host community stand on equal terms, but in a very unequal world this isn't easily achieved. An Adelaide based cooperative called Just Travel is one attempt to promote travel experiences which respond to the aspirations of the people of the Third World rather than the market pressures created in the rich countries. Experience so far has shown clearly that several groups of people in Asia and the Pacific are keen to welcome travellers who are well prepared for their holiday and are willing to meet their neighbours on their

But it will be a long time before real progress is made. Major structural changes are necessary in the control of capital, the interpretation of culture and the care of the social and physical environment before anything like a humanised tourism is possible in the Third World. Only a strong international peoples' movement involving travellers, workers and the people who pay the price for the dream holiday can create a situation where governments and travel policy makers are forced to apply controls that will make travel a humanising and enriching experience for all



Swordgrass Brown

Butterfly

By Paul Pedevrexakis

Stewart West, the shadow minister for the environment. does not use the short, sharp rhetoric of the slick politician. Sitting behind his desk looking through half-inch thick glasses. West answers questions with deep sighs, long pauses, and often complex answers.

West is a large man, 47 vears old, an ex-waterside worker, former union official and the man who succeeded Connor in the New South Wales south coast seat of Cunningham. Although only on the front bench for a short time, West already has a reputation as an extremely hardworking shadow minister. Without the large staff of a minister, he is forced to do much research himself, writing his own speeches and churning out press releases. He is known to be disappointed by the poor run the many press releases get in the mass media, but has not given up and now works on the apparently correct assumption that opposition press releases often get run on a percentage basis - that is, 0.001% are run.

I began by asking the shadow minister about his perception of the differences between the Australian Labor Party and the Liberal/ National Country Party policies on the environment.

Well, the key differences are very specific. We are com- We introduced that Act, and mitted to taking the environment into consideration set up inquiries under it in regard to new development on Ranger Uranium and projects, and I don't really believe that the present federal government is. Virtually all federal environmental legislation has been introduced by the Labor Party: the Environment Protection (Impact of Proposals) Act, the Great Barrier Reef Marine Park Authority Act, the National Parks and Wildlife Service Act . .

Act is perhaps the most significant piece of environlegislation in Australia. It allows federal scrutiny of major projects in Paul Pedevrexakis observes federal environmental affairs from the Parliamentary Press Gallery in Canberra.

The ALP's Stewart West

or where there might be a federal interest, such as production for export and so on. we're the only government to Fraser Island. There have been a number of matters that have cried out for a public inquiry on a national level and yet the government hasn't introduced an inquiry - two that come to mind are the aluminium industry and South West Tasmania. But the Fraser Government just won't do it. We've only now, with the help of the The Impact of Proposals Democrats, set up a Senate Select Committee as a second best to inquire into South

West Tasmania. The short answer to your which the government of the inquiry.

areas of national significance | doesn't.

Would you institute an inquiry into the aluminium industry in general under the Impact of Proposals Act, and how might that affect your relationship with the New South Wales Government?

Last year the Combined Caucus Resources and Economics Committee decided that there should be an inquiry into the economic, environmental and energy aspects of the aluminium industry in Australia under to try to get uniformity of development question is that we're not that even if we are able to states, anti-development, but we do achieve such uniformity, want to take environmental there's always a political de-

In NSW, where we now have the best state environmental legislation, we still haven't achieved a regional inquiry - as distinct from individual inquiries into coal mines, power stations and individual smelters - to look into the overall economic and environmental effects of development in the Hunter Valley.

Therefore if I were minister for the environment in a federal Labor government one of the first things I would press for would be a national inquiry into all aspects of the aluminium industry. Whether that would still be necessary two years down the track is another matter. There are other factors now operating which will militate against some of the more excessive projects. Power costs are going up, mainly because even the Fraser government has realised that the borrowing programmes of the largest eight statutary bodies - including the state electricity commissions - have blown out to such an extent that a brake has had to be put on their borrowings from the Loans Council. The authorities are seeking to make up this shortfall by raising tariffs, which will affect developments such as aluminium smelters.

If an inquiry called into question the desirability of some aluminium projects, do you think that a Labor government would be able to take on the large aluminium companies and match them blow for blow, especially in the light of the pressure such companies have previously brought to bear on the Federal government?

Yes, I believe we would. even more than the Fraser government is now doing. believe we would have to face up to the problem of regulating development. There's the Impact of Proposals Act. only so much money float-But I think the first task is ing around, so if these programmes state legislation. I would aren't rationalised then it will prefer this to happen, and for certainly be to the detrithe states to carry out their ment of budgetry policy own inquiries. The problem is financial payments to the specific purpose grants, social welfare payments. We must matters into consideration, cision to be made at the end rationalise in the interests of controlling the money

supply, or we could end up in the same position as the present government is, depending on high interest rates and domestic surpluses to control inflation and the money supply.

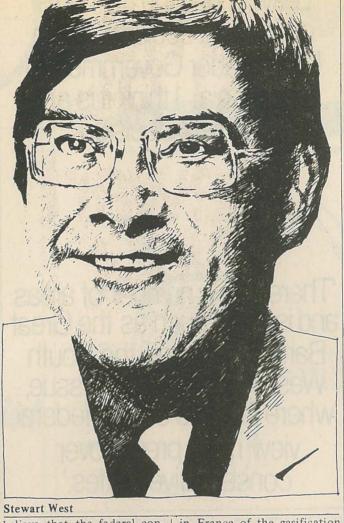
We've just had the decision from the Tasmanian government on the South West Tasmania referendum which leaves out a 'no-dams' option. Why should conservationists have faith in the Labor Party when a Labor government leaves out what conservationists see as the

most attractive option? Well, the first thing is that this is a decision of the Lowe Labor government in Tasmania. I think it is an incorrect decision. I think that whilst they stuck with their legislation for the Gordonabove-Olga option they were entitled as the government to have it passed. Once they decided to drop that line and to go for a referendum I think they were really obliged to give people of all views a chance to register their opinions. So I think they were wrong. I still hope they'll change their minds. However, if they don't they will have to wear it as a political plus or minus.

I hasten to point out that the federal opposition unanimously opted for a public inquiry under the Impact of Proposals Act. The govern- believe that the federal con- | in France of the gasification ment won't do that so we and the Senate voted on the voices to set up a Senate Select Committee, I fully expect the environment move-

In the last election campaign some people said that present federal government they voted Australian Demo- is willing to break down its crat because they believed the international on the uranium issue than out saving they wouldn't Labor. In fact in one issue of allow reprocessing - they Callum actually advocated a agreements. They started out mining. On this sort of issue, the thing that bothers conservationists is how far can Labor be trusted?

We have a federal policy which I know you are familiar with. It's there in members of the EEC, mainly that not one state in the USA have to meet that problem print. I have every reason to because of the centralisation is willing to be the first when we come to it. It may



position of a majority in Caucus.

Having said that, I believe it will be quite difficult to ment throughout Australia to implement, because of the give us credit for our federal development that will alposition.

development that will already have taken place. Due to the declining market for uranium it is obvious that the safeguard Democrats would hold firmer arrangements. They started Chain Reaction Mungo Mac- now write that into their Democrat vote for those insisting on separate agreestrongly opposed to uranium ments with individual countries - in the last several days they've broken that down too, by agreeing to treat the European Economic Community as a whole and to allow free transfer between

ference will stay with that and enrichment facilities. It's joined with the Democrats policy. I believe that's the a much looser and more fluid situation now than even the government started out to achieve.

Although this statement needs to be qualified, I'd say that on a world level the Party will prevail. nuclear power industry is in decline, more rapidly in some inability so far to solve the compensation. waste disposal problem. I don't think there are any

state to act as a permanent repository for nuclear waste. In Europe it's different. I suppose that's understandable because of the lack of hydrocarbon. Even under the socialist government in France I don't expect there will be an abrupt halt to the nuclear power programme. On the contrary, they'll probably try to build up to 35% of electricity coming from nuclear energy, which will be achieved when the nine or ten new stations in the planning or construction phase are completed. They'll probably even go beyond that. But under Giscard they were to reach about 70% of power by nuclear means by 1990.

By the time we're in power the trend against nuclear energy will have accelerated. There will not only be increased pressure on a Labor government to oppose uranium mining on environmental, nuclear safeguard and proliferation grounds, but also on economic grounds, because if we support proliferation of the large and small uranium mines that are proposed in Australia we'll be producing about twice as c much uranium as we could reasonably expect to sell.

So there's lots of things going for our uranium policy. Sure, there will be people outside the Party pressuring us to drop our objections, and from inside the Party and even inside a Labor government there will be people who will have thoughts about reversing the uranium-mining policy. But I believe that the anti-uranium lobby in the

Will a Labor government countries than in others. Cer- be forced to pay compensatainly more rapidly in the tion to miners? I can imagine United States, due to in- that they would apply quite a creased capital costs and the degree of pressure to demand

In my view we have made our position very plain. We new nuclear power facilities stand for a moratorium until on order in the USA. Costs the problems are solved. Our have blown out astro- policy says that we will nomically. Although the repudiate new contracts Nuclear Regulatory Commis- entered into by this nonsion and the Environment Labor government. Now I Protection Authority say that know there will be problems. technically they may be able | Maybe once we start revoking to solve the problem, they're export licenses, compensation not sure, and I was informed payments may be made. We'll

30 Chain Reaction

- and I can't say now how a federal Labor government would meet the problem involve some form of stockpiling and acquisition. But we could not retain our credibility if we went into an election with the policy we have now and then, once elected, repudiated our own policy.

What would a Labor government do on the National Estate?

I think there probably isn't very much wrong with the Australian Heritages Commission Act as it stands. The Commission accepts recommendations for areas that should be placed on the National Register. Section 30 of that Act sets out that the relevant ministers are not entitled to take any action by ministerial or administrative decisions that would harm any area on the National Estate. That obviously covers such areas as the issue of export licenses for mineral sands from Fraser Island or Morton Island, which are on the National Estate.

There are currently two

bills in the Senate, a Democrat and a Labor bill, which seek to amend the Customs Act to bring it into line with Section 30 of the Heritages Commission Act, so that we could place any proposals to mine on these areas before both houses of parliament. I think there's a very strong case to say that a federal Labor government should seek to tidy up at least section 30 of the Australian Heritages Commission Act and perhaps section 112 of the Customs Act which deals with the issue of export licenses. That's to make it virtually impossible by ministerial decision to allow actions that would be detrimental to areas once they're placed on the National Estate register.

By the time a Labor it's quite possible that Australia's oil self-sufficiency will have worsened. Is there any way that a Labor government would tolerate oil drill- about the declaration of the ing on the Great Barrier Reef.

about that. The Great Barrier

Leaving out the no-dams option 'is a decision of the Lowe Labor Government in Tasmania. I think it is an incorrect decision."

'There are a number of areas and issues, such as the Great Barrier Reef and the South West Tasmania dams issue, where I think a strong federal view must prevail over conservative states.'

whole reef area from the top | management plans can be of Cape York (and it should | tidied up sequentially. be extended to the border right down to south of Rockpark area. Now the probgovernment is dragging its under commonwealth-state feet and is being frustrated by the Queensland state government in the sequential of now we've only got the Capricornia section declared and there's been a long hassle Cairns section.

Our policy is very clear: No, let me be very clear the declaration of the sections of the park should reef at risk. Reef Marine Park Authority be speeded up, the whole Act as introduced and passed | Reef area under the Act

by the Whitlam Labor should be declared as park government designates the and then the zoning plans and

Once we do that there with Papua New Guinea) can't be any mining or drilling. So we think that's hampton as a marine park. the quickest and safest way Once the area is designated to go about it, certainly as park, the Act expressly given the fact that the fedeforbids mining and drilling in ral government has amended the Seas and Submerged lem is that the present Lands Act to extend the area jurisdiction out to the edge of the continental shelf for the express purpose of issue oil government comes to power declaration of the various drilling licenses jointly with areas of the park. So that as the Queensland government. The only assurance Anthony has given is that they won't allow drilling within 30 miles of the reef, which is nonsense because wind and tidal movements in a blowout situation would place the

The Barrier Reef and

West Tasmania illustrate the problem of relations between federal and state governments. It could be argued that a federal Labor government would have more trouble handling a state Labor government than your opponents.

That may be true to some extent. Maybe there'll be a problem with New South Wales if the government continues with its contingency plan - and this has certainly vet to be decided - to mine under or in National Parks for coal. There might be a conflict there if we considered it an area of national significance.

Would you disallow export approval for coal from such an area?

Well, that remains to be seen. But I do agree that there is this problem of federal-state relations with regard to the environmental consequences of development. But I guess it gets back to what I was saying earlier about the need to tidy up the legislative scene.

Another area where you could have problems is that of the public service.

No more in the environmental and energy areas than in economic areas. Certainly that was a problem for the Whitlam Labor government.

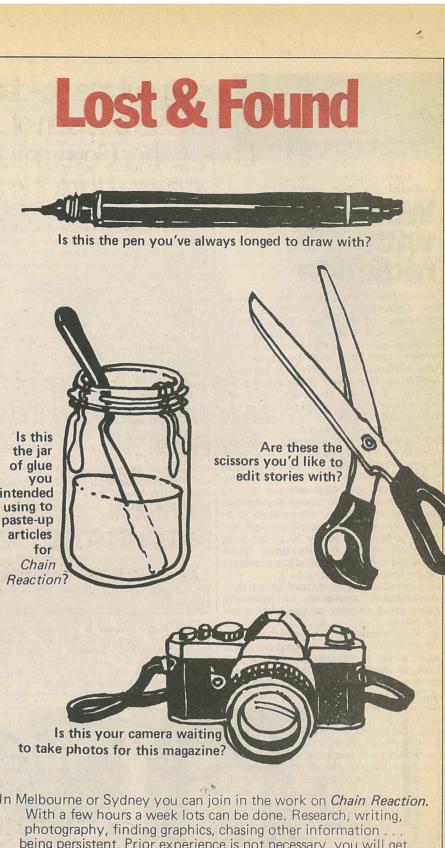
Our policy is to once again have a federal Department of the Environment. Certainly if I were minister I would want to have a head of department who was sympathetic to our aspirations and policy.

Since being in environ-ment I've realised the need for a more active interventionist commonwealth role where necessary, without being heavy handed, and a particular interest in areas of national importance. There are a number of areas and issues, such as uranium mining, the Great Barrier Reef, logging in some areas, the South West Tasmania dams issue, perhaps the Darling Ranges in Western Australia, and sandmining on the two great sand islands in Queensland, where I think a strong federal view must prevail over conservative



parts and accessories Our own range of Cycle Tour custom-built touring bicycles.

INNER CITY CYCLES 29 Glebe Pt Rd GLEBE 2037 Telephone 02 660 6605



In Melbourne or Sydney you can join in the work on Chain Reaction. being persistent. Prior experience is not necessary, you will get plenty with us. It is an excellent opportunity to use and learn skills. Phone (02) 698 4114 or (03) 63 5995

Help us report the real world

REMS

Working with

A number of letters have been received in response to this column from 6. Make sure that the 'coning' device whilst operating the X-ray equipment. tissue.

This is often the case when the or faulty. There is no mandatory their patients. A faulty X-ray machine properly qualified to do so. can belt out up to fifty times more than the amount of radiation necessary to perform the task.

If readers are concerned about their occupational exposure to radiation, there are a number of steps which can be taken:

1. The Commonwealth Radiation Laboratories will send people out to check

2. Walls of the room where X-ray equipment is used should be treated with barium to prevent penetration through into other rooms.

3. It is desirable that people operating the equipment be safely located behind a lead glass screen when taking the X-ray. A further precaution is the wearing of a lead apron by female operators.

. Insist on good quality lead aprons for both the operators and the patients. 5. When X-raying babies and young children, use specially designed moulded polystyrine bags to keep the infants still. This will obviate the necessity for the parents or the operator to hold them, thus exposing themselves to random X-radiation.

members of the medical profession in the machine is working properly, working with X-rays, in particular from and that the machine is equipped with a nursing sisters. Fears have been ex- good light-beam diaphragm. Use the pressed that they may be exposed to smallest possible field to prevent scatter unnecessarily high levels of radiation and unnecessary radiation of other

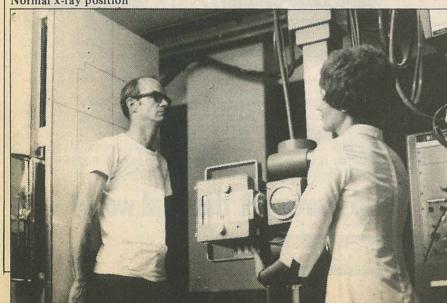
Moves have recently been underway equipment they are using is either old to register radiographers, thus giving them professional status. These moves requirement on general practitioners however have met with considerable to have their equipment regularly opposition from the established checked. Yet equipment which is in radiology profession, fearful that its frequent use needs to be checked as status may be undermined. This is an often as once per month. There is also unfortunate state of affairs because a generally low consciousness among registration would help considerably in general practitioners about the dangers tightening up of X-ray procedures, of unnecessary and over-exposure to X- and in limiting the number of people radiation, to themselves, their staff and able to use X-ray machines to those

Judy Wilks

(with thanks to Dr Jo Kavanagh, Radiologist at the Royal Melbourne Hospital)

The Rems column is a project of the Friends of the Earth/Doctors Reform Society Radiation Working Group. This and measure equipment. Cracks and Chain Reaction series aims to give leaks in the lead lining of the machinery information on how radiation and X-rays cannot be seen with the naked eye. affect our everyday lives and health.

Normal x-ray position



Discover Australia with



Lots of people are rediscovering the bicycle as a means of transport and recreation. And, they're finding new places and adventure in their own country as a result. Let Freewheeling magazine aid your enjoyment of cycling and Australia by keeping you informed on cycle touring, bicycle trails, urban planning, history, maintenance and camping info. Freewheeling presents its information in a clear concise form which doesn't go stale so our back issues are always in demand. Subscribe at the special price on the form below as sometimes we're a little hard to find in newsagents.

name

address

postcode

I enclose \$6 for four issues starting with the current one.

Freewheeling Australia Publications. PO Box 57, Broadway 2007

Films

The Life and Times of Rosie the Riveter produced and directed by Connie Field Distributed by Leclezio Films Sydney, 33 Riley St. Woolloomooloo, 2011



From the film The Life and Times of Rosie Riveter.

During the Second World War, duty to one's country and fighting men, plus the hope of better wages, brought millions of American women temporarily into areas of American industry in which they have seldom worked metal foundaries and shipyards.

Women added the needed muscle power and extra hands to the production for war and the maintainance of domestic production and then stepped aside to have babies when the men came home.

Footage from films produced by the propaganda section of the War Department are used effectively to reproduce the atmosphere and arguments of the period. The blunt chauvanism raises telling laughs in the picture theatre, while the style is often reminiscent of the Hollywood movies of the period that we are still watching on television.

Unfortunately the makers of Rosie the Riveter add little new material beyond five women (three black and two white) who are interviewed about their experiences. The result is an oversimplified thesis that women are not given equal opportunity to compete for the elite, skilled and better-paid jobs in the community.

Nevertheless, the film is extremely enjoyable and is worth seeing. It is clear that women have not been able to change their situation very much in the last 40 years. Stasia Zika



On Sacred Ground, directed by Oliver Howes. Film Australia, PO Box 46, Lindfield, NSW, 2070, 1980, 58 minutes, colour,

On Sacred Ground is a film of optimism and inspiration. We have already seen, over the last few years, a number of films which have portrayed the terrible Aboriginal history which followed white settlement in Australia. They set the scene, now On Sacred Ground marks Aboriginal successes where communities have been allowed to manage their own

Produced in the Kimberley, Western Australia, the film is introduced by Ribjna Green - a young man who left for twelve years to go to school and college, returning to work on community development in his homeland. His quiet enthusiasm is infectious, and one can see that his aim of training another couple of Aboriginal people, with his skills, will eventuate.

This will not be at the cost of the traditional ways of local culture and beliefs. Discussions amongst the people, plans made for the future, and dealings with the inevitable white bureaucracies, always defer to the traditional ways of the elders. Yet this is not the conservatising influence that many of us perhaps expect, but a source of inspiration and conviction. The old ways and the new can mesh.

Of course, there are the stories of Aboriginal people being rounded up and shot or raped, exploitation and dese-- such matters cannot be avoided when stories of massacres are common in every community in the

Kimberley, some as recent as this century

But the tide has changed. All over the hundreds of square kilometers that make up the Kimberley are Aboriginal communities planning their own autonomous properties, mostly cattle stations. There, it is hoped, by Monty Gordon and others, that some of the young alienated Aboriginals from the towns will find employment and the security of the old tribal ways. Dingo Springs, a place of one thousand acres, was one of the first properties returned to Aboriginal people. As Bulla explained in the film, the Aboriginal workers originally there 'worked for white man, made money for white man, but blackfella got nothing out of it'. Now this has changed. At Noonkanbah too, the previous white manager for years employed old Aboriginal people and pensioners who never saw their pay, until the station was acquired for the Aboriginal people by the Aboriginal Land Fund Commission following the workers' walk-off in 1971.

On Sacred Ground is a good film for Aboriginal people and their supporters who are feeling dispirited and cynical. It is a film to rekindle the hope that the fight for land rights is still worth it but it won't delude you that it will be easy. Two messages are clear - land rights is a meaningless phrase, unless accompanied by Aboriginal selfdetermination, and that white involvement is okay, but by invitation only!

With more successes, as Bill Ryan from Hall's Creek says, 'people will walk differently, they'll walk proud'

See the film.

Fiona Kyle

Not all travel is JUST travel Most travel in the Third World creates

- greater dependency and poverty
- loss of cultural identity
- environmental deterioration

JUST TRAVEL is a co-operative offering limited holiday experiences in the Third World which are responsive to the needs and aspirations of the host communities.

JUST TRAVEL is currently preparing its 1982 and 1983 programme of tours for the sensitive traveller to Asia and the Pacific. Send coupon or write for further information to JUST TRAVEL c/- 18 Westall Street, Hyde Park, South Australia 5061 (Phone 08 271 0232).







TASTE THE DIFFERENCE!

Our superb SAMAP *Naxos natural-stone flour mills will turn any grain into superfine, fine, medium or coarse 100 per cent wholemeal flour and crack wheat too for your healthful cakes, buns, scones, pies, sponges, breads, desserts, invalid, pet & animal food. Also dried beans, peas, lentils, etc. for delicious soups & meat substitutes.

Independent tests in Germany confirm a 20 per cent saving on the weekly food bill by including a reasonable amount of the healthy grains into your diet.

*Naxos stone is the hardest & most suitable stone in the world according to French geologists, and has been mined in Greece since Roman times, just one reason why Swiss & other European naturopaths & dieticians prefer SAMAP, Remember, only natural stone gives you trace minerals (1.5 - 2.0 per cent) as a by-product!

Send 2 stamps today to Nature & Health Products, 29 Melville Ave., Strathfield, N.S.W. 2135 for our informative & pictorial mill catalogue called "Home Flour Mills & the Milling of Flour" with Price List. Dealerships available now for these splendid mills.

Included with our catalogue is an Australia-wide list of health food shops selling the SAMAP mills - or you may buy direct from us per Mail Order - your choice. Also included is a list of suppliers and farmers selling Organically-grown and bio-dynamically-grown grains, vegetables & fruits, hand juicers for grasses & vegetables, water distillers, hand juice presses, butter churns and separators,

REVIEWS

Dust to Dust, researched and directed by Sabina Wynn, 16mm, colour, 27 minutes. Available from Sydney Film Makers' Co-operative, St Peters Lane. Darlinghurst, New South Wales. Telephone (02) 33 0721



Graves of dead workers, from the film Dust to Dust

Dust to Dust is a short film about the experiences of a group of Aboriginal miners at the asbestos mine at Baryulgil in northern NSW. The mine closed in 1977, shortly after the dangers to health in the asbestos industry began to make media headlines in Australia. The miners had mostly worked for 15-20 years at the mine, and had been exposed during that time to incredibly high levels of asbestos dust. Their exposure. although not adequately monitored, was clearly greater than that responsible for the epidemic of deaths and ill-health among workers in the manufacturing side of the asbestos industry.

The film, through the words of the miners themselves and interviews with government officials, exposes some of the duplicity and deceit experienced by those workers trying to establish their state of health after asbestos exposure.

Unfortunately, no interviews with executives of the asbestos industry are included, no doubt because by the time the film was made, in 1980, such people were very reluctant to say anything

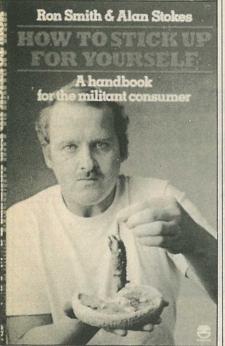
However, the film does clearly establish the apparent cover-up by the government bodies charged with evaluating the hazards of asbestos dust to workers. It also stresses the failure of the mine owners and the Australian Workers Union, who covered the miners, to take any responsibility for alleviating the hazards, or even informing the workers of them.

The film is worth seeing as an extreme example of the problems faced by all people trying to get some action about health hazards in industry

Bob Muntz

Books

How to Stick up for Yourself - A Handbook for the Militant Consumer by Ron Smith and Allan Stokes. Fontana, 1981, 264 pages, \$5.95 (soft cover).



Although How to stick up for yourself is a book designed to appeal to the more militant among us, it clearly illustrates how all consumers, militant or otherwise can get a better deal. The serious business of buying the weekly food purchases, selecting a new or second-hand car or purchasing a new appliance dealt with effectively by the humourous use of personal anecdotes.

The main purpose of the book is to supply the consumer with a directory of information on aspects of active consumerism in Australia. How to organise and execute a street demonstration and measures to make members | It describes the latest tidal plants as well \\$67 (hard cover)

well documented.

The major contribution to the consumers never-ending battle for a fair deal is revealed in the latter part of the book. Here the authors tackle the corporate giants and politicians, giving the reader a light-hearted look at the workings of the corporate mind and how to activate your sitting member.

The most valuable part of the book is the appendix which clarifies the roles of government departments, state bodies and consumer organisations.

Cathy McCallum

Alternative Sources of Energy, 10th Anniversary Edition published by Alternative Sources of Energy Inc., Milaea, Minnesota, July/August 1981, 60 pages.



This 10th anniversary edition of the magazine has, as its main theme, the possible uses of both wind and water as alternative energy sources.

For anyone with even a slight interest in the harnessing of such energy sources, the magazine contains some interesting articles. They tend not to be overly technical and therefore would be of interest to a wide range of people.

One such article, by James Schmidt, is on various people's experiences with wind systems. It describes in detail the problems involved in setting up and maintaining two wind generators.

The first was a 240 volt, 3000 watt conventional 3 blade propellor type windmill, the second a more unusual 240 volt, 4000 watt vertical axis windmill. The article is very down-toearth and covers practical problems and some solutions found by the people running the systems.

There is also an article, by Rodger Charlier, on the future of tidal power.

publicly about asbestos and health. | of parliament act on your behalf are | as the Rance River plant, which was the world's first operating tidal power system.

The magazine is of USA origin, however, it contains sufficient information in both the articles and the letters, reviews and advertisements, to be of value to all people with an 'interest' in alternative energy sources, but invaluable to those who are dedicated to the practical application of such energy sources.

John Lindsay

What is Happening to the Blue Mountains? by Jim Smith. A Megalong Book, Second Back Row Press, Katoomba, 1981, \$2.50.

There has long been a need for this booklet on the ecology, and threatened destruction of the world-renowned Blue Mountains.

Jim Smith conveys a sympathetic feel for the Mountains environment, its sheer sandstone cliffs, spectacular, waterfalls, its walks and reserves, through a series of pithy and provoking quotes from past observers. He establishes the importance of the water systems, their fragility and points to sources of pollution and destruction largely uncontrolled development.

The booklet is attractively illustrated throughout with scientific diagrams, maps and historic photographs.

With a local government election looming, it is a deliberately timely contribution to the current debate on development and protection of this unique environment.

John Baker

Other books worth mentioning:

Flaws in the Glass, A Self portrait by Patrick White. Jonathan Cape, London, 1981, 260 pages, \$17.00 (hard cover). Living Better With Less - an end to

'growthmania', how to cut waste and improve our lives by Ian Pausacker and John Andrews. Penguin Books, Australia, 1981, 134 pages, \$7.95 (soft

Hold the Line, Costing Melbourne's Transport Options by John Andrews, Geoff Lacey and Patrick Moriarty. A report published by the combined public transport unions, Melbourne, 1981, 38 pages, \$1.00 (soft cover).

Fire and the Australian Biota by A M Gill, R H Groves and I R Nobles. Australian Academy of Science, Canberra, 1981, 582 pages, \$39.95 (hard cover).

Weather Forecasting, The Country Way by Robin Page. Penguin Books, Australia, 1981, 71 pages, \$3.50 (soft cover). Conservation and Evolution by

C H Frankel and Michael E Sculer, Cambridge University Press, Melbourne, 1981, 327 pages, \$21.50 (soft cover),

BAINFOREST

question of US involvement in the deforestation process, which has been quite heavy from the beginning, especially in SE Asia and Latin America. In the Amazon region, for example, the US government (especially the State Department, the co-producer of Global 2000) and US corporations were heavily involved in the mid-60s in instigating and planning the disastrous program of corporate and multinational development of the Amazon. The loans for Amazonian highway development came from the Inter-American Development Bank and the World Bank, and in the latter case represented the largest grants ever made for highway construction in its history. Also important were major grants-in-aid from USAID for technical assistance, USAID loans under the Alliance for Progress, and direct US Army aid to the Brazilian Army Corps of Engineers engaged in building the highways which are the main factor in the destruction of the Amazon, USAID was also involved in mineral survey work. As well there are many US-based corporations involved in the area, including some of

the major landholders and forest destroyers. The plan to flood large areas of the Amazon Basin to provide hydropower, a plan which will destroy huge areas of forest, was thought up by the Hudson Institute. Much of the material being produced on the beef cattle ranches, for which so much of the forest is being destroyed, is destined for markets in the USA. More generally there is the overall US support for the kind of government, social system, and development model which makes what is happening in the Amazon possible. US involvement in other major centres of rainforest destruction such as the Philippines and Indonesia is no less clear, as is its overall responsibility for the development model. Yet no hint of these unpleasant facts, important though they are for formulating plans of action, reaches the reader of Global 2000. While these social structures and conditions of support for them continue, even in mitigated form, there is little hope for the tropical rainforests or the people who depend on them.

AUSTRALIA TOO HAS ITS AREAS of rainforest, both tropical rainforest, found in Queensland, and subtropical, extending well down into NSW. While these are not as rich as some tropical rainforests north of Australia, many areas are scientifically important and

especially valuable in the Australian context, where much rainforest has already been eliminated. Australia, as the only developed country with tropical rainforest, may at first glance seem to be protected from the sorts of pressures which threaten to make the richness of the world's most complex ecosystem largely a memory in most places by the turn of the century, But in fact the sorts of social forces threatening Australian rainforest are fundamentally not so very different from those destroying it elsewhere namely, its subjection to considerations of private gain and corporate advantage. together with the compliance of governments and the relevant government agencies (the various state forest services) which, like their counterparts in the underdeveloped world, almost invariably place commitments to the private interest consideration of the forest industries before the public interest considerations involved in conserving the forests. If the rainforests are to survive, in Australia or elsewhere, these forces will have to be understood and resisted.

This is a condensed version of a longer paper on the world's rainforests. It is available by writing to Chain Reaction's Melbourne office, enclosing \$1 to

WANT TO STUDY THE ENVIRONMENT?

Tasmania offers special opportunities in this field.

Enrolments are still open for Third Term 1981 for post-graduate degrees leading to MASTER OF ENVIRONMENTAL STUDIES AND DOCTOR OF PHILOSOPHY.

for information write to Dr R. Jones, Centre for Environmental Studies, University of Tasmania, GPO Box 252C. Hobart 7001

Tasmania

the environment state



Youcanstill obtain back copies of most editions of ChainReaction

including

Winter 1981, No 24 - Alcoa: clearing the Jarrah and buying Portland, lead victory, shrinking Environment Department and Activists Contacts supplement. \$1.50. Summer 1980-81, No 22 - The Great Barrier Reef, food for people . . . or cars, Cliff Dolan interview, and Trees you won't see next year. \$1.50

October-November 1980, No 21 - South West

Tasmania, How we can now stop uranium mining, The Federal Government and the elections, seeds patenting,

August-September 1980 Vol 5 No 4 - Dirt Cheap, new Australian film, Aluminium, Tasmanian Aborigines.

Nineteen back copies of Chain Reaction - all those publishedfrom Autumn 1976 (except Vol 2 No 3, of which we will supply a reprint of the major stories, and No 23) are available as a set for \$27. Add another \$2 to include this edition (No 26). All post free

Send orders to: Chain Reaction, Room 14 Floor 4, 37 Swanston Street, Melbourne, 3000.

The Fund for Animals Ltd PO Box 371 Manly New South Wales 2095 Telephone (02) 977 1912, 977 1557 Telex AA72577

Current objectives

To see the proper implementation and enforcement of endangered species legislation in Australia, covering both trade and habitat protection. To ensure Free Zone. We also have contact with proper management of living resources other environmental groups and support in the Southern Ocean; to stop any proposed mineral development on the Methods Antarctic continent or surrounding waters. Lobbying for the establishment of marine sanctuaries around Australia and general coastal protection. Financial support of small projects overseas and within Australia; and undertaking a low key mineral energy resource use study.

Methods

We rely heavily on our supporters (now approximately 9 000) for lobbying, publicity and fund raising. Use is made of the media extensively by placing advertisements on specific issues. Paid researchers and campaigners provide the stinging end of the operation, while newsletter circulation. press releases, publications, sale of merchandise and attendance at important conferences, are carried out.

Past activities

The Fund has been operating as an office for only four months.

Future plans

To increase the number of our supporters several times and thereby our effectiveness.

Help needed

As with any organisation we need more volunteers!

Resources available

There is a full-time staffed office in Sydney with typing, photocopying, telex and library facilities, including a wide range of merchandise for sale. Extensive files on endangered species, Antarctica and energy. FFA publishes newsletters for supporters and technical bulletins.



Oakleigh District Environment Group Flat 1/7 Monash Street South Oakleigh, Victoria, 3167 Telephone (03) 579 4302 568 7243

Current objectives

These are to participate in the upgrading of the Oakleigh environment Currently we are working towards having Oakleigh declared a Nuclear their campaigns where possible.

Our methods are primarily concerned with local newspapers, newsletters and community groups. Through these we create awareness of our projects and gain support from local politicians.

Past activities

We are a relatively new group, having formed only in January 1981. Our past activities have been concerned with educating our community through street stalls and newsletters. Through these we have commenced our Nuclear Free Zone campaign. We have conducted a survey of Oakleigh citizens and found overwhelming support for our aims.

Future aims

In the future we will be involved with developing bicycle paths in Oakleigh and developing the area's parks We are also open to suggestions from new members about areas they would like to see improved.

Help needed

Any form of support is appreciated; however, people willing to spend more time on activities such as producing our newsletter and participating in street stalls are most needed.



Campaign Against Nuclear Energy 310 Angas Street Adelaide, 5000 Telephone (08) 223 6917

Current objectives

Our overall objective is to stop uranium mining and processing in South Australia particularly by creating an awareness of the hazards associated with the nuclear industry and its tragic economic consequences, by taking active opposition to its development, and by promoting the use of alternative forms of energy.

Methods

A whole range of activities - films, displays, public meetings, production and sale of stickers, badges and magazines, membership and newsletter, action groups working with trade unions, media, Aboriginal groups, research and direct action, women against nuclear energy, nuclear free Pacific struggles, office collective. pamphletting round particular issues, liaising with other groups e.g. Coalition for a Nuclear Free Australia. **Future plans**

Public education of the economic arguments pushed to override any health considerations, highlighting uranium mines at Roxby Downs and leach processing at Honeymoon (a process banned in the US); 'Boycott BP' Campaign because of involvement in Roxby Downs; the push for adequate environmental legislation in South Australia; development of Coalition for a Nuclear Free Pacific; encouragement of Nuclear Free Zones campaigns by local groups; opposition to AMDEL Laboratories in Adelaide at Thebarton and Frewville.

Help appreciated

Research and distribution of information on uranium mining projects in South Australia.

Resources available

Film contacts, literature, contacts, speakers.

FRIENDS OF THE EARTH MEMBERSHIP

Dear Friends of the Earth

Please	find	enc	ose	d	my	me	mb	er
ship fe	e of \$	S				(as p	e
rates b	elow).							

i di i i	•		•	•		٠	۰	•		•	•		
Address.		٠										٠	
Postcode													

Please find enclosed my gift membership fee of \$......

The gift membership subscription is

Mamo

Address

Membership fees: New South Wales and Victoria \$15 (or \$7.50 students. unemployed and pensioners). Other states and territories \$10 or what you can afford.

Chain Reaction is sent free to all members of Friends of the Earth.

Make cheques payable to Friends of the Earth and post to the group nearest you - see list at right.

Donations are very welcome.

Contact us for details on how to make tax deductible donations to FOE.

National

Friends of the Earth groups from around Australia will meet 20 to 24 January 1982, at Camp Eureka outside Yarra Junction, 70 kilometres east of Melbourne

An organising group from FOE Victoria is meeting regularly to plan the meeting. Agenda items and details from each group on numbers attending should be sent immediately to the organising group. An agenda will be circulated to all groups before the meeting. FOE members in Melbourne are being asked to help with transport and assistance in the kitchen. The organising group can be contacted either through Friends of the Earth Collingwood, 366 Smith Street, Collingwood 3066; telephone (03) 419 8700 or the Chain Reaction Melbourne office Room 14, Floor 4 37 Swanston Street, Melbourne 3000; (03) 63 5995.

See you in January!

Yorke Peninsula

We are a small group - no more than a dozen active members - in a very conservative country area. However, we vital. Spencer Gulf is one of the prime targets of the Tonkin government for

FOE GROUPS

nuclear development, as well as already being the site of some of the major polluting industries in South Australia. The Gulf itself is already so polluted with heavy metals that the situation is critical, and its role as the prime cray spawning area in the state makes the situation even more desperate.

In order to be more effective in the struggle, we have combined with Port Pirie FOE, Whyalla Campaign Against Nuclear Energy, and Augusta Alternative Energy Discussion under the title of Gulf Alliance, and meet quarterly under this guise to discuss overall strategies, and combined actions.

Our on-going campaigns are:

Port Pirie Uranium Enrichment Plant Feasibility Study. We are in the process of getting together various submissions on this issue, but basically see it as the back-end of the problem.

· As part of our above commitment. we are actively promoting the concept of 'direct-action', and the need for consider our activities and political environmental groups to be trained involvement in local affairs to be fairly in the tenets of non-violent civil disobedience.

Jules Davison

Australian Capital Territory

Canberra: 17 De Burgh Street, Lyneham, 2602. Phone (062) 47 8868

Northern Territory

Darwin: PO Box 2120, Darwin, 5794, Phone (089) 81 6222

Queensland

Brisbane: PO Box 667, South Brisbane, 4101. Phone (07) 44 1616

South Australia

Adelaide: 310 Angas Street, Adelaide, 5000. Phone (07) 223 6917.

Port Pirie: PO Box 7, Port Pirie, 5540, Phone

Northern Yorke Peninsula: C/- 'Valinor' 734 Moonta Mines, Moonta, 5558.

Hobart: 102 Bathurst Street, Hobart, 7000. Phone (002) 34 5566. Burnie: PO Box 350, Ulverstone, 7315

Victorian Resource Centre: 366 Smith Street, Collingwood, 3066. Phone (03) 419 8700. Eltham: PO Box 295, Eltham, 3095. Phone (03) 435 9160.

Please note - several contacts are home addresses and telephone numbers. Chain Reaction offices are listed on page 1.

Glen Waverley: c/- 1092 Whitehorse Road Box Hill, 3128, Phone (03) 88 1610. La Trobe University: Environment Resource

Centre, La Trobe University Students' Union, Bundoora, 3083. Phone (03) 478 3122 ext.

Monash University: Community Research Action Centre, Monash University Union Clayton, 3168. Phone (03) 541 0811 ext.

Oakleigh: 1/7 Monash Street, South Oakleigh 3167. Phone (03) 579 4302.

Western Australia

Perth: Office - 537 Wellington Street, Perth 6000. Phone (09) 321 5942, 321 2269. Shop 373 Oxford Street, Mount Hawthorn 6016. Phone (09) 444 6017.

Manjimup: PO Box 132, Manjimup, 6258. Phone (097) 72 1344.

University of Western Australia: Guild of Undergraduates, University of WA, Nedlands,

New South Wales

NSW Resource Centre: 101 Cleveland Street, Chippendale, 2008 Phone (02) 698 4114. Blue Mountains: 94 Waratah Street, Katoomba, 2780.

Ryde: 18 Kokoda Street, North Ryde, 2113. Phone (02) 88 2429

Randwick: 84 Dalmeny Avenue, Rosebery,

Self Sufficiency Supplies

Telephone (049) 23 999

Items we carry are:

 Household electric supply from solar and wind with batteries, inverters, 12 Volt lights, electric fences etc.

Hot water systems from solar and wood

 Househeating systems from solar and wood including hot water radiators

Solar pool heating systems and pool covers

- · Large range of wood-fired cooking stoves, heating stoves and fire-
- Hydraulic rams, windpumps and electric pumps for household water supply
- Dalrac Earth block presses and adobe moulds.

Composting toilets

- Organic gardening supplies and natural pest controls
- Push mowers, battery mowers, compost tumblers
- Flour and grain mills (hand operated or electric) plus hand operated mincers

Preserving outfits, bread tins, baby food grinders

• Huge range of books on self sufficiency and natural living (Mail order book catalogue available for 5 x 24¢ stamps)



Iberian Panniers. The largest in the range, these panniers have many special features including an extension on the main compartment in 4-oz. nylon (155 g.s.m.) which completely closes with a drawcord for increased capacity and/or improved weather resistance. The flap is elasticated and fastens with straps and Simploc buckles.

KARRIMOR have a superb range of cycle touring panniers

or product brochure write to: Cycle Dept., Outdoor Agencies Pty Ltd, P O Box 135, Beaconsfield, NSW 2015



