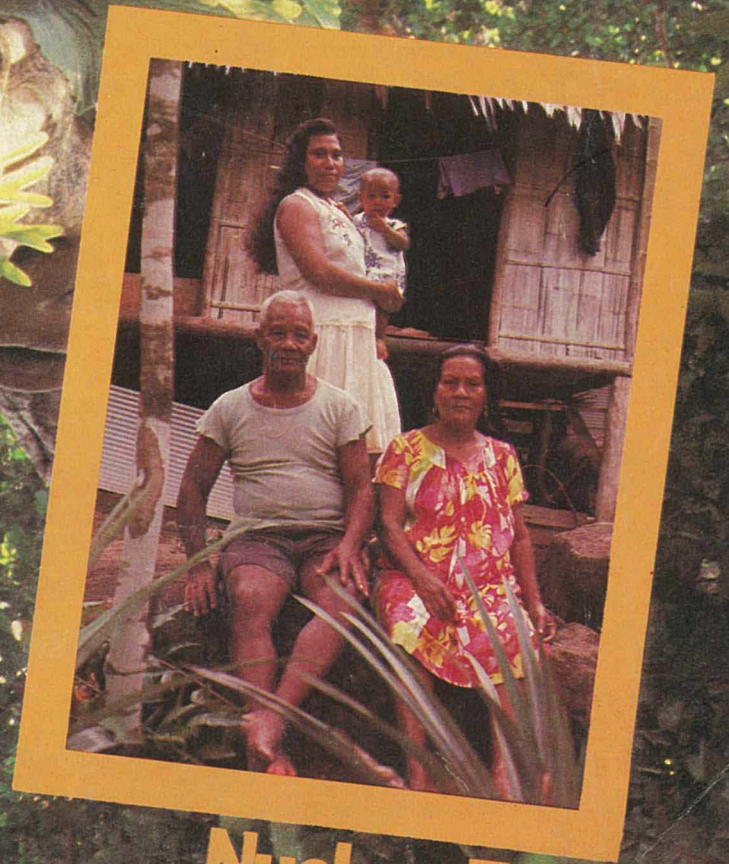


Chain Reaction

Friends of the Earth Australia

Number 23 Autumn 1981 \$1.50*

Rainforest The Fight in NSW



Nuclear Free
Pacific
Supplement

Andes Trekking

Rising steeply..... from the Pacific Coast
 in tier after tier stand the Andes.
 Amidst their labyrinth of snowy peaks,
 flourished the Incas, of the greatest civilisation
 of the New World. We shall follow Inca trails
 into the heart of Peru and Bolivia. In remote
 mountain villages we meet Quechua Indians,
 direct descendants of the Inca. In many ways
 their lifestyle has changed little since Inca times. The
 scenery ranges from snowy peaks, to Amazon jungle,
 to arid desert. Machu Picchu, Lake Titicaca, Easter Island,
 Cuzco and Lima will be visited. Llamas are used
 to carry all loads, so no prior trekking experience
 is necessary. Group size limited to 15. Contact
 us soon for details of this extraordinary adventure:

AUSTRALIAN HIMALAYAN EXPEDITIONS
 3rd Floor, 28-34 O'Connell St. Sydney.
 (02) 231 6050, 233 7958 (Mon-Fri).

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



For further information contact
WORLD DEVELOPMENT TEA:
 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

"KEEP SEEDS PUBLIC"
 DON'T PATENT PLANTS



A new book from the Free Access to Seeds Committee for all people opposing Plant Variety Rights (PVR).

- Topics covered
- How patents and PVR work
 - Why PVR must be opposed
 - Answers to arguments in favor of PVR
 - How PVR can be stopped, including an action guide designed for people in all sections of the community.

Only \$1 including postage plus an anti-PVR bumper sticker.

Cut out and return to
FREE ACCESS TO SEEDS COMMITTEE,
FRIENDS OF THE EARTH,
366 SMITH STREET,
COLLINGWOOD 3066.

Name

Address

Telephone

Please send me copies of 'No PVR for Australia' @ \$1 per copy post paid.

Please put my name on the mailing list of the anti-PVR group closest to me.

I enclose a donation of \$..... to support the opposition to PVR.

Please send me monthly copies of *National Seeds Action Bulletin*. Enclose \$3 for costs.

BELAU INDEPENDENT?

On 3 December 1980, Japanese scientists were in Belau (formerly Palau in the Trust Territory of the Pacific Islands) on their tour of the Pacific Islands. The purpose of their trip was to convince people here that nuclear waste dumping in the Pacific is safe. The Belau Legislature called a big public hearing. A number of people went to the hearing, not to listen to the Japanese scientists explaining the safety of the ocean dumping in their highly confusing terminology, but to inform the Japanese that we can not let them use the Pacific as a dumping ground for their unwanted nuclear wastes.

On 1 January 1981, the constitutional government of Belau came into effect, thereby replacing the USA colonial government which has been administering the Island for some time. There were a lot of tears in almost in almost everybody's eyes as 400 and some years of colonization is more than enough for us to take.

Although we are now a nation in our own right, the USA has come up with a treaty to take 75% of the land to be used for nuclear submarine base and nuclear storage. The USA is refusing to recognise our constitution that prohibits any nuclear presence in Belau. The treaty that has been prepared by the USA is much worse than their treaty with American Indians.

Roman Bedor
 Belau

WEAPONARY

I want to say how much I admire the work of FOE. The work you are attempting to accomplish is one of the few bright signs in an otherwise depressing world. You people really do speak for a large number of people - the problems is getting the ideas across and overcoming the feeling of apathy and utter helplessness which most people feel when confronted with these issues. We all need to be more creative and imaginative in working out strategies.

I suggest that as well as supporting the World Disarmament Campaign petition, we, individually, write or phone our local Federal Member of Parliament expressing our concerns and asking for their comments. Our letters need to be framed in such a way that politicians are forced to make specific comments, and hopefully, commitments to the cause. This phone-in, write-in, could be immeasurably strengthened if each person could arrange to have say 5-10 friends and acquaintances to do the same.

I wish to suggest that as an intermediate goal we also ought to

LETTERS

concentrate on achieving some form of international control of nuclear weapons and nuclear power stations. I believe that the technical capacity exists, or could soon exist, to achieve this control over these weapons without relying on trust between nations.

Bill Lumsden
 Melbourne

LOUSY SIXPENCE

A 16mm documentary film is ready to go into production after one year of research and scripting. The title *Lousy Little Sixpence* refers to the weekly wage paid to Aboriginal children who were forced to become station hands or domestic servants in NSW during 1909 to 1942. During that period over one third of all children were removed, often by force, from their parents and communities. They were sent long distances to 'training' homes and then onto 'better' stations and middle class white homes. They had to serve a minimum of four years as 'apprentices' (there were no trade certificates given after that period), most of their wages were paid directly to the Aborigines Protection Board, and the police had power to apprehend them if they escaped their employment. Because of film production costs rising so high, the film Commission is unable to fund any new projects until July 1981. *This has caused immediate problems for us.* Many of the important interviews to be used in the film are elderly. We consider it important that we begin to record their memories on film as soon as possible.

We appeal to you to support this important project. Donations of any amount are most welcome.

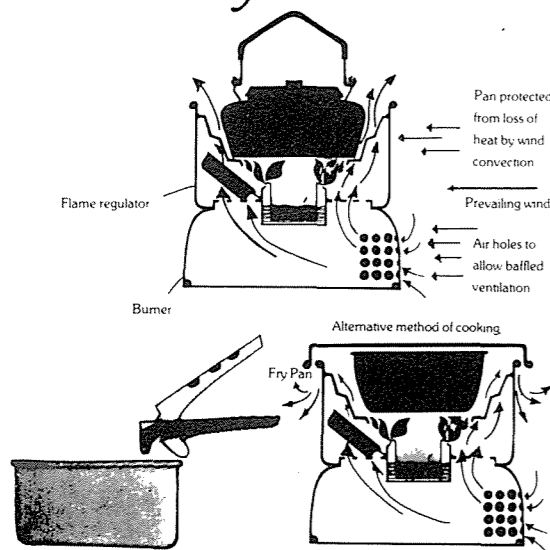
Alec Morgan and Heather Goodall
 Post Office Box 217
 Kings Cross, NSW
 Telephone (02) 698 8115

LETTERS

You are invited to write letters to *Chain Reaction* with your comments and criticisms of articles or on other issues of interest to you. We are more able to publish your letter if it is under 250 words. Write today to the Editors *Chain Reaction*, 366 Smith Street, Collingwood, Victoria, 3066, Australia.

TRANGIA

The modern
 lightweight cooking
 system



The Trangia is a complete cooking unit made in Sweden from high quality materials. Its unique design makes it suitable for outdoor use even in the worst weather conditions, although it is just as efficient inside the tent.

1. It is easy to erect and to light even in outside windy conditions.
2. The pans are difficult to knock over because they sit down inside the stove. In case of an accident the stove can be easily extinguished with a bucket of water.
3. There is no need for priming etc., and so no fuel contamination of hands, food or clothing. Methylated Spirits can, however, be used to sterilise your hands.
4. Methylated Spirits is readily available throughout Australia. After wood it is the next most widely distributed renewable fuel.
5. Very few parts can be lost. Replacements if required are low in cost.
6. Minimal cleaning and maintenance required.
7. Because the main pan sits so low inside the Trangia unit, it is possible to carry the unit to different positions with little risk of the pans tipping over.
8. The Trangia can be used outside or inside the tent, when a slate or stone beneath it will prevent any damage to the groundsheet.
9. The Trangia is suitable for boating, bushwalking, camping, caving, cycle touring, ski touring, etc.

NOTES: There are two Trangia models, reference numbers 25 and 27. The 25 model has the larger capacity. Both models include a good handle designed to:

- a) Provide maximum strength.
- b) Obviate utensil damage.
- c) Incorporate heat dispersion holes to avoid burnt hands.

OUTDOOR AGENCIES PTY. LTD.

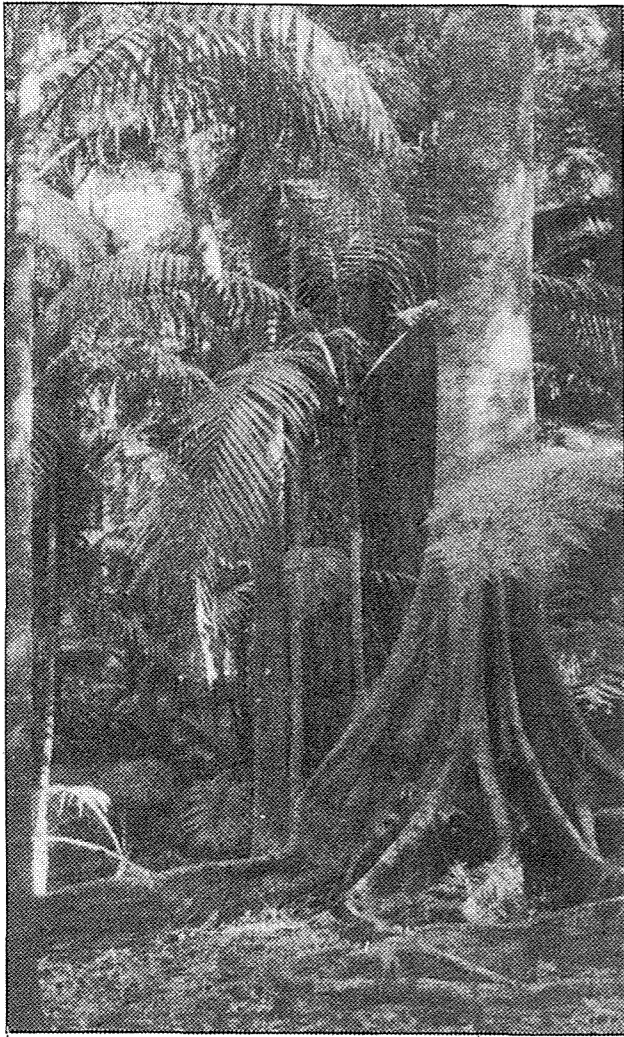
148 Queen Street, Alexandria N.S.W. 2015.

Phone: (02) 699-7698, 698-3860.

For further details, contact Miss C. Muzzin.



RAINFORESTS: THE FACTS



The NSW Forestry Commission is systematically destroying the last of NSW's rainforests.

These rainforest are the home of over 20 rare and endangered animals and over 40 rare and endangered plants.

Rainforests are less than 2% of all NSW forests — and over half of them are controlled by the NSW Forestry Commission.

All rainforests on public lands should be conserved.

TAKE ACTION

- Write to, or sign and send this leaflet to:
Mr Neville Wran, Premier,
Parliament House,
SYDNEY, NSW 2000
- Send a donation to the
Native Forest Action Council
P.O. Box 1875,
CANBERRA CITY,
ACT, 2601

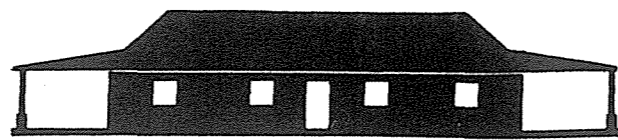
Authorised by Nicole Bannister, c/- P.O. Box 1875, Canberra City ACT 2601

I support the preservation of all NSW's remaining rainforest areas.

Name

Address

Signature



BELBOURIE

THERE IS NO WAY TO DESCRIBE THIS SMALL HUNTER VALLEY WINERY UNLESS YOU'VE BEEN THERE — NO WAY TO DESCRIBE THE WINES MADE THERE UNTIL YOU'VE TASTED THEM — HUGE WINES, COMPLEX, MOUTH FILLING WITH LONG LINGERING AFTER TASTE — WHITE WINES LONG AGED IN FRENCH AND GERMAN OAK CASKS AND DESTINED FOR A DECADE OR MORE OF CELLARING AND INTENSE COMPLEXITY. FULLY FRUITED RED WINES WITH BIG TANNIN WHICH WILL AGE GRACEFULLY WITH YOU. JUST AS IT IS HARD TO DESCRIBE THE HUNTER ITSELF AND THE EFFORTS WE AT BELBOURIE ARE MAKING TO SAVE IT FROM ALUMINIUM FOR OTHER VINTAGES.

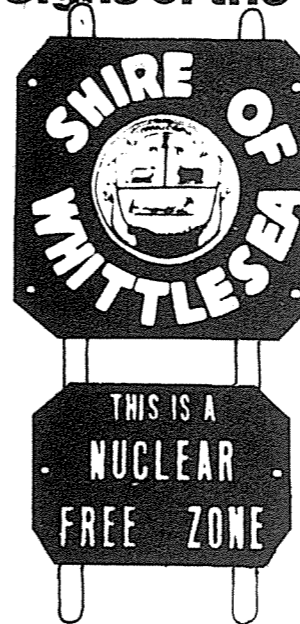
JIM ROBERTS AT BELBOURIE
WILL TELL HOW YOU CAN HELP
— AND HOW YOU CAN GET HIS
WINES.

BELBOURIE
PRIVATE MAIL BAG
POKOLBIN DELIVERY
MAITLAND
2320

AND RECEIVE A CATALOG BUT
THERE'S NO SUBSTITUTE FOR
VISITING AND TASTING AND
TALKING.

EARTH NEWS

Signs of the times



Many municipal councils in Australia have declared Nuclear Free Zones (NFZ) including strategic ports for export of yellowcake and areas designated as possible nuclear reactor sites. At the moment councils have no statutory power to declare NFZ but are exploring ways to make the decision legally binding.

Sunshine Council (Vic): insisted there be a report on a local tip before further hospital trash (previously radioactive material) dumped.

Brunswick Council (Vic): are investigating street traffic bylaws to prevent uranium ore passing through this NFZ (from Port Melbourne to Ore Sorters Australia Limited — a subsidiary of Conzinc Rio Tinto of Australia Limited).
Leichhardt Council (NSW): wrote a strong letter of censure to the Atomic Energy Commission when it discovered yellowcake had been transported through this NFZ from Lucas Heights.

Cockburn Sound (WA): has not been able to enforce their NFZ declaration in relation to the USA nuclear submarines using the dock, but did co-host the Indian Ocean Peace Conference last year.

Townsville Council (Qld): is considering a NFZ declaration as the French mining company Minatome prepares to start on the Ben Lomond uranium mining lease.

All NFZ exclude from their declaration radioactive isotopes for medical purposes. Industrial and agricultural use of isotopes has been excluded by some councils but needs analysing as to its risks and benefits to the community.

Action: A list of NFZ councils, a kit with campaign details and NFZ stickers are available at MAUM, 150 George Street, Fitzroy or FOE.

Kangaroo Is.

Kangaroo Island, South Australia, is the centre of a debate involving the Department of Lands and the Nature Conservation Society of South Australia.

The state government advocates agricultural development of 14,500 hectares of the island — an area of virgin bushland and an important habitat for wildlife.

The NCSSA believes that a recent government report on the future of this area has not fully assessed the environmental consequences of agricultural development or adequately considered the long-term economic and social aspects of alternative land-use. They also point out that soil and water salinity levels make this land unsuitable for primary production and that preserving the bushland as a tourist facility would be a more logical plan.

KEEP IT



14,000 HECTARES OF KANGAROO ISLAND'S PRISTINE BUSHLAND

THIS AREA OF UNSPOILT HEATH WOODLAND AND WETLANDS MUST BE KEPT FOR FUTURE SOUTH AUSTRALIANS. A DONATION TO THE KANGAROO ISLAND ACTION GROUP WILL HELP ACHIEVE THIS AIM.
C/o Nature Conservation Society
110 Angus St Adelaide Ph: 223 1144

The Kangaroo Island Action Group has been formed to prepare a submission and publicize the issue.

Action: Information on the campaign is available from the NCSSA office, Conservation Centre, 310 Angus St, Adelaide, South Australia 5000. The group would also appreciate donations.

Fighting for Liberation

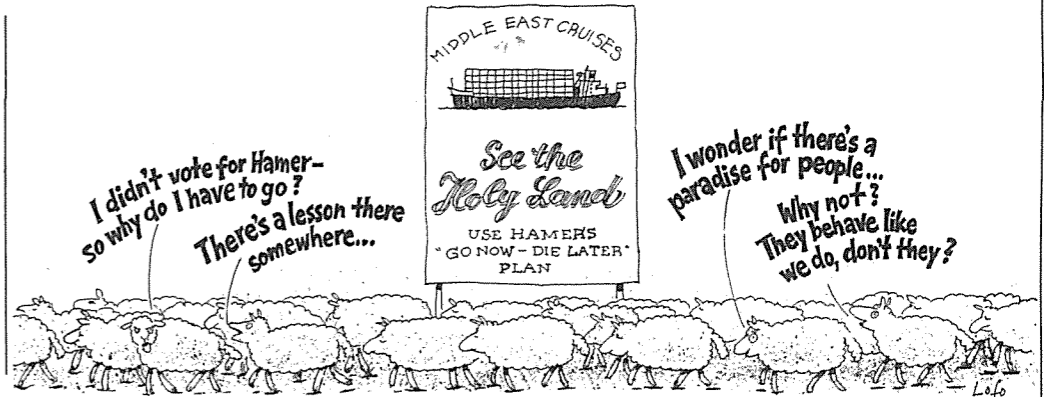
The Seventh National Homosexual Conference for Lesbians and Homosexual Men is to be held in Adelaide on the weekend of 29, 30 August 1981. The conference has the theme 'Fighting for our liberation in the 80's'. Some of the workshops that have been recommended are: Gays and Racism, National

Organisation of the Movement, Gay Lawyers Network (Fund), Disabled Gays, Child/Adult Relationships.

Action: For more information about the conference, fund raising, travel assistance and registration, write to Homosexual Conference Collective, GPO Box 244, Adelaide, South Australia 5001.

No cents from Hamer

We have been told that the Royal Society for the Prevention of Cruelty to Animals, when seeking state funds to keep their operations going were recently told by Victorian Premier Rupert Hamer that they would not get "Sc" if they did not drop their opposition to live animal exports.

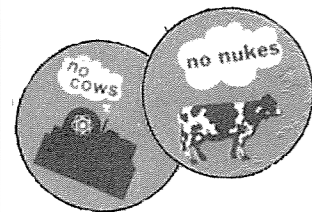


EARTH NEWS

Radioactive fertilizer

Atomic wastes from the Kerr-McGee Nuclear Corporation in Oklahoma are reportedly being used to fertilize cattle feed.

Kerr-McGee's Sequoyah facility, a plant which con-



verts uranium ore into uranium hexafluoride for processing as nuclear fuel, generates approximately 32.8 million litres of radioactive waste each year. The nuclear firm has been using the waste from the uranium reprocessing - a water sludge called raffinate, which has a high nitrogen content - to fertilize grass used as cattle fodder. Barium chloride is added to the raffinate to reduce radioactivity before it is stored in large concrete-lined holding ponds.

Kerr-McGee spokesperson Donna McFarland said, "For about five years we used the fertilizer to grow hay. It really increased the yield. Then in 1978 we introduced cattle onto the land to feed off the fertilized hay." McFarland claims tests on some of the slaughtered cattle gave the animals "a clean bill of health".

The Kerr-McGee Corporation is reportedly now planning to market the radioactive fertilizer commercially.

Ben Lomond South West stalemate

The French company, Minatome, has applied for a second lease at the Ben Lomond uranium mine site, near Townsville, for tailing dams, a yellowcake mill and other facilities. If granted it will cover more than 2,000 hectares.

A formal objection to the granting of such a lease represents the only channel available within the legal system to express opposition to the uranium mine. Predictably, however, Queensland's archaic Mines Act makes it virtually impossible for anyone opposing the Queensland Government to win. The Act allows the Minister for Mines to overrule any decision that the presiding Mining Warden may make. It also restricts arguments to legalities and a narrow definition of the effect of uranium mining. Nonetheless, the hearing is an important measure of the arguments against uranium mining and provides another forum for the arguments to be presented.

The Hearing proper commenced on 8 December with Minatome presenting eight witnesses. Time constraints forced an adjournment to 2 March 1981 when the case against the mine will be presented by an expected ten expert witnesses.

Legal Counsel for the anti-uranium case are contributing their services free of charge (the case has probably cost Minatome \$20,000 in legal fees) but administration costs and airfares are mounting up.

Action: Donations can be sent to the Townsville Regional Conservation Council, Post Office Box 364, Townsville, Queensland 4810. Telephone (077) 71 6226.

Tasmania's two Houses of Parliament are locked in a stalemate over the state's next power scheme: to be or not to be and which one?

In early November 1980, the House of Assembly passed a Bill authorising the construction of a dam on the Gordon River, above its junction with the Olga. In December, the Legislative Council caused a constitutional crisis by not only rejecting the Government's bill for a Gordon-above-Olga scheme but by amending it to authorise a Gordon-below-Franklin scheme.

The Labor Premier, Doug Lowe, will not have a referendum nor an House of Assembly election, nor will he resign or backdown on saving the Franklin; a stand to be commended. The Council have said they won't backdown, so the crisis may continue for months.

A Federal-State Inquiry might be a way out of the deadlock. An Inquiry was recommended by the House of Representatives Standing Committee on Environment recommended by the House of Representatives Standing Committee on Environment and Conservation in August 1980. By recognising the national importance of South West Tasmania, an inquiry would open the way for federal assistance to Tasmania through: incentives for energy efficiency schemes and alternative energy sources, subsidies for labour intensive rather than energy intensive industry and help for management of an enlarged South West National Park of World Heritage status.

More than my job's worth

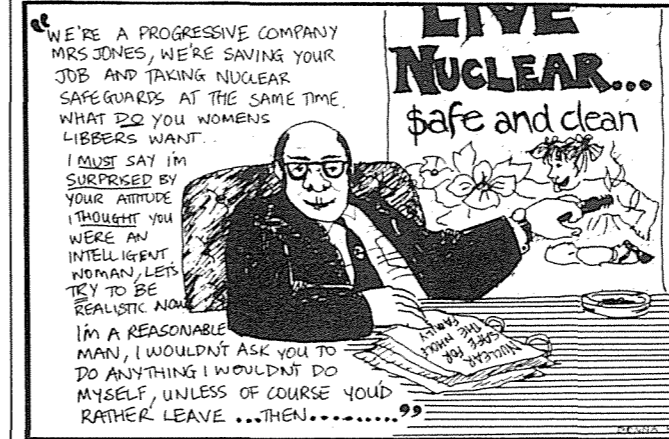
Anthony Mazzocchi, a director of the United States of America's Oil, Chemical and Atomic Workers Union claims that millions of women are under increasing pressure from USA industry to undergo sterilizations in order to avoid giving birth to defective children - defects caused by chemical exposure on the job.

Rather than remove dangerous substances from the work place, Mazzocchi said, companies are telling women to sterilize themselves. Those who refuse to do so either must accept lower-paying jobs or leave.

The union's health and safety director said that men are under similar pressure as new studies find that some chemicals are harmful to sperm as well. He said that if this trend continues, there is a real possibility that "neuter-

ing clinics" will be established for certain kinds of workers in the USA.

However, here was a sad and ironic ending in the case of the five women who were sterilized in order to keep their jobs with American Cyanamid in 1978. The company has shut down the section in which the women worked and all five have been transferred with complete loss of the departmental seniority and pay for which they had sacrificed so much. They are now on the lowest levels of their new departments. They would not have needed to be sterilized to work where they are now - a tribute to the callous cynicism of American Cyanamid, who face damages suits and a \$10,000 fine from the Occupational Safety and Health Administration.



Pentagon protest

On 17 November 1980, 115 women were arrested during a two day civil disobedience action held at the Pentagon in Washington DC. The action opposed military escalation and violence against women.

2,200 women gathered on 16 November for workshops on militarism, ecology, racism, health care, poverty, and violence against women. On the second day the women held a demonstration consisting of four phases: mourning, rage, gathering strength and defiance.

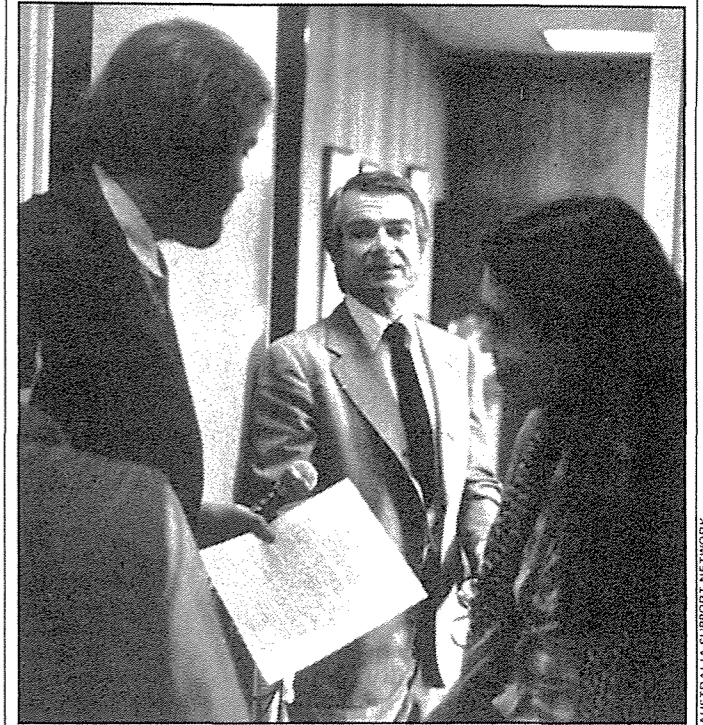
During the mourning phase gravestones were laid for victims of the American nuclear policy. These

included stones for Karen Silkwood, Vietnamese women and Harrisburg women who may die of cancer in twenty years time.

115 women were arrested while engaged in non-violent disobedience actions. They were clamped in leg irons in unseated buses and taken to a womens prison.

Some of the women have already been charged with 'obstructing entrance to a government building' and sentenced to ten or thirty days imprisonment. The rest have either been released on bail or have remained in jail in solidarity with those already sentenced.

Support for Portland



Winona La Duke (right) and Peter Hayes (left) delivering a protest note to the Australian Consul-General in San Francisco, Mr G V Brady, (centre), December last year. Winona and Peter were members of a delegation from a demonstration staged outside the Australian Consulate by the Australia Support Network a group sympathetic to Australian Aborigines. The note protested the annexing of Aboriginal Land in Portland, Victoria, by the Aluminium Company of America (Alcoa).

Winona, a member of the International Indian Treaty Council, said coming out of the Consulate, after the delegation was refused a full hearing, "I thought that the Australian Consul-General was the most patronising government official I have ever met. I've understood that they treat Aboriginal people the same way as they treat Indian people here, but that man would not listen to what we had to say."

The politics of food



of Friends of the Earth will use the day to focus on a number of food politics issues. They include women and food production, food and unions, agribusiness in Australia, food as a political weapon, and the marketing of infant formula in the third world.

The Food Justice Centre plans to produce booklets, videos and a travelling display on these issues. Help is urgently required in getting this project underway.

The Food and Agricultural Organisation of the United Nations has proclaimed 12 October, 1981 as World Food Day. The Food Justice Centre

Action: Contact Food Justice Centre, Friends of the Earth, 366 Smith St, Collingwood Victoria 3066. Telephone (03) 419 8700.



Members of the Melbourne Symphony Orchestra performing Yes We Have No Plans for Nuclear in the Musicians United for Safe Energy Options concert at the Kew Civic Centre, Melbourne. This was their second classical concert against uranium mining and nuclear energy.

Ranger now

Aerial view of the ore treatment plant for the Ranger uranium mine at Jabiru in the Northern Territory, about a sixth of the total operation. In the centre is the grinding building, the thickening tanks (centre foreground) are for leaching the ore.

This picture, leaked to Chain Reaction, shows an area about 2 km wide. The mining pit is separate.



EARTH NEWS

Some of our plutonium is missing...

The British television series *Panorama*, in a programme entitled 'Some of Our Plutonium is Missing' recently investigated several alleged incidents at the United Kingdom Atomic Energy Authority's fast reactor at Dounreay in Scotland.

They reported that in 1973 and again in 1977 fuel pins containing up to twenty five grams of plutonium disappeared from the plant's cooling pond. Despite a wide search neither pin has been found.

Then in May 1977 a high-active waste silo exploded, hurling a huge concrete plug into the air moments after a worker had left the area.

More recently eight men were engaged in handling reactor waste without being told it contained plutonium. Consequently they did not wear the crucially important respirators necessary to prevent them inhaling the metal.

The UKAEA puts these incidents down to "management" and "paperwork" errors, claiming that their significance has been exaggerated and that Dounreay's (published) safety record is good.

Panorama, however, questioned the credibility of these claims, pointing out that the UKAEA failed to report the plutonium waste incident to the Health and Safety Executive and has never made the general public aware of any of the above incidents.

How much do we know of what really goes on?

TRANSITION

Friends of the Earth in Sydney's new address is: 101 Cleveland St, Chippendale New South Wales 2008. Telephone (02) 6984114.

To the tune of \$7000



The Outlaws at CANE WA's Concert in the Sun held at the Fremantle Oval on 10 January.



It will be bigger next time... the Uranium Moratorium meeting, over the Australia Day weekend in Melbourne, decided to invite some 30 other trade unions, peace groups, women's groups and other organizations to join them in June, in Sydney, to form a new national anti-uranium organization, the Coalition for a Nuclear Free Australia.

Picture shows delegates Leigh Holloway, for Chain Reaction; Robert Griew, Canberra Peacemakers; Julie Cook, Campaign Against Nuclear Energy (Perth); Rein Albatross, Greenpeace (Sydney); Annabelle Newbury-Knight, CANE (Perth); Jan Phadke, CANE (Adelaide); and Pat Lowther, Friends of the Earth (Melbourne).

Earth News

We greatly need your contributions - concise, and with visual material. Write to the Earth News Collective, *Chain Reaction*, 366 Smith St, Collingwood Victoria 3066, Australia.

Ban Lomond

Telecom workers in Townsville have, by a 2 to 1 majority, decided to apply bans on supplying and servicing Minatome.

The Campaign Against Nuclear Energy in Perth is wearing a smile to the tune of \$7000 after its successful 'Concert In The Sun' on 10 January 1981. Four of Perth's top bands played to over 3000 people. In the line up were: Outlaws, The Riffs, David Warner and his band, and The Dugites.

The profits landed the movement on its feet to fight the anti-nuclear struggle in 1981. Some of the money will be spent on a renewable energy and energy conservation display for use in libraries and shopping centres. The rest will be used to oppose the issues that face Western Australia under the Court Government ie: uranium mining, a proposed nuclear power plant, a nuclear base at Cockburn Sound, and repressive legislation against civil liberties: the right to organize public meetings and heavy fines and imprisonment for impeding a government project.

Live and let die

Residents in a West Berlin neighbourhood were shocked one morning after reading a letter sent to them from local government authorities.

The notice, found in their mailboxes, asked Berliners whose life should be saved if there was a nuclear accident. It said that there were only 3,000 places available in a special nuclear shelter in a subway station, and that "to avoid a disordered distribution of places in the event of a disaster, we want to appropriate the available space now."

People were asked to name those worth saving, give a reason why, and send their suggestions to the Berlin government.

It turns out that the notice was a fake put out by a local anti-nuclear group. Police said it was forged and could easily have passed as an official release.

Source: Open Road, an international anarcho-feminist tabloid. A contact address for Open Road is: The Open Road, Box 6135, Station G, Vancouver, BC V6R 4G5, Canada.

And now... more readers

Two colour pictures on the cover of this edition of *Chain Reaction*, a sales campaign and a confidence that percolates through the magazine may give the impression that all is rosy for its future.

Oh, how we wish it were all that simple and encouraging! But, success for this magazine is to continue to be published. *Chain Reaction's* accounts still reveal huge problems. While a slide in sales has been halted, growth has, so far, been gradual. This is all part of a process which it is helpful for readers to understand.

Stage 1 of the re-launch of *Chain Reaction* was to re-organize the administration of the magazine, to ensure that people who subscribed actually got their magazine, to bring it out on time, and to have particular people with clear responsibilities for each area of the *Chain Reaction* work. That began in April last year. Stage 2, at the same time, was to bring out a brighter magazine - more clearly edited, crisper, easier to read. Advertising also had to be increased to bring in money to keep CR alive. All that has worked.

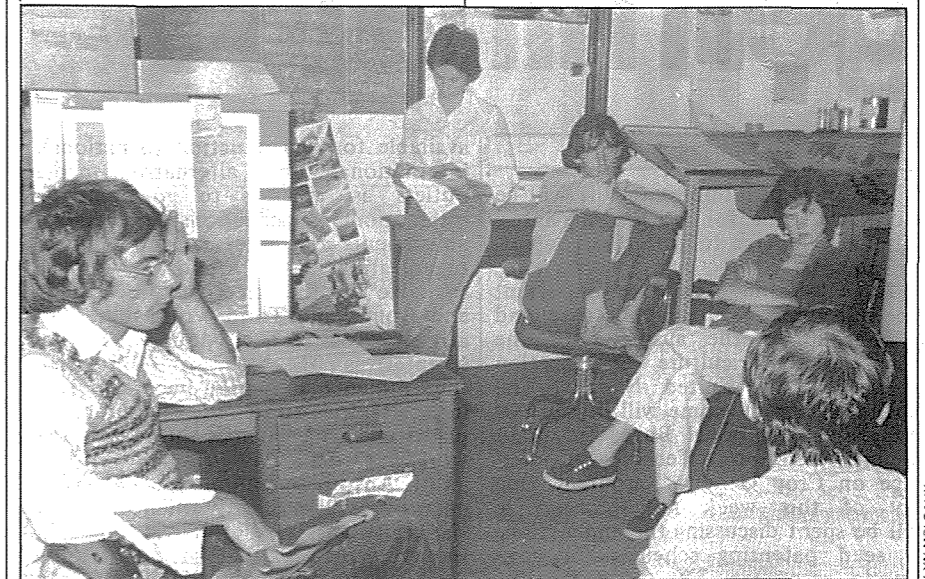
Now stage 3, the big challenge, is to increase sales. A number of steps have been taken, but many more remain ahead of us - and *us* includes the readers. Members of the *Chain Reaction* Collective, including the Editors, have travelled frequently over the past year to increase contacts with environmental and energy groups around the country. That programme of travel will continue - so we keep up a flow of articles from far and wide, so we know what is happening in Sydney, Hobart, Perth, regional centres, etc. This magazine must maintain constant links with diverse groups around Australia. It is not enough if the magazine is seen as just one from Friends of the Earth, it has a broader purpose and is open to wide use by community groups.

Newsagency distribution has weakened in the period prior to the re-launch of *Chain Reaction*. Now we are seeking a dozen underwriters to provide \$200 each towards getting us back on the news stands around Australia.

Leaflets are being printed for insertion in some periodicals and for general promotion of *Chain Reaction*, thanks to readers generous support for our Special Appeal for a subscriptions campaign. We have asked many environmental groups, and student newspapers, etc., to run advertisements for CR subs. Radio promotions are being broadcast on Melbourne community station 3CR and we plan to run them in other states.

Income for the magazine has gone up considerably over the past few editions, through increased sales, advertising and through the sponsorship of colour covers and major features by Friends of the Earth, other environment groups and unions. But, expenditure has been rising faster and a loss is still made on

BACKSTAGE



Chain Reaction Collective meeting - (from left) Bruce Scates, Candy Strahan, Richard Shelton, Linnell Secomb, Leigh Holloway.

each edition - clearly a situation which soon leads to extinction. The things that can save us are finding further sponsors, individuals and/or organizations who see *Chain Reaction* as an important and effective contribution to the discussion of energy and environment issues in Australia, and many more sales, through a rise in the number of members of every Friends of the Earth group and to other subscribers.

We appreciate that it takes time, but also know that if every reader of *Chain Reaction* were to successfully urge one more person to become a subscriber or Friends of the Earth member sales

would double. That is what has to happen for CR to be a sustainable effort. If you can get more than one individual, school, community group, company, union, library or whoever to subscribe please do so. It is the biggest contribution anyone can make to this magazine.

Leigh Holloway

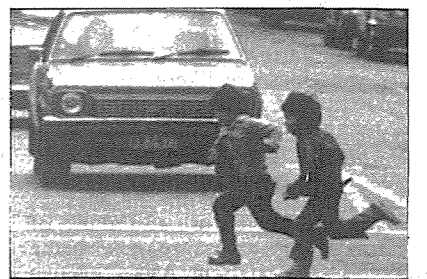
Rems, *Chain Reaction's* column on radiation - written by the Friends of the Earth / Doctors Reform Society Radiation Working Group - will appear again in the next edition of CR.

Chain Reaction

COMING SOON

SUCCESS

Lead free petrol is now to be introduced around Australia. *Chain Reaction* researchers in Sydney and Melbourne are preparing an analysis of this successful campaign. Read about it in our Winter edition.



ENVIRONMENT DEPARTMENT

The Australian Government's means of dealing with the environment - how is it working these days?

CONTACTS

A handy guide to energy and environment groups around Australia.

Seed issue germinates

By Mark Cole

The first six months of 1981 will be a critical period for the growing international campaign to stop plant patenting schemes.

In April and June two important meetings will be held in Rome and Nairobi under the auspices of the Food and Agriculture Organization (FAO) of the United Nations. The April meeting in Rome will be a FAO/IBPGR (International Board for Plant Genetic Resources) Technical Conference on Crop Genetic Resources. One day of this week long conference will be spent discussing the implications of seed patenting schemes for crop genetic resources. The June meeting in Nairobi is being billed as the "World Seed Congress" and FAO has described this meeting as a "Technical Conference" on improved seed production.

These conferences will be used by the big agribusiness and agrichemical seed companies to lobby Third World governments to create the necessary conditions for their activities to prosper even more profitably than at present. Certainly attempts will be made to influence Third World governments to pass legislation aimed at facilitating the growing hold of transnational corporations on the seeds business. Already 22 Third World countries have been lobbied by industry representatives or the Union for Protection of New Plant Varieties (UPOV). UPOV is an inter-government organization which promotes plant patenting legislation.

Both meetings are likely to at least be used as staging posts to 'help' governments to amend their rules and regulations concerning such matters as seed breeding and seed quality control.

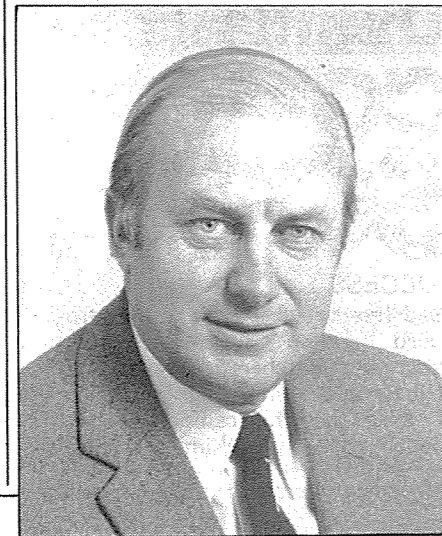
Alternative Reports on the world's seed trade and on the use and abuse of plant genetic resources are now being compiled by activists in Asia (through Alternative Research, Asia), Europe and North America (through the International Coalition for Development Action) and Australia (through the Food Justice Centre of Friends of the Earth). These reports will be made

Mark Cole works on seeds patenting issues at the Food Justice Centre of Friends of the Earth, Melbourne.

available for dissemination to national, international and alternative media outlets as well as to governments, international organizations, research establishments and peasants' and farmers' organizations. The reports will be available at the meetings in Nairobi and Rome, and Third World representatives will be actively lobbied by representatives of these groups fighting the influence of agribusiness concerns in the Third World and the spread of plant patenting schemes throughout the world generally.

In Australia the debate over seed patenting will intensify when the Plant Variety Rights (PVR) Bill is tabled in the Australian Parliament this coming Autumn session. Immediately after a meeting of all state ministers of agriculture in August 1980 the Federal Minister for Primary Industry, Peter Nixon, made a public commitment to table the bill and allow six months of public debate. However, in his recent announcements, Mr Nixon has simply stated "... and there will be public debate" without reference to a six month period. By June, the Liberal and National Country Parties coalition will not have a majority in the senate and it is unlikely that the proposed bill will be passed after the changeover of senators. This accounts for Nixon's apparent unwillingness to stick to his earlier promise.

Peter Nixon, Minister for Primary Industry



Attempts by Nixon to push the bill through before June may be of little avail. For the bill to be workable all states must pass complementary legislation which involves states contributing to the overall costs of the scheme. Only one state need refuse to co-operate with the Australian Department of Primary Industry and the entire scheme will be sabotaged. It was the combined efforts of the New South Wales and Tasmanian agriculture ministers at the last Agricultural Council meeting which led to Nixon's promise of six months public debate. Both these states should be able to keep Nixon to his word by using the threat to halt the passage of complementary legislation.

Strong opposition to the bill has developed amongst Australia's farming community. According to a poll conducted by *National Farmer* (11 December 1980) only 19% of Australia's farm community support the bill while 56% are opposed. The poll revealed that a majority of farmers in every state were opposed. A massive 68% of farmers believed that the major beneficiaries of plant patenting would be multinational chemical companies. Almost three-quarters of Australia's farmers (73%) believed that PVR would certainly mean higher costs for crop and horticultural producers. In a straight vote on whether a plant breeder who developed a special strain should have the right to benefit from a patent, farmers were about evenly divided, but on the question of whether they thought PVR would greatly improve the availability of new and productive crop strains the majority returned a strong NO.

Once again it seems the National Country Party in Australia has deserted its electoral base, to support the narrow economic self interest of transnational corporations.

In 1980 The Bureau of Agricultural Economics in Canberra initiated a study of the likely costs and benefits of a seed patent scheme. Sources within the BAE have informed *Chain Reaction* that there has been substantial disagreement between economists employed by BAE over whether or not the DVR scheme is desirable. It is highly likely that their final report to be published in April will be very non-committal. This

will be a 'smack in the eye' for the Department of Primary Industry which has strongly supported the concept. The Department of Primary Industry has itself prepared a paper for state ministers and the working party involved in preparing guidelines for the Australian scheme. The paper calls for a quick decision to be made on whether or not to proceed with the scheme and for agreement on a final set of guidelines.

As opposition to seed patenting increases and the chances of the Senate agreeing to any bill slip away as June approaches, the pro-PVR camp and their followers in government can be expected to make a concerted attempt to crush public debate and push the bill through the Autumn session of parliament.

One thing is sure, with different state ministers squabbling over the pros and cons of PVR and with industry representatives unable to agree amongst themselves over the content of the proposed bill, an enthusiastic, vocal and well organized public campaign should sound the death knell for PVR in Australia.

Associated with the extension of seed patenting around the globe is the increasing commercialization of the seed business. Since seeds have become patentable, they have become a profitable commodity within the agricultural cycle, which itself has become a big business enterprise. Chemical fertilizers, insecticides, high-yielding varieties and increasing mechanization are all part of a development process in which short-term spectacular gains manage to outweigh the longer term potential for irreparable damage to the genetic diversity in the world's agricultural system. The many reasons for alarm on the genetic front go hand in hand with negative developments in the sphere of social relations in rural areas. More food through a mainly production oriented strategy has not meant less hunger for toiling peasants in the countryside of the Third World.

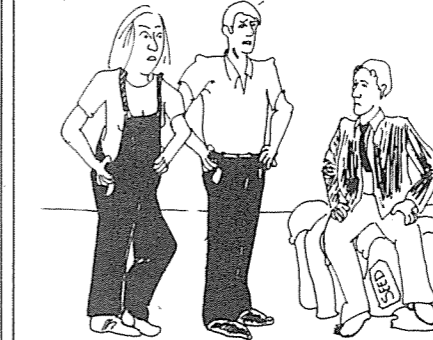
Large agribusiness, petrochemical and drug corporations, already active in agriculture through fertilizer, insecticides and equipment production, are now heading fast to dominate seed breeding and distribution.

They can then go a long way towards dictating what crops should be grown, what inputs will be required and how/where the products will be sold.

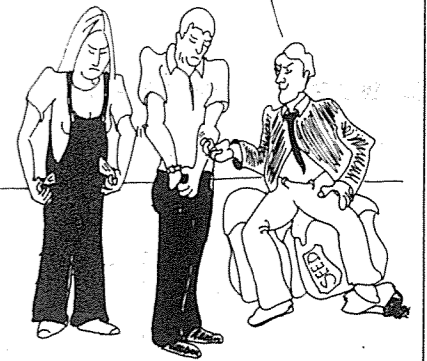
The primary concern of such transnationals is not the development of poor peoples crops - lentils, chickpeas, cassavas, etc. - but the development of large acreage export oriented plantation crops, such as rubber, pineapples, palm oil, soybean, cocoa and rice.

The agrichemical companies have already established their own seed banks and they are highly secretive about their activities on this front. This secrecy means that plant breeders

Why do seeds need to be patented anyway



Royalties, Royalties

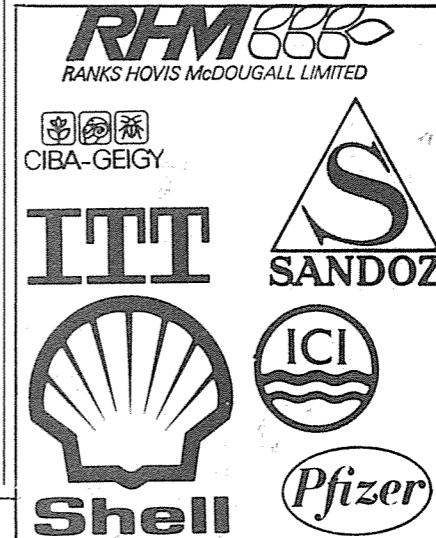


"In closing, I would like to leave you with this thought. One way to ensure that a farmer pays attention to the agronomic needs of a crop is to sell him expensive, high potential seed. Planting expensive seed has a psychological effect far greater than the monetary value would indicate, in ensuring that the seed receives adequate nutritional and other inputs"

John G. Herbett
General Manager & Director, Pacific Seeds (owned by Continental Grains who control much of the world grain trade).

in the Third World countries are barred from access to resources which came from their own countries in the first place. Third World countries are also being asked to pay royalties for seed developed from wild and traditional seeds which originated from within their own borders.

Corporations buying up seed companies



WHY OPPOSE SEED PATENTING IN AUSTRALIA?

In Australia seeds are a public resource. Anyone can grow, multiply, sell or exchange seed of any plant variety. A PVR scheme challenges this principle. Seeds become the private property of organizations and individuals who have the right to determine how/where the seed is sold and to charge farmers and growers a royalty fee to use it.

Seed patenting effectively allows large corporations to control seed production and sales. Large petrochemical and drug corporations have used PVR type legislation in Europe and in the United States of America to dominate seed sales and engage in oligopoly pricing.

Germ plasm, the basic seed used in breeding programmes is hoarded by these corporations; exchanges of seed and scientific information slow down. The uniformity encouraged by patenting requirements make crops more susceptible to pest and disease attack. As the sale of patented seeds becomes more profitable, private industry becomes more involved. Public plant breeding is curtailed and subordinated to the needs of the private sector. Private sector breeding work is concentrated on 'cosmetic breeding' paying most attention to the cheap development of patentable crops. Most funds go into marketing and advertising. Very little work goes into risky, long term innovative research. For more information see feature stories in *Chain Reaction* Vol 5 No 3, CR No 21 and *Earth News* in CR No 22.

ACTION: Readers may like to write to their State Minister for Agriculture and the Federal Minister for Primary Industry insisting on six months public debate.

More information on seeds patenting can be gained from the Food Justice Centre, Friends of the Earth, 366 Smith Street, Collingwood, Victoria, 3066 - telephone (03) 419 8700. The FJC can supply a list of groups around Australia active on these issues.

Chain Reaction will also be continuing extensive coverage of the controversy.

RAIN FOREST

Australia's rainforests are magnificent ecosystems, threatened by severe logging programmes. The efforts to protect them are now being stepped up by a wide range of environmental groups. These special reports for *Chain Reaction* outline the national situation, with particular focus on New South Wales.

Kathie Rea and **Tim Darling** prepared these reports from information provided by **Brian Guilfoyle**, Assistant Director of the National Trust of Australia (New South Wales), **David Allworth**, Convenor of the Australian Conservation Foundation's Land Management Committee, **Peter den Exter**, President of the North Coast Environment Centre, **Peter Prineas**, Executive Secretary of the National Parks Association of NSW, **Jeff Angel**, Co-ordinator of the Rainforests Action Centre, **Jim Somerville**, Vice President of the Colong Committee, **Ian Penna**, Forestry Project Officer for ACF and **Allan Catford**, NSW Liaison Officer for ACF.

THE MOST COMPLEX TERRESTRIAL ECOSYSTEM

Rainforest is the most complex of the world's terrestrial ecosystems, occurring in areas of high, well distributed rainfall and lacking in extreme cold spells. It is generally a very dense vegetation forming a closed canopy 20 to 45 metres from the ground. This protects the forest floor from sun, wind and temperature extremes and allows a varied growth of small shrubs, vines, mosses, lichens and fungi. The variety and extent of forest floor growth and the entwining vines and trees will often make a rain forest impassable.

The diversity of rainforest flora and fauna is such that while it covers only 10% of the world's surface, almost a half of the world's species can be found within the total environment.

The broad structure and major characteristics of rainforest are the same worldwide. However, the separation and movement of land masses, occurring through continental drift, has resulted in evolution of local types. Thus Australian rainforests contain distinctly native flora and fauna and are *not* 'exotics'. Very specifically, they exhibit characteristics peculiar to Australian climatic conditions. These are primarily as a result of



LEO MEIER



RAINFOREST IN AUSTRALIA'S EASTERN STATES

annual water stress (shortage), which gives rise to the occurrence of both deciduous and sclerophyll species in some Australian rainforests. Very little research into rainforest ecosystems and the effects of disturbance upon the ecosystem has occurred anywhere. The lack of understanding of rainforests has meant that there is no single accepted method for this classification. This in itself creates problems: forest management bodies often adopt extremely broad definitions which both over estimate the amount of rainforest remaining and allow the exploitation of 'mixed' rainforest types, normally those containing sclerophyll species. Conservationists and researchers argue that no rainforest exploitation should occur until rainforests are more clearly understood and defined.

In Australia the definitions most often used to cover rainforest types are tropical, sub-tropical, temperate, and dry temperate (see map). However, studies of structural characteristics have delineated twenty broad types, any of which may exhibit variation in species of plants and/or animals in different climatic altitudinal zones. Therefore, the location and extent of each rainforest type needs to be defined before management policies are determined.

At present the major reason for rainforest exploitation is as a source of timber. Such exploitation has already resulted in drastic reduction of world rainforest areas. Other non-destructive uses, or potential uses, of rainforest include: retaining topsoil and regulating run-off, particularly for urban water catchment areas; producing minor products such as resins and gums; providing a source for biological production of prescription drugs; maintaining gene pools and ensuring continuation of many flora and fauna species; providing research areas for better understanding of ecosystems and species development; and maintaining representative ecosystems in pure form for future reference.

None of these important uses will be possible if present day management of timber extraction is allowed to continue the destruction of rainforests.

FORESTS & POLITICS IN NEW SOUTH WALES

The future of a significant portion of the remaining rainforests in New South Wales could be determined this year. The Environmental Impact Statement on Washpool

State Forest, prepared by the Forestry Commission of NSW, strongly favours logging. The closing date for submissions concerning the Washpool EIS is 2 March, and conservationists will be focusing around this issue in the coming months. The Terania Creek Inquiry report and the Hastings Valley EIS will be released later this year.

Environmentalists consider that less than a quarter of the rainforest area existing at the time of European settlement survives today. The greatest threat to the remaining rainforest in NSW is logging. Washpool (the last major coachwood forest in the world), Terrania Creek, the Mount Boss area in the Hastings Valley and Grady's Creek Flora Reserve in the Border Ranges are all subject to logging proposals. The major conservation bodies in NSW seek an end to logging in these areas, and call for them to be transferred to the National Parks and Wildlife Service.

Sixty percent of the rainforests are controlled by the Forestry Commission. Only about 22,000 hectares are included in the State's system of National Parks and Nature Reserves; that is less than ten percent of a total of 300,000 ha. The remainder is privately owned.

So the future of much of the state's rainforest will be governed largely by the policy of the Forestry Commission. The Commission's present policy is to phase out general purpose rainforest logging subject to existing commitments. The catch is that practically all remaining rainforest under the FC's control is committed to the mills and extensive logging. The 'phasing out' may not occur until all rainforests have been logged.

An accurate assessment of the amount of remaining rainforest is unknown. While the FC's estimates there is 300,000 ha, conservationists suggest that the figure could be as low as 150,000 ha, and that only about 100,000 ha remain untouched by loggers. The discrepancies in these estimates result from the definitions used, with the FC defining 'rainforest' in the best interests of the timber industry.

The FC estimates include land which once supported rainforest, but which may now be degraded farmland. While the Commission over estimates the amount left in the state overall, it excludes from its definition rainforest which also includes Brush Box emergents. Thus the Commission denies that the 70 ha of Terania Creek it proposes to log is rainforest. Similarly the FC states that less than 25% of Washpool Forest is rainforest because like Terania Creek it has hardwood emergents which tower over the rainforest canopy. The Commission's motivation in redefining 'rainforest' is not hard to find; by playing down the rainforest element, it hopes to tone down public objections to its logging proposals.

The Commission's behaviour in relation to the Terania Creek Inquiry and the Washpool and Hastings Valley studies has led to great dissatisfaction with the Commission among conservation groups. Although the environmental impact study at Hastings Valley is not completed, logging in the area has not been halted. This directly contravenes government policy which states that an EIS must be completed before any development can proceed. The Commission is not complying with the policy requirements imposed on it, and Neville Wran's Cabinet is allowing the Commission to flaunt the environmental safeguards it introduced.

Conservationists, including Murray Wilcox QC, President of the Australian Conservation Foundation, have called for a public inquiry into the Commission.

Environmentalists sought to co-operate with the Terania Creek Inquiry but have become thoroughly dissatisfied with the way the Inquiry has proceeded over the last fifteen months. It has become increasingly formal, restrictive and legalistic to the extent that Dr Len Webb of the CSIRO Rainforest Unit was prevented from criticising aspects of the Commission's decisions on the grounds of his alleged lack of expertise.

The Commissioner of the Inquiry, Mr Justice Isaacs,

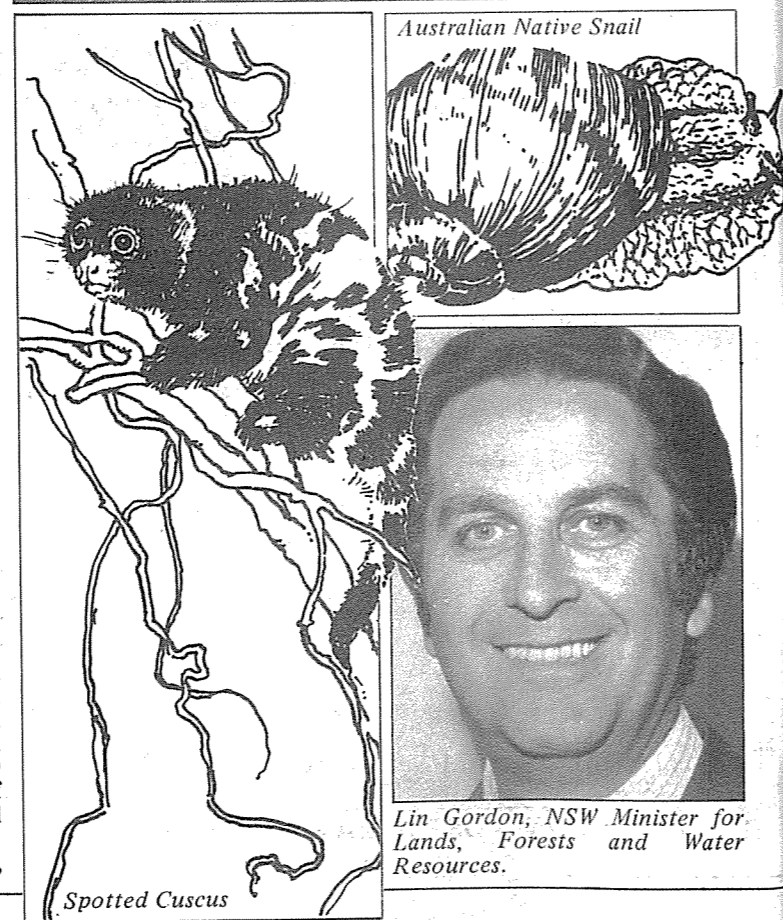
interpreted the Inquiry's terms of reference very narrowly, and has excluded as 'irrelevant' discussion of such matters as reforestation, National Park proposals and the suggestion of assistance to sawmills in order to utilize alternative supplies of timber.

The Washpool EIS is at best grossly inadequate. It devotes nine pages to discussing the logging alternative and only two to the other suggested uses of the forest.

Little attention is given to Washpool's importance as a wilderness area, and no fauna study has been carried out by the Forestry Commission. Peter Prineas, Executive Secretary for the National Parks Association of NSW, considers that an adequate wildlife survey would take four or five years to complete.

The Forestry Commission as the 'determining authority'

Coombadjha Road at Viper Scrub.



Spotted Cuscus

Drawings by LIZ HONEY

Australian Native Snail

Lin Gordon, NSW Minister for Lands, Forests and Water Resources.

Slender Tree Frog.



A load of logs passes picnic facilities established in a stand of rain forest reserved from logging, on Mt. Boss State Forest

is responsible for advertising and adjudicating the EIS. Thus it is empowered to make the final decision, but environmentalists are urging the Planning and Environment Commission to review the issue, hoping that its Minister, Eric Bedford, will take the matter to Cabinet.

The Commission has not announced how it will proceed after the 2 March deadline for submissions on the EIS. The Rainforest Action Centre has not made a submission as organizers believe their time will be better spent strengthening public opinion against logging. Along with other conservation groups, the RAC is calling for a public inquiry into Washpool.

Jeff Angel, Co-ordinator of the Centre, notes that the EIS shows that hardwood loggers don't need Washpool for at least ten years, and that alternative rainforest timber north of Washpool would last at least two years. "There is plenty of time", he comments, "to develop alternatives." These include reforestation, the use of regrowth timber, technical assistance to rainforest mills to switch to alternative timbers and the diversion of pine sawlogs from Bathurst. Jim Somerville, member of the wilderness group, the Colong Committee, has presented the Bathurst alternative in a submission to the Forestry Commission. He suggests that the Commission offer financial assistance to one or more of the mills at Washpool to relocate at Bathurst where vast amounts of timber will become available by 1988.

Associated Country Sawmillers, the timber industry's lobby group, ran a six week television and press campaign in November-December 1980 to put the case for logging. Along with the fallacious claim that logging is actually beneficial to rainforests, the ACS's chief tactic was to cry "unemployment".

Statistics on Australian forest trends released by the Australian Conservation Foundation demonstrate the hypocrisy of the ACS in claiming that it is concerned about unemployment. Sawmillers, with their eyes fixed firmly on their profit margins, are introducing new technology and amalgamating their mills, putting people out of work. In the last decade, during which log output increased by 17%, the number of people employed in felling and extraction activities dropped by 34%.

Alternatives to rainforests, a soon to be expired resource at the present rate of felling, must be embarked upon soon to avoid future unemployment. Reforestation programmes would create immediate employment, while the alternatives to rainforest logging discussed above would provide jobs well into the future.

The decision on Washpool and rainforest logging generally in NSW will depend on how much pressure is applied on the Government and by whom. The timber industry is asserting itself strongly, and environment groups are placing emphasis on lobbying politicians. They are urging the wide section of the community that is opposed to logging to voice their opposition by writing Premier Wran, other members of the NSW Parliament and to the newspapers.

In the majority of Australian Labor Party branches there is strong support for the protection of rainforests, but Ministers Lin Gordon and Don Day (the member for Casino in the heart of the North Coast timber industry) represent a small but strong pro-logging faction. Don Day refers to the Washpool EIS as "a statement of intention" to log, and is determined to see that logging goes ahead because of its importance to the people of his electorate. However the conservationists in the ALP say that the party would be prepared to sacrifice Day's seat over the issue. The Government's term ends early in October but the State election could be held sooner. The decision on Washpool may be held over until after the election.

NATIONAL

Australian rainforest extends discontinuously from Cape York down the lowlands and highlands of the East coast to Tasmania, rarely extending more than 150 kilometres inland (see map). There is a further small pocket of rainforest in the North West of the Northern Territory.

At the time of European settlement rainforest covered 1%, or 8 million ha of Australia. Today, accurate figures of how much is left are not available but most estimates range between a quarter and one third of the original amount, ie: 2 million to 2.67 million ha. Of this perhaps half has been previously logged or damaged by adjacent land usage, so the total amount of virgin rainforest may be as little as one million ha. Very little of what remains is protected within National Parks or Wildlife Reserves and most is on Crown land and available for logging.

Queensland contains more rainforest than any other state. Since settlement it has been destroyed by timber extraction and the clearing of the land for farming. Virgin rainforest has been destroyed to such an extent that the Queensland Department of Forestry admits that "the private cut of rainforest is now almost negligible, and the Crown cut is also likely to decline as logging operations progressively move from virgin to recut areas".

Rainforest in Queensland is important for two unique reasons. As the dominant heavy vegetation along the North Eastern coast, it's top soil retention and control of run-off ensure that minimum silt is allowed to carry downstream and kill off areas of the Great Barrier Reef. The rainforest areas in the North act as a barrier to the spread of agricultural diseases from South East Asia.

At the moment concern is focused on two significant rainforests; the Daintree - Bloomfield Rivers area and the Mt. Windsor Tablelands.

Victoria contains small pockets of rainforest, mainly in East Gippsland. These are under threat from wood chipping proposals but are already extremely vulnerable to fire and wind damage as the adjacent land is mostly cleared. The Native Forest Action Council is opposed to the logging or woodchipping of any Victorian rainforests.

Tasmania contains 400,000 ha of rainforest. Most of this is located in the North Western area of the state. All forest

areas in Tasmania, indeed it would seem all natural areas, are threatened by the policies of the relevant managing body. Tasmanian forest management is extremely wasteful and the Government receives the least payment per forest unit in Australia. Once a rainforest area has been cleared it is normally burnt and resown with faster re-generating eucalypts. More areas of significant Huon Pine rain forest will be flooded by the proposed second dam on the Gordon River, and it is this major threat that is currently being challenged by Tasmanian, and mainland, conservation groups.

RESCUE THE FORESTS

The Australian Conservation Foundation sees the preservation of Australia's remaining rainforest areas as a major conservation priority for 1981. A campaign has been launched to save rainforest areas around Australia under the theme "Rescue the Rainforests".

Already funds have been allocated to a study on the fauna in the Washpool area, preserving Mt Windsor Tableland, financial assistance to the Rainforest Action Centre and National Trust activities, and the Cape Tribulation Community Council. Leaflets are being individually mailed to all 10,000 members and TV ads are planned. In the future posters and postcards will be widely distributed for campaign use.

- Interested people are urged to write to the Premiers of NSW and Queensland urging the preservation of rainforests.
- Each monthly newsletter of the ACF will contain background information on the rainforest issue on a state by state basis.
- Public meetings are being held in NSW and Victoria on Tuesday March 17

Further information: Australian Conservation Foundation, 672B Glenferrie Rd, Hawthorn Victoria 3122, ph (03) 819-2888. Donations over \$2 are tax deductible, please indicate if you want it to be spent on rainforest activities. Australian Conservation Foundation (NSW) ph (02) 27 1497.

CONTACT GROUPS

Queensland:
Queensland Conservation Council & Environment Centre,
147 Ann St,
Brisbane. 4000.
telephone: (07) 221 0330 or 221 0188.

Cape Tribulation Community Council,
Private Mail Bag 1,
Mossman. 4873.

telephone: (070) 56 5219 or 53 2833.
Townsville Regional Conservation Council and Environment Centre,
Ground floor T.H.A. building,
819-821 Flinders St.,
Townsville. 4810.

telephone: (077) 71 6226.

Tasmania:
Tasmanian Wilderness Soc.
C/- Tas. Environment Centre,
102 Bathurst St.,
Hobart. 7000.
telephone: (002) 34 5566.

Victoria:
Native Forest Action Council,
Environment Action Centre,
118 Erroll St.,
Nth. Melbourne. 3051.
telephone: (03) 329 5519.
Australian Conservation Foundation,
672B Glenferrie Rd.,
Hawthorn. 3122.
telephone: (03) 819 2888.

NSW:
Rainforest Action Centre,
C/- Total Environment Centre
18 Argyle St.,
Sydney. 2000.
telephone: (02) 27 4714.
The National Trust of Australia (NSW)
Observatory Hill,
Sydney. 2000.
telephone: (02) 27 5374 or (02) 27 9471.

Australian Conservation Foundation,
C/- Total Environment Centre,
18 Argyle Street,
Sydney. 2000.
telephone: (02) 27 1497.
Native Forests Action Council,
C/- Canberra and South East Region
Environment Centre,
Childers St. Buildings,
Kingsley St.,
Acton, ACT. 2601.
telephone: (062) 47 3064.
North Coast Environment Centre
Hyde St,
Bellingen. 2454.
telephone: (066) 55 1535
National Park Association of NSW,
C/- Environment Centre (NSW Pty Ltd)
399 Pitt St.,
Sydney. 2000.
telephone: (02) 267 7722 or (02) 267 7446.

More tonnes of sand

Interest is rising about plans for sand mining on Moreton Island, 35 kilometres across Moreton Bay from Brisbane. Liz Bourne and John McCabe of the Queensland Conservation Council supplied reports for *Chain Reaction* which have been edited by Andrew Kelly.

As with Fraser Island and Cooloola before it, the issue at Moreton Island is sandmining and the fear of the devastating impact such an industry could have on the island's fragile environment. The publicity generated by the campaign to save Moreton Island from this threat is, in turn, creating another one - that of uncontrolled recreational use by the people who have flocked to the island in the last few years.

Leases for sandmining on the island have been held for the past twenty-five years, but they did not become an issue until 1975, when the Brisbane City Council, in a new town plan, proposed the majority of it for extractive industries (ie: sandmining). A record number of objections were lodged and the City Council reacted

by re-zoning the land open space.

In response to the public outcry, the Queensland Government commissioned an environmental impact study in October 1975. Two strategies were proposed: make all the island a national park or make most of it a park but allow mining on 6.4% of the island.

Using this study as a basis a public inquiry was conducted by senior public servants, late in 1976 and it recommended that mining, with strict environmental controls, be permitted on 6.4% of the island. This mining was to be completed by 1990.

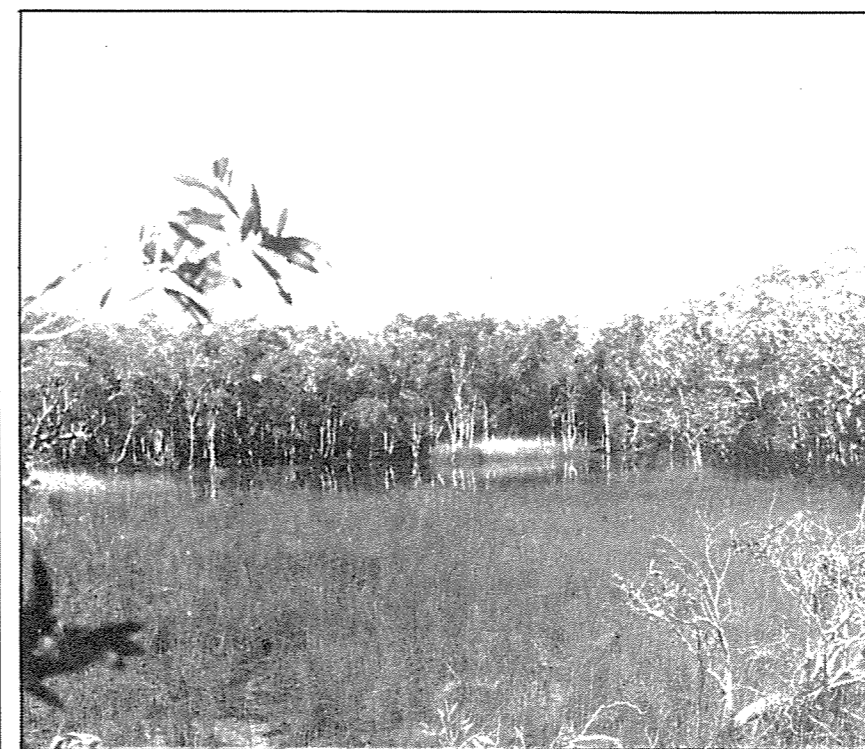
Rather than accept the recommendations of the inquiry, the State Government established an interdepartmental committee to review its findings in June 1977. After three and a half years, the committee has been unsuccessful in coming up with a recommendation acceptable to the Government.

Publicly the Government claims that no decision has been made on Moreton Island; privately the Government has been behaving in a different fashion. It is apparent that they believe that some mining, at least, is desirable. Thirteen leases granted for the island were due to expire in 1977, 1979 and 1980. The Mines Minister, Ron Camm,

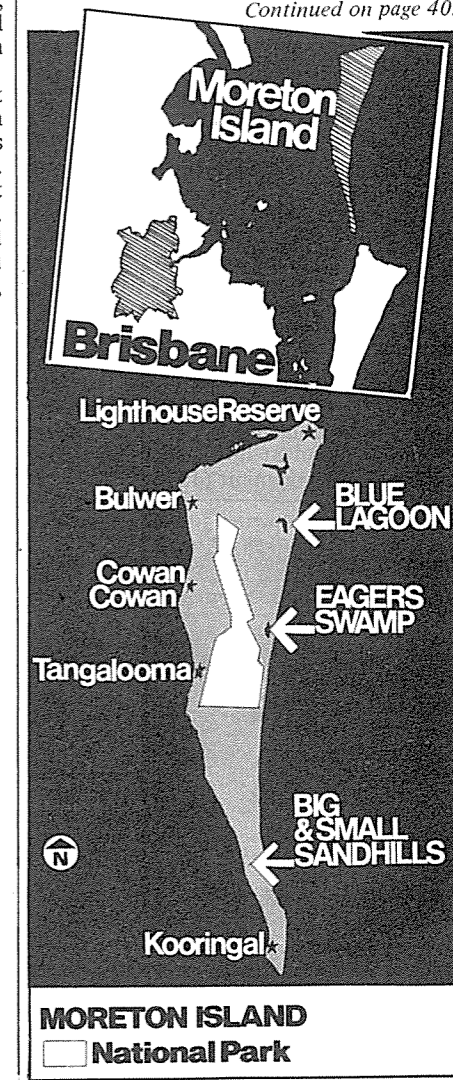
renewed all licenses for periods from five to twenty-five years. Despite the Inquiries recommendation that they should not be renewed. His successor, Victor Sullivan, renewed a further lease due to expire on 30 November, the day after the State elections. Because of changes to the Mines Act in 1979 lease renewals can be granted automatically by the Minister and therefore there is no avenue for the public to formally object. By renewing these licences the Government has greatly restricted its options and strengthened the miners case for compensation should a decision be made to limit mining.

Sandmining interests have been openly calling for the mining of up

Continued on page 40.



Mangrove Swamp, Moreton Island



CHAIN REACTION map by Mark Carter

Low point for highest waters

By Simon Balderstone

Spencers Creek is an alpine waterway which begins just below the highest point in Australia — the summit of Mt Kosciusko, in the Kosciusko National Park. But the creek, despite its position, has the dubious distinction of having had its waters ruled “unfit for human consumption” by health authorities because of sewerage pollution.

You see, the creek is in the midst of the ski resorts of the national park, and thus typifies the continual battle of priorities the New South Wales National Parks and Wildlife Service has in controlling the park and the activities pursued therein.

A team from the Service has recently completed a draft Plan of Management for the national park and it will be released in late March or early April for public comment. The final plan will eventually reach the Minister for Planning and Environment, Mr Bedford, for his consideration.

The draft Plan of Management is believed to contain the following recommendations:

- That accommodation at all but one of the established ski resorts in the park be kept at limits set in the last plan of management (1974).

- Three new ski run areas — with provision for essential services, lifts, etc, but with no overnight accommodation — be allowed to cater for the increased popularity of skiing.
- As a traffic-easing option, a mass transit transport system be operated into the ski areas, with a terminal down the valley, possibly near the Park entrance.
- Several huts near the summit be removed.

The one ski resort which will not be allowed to build up accommodation from its present level to the limit set in the 1974 Plan of Management is Charlottes Pass, at the headwaters of Spencers Creek.

Charlottes Pass has been the scene of some of the most reprehensible examples of ecological destruction in the park, such as, extensive soil erosion (which required urgent remedial works), the effects of nutrients from sewage treatment in Spencers Creek, and the damage to the David Moraine by electrical reticulation works and snow clearing.

Another example, a savage reminder of the possible consequences of resorts in national parks, was a major oil spill in the winter of 1979, when 4000 litres of heating fuel flowed into Spencers Creek.

The draft Plan of Management is liable to put an ultimatum to the pro-

prietors of the Charlottes Pass resort; if the resort proves to be environmentally destructive, its lease may not be renewed in 2015. There is fair warning of this in the NPWS Planning Issue Statement on Resort Areas.

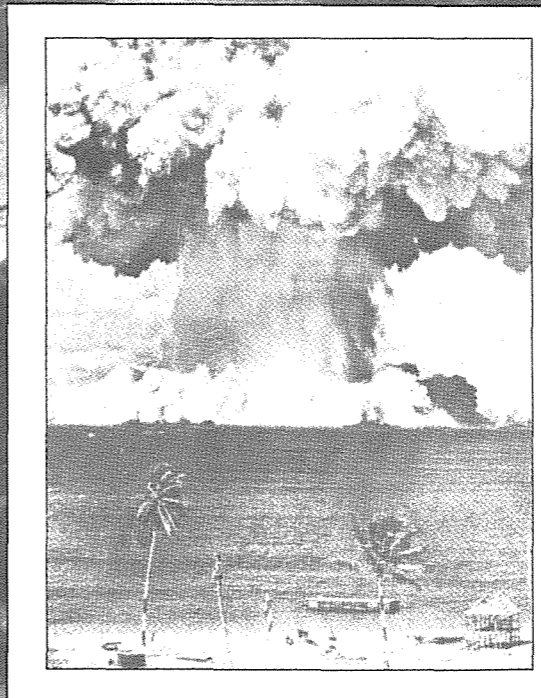
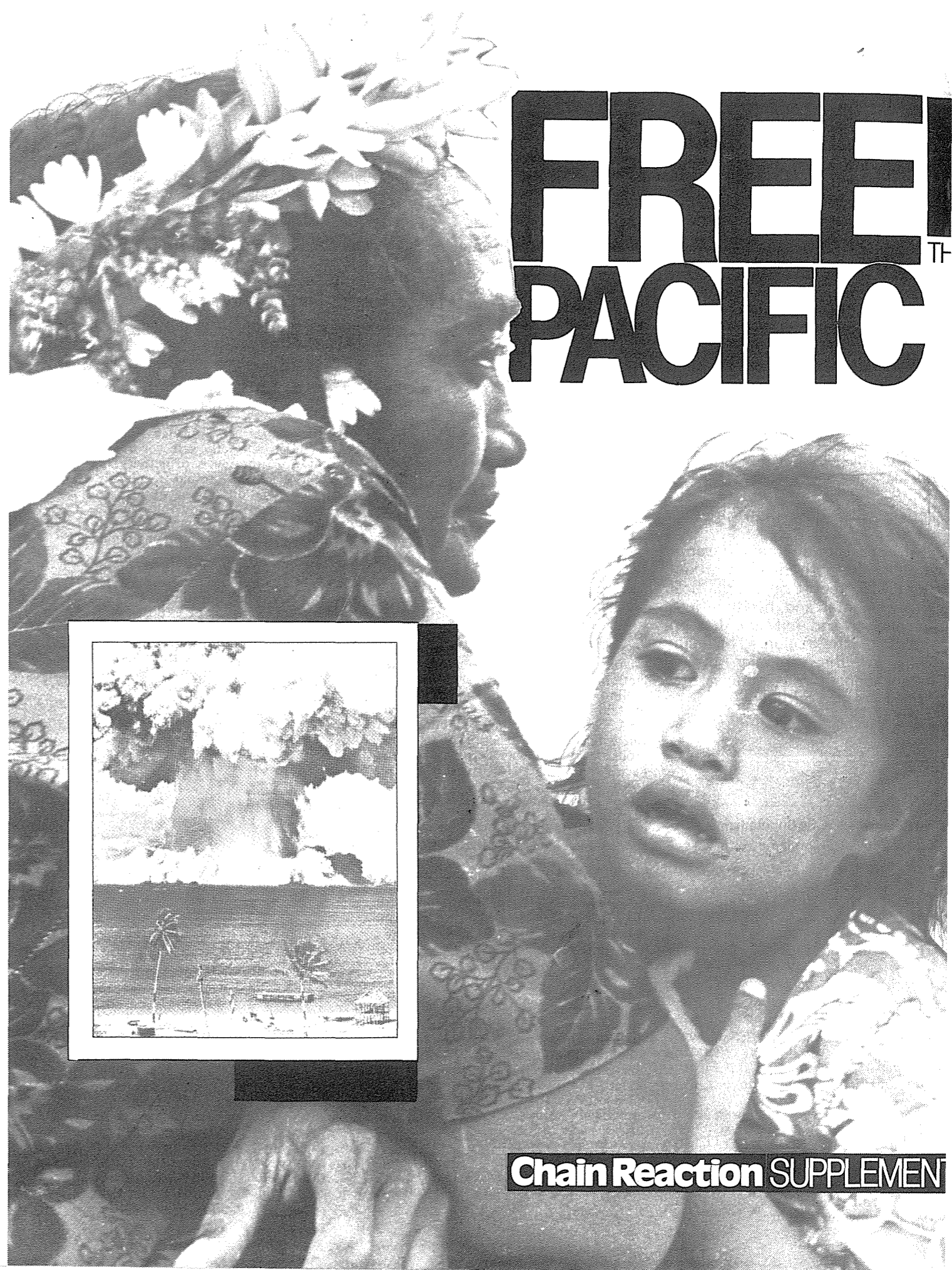
“... Because of the area’s important nature conservation values, a careful and critical evaluation of future management options will be made before any decisions are taken regarding extending or renewing any leases. The preferred long term option is to phase out all developments” says the statement.

The NPWS is particularly forthright on Charlottes Pass because of past events, and, now, the proof that the area is a habitat of the endangered mountain pygmy possum. It is not so forthright with the other major resorts, and, of course, once the Plan hits the Minister for Planning and Environment, proprietors of the big ski resorts such as Thredbo (Lend Lease) and Perisher (Kerry Packer) will pile on the pressure, and, if past experiences are anything to go by, may well be partly successful. Until four years ago there was no public vehicular access into Perisher, but suddenly cars were allowed in, and Mr Packer now has a 1,500 capacity car park as part of his resort. Lend Lease have mammoth plans that if successful will double the size of

Continued on page 40.

Simon Balderstone writes for the Melbourne Age from the Parliament House gallery in Canberra.

Dam building on Spencers Creek to stop the flow of oil pollution. June 1979



Chain Reaction SUPPLEMENT

The Pacific people have suffered a long history of oppression. The days of 'blackbirding' involving the use of islander slaves on Queensland canefields have been replaced by a less blatant but no less insidious political and economic powerlessness.

The Australian Government, through its involvement in Pacific organizations and through its aid policy, helps maintain Pacific Island dependence on the major powers in the Western World. Australia will soon sell uranium to France. France continues to test nuclear bombs on Moruroa Atoll in 'French' Polynesia against the wishes of the people. And Australia is negotiating a uranium trade agreement with Japan despite the Japanese plan to dump nuclear waste in the Pacific. All Pacific nations oppose radioactive waste dumping in their waters.

In this special *Chain Reaction* supplement, writers from around the Pacific report on the political, environmental and health effects of nuclear and military developments in the region. The many levels of the campaign for an independent and nuclear-free Pacific are also outlined.

Chain Reaction

Nuclear-Free Pacific Supplement
Editor Linnell Secomb

Art Mark Carter, Martin Cole, Nick Maclellan, Patrick Nuzum, Rob Parry. Editorial Jeff Atkinson, Andrew Hewitt, Bess Secomb, Beverley Symons, Ann Wigglesworth.

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Supplement cover — Penrhyn Islanders in the northern Cook Islands. Photo: Rolf Heimann. 'Baker' atomic test at Bikini Atoll, July 1946. Source: Pacific Concerns Resource Centre.

Marshall Islanders put to the test

The USA nuclear testing programme in the Marshall Islands has had severe longterm health effects on the many people exposed to radiation. Darlene Keju reports:

HONOLULU, USA After a nuclear attack, can cities be made safe for people to live in again? At Enewetak Atoll in the Marshall Islands, the United States government has gained valuable information on its nuclear clean up capabilities and is hoping to prove what it couldn't at Bikini: that it is possible for people to move safely back to an area devastated by nuclear bombs. (See *Chain Reaction* 22 for more information on the three year \$USA 100 million clean up of the plutonium contaminated Enewetak Atoll.) The USA tested 43 nuclear bombs at Enewetak and 23 at Bikini, both small atolls in the Trust Territory of the Pacific Islands (Micronesia), from 1946-1958.

In 1969, the USA Atomic Energy Commission said "there is virtually no radiation left on Bikini," and declared the atoll safe for rehabilitation. Marshallese returned slowly during the early 1970's. In 1975, plutonium was discovered in the 100 people who were living on Bikini. In spite of the health risks that continued to develop, the 139 people on Bikini were not evacuated until late 1978, after many had received twice the maximum dose allowable in the USA.

On 1 March 1945, the USA tested *Bravo*, its largest hydrogen bomb at Bikini. *Bravo* was 1,150 times bigger than the Hiroshima atomic bomb which killed 100,000 people. It seriously contaminated Japanese fishermen aboard the *Lucky Dragon* fishing near Bikini, more than 200 Marshallese on the neighbouring atolls of Rongelap and Utrik and 28 Americans monitoring radiation on another atoll.

Darlene Keju, from the Marshall Islands, is a student at the University of Hawaii's School of Public Health, and she was an organizer of the Nuclear-Free Pacific Conference held in Hawaii in May 1980.

The Rongelap people were not warned about the test and within hours of exposure, they began to vomit and their skin itched terribly.

Despite their high exposure, they had to wait two days before being evacuated, while the USA scientists on nearby Rongerik Atoll were evacuated within 24 hours of the test. Later in March, many of the more heavily exposed Marshallese began to wholly or partially lose their hair and skin burns started to show on the necks, shoulders and feet of many people.

The Utrik people returned home in three months, but the Rongelapese had to wait three years because their atoll was too 'hot' for safe habitation. In 1957, government scientists said that "in spite of slight lingering radioactivity" Rongelap was safe for re-habitation. As the people returned, the USA scientists stated

"Even though . . . the radioactive contamination of Rongelap Island is considered perfectly safe for human habitation, the levels of activity are higher than those found in other inhabited locations in the world. The habitation of these people on the island will afford most valuable ecological radiation data on human beings."

Since 1964, more than 85% of the Rongelap children have developed abnormal thyroids, needing surgery. Furthermore, 50% of the exposed Marshallese suffer from thyroid problems as compared to about 3 to 4% among people in the USA. Most tragic of all, in 1972, Leko Anjain, who was only one year old when exposed to fallout on Rongelap, died of leukemia.



Bikini family waits for evacuation. These people now suffer severe health effects from radiation exposure.

In spite of the overwhelming health problems that began to develop, Atomic Energy Commission scientists consistently downplayed the possibilities of future health risks for the people.

Meanwhile, the Utrik people were also suffering from radiation contamination, but because their exposure was considered to be a small dose (less than 10% of the Rongelap dose) USA scientists continually assured them that they would have no health problems. But suddenly 22 years after their exposure, in 1976, the cancer and thy-



roid disease rate on Utrik increased to equal that of the more highly exposed Rongelap population.

While these health problems developed on Rongelap and Utrik, the USA Government has attempted to ignore a growing rate of illnesses on many other islands whose people were not evacuated at the time of the tests.

Birth deformities, still births and miscarriages are increasing among women from many of the islands, where people received both high and low level exposure.

People in the Marshalls feel it is time they got doctors independent of the USA Government to perform exami-

"Out of 406 people who live on Likiep Atoll there are documented reports that list nine women who have given birth to babies with severe mental retardation, one woman who had three 'strange' stillborn babies, one 'completely unrecognizable as human'. Also reported among women on Likiep were ten other babies who were not normal."
Micronesian Independent newspaper.

nations and provide treatment for their illnesses so that they get honest and adequate medical care. Up to now, however, the USA Government has blocked attempts by Marshall Islands leaders to bring independent doctors and scientists to the islands.

It has been written many times that the only interest the USA has in Micronesia is strategic. This is quite obvious in the Marshalls where the nuclear testing programme came before the health of and safety of the Marshallese people.

Biological time bomb

8,000 displaced Marshallese live on tiny, 24 hectare, Ebeye Island. Darlene Keju describes the overcrowding and insanitary living conditions which are the human price for improvements to USA missile accuracy.

HONOLULU, USA In 1964, the USA army evicted hundreds of Marshallese living on the many islands in Kwajalein Atoll to construct and operate its missile testing range. The Marshallese were moved to Ebeye, a small sand bar of an island located in Kwajalein Atoll. Approximately 24 hectares in size, it now has a population of more than 8,000 Marshallese, giving it a higher population density than New York City. Kwajalein, the world's largest atoll, has developed into the USA's most important testing site for nuclear weapons delivery systems.

The overcrowded living conditions, poor sanitary facilities and inadequate hospital has prompted Ebeye to be described as a "biological time bomb which could go off at any moment". Because the USA Army's Kwajalein Missile Range provides relatively high paying jobs, thousands of Marshallese have moved to Ebeye from their homes on other islands.

Few of the houses on Ebeye have running water or indoor plumbing facilities.

Indeed, a recent Trust Territory report said "As with the shortage of water, the lack of proper sanitary facilities is a major cause of the high rate of sickness on Ebeye. Additionally, foul odours and visible water pollution are part of the normal environment in which the people must live and work and the children must play".

Almost yearly, sicknesses such as influenza and diarrhea sweep the small island, claiming dozens of lives, mostly among the young children. Yet the Ebeye hospital is totally under-staffed and ill-equipped to handle the health problems, and Marshallese have difficulty gaining medical treatment at the excellent Army hospital on Kwajalein Island, just three miles away.

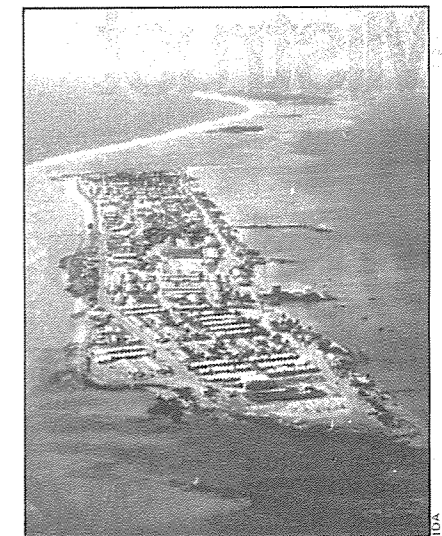
Moreover, Marshallese have only limited access to Kwajalein's excellent

sporting and recreational facilities, which include baseball fields, basketball, handball and tennis courts, swimming pools, a golf course, and free movies. In short, Kwajalein with its 3,000 Americans resembles a middle class USA neighbourhood. In order for Marshallese who live on Ebeye to enter Kwajalein, they must obtain a special permit, which requires that they be off Kwajalein by night or risk arrest.

Little concern on Kwajalein is shown for the extreme conditions on Ebeye. Dr Konrad Kotrady, after working in the Marshalls said "The Army's position was summed up to me one day when a high level command officer remarked that the sole purpose of the army at Kwajalein is to test missiles. They have no concern for the Marshallese . . ."

These problems and lack of adequate compensation gave rise to intermittent protests by the Marshallese, beginning in 1977, that at times halted missile tests and closed the base. Kwajalein landowners occupied their islands in the missile range, demanding compensation and access to "off limits" islands. Many of Kwajalein's 90 islands, dotted with radar tracking equipment, are in the danger zone during missile tests.

But despite the dangers, over 500 Marshallese occupied key islands in 1979 threatening to close the missile range which forced the Pentagon to negotiate a new lease agreement. The old agreement had paid some landowners \$USA10 an acre a year for 99 years use of the atoll — in a lump sum of \$750,000 in 1964. The new one year lease is paying the Marshallese



Ebeye Island, where the population density is higher than New York City.

more than \$7 million.

Although the occupation was a strong and militant stand on the part of the Marshallese, the USA government has done little to upgrade the living conditions on Ebeye. As the Trusteeship comes to an end in 1981 or



Roi Namur Island, Kwajalein. Part of the USA military base.

82, the USA government will turn administration of Ebeye over to the new Marshall Islands government. Still totally dependent on USA money generated from the missile range, the Marshallese are unprepared now to close the missile range for good.

Mistrust in trustees

Pacific Islanders are demanding strongly their right to economic and political independence. Giff Johnson explains the current situation in Belau as it attempts to become an independent nation.

HONOLULU, USA The new Republic of Belau (formerly Palau) inaugurated its government in January this year. But Belau's attempt to become a sovereign nation has brought strong opposition from the United States of America Government which has plans to use 28% of the limited land in Belau

for a jungle warfare training base and other purposes. Belau is located 800 kilometres east of the Philippines.

The people of Belau adopted a constitution that bars foreign use of their land, and conditionally bans entry of any nuclear material or weapons. Belau's 14,000 inhabitants have overwhelmingly supported the constitution (by 92%, 70% and 78% margins) in three separate referenda necessitated by USA refusal to accept the document.

At present, Belau is administered by the USA under a United Nations Trusteeship Agreement. But as political status negotiations between Micronesia

"In discharging its obligations the administering authority (USA) shall: . . . promote the economic advancement and self sufficiency of the inhabitants against the loss of their resources, . . . promote the social advancement of the inhabitants, and to this end shall protect the rights and fundamental freedoms of all elements of the population without discrimination; protect the health of the inhabitants . . ."

Excerpts from the United Nations Trusteeship Agreement for the United States Trust Territory of the Pacific Islands.

and the USA to end the Trusteeship continue into their eleventh year, the USA have added another demand to their original military plans for Micronesia: that the Micronesians cede the right of "strategic denial" to the USA "in perpetuity".

The Micronesians, however, do not support the USA demand.

Nevertheless, in November 1980 negotiators from Belau initialed the Draft Compact of Free Association, which includes a military "denial" clause valid for 100 years.

Also *The Washington Post* reported in November, "a side agreement . . . has been drawn up permitting normal deployment in the area by USA nuclear armed military forces and nuclear powered ships."

This agreement will be offered to Belau voters at the time of the referendum on the free association agreement. The fact that some of the Belauan negotiators did not support initialing the Draft Compact, and the overwhelming support for the constitution in Belau, suggests that any agreement proposed to allow United States military use of Belau will meet strong opposition.

Giff Johnson edits the Micronesia Support Committee Bulletin. He has travelled extensively in Micronesia and the Pacific and was an organizer of the Nuclear-Free Pacific Conference in 1980.

Low level facts

French Government secrecy, lies and repression are part of life in 'French' Polynesia. Roger Wilson examines nuclear testing and accidents and moves for independence in 'French' Polynesia.

WELLINGTON, New Zealand Make your first foray onto the streets of Papeete and two things immediately strike you. The first is the humidity. The second is the fact that the streets are clogged with cars, mopeds, the gaily-painted passenger trucks — but few pedestrians. Everyone, but everyone is motorised in some way or other.

The humidity cannot be attributed to the influence of the French in 'French' Polynesia. But the proliferation of the motor vehicle can be, and is just one of the many ways in which Western 'civilisation' has permeated the traditional Polynesian lifestyle. Some examples of this are relatively innocuous.

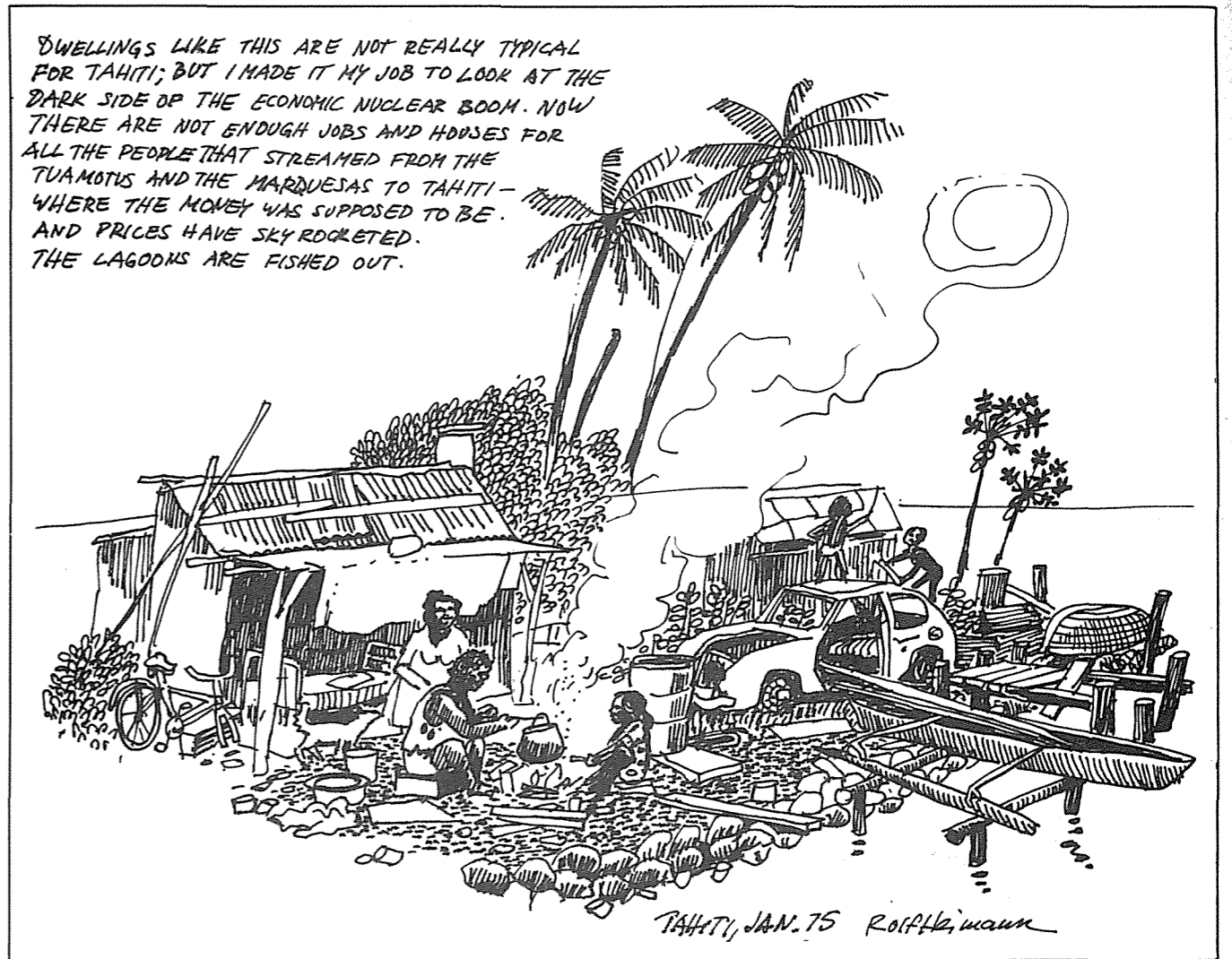
Some examples are not innocuous. The Australasian visitor must be struck by the vast military presence in Tahiti. Add to this the highly visible gendarmes and local police, and the somewhat less visible Renseignements Generaux (secret police) and there are the makings, if not the substance, of a highly efficient police state.

"But why?" one might ask. "What grand strategy makes it imperative for the French to maintain such forces over 15,000 km from the Metropole?"

The strategy is, of course, France's determination to hold the balance of power in any superpower conflict between East and West. The arrogance of the strategy is lost on the French mentality, as is its stupidity. But the political sensitivity of testing nuclear weapons on European soil is not lost. Hence the need for a far-off 'host' country with a compliant population who will acquiesce rather than try and fight against such heavy odds. In the

Continued on page 26.

Roger Wilson is National Organizer of Friends of the Earth in New Zealand. In October–November 1980, he spent eight weeks in Tahiti on behalf of Greenpeace New Zealand.



Rolf Heimann sailed around Polynesia after being in the most recent protest yacht to sail into the testing area near Moruroa Atoll. He now is an activist and cartoonist who contributes frequently to Chain Reaction.

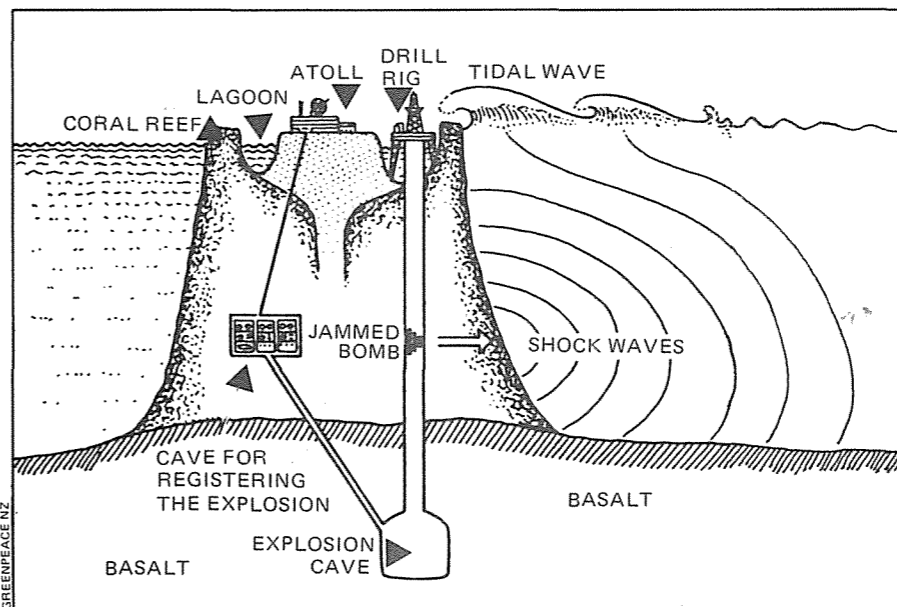
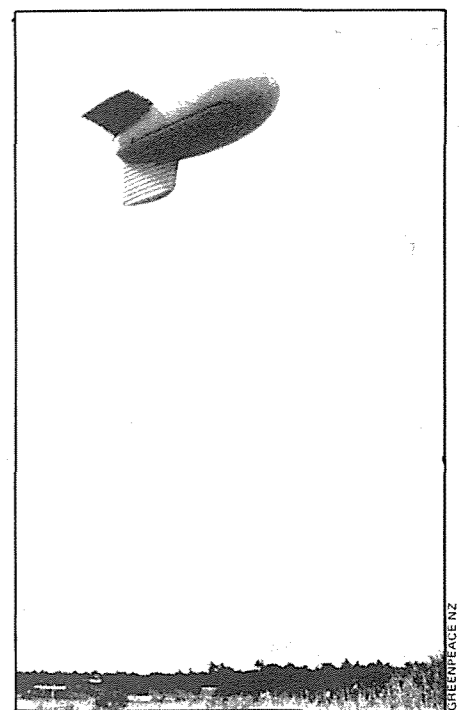







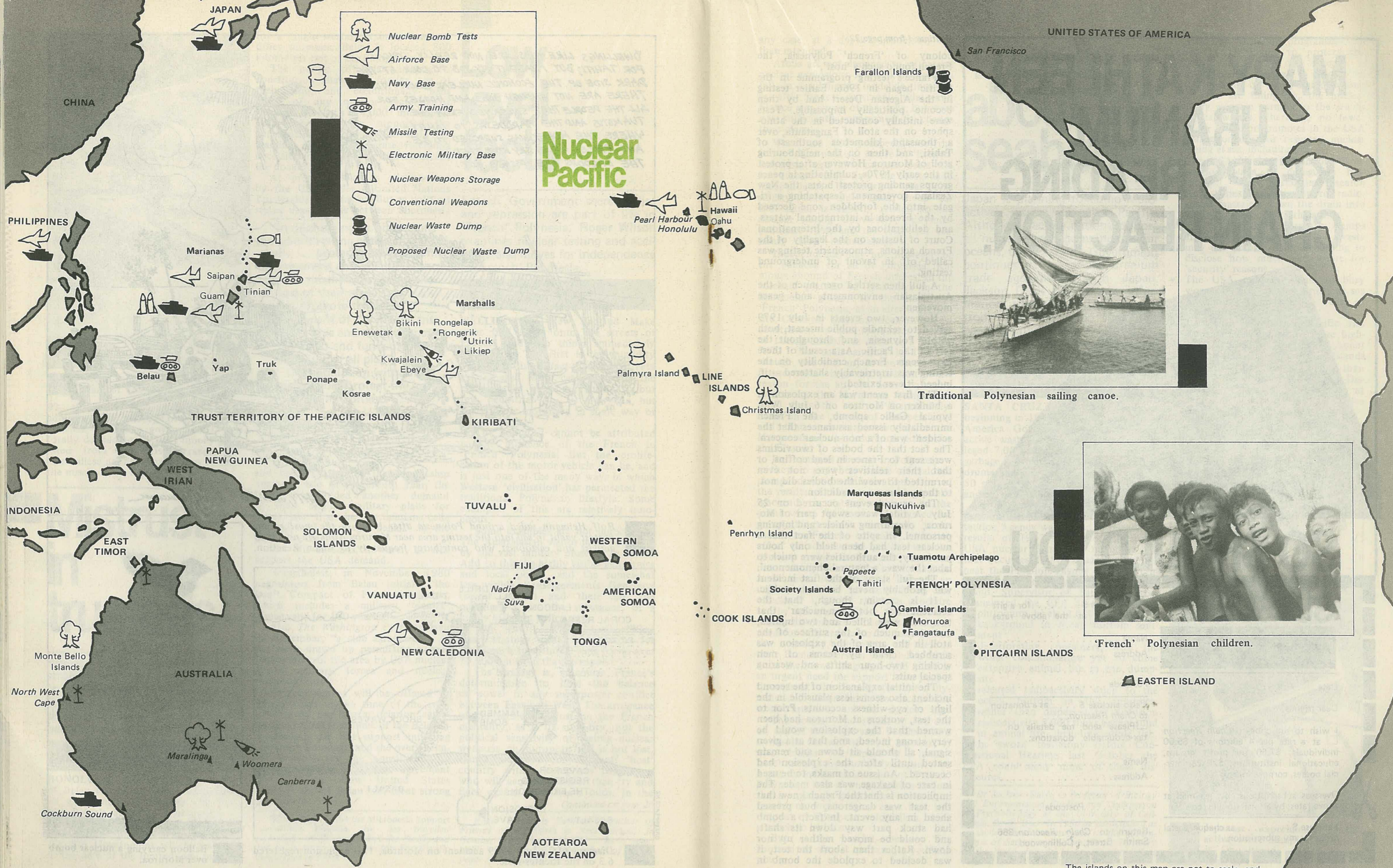
Diagram of 25 July 1979 accident on Moruroa. This explosion registered 6.3 on the Richter scale.



Balloon carrying a nuclear bomb over Moruroa.

Nuclear Pacific

-  Nuclear Bomb Tests
-  Airforce Base
-  Navy Base
-  Army Training
-  Missile Testing
-  Electronic Military Base
-  Nuclear Weapons Storage
-  Conventional Weapons
-  Nuclear Waste Dump
-  Proposed Nuclear Waste Dump



Traditional Polynesian sailing canoe.



'French' Polynesian children.

The islands on this map are not to scale, and are primarily those mentioned in the text.

MARY KATHLEEN URANIUM KEEPS READING CHAIN REACTION.



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Continued from page 22.

colony of 'French' Polynesia, the French found such a 'host'.

France's testing programme in the Pacific began in 1966. Earlier testing in the Algerian Desert had by then become politically impossible. Tests were initially conducted in the atmosphere on the atoll of Fangataufa, over a thousand kilometres southeast of Tahiti, and then on the neighbouring atoll of Moruroa. However, after protest in the early 1970s, culminating in peace groups sending protest boats, the New Zealand government despatching a frigate into the forbidden zone decreed by the French in international waters, and deliberations by the International Court of Justice on the legality of the French actions, atmospheric testing was called off in favour of underground testing.

A lull then settled over much of the Australasian environment and peace movement.

However, two events in July 1979 served to rekindle public interest, both within Polynesia, and throughout the rest of the Pacific. As a result of these two events, French credibility on the testing was irretrievably shattered - if, indeed, it ever existed.

The first event was an explosion in a bunker on Moruroa on 6 July. With typical Gallic aplomb, the French immediately issued assurances that the accident was of a 'non-nuclear' concern. The fact that the bodies of two victims were sent to France in lead coffins, or that their relatives were not even permitted to view the bodies did not, to them, seem a contradiction.

The second event occurred on 25 July. A tidal wave swept part of Moruroa, overturning vehicles and injuring personnel. In spite of the fact that a nuclear test had been held only hours previously, the authorities were quick to label the wave a 'natural phenomenon'.

The full story of the first incident will probably never be made public. It is certain, though, that the accident was not 'non-nuclear', that two men were killed and two injured, and that much of the surface of the atoll in the area of the explosion was scrubbed clean by teams of men working two-hour shifts and wearing special suits.

The initial explanation of the second incident also seems less plausible in the light of eye-witness accounts. Prior to the test, workers at Moruroa had been warned that the explosion would be very strong indeed, and that at a given signal, all should sit down and remain seated until after the explosion had occurred. An issue of masks, to be used in case of leakage was also made. The implication is that the French knew that the test was dangerous, but pressed ahead in any event. In fact, a bomb had stuck part way down its shaft, and could be moved neither up nor down. Rather than abort the test, it was decided to explode the bomb in

any case, at a depth considerably less than intended.

Atolls are not designed to withstand nuclear explosions. A chunk of Moruroa fell, in a submarine landslide, into the sea after the test, causing the tidal wave. France was aware of the risks, but were not sufficiently concerned to change their plans.

What are the prospects for the future? The political future of 'French' Polynesia and the nuclear tests are inexorably tied. End the tests and independence becomes a real possibility since the French need for the islands is directly related to the nuclear testing. Conversely, gain independence first, and the tests will certainly stop immediately.

Independence may not, however, be the panacea for all of Polynesia. Rumours abound of French interest in the volcanic plateau of Nukuhiva in the Marquesas group, to the north of 'French' Polynesia, as an alternative test site. Certainly there has been an airport constructed in the Marquesas capable of taking aircraft as large as a Boeing 747. No such aircraft land there, though, nor will any in the foreseeable future, which begs the question of the reason for the airport. Some commentators see the Marquesas being separated from the rest of 'French' Polynesia in the event of independence and that such major works in the Marquesas are an insurance policy for the French.

But rumours abound in Polynesia - as they do anywhere where officialdom clamps down on information. One of the results of this is an appalling public ignorance on matters nuclear - to the point where 'la bombe' is blamed for many things which are totally irrelevant. The French, naturally, make no effort to educate the public, since an ignorant public makes public opinion more easily discreditable. Education must come from others. There is an urgent need for information on the effects of low-level radiation exposure to be translated into Tahitian and widely disseminated. There is an urgent need for Polynesians to be reminded of the conniving, deception and lies of their French rulers on the nuclear issue - in their own language. And there is an urgent need for support from people throughout the Pacific for the Polynesians in their battle to escape the worst creations of the nuclear age.

The tourist who soaks up the sun on one of the white sand beaches, who swims in the almost tepid lagoons, or who cloisters her/himself in a luxury hotel room is most unlikely to gain even a glimpse of the sinister side of 'French' Polynesia. But if one scratches below the increasingly plastic and aluminium facade on one's foray into that last outpost of European colonialism, there is much to be learnt.

But - be careful, because Big Brother is almost certainly watching you.

They lie about the seabed

Japan is planning to dump radioactive wastes in the Pacific. Although Pacific nations oppose all nuclear waste dumping in their oceans, the Australian Government continues to negotiate uranium trade agreements with Japan. Jackson Davis reveals new information that shows that leakages from past USA dump sites have contaminated edible fish and that some dump sites are situated in prime commercial fishing grounds.

SANTA CRUZ, USA For 24 years beginning in 1946, the United States of America Government dumped radioactive wastes into the oceans. An alleged 7,000 curies of high-level nuclear garbage was packaged in used 250 litre drums and casually jettisoned at sea at 50 sites up and down both USA coasts and in mid-Atlantic and Pacific oceans.

After several years of incessant prodding the USA Environmental Protection Agency was forced to release the results of 1977 surveys of the major USA nuclear dumpsites, including one that occupies 12,500 square kilometres near the Farallon Islands off San Francisco. As scientific advisor to Quentin Kopp, Supervisor of San Francisco, I analyzed the EPA data and found:

- plutonium levels 2,000 times above background in ocean bottom sediment
- deteriorating containers, with the worst contamination yet to come
- extensive animal life in the dumpsite
- released radioactivity stuck to the ocean bottom in the dumpsite, rather than dispersed by diffusion
- radioactivity 5,000 times background in animal life, including edible fish.

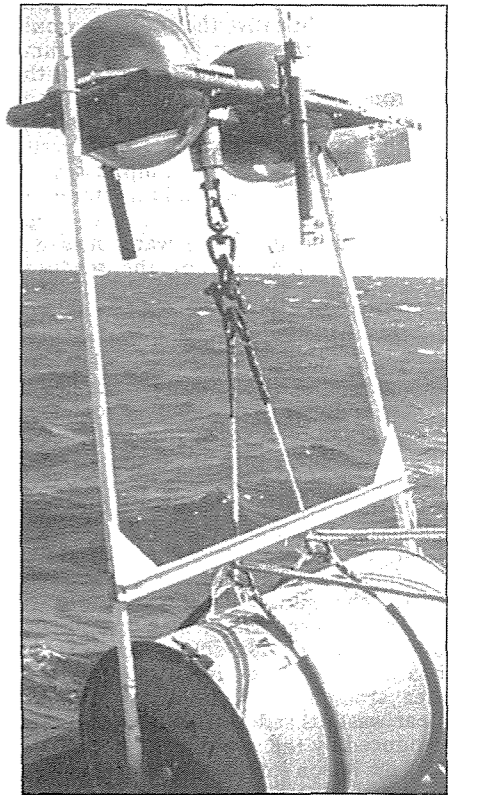
In sworn testimony before Congressional Hearings last October the EPA could deny none of these disclosures.

Dr Jackson Davis, is Professor of Biology and Environmental Studies and Chairperson of Psychobiology at the University of California, Santa Cruz. In 1980 he participated as an environmental consultant to the governments of Saipan and Guam (Trust Territory of the Pacific Islands) in a series of meetings on the Japanese dumping issue.

The USA seadump programme was ended in 1970 not to protect the environment but to save money. It simply became cheaper to dispose of nuclear wastes on land. But now that land sites are filling up, the nuclear industry is again turning to the sea to bury its wastes. There are no fewer than six active programmes in the USA involving ongoing or resumed nuclear dumping at sea, including

- The USA Nuclear Regulatory Commission plans to deregulate biomedical wastes, permitting research laboratories to pour more radioactive materials down the drain into sewers and hence into the sea.
- The USA military currently dumps alleged low-level radioactive waste into the oceans at will, refusing to disclose how much and where for 'security' reasons.
- The USA military wants to bury worn out nuclear submarines at sea by sinking them off the coast of California.
- The USA and other Pacific rim nations are planning to store high-level radioactive wastes spent reactor fuel - on mid-Pacific Islands.
- The USA has invested more than \$USA20 million in its Seabed Disposal Programme, aimed at depositing high-level radioactive wastes in the ocean floor.

Although the USA is the acknowledged leader in radioactive contamination of the oceans, Great Britain has



Japanese experimental radioactive waste dumping operation is monitored by a movie camera.

"There are only 90,000 people out there. Who gives a damn?"

Henry Kissinger.

dumped ten times more radioactivity at sea than the USA. But all past sea dumping programmes pale before the planned Japanese programme, scheduled to begin as early as September 1981. This would entail sea dumping of 100,000 curies per year indefinitely — more radioactive garbage annually than the USA claims it dumped in 24 years. The site of the planned dumping is the Pacific waters just north of Micronesia.

Why Micronesia? Henry Kissinger put it bluntly: "There are only 90,000 people out there. Who gives a damn?"

The Japanese Government has testified at length on the 'safety' of their programme, but their testimony and their documents reveal fundamental flaws in their evaluation of its safety. They have assumed, for example, that the massive quantities of radioactivity they plan to dump will disperse evenly in the entire Pacific Ocean and thus be diluted to 'acceptable' levels. In fact the Farallon experience shows that the released radioactivity sticks to the ocean floor in concentrated form, where it is eaten by animals attracted to the dumpsite.

The Japanese programme is not only scientifically flawed; it is illconceived on political, moral and economic grounds. Politically, the Japanese would have to carry out the programme against the unanimous wishes of the Micronesian people. Economically, the proposed dumping programme borders on the bizarre. All the low-level wastes Japan says it wants to dump at sea for the next two decades could be stored on the Japanese mainland in a single medium-sized industrial warehouse at a fraction of the cost of the seadump programme.

But there is a more sinister theme unfolding in the Japanese dumping programme, involving the USA. The USA is legally obliged to "protect the health and natural resources" of the Micronesian people by its United Nations Trusteeship Agreement, and yet has adopted a strict hands off policy with regard to the Japanese radioactive dumping programme. Why? The USA research vessel *Vema* has just concluded an extensive survey to assess the suitability of this area of ocean for disposal of high-level wastes by the USA. The chief scientist on board the *Vema* reported that the area studied could hold "all the nuclear waste that has been or ever will be produced by the world."

The lesson of the Farallon incident is clear: what we put into the ocean eventually returns to us in our food. The fate of the world's oceans, and we who depend on them, hangs in the balance.



Nuclear weapons being loaded on a helicopter for transport between military bases in Hawaii.

The Pacific armoury

The world spends \$USA450 billion per year on armaments. Jim Albertini outlines the development of a first-strike strategy within this arms race and its threats in the Pacific.

HONOLULU, USA The people, land and waters of the Pacific have become the victims of modern military experimentation.

Between 1946 and the present, more than 150 nuclear weapons were exploded in the Pacific by the United States of America, France and Great Britain. France continues to test its nuclear bombs in Polynesia, while the USA, and the Union of Soviet Socialist Republics and China test-fire their missiles in the Pacific.

Pacific Island people have always been considered insignificant and expendable by the major powers. Native lands have been confiscated, irradiated

Jim Albertini is a long-time activist for peace and justice and is co-ordinator of catholic Action of Hawaii/Peace Education Project.

and in some cases vaporized. Marine and land life have been poisoned. Island culture, economy, language — every fabric of life — have all been militarized and topped with a legacy of cancer for present and future generations.

Trade in weapons quintupled between 1969 and 1979 and there are no signs of this trend reversing. With a booming weapons business the outcome in the Pacific is clear and predictable. Political control of island communities will inevitably increase to suppress opposition to the growing militarization.

Another development in the overall militarization process is renewed cold war rhetoric and major increases in big-power military expenditures to protect vital interests and to maintain or expand spheres of influence. Hawaii is perhaps the classic example of what is to happen to more and more of the Pacific and the world if the militarization process is not stopped. Within the Hawaiian Islands there are now upwards of 100 USA military installations and there are more than 3,000 nuclear weapons stored and readied for use. Yet, the people of Hawaii are given no information or decision making power. Even accidents involving the release of radioactivity from nuclear weapons are considered top secret. It seems to matter very little that such accidents could pose a serious threat to the health and safety of people and the environment.

Over 20 million litres of radioactive liquid waste have been discharged by USA nuclear-powered submarines in Pearl Harbour and more than 2,100 drums of radioactive solid waste have been dumped on the ocean floor 83 kilometres from Hawaii's shores.

Especially grave developments which have disastrous implications for the

Pacific and the world involve new superpower policies regarding the use of nuclear weapons. These include the use of nuclear weapons against non-nuclear powers and in limited nuclear wars between nuclear powers. Potential targets in the latter situation could well be remote Pacific bases far from the concentrated population centres of the powers involved.

Perhaps the most chilling of all military developments is the move toward first-strike attack by one superpower upon the other. This is nothing but madness. The shift away from nuclear deterrence towards first-strike is a major step toward global suicide. It makes nuclear confrontation between the USA and the USSR hair trigger, increasing the risk of a global holocaust. The world is being carried from the policy of nuclear deterrence where neither superpower dares fire its weapons against the other, to a first-strike confrontation where neither side dares not to be the first to press the doomsday button.

The Pacific is far from the concentrated population centres of the USA and the USSR but it is where much of the first-strike action is. Here in the Pacific we are where the nuclear submarines, nuclear warships, and aircraft operate. We are also where the first-strike support structures are located. In effect, we are becoming the prime targets of a first-strike nuclear attack.

All Pacific Island and Pacific rim countries whose governments play host to big power military systems have become expendable pawns in first-strike nuclear war plans.

The issues of a nuclear-free, independent, and oppression-free Pacific are closely connected. The people of the Pacific must refuse to let themselves be turned into first-strike pawns. For us this means a nuclear-free Pacific.



Representatives from Trade Union Movements around the Pacific met in Fiji to establish the Trade Union Forum which will work for an independent and nuclear-free Pacific.

Pacific trade unions unite

Recently trade unions around the Pacific met to discuss their contribution to the Nuclear-Free Pacific campaign. John Halfpenny reports on their decisions and proposals for action.

MELBOURNE, Australia Trade Unions from countries in the Pacific region have joined together to co-ordinate their policies and actions in support of a Nuclear Free Pacific.

Representatives from Trade Union Movements in Fiji, Japan, New Zealand, Hawaii (USA), New Caledonia, Vanuatu, Kiri bati, Australia and Guam met in Nadi, Fiji, during November 1980 and declared

"The Pacific region has borne the brunt of the nuclear age.

John Halfpenny is the Victorian State Secretary of the Amalgamated Metal Workers and Shipwrights Union. He is the Interim Convenor of the Pacific Trade Union Forum.

All aspects of the nuclear industry — military, reactors, waste disposal, and uranium mining — pose an imminent threat to the Pacific countries and their peoples.

Because of this threat we declare our determination to campaign for a Nuclear Free Pacific."

Establishment of the tentatively named Pacific Trade Union Forum marks an important step in the move towards broader and more active regional co-operation amongst trade unions.

The Forum will be formally launched at a conference to be held in Port Vila, capital of Vanuatu, from 28 to 31 May, 1981.

The Nadi meeting endorsed a number of proposals for co-ordinated activity including

- Trade union deputations to Japanese, USA and French Embassies in each country to protest against proposals to dump nuclear waste, continued nuclear testing and deployment of nuclear arms in the Pacific.
- Approaches to all governments in the Pacific region to seek support for the aims of policies of the Forum on nuclear issues.
- An investigation to establish the possibility of a consumer boycott on selected Japanese, USA and French products widely used in the Pacific.

The Nadi meeting was opened by Fiji's Minister for Labour, Industrial Relations and Immigration, who said

"I see the question of nuclear proliferation is high on your agenda. It is also high on the priority list of governments and individual citizens of this region. I stand here to speak as one human being sounding an alarm — and expressing profound disquiet."

The Governor of Hawaii, George R Ariyoshi, sent a message of support to the meeting. Part of the Governor's message said

"Certainly one of the most crucial issues facing those of us who consider the Pacific Ocean our home, is the haunting prospect of it becoming an international dumping ground for nuclear waste."

The final declaration adopted by the Pacific trade unionists states

"Our determination to achieve a Nuclear Free Pacific is consistent with basic trade union objectives of concern for the welfare and well being of working people and their families.

This concern also compels us to recognize that problems and issues affecting the welfare and well being of members in one Pacific affect workers in countries throughout the region."

The campaign

In 1975, the first conference for a Nuclear-Free Pacific was convened in Suva, Fiji. This established a pan-Pacific movement for a nuclear-free and independent Pacific. Sandy Galazin reports on the third NFP Conference, held last year in Hawaii, and on the active campaign which has followed.

HONOLULU, USA The movement for a Nuclear and Oppression Free Pacific reached new heights of international solidarity in May 1980 in Hawaii during the third Nuclear-Free Pacific Conference. Perhaps the most notable action plan adopted at the conference was the establishment of the Pacific Concerns Resource Center. Simply stated, the purpose of the PCRC is to strengthen the Nuclear-Free Pacific movement and the efforts of the Pacific and Pacific rim peoples for self-determination. Also paramount among the actions was the opening of a second PCRC office in Vanuatu which facilitates communication and action between North and South Pacific peoples and issues. Smaller branch offices have been established in Belau (formally Palau) and Aotearoa (as Maoris term New Zealand).

The delegates have succeeded in raising over \$USA30,000 for PCRC for its first year of operation. Within the PCRC network, campaigns have been created around specific issues: RIMPAC (Rim of the Pacific military exercises); *Trident*, the USA nuclear powered and armed first-strike submarine scheduled for Pacific deployment in 1982; and independent medical and environmental surveys among Pacific victims of nuclear weapons testing.

With the aim of exposing the true situation of peoples and eliciting support, international solidarity days have been organized. In addition to 6 February, Waitangi Day; and 1 March, Nuclear-Free Pacific Day; other days scheduled for 1981 include: 14 July, Bastille Day against French colonialism;

Sandy Galazin currently works at the Pacific Concerns Resource Center office in Honolulu and was an alternate delegate to the Nuclear-Free Pacific Conference in 1980. She has been active in Hawaii with the leprosy patients struggle for land and self-determination.

24 September, in support of New Caledonians; and 28 November, focusing on East Timor and West Irian.

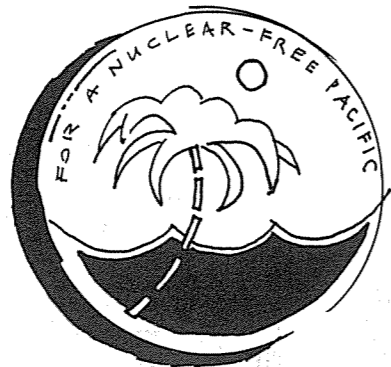
Other Pacific based organizations are also becoming active, including the Pacific Conference of Churches and the Pacific Trade Union Forum.

The Japanese government plan to dump 'low-level' radioactive waste into the Pacific has aroused a united opposition unparalleled in the history of the NFP campaign. Pacific peoples are saying "NO". Scientific analyses of past dumping in USA coastal waters has justified the alarm. A call for a petition campaign during mid-1980 resulted in 10,000 signatures gathered and delivered to Japan within a three week period. This was done in cooperation with activist groups in Japan. Pacific governments began plans to boycott Japanese products.

The current state of the Nuclear and Oppression Free Pacific campaign is one of hope, deepened resistance, and increasing solidarity. Wherever you are, there are ways for you to participate.

What You Can Do

1. Contact the groups active in your state (see contact list) for more information and work with them in the campaign.
2. Distribute information. This issue of *Chain Reaction* would be a good start.



3. Organize a public meeting in your area. The groups listed in the contact list would be happy to help and advise you. Speakers, literature and slides or films are available.

4. Write to the Prime Minister or Minister for Foreign Affairs, urging the Australian Government to
 - Oppose the Japanese plan to dump radioactive wastes in the Pacific.
 - Oppose French nuclear bomb tests in the Pacific.

Addresses - Malcolm Fraser, Prime Minister, House of Representatives, Canberra, ACT, 2600.

- A A Street, Minister for Foreign Affairs, Commonwealth Parliament Offices, 400 Flinders Street, Melbourne, 3000.

5. Write to the Minister for Trade and Resources urging Australia not to sell

uranium to the French Government. Address - J D Anthony, Minister for Trade and Resources, House of Representatives, Canberra, ACT, 2600.

Contact List - Groups Active on the Nuclear-Free Pacific

Australian Capital Territory
Canberra Environment Centre, PO Box 1875, Canberra City 2601. Telephone (062) 47 3064.

New South Wales
Association for International Cooperation and Disarmament, PO Box A243, South Sydney 2000. Telephone (02) 26 1701.

Northern Territory
Movement for a Non-Nuclear Future, PO Box 2120, Darwin 5794. Telephone (089) 81 6222.

Queensland
Campaign Against Nuclear Power, PO Box 238, North Quay 4000. Telephone (07) 221 01888.

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

Pacific Solidarity Group, 31 Addison Road, Black Forest 5035. Telephone (08) 297 6249.

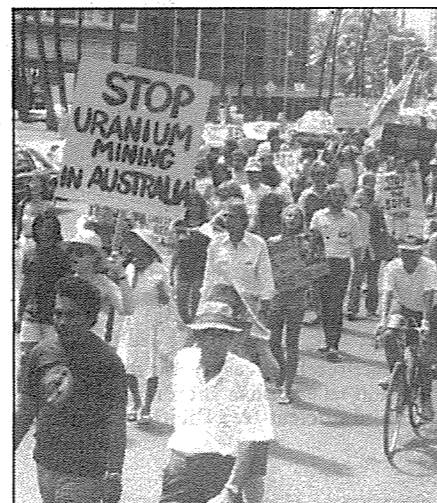
Tasmania
Movement Against Uranium Mining, 102 Bathurst Street, Hobart 7000. Telephone (002) 34 5566.

Victoria
Friends of the Earth, 366 Smith Street, Collingwood 3066. Telephone (03) 419 8700.

South Pacific Action Network, PO Box 328, North Melbourne 3051. Telephone (03) 41 6898.

Western Australia
Campaign Against Nuclear Energy, 537 Wellington Street, Perth 6000. Telephone (09) 312 5942.

1980 Nuclear Free Pacific Conference delegates marched to the French Consul in Hawaii to protest against the testings of two neutron bombs on Moruroa during the conference.



A case for whaling

Friends of the Earth's international efforts to stop commercial whaling are well known. In the end, Malcolm Fraser and the Australian Government supported an end to this exploitation in the world's oceans. But there are important human consequences from such actions and the Eskimo people of Alaska's Arctic region became unwitting victims of a complete ban. Members of the Alaska Eskimo Whaling Commission will be visiting Australia this April for the assembly of the World Council of Indigenous Peoples in Canberra. John Morieson reports.

The Inupiat of North Alaska have found new friends in Australia in their battle against the international powerplays which interfere with their subsistence lifestyle. The National Aboriginal Congress is supporting the Alaska Eskimo Whaling Commission in its fight with the International Whaling Commission which wants to end the Eskimos traditional relationship with the Bowhead whale.

For centuries and perhaps some thousands of years The Inupiat ("the real people") have depended on the Bowhead whale along with other dietary resources of the Arctic, including seal, caribou, fish, birds and the occasional bear. Most of the Eskimo's traditional supply of nutrients comes from meat because vegetable foods just don't grow in that climate the way they do here. Therefore when the International Whaling Commission imposed firstly a zero quota, then a quota of 12 whales (struck and killed) in 1977 there were enormous social consequences in the Eskimo villages dotted along the northern coast, and even for their relations in towns further away like Anchorage and Fairbanks.

Rosita Worl, an anthropologist at the University of Alaska, made a socio-cultural assessment of the impact of the IWC quota on the Eskimo communities at Barrow, Kaktovik, Kivalina, Nuiqst, Point Hope, St. Lawrence Island, Wainwright and Wales. She noted emotional responses which ranged

John Morieson, of Melbourne, has been working in North America on human rights and community organisation issues.

from anger, fear and frustration to disbelief.

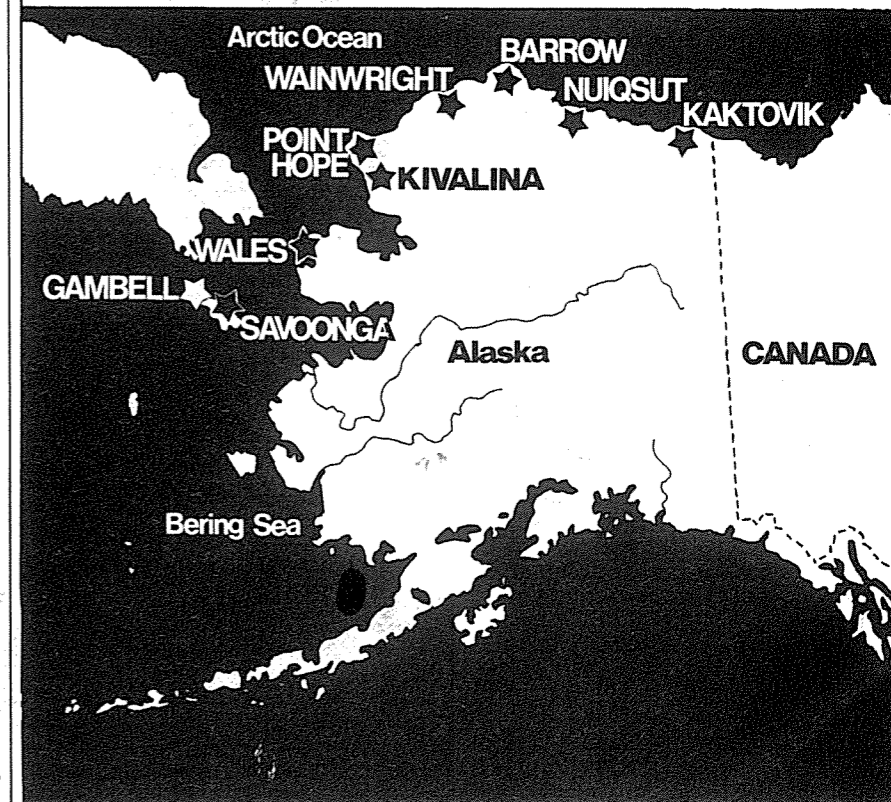
The most immediate response was fear of a food shortage, but equally as vital was the concern expressed about the survival of their cultures. Although the Inupiat have adopted innumerable western cultural elements they have drawn the line at their Bowhead whale complex. The inflated economy which seduces some Eskimos towards western ways will last only another twenty years, when the oil from Prudhoe Bay is expected to run out. Then the royalties cease, and if by then the Inupiat have lost their subsistence skills then an eternity of welfare dependence lies before them.

They stubbornly refuse to acquiesce to this boring and debilitating alternative. The Alaska Eskimo Whaling Commission was formed from among the whaling captains as a defensive organisation to represent Inupiat interests to the IWC to the government of the United States of America, and to the world. More recently the role has broadened to incorporate research on

the Bowhead which is really the responsibility of the USA government. Every year between 1972 and 1976 the Scientific Committee of the IWC had expressed concern and sought information on the Bowhead. Notice of this concern was not conveyed to the Inupiat whalers until January 1977. Even then the locals were not told that there was the remotest possibility that the IWC or any other entity would recommend a moratorium on a whale hunt centuries old.

Later in 1977 Eskimos from Canada, the USA and Greenland combined to create the Inuit Circumpolar Conference, specifically as a defensive reaction against incursions against their traditional culture and lifestyle. One important resolution concerned adequate game management programmes with provisions for maintaining subsistence resources including preservation of the right for Alaskan Eskimos to hunt the Bowhead whale. Other resolutions included; fulfillment of the 1971 Alaska Native Claims Settlement Act, establishment of homerule in

INUPIAT AND ST LAWRENCE YUPIK WHALING COMMUNITIES



Greenland, research and promotion of appropriate village technology, improvement of health care and guarantees of environmental protection. Readers of *Chain Reaction* may be interested to read the text of Resolution 11 of 1977 which concerned the peaceful and safe uses of the Arctic Circumpolar Zone.

*"Inuit Circumpolar Conference Resolution 77-11
A Resolution on Arctic Policy:
Peaceful and Safe Uses of the Arctic Circumpolar Zone"*

Whereas, we Inupiat recognize that it is in the best interests of all circumpolar people that the Arctic shall forever be used for peaceful and environmentally safe purposes; and

Whereas, we Inupiat are equally interested in the continuation of our homeland free of human conflict and discord; and

Whereas, we Inupiat acknowledge the emphatic contributions to scientific knowledge resulting from a cooperative spirit in scientific investigations of the Arctic;

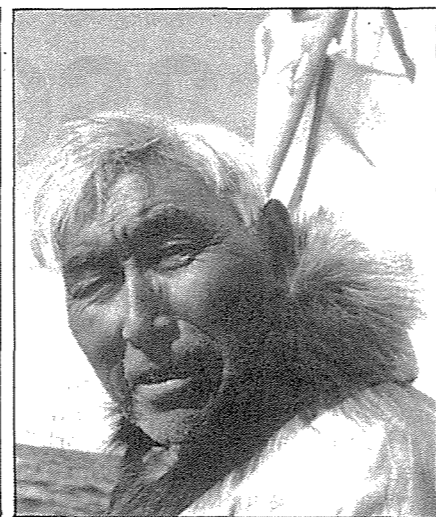
Now, therefore, be it resolved that:

1. the Arctic shall be used for peaceful and environmentally safe purposes only;
2. there shall be prohibited any measure of a military nature such as the establishment of military bases and fortifications, the carrying out of military manoeuvres and the testing of any type of weapon and/or the disposition of any type of chemical, biological or nuclear waste;
3. a moratorium be called on implementation of nuclear weapons; and
4. all steps be taken to promote the objectives in the above mentioned."

The Eskimos know of course that they can pass resolutions till the cows come home and nothing necessarily comes of them. However they've learned a lot by observation of the Europeans and North Americans in their northward thrust, first for whale oil and now for petroleum oil. They came off second best in regard to the despoliation of the whale resource by Yankee whalers last century. (Ironically, the "white"-imposed IWC quota is a legacy of the "white" depredations on the Bowhead stock of a hundred years ago.)

This time, having learned from their dealings with Atlantic-Richfield, Humble Oil and British Petroleum, the Inupiat are fighting back (all 4,000 of them) with every resource they can muster.

At the end of April 1981, for instance, members of the AEWG will be visiting Canberra, Australia, as part of a delegation to the world assembly of the World Council of Indigenous Peoples. To be hosted by the National Aboriginal Congress, the assembly will



Right: *The late John Quincy Adams, whaler of considerable fame in the Arctic*

Below: *Traditional seal-skin covered whaling boats*

Bottom: *Flensing (stripping the blubber from) a Bowhead whale*



Photos by BILL BACON

discuss matters of mutual interest to ensure political, economic and social justice to indigenous peoples throughout the world. Economic goals include "right to a land base and tenure" and "right to resource use, ownership, management and profit". Social goals include "freedom to maintain culture, language and traditions", "recognition of distinctiveness of indigenous peoples" and "mutual respect of all cultures". Political goals include "right to self-determination", "right to organise and administer self" and "right to control own education".

They will be particularly interested to visit Australia because until very recently they regarded this country as aggressively anti-Eskimo. They acknowledge that their judgement has been based on the anti-whaling stance of the Australian delegation at IWC meetings. Because the IWC was set up to control commercial whaling the Eskimos resent the intrusion into aboriginal subsistence whaling. And because Australia plays a big part in the Scientific Committee, which provides "evidence" on whaling stocks, the AEWG believes the Australian Commissioner's role is critical. Therefore at the last IWC meeting in England when the Commissioner, Professor Ovington, agreed to chair a special working group to develop management principles and guidelines for aboriginal subsistence whaling and agreed that representatives of indigenous peoples involved in such hunting should participate, the AEWG felt that at long last the IWC was beginning to treat the Inupiat responsibly.

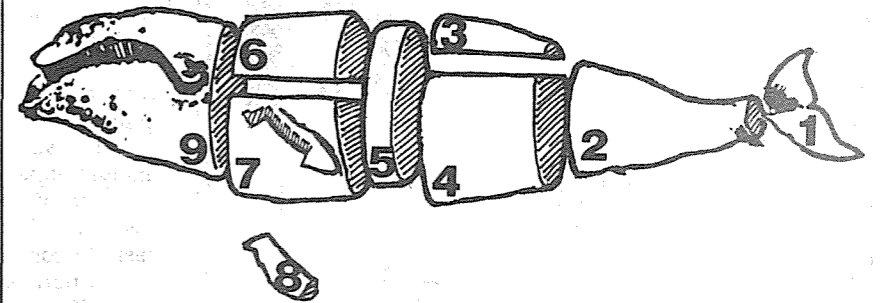
However, the meeting is not scheduled until the next annual IWC meeting in mid 1981. In the meantime Prof Ovington, who as Australia's Director of National Parks is conscious of creating good working relationships with Australian Aborigines in respect of Kakadu National Park, wrote to the USA Commissioner expressly requesting Inuit representation at an earlier meeting of a steering committee held in February 1981 in Seattle.

The National Aboriginal Conference has already resolved to support their indigenous brothers of the Arctic by siding with them on the Bowhead whale issue. A telegram to the last IWC meeting spelt it out:

"The National Aboriginal Conference, the elected representatives of the Aboriginal people throughout Australia, strongly supports the rights of indigenous people throughout the world to carry on subsistence whaling necessary to their lifestyles. In particular, the NAC urges the Australian Commissioner to the IWC to support the hunting rights of the Inuit people of Alaska at the July 21-6 meeting of IWC.

J P Hagan, Chairman."

POINT HOPE BOWHEAD WHALE DISTRIBUTION



- 1 Flukes distributed at spring feast
- 2 Slush Ice Feast in fall or pre-whaling spring feast
- 3 Captains wife distributes to every household
- 4 Captains share for distribution during feasts
- 5 Shared by the eighth crew to arrive
- 6 Divided among captain's crew
- 7 To crews of second and third boats to arrive
- 8 To the two oldest crew members
- 9 Crews of the fourth, fifth, sixth and seventh boats share this portion



Children standing on the lip of a Bowhead whale, June 1978, Wainwright, Alaska

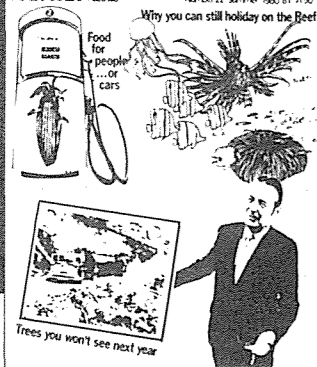
Already there has been personal contact. Reg Birch, NAC member from Wyndham, Western Australia, had discussions with Jake Adams, AEWG Chairman, in Nuuk, Greenland in June 1980.

Australian Aborigines understand the values implicit in the Inupiat relationship with the Bowhead. Generosity is an esteemed personality trait. Not only does a hunter aspire to be successful, he also wants to be able to share. In the conclusion to her report, Rosita Worl wrote: "The persistence of the desire to participate in subsis-

tence activities has perplexed those who cannot understand the strong cultural attachment. Whaling societies believe their cultural survival is based on a direct and intimate relationship with their environment and the hunting of bowhead whales."

Reference:
Sociocultural Assessment of the impact of the 1978 International Whaling Commission quota on the Eskimo Communities by Rosita Worl, University of Alaska, Arctic Environmental Information and Data Center, 707A Street, Anchorage, Alaska, USA, 99501. (Prepared for the USA Department of the Interior, December 1979)

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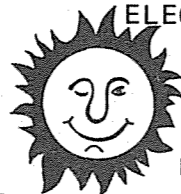
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Development minefield

The energy resources boom is posing a fundamental challenge to the environment movement. Some pessimistically chart Australia's future as a Third World country and 'clapped out quarry'. However, many environmentalists are starting to tackle the issues. It is a test of their convictions and part of an evolving ideology.

Over the past decade a new spark of environmentalism has reached Australians. People have begun to ask if our way of life - how we profligately consume resources, employ people, define our standard of living - is askew. Did air, water and noise pollution, logging of rainforests, sand mining of our best coastal areas and other environmental degradation really improve our standard of living?

To counteract this deterioration environmental groups became more sophisticated, employing full time lobbyists. These environmentalists can remember a decade of continual controversy over a multitude of issues. It was not the slow, polite politics of previous decades.

Today, the huge investments in resource projects are escalating controversy further. In New South Wales, the Wran Labor Government's commitment to resource development is leading to an assault not only on the Hunter Valley but on one of the most established elements of conservation policy - national parks.

Jeff Angel, Assistant Director of Total Environment Centre, in Sydney reports for Chain Reaction.

COAL MINING IN NATIONAL PARKS

The concept of national parks goes back almost a century.

First, there were the national parks of the late nineteenth century - mainly seen as pleasure resorts for the wealthy.

In the 1920's and 30's the recreational bush person emerged, and not long after concerted scientific demands for nature conservation arose. The impact of economic development on natural land values and the invasion of the cities by the motor car prompted many national park proposals. The idea of wilderness began to develop in the Australian consciousness.

The wilderness ethic is the antipathy of economic exploitation; small wonder that miners are particularly antagonistic to the concept. Wallace Stegner, USA writer suggests that wilderness provides "the chance to see ourselves single, separate, vertical and individual in the world, part of the environment of trees and rocks and soil, brother (sic) to the other animals, part of the natural world and competent to belong in it."

Now a New South Wales Government policy initiative strikes at this core of environmental achievement, and

ensures even further politicization of the movement.

The policy is called *Resolution of Conflicts between Underground Extraction of Coal Resources and Dedication and Management of Areas as National Parks and Nature Reserves*. It contains proposals to allow coal mining in parts of national parks and nature reserves, in response to the role politicians say New South Wales has to play in meeting world energy needs.

Conservationists fear economic pressures will, as the 'energy crisis' becomes more hysterical, make such coal developments more and more possible. Other mineral developers will demand entry into parks and nature reserves. There is little detail in the supporting document to allay environmental fears. In fact, the oft quoted cliches "strict controls" and "wherever possible" attain almost mythical significance.

In short, the policy is an attempt to attack the present definition of "national park", to accommodate it to the economic priorities of the Wran government.

Continued on page 39.
See also map next page.



Grape picking in a Pokolbin vineyard in the Hunter Valley

PROPOSED & EXISTING — COAL, ALUMINIUM, POWER STATION & DAM DEVELOPMENTS IN THE HUNTER VALLEY

Charted November 1980

KEY

Existing Proposed

COAL MINES

1. Between Raymond Terrace-Maitland-Cessnock and Toukley there are 36 coal mines.
2. Between Singleton and Muswellbrook there are 15 coal mines.
3. Saxonvale
4. Mt. Thorley
5. Warkworth
6. Wambo and Wambo No. 1
7. Buchanan Lemington
8. Bloomfield
9. Barix
10. Hunter Valley No. 1
11. Ravensworth No. 2
12. Swamp Creek
13. Howick North
14. Liddell State
15. Mt. Arthur South
16. Foybrook and Foybrook No. 1
17. Bayswater No. 2
18. Mt. Arthur North
19. Mt. Sugarloaf
20. Muswellbrook No. 1
21. Muswellbrook No. 2
22. Liddell
23. Energy Recycling Corp. P/L
24. Ulan No. 1

COAL LIQUEFACTION (COAL TO OIL CONVERSION)

25. Muswellbrook to Scone Dept. Mineral Resources reservation. Liquefaction plant to be sited here or in Newcastle.

POWER STATIONS

- | | |
|-----------------|---------------|
| 26. Eraring | 30. Liddell |
| 27. Munmorah | 31. Bayswater |
| 28. Vales Point | 32. Eraring |
| 29. Wangi | |

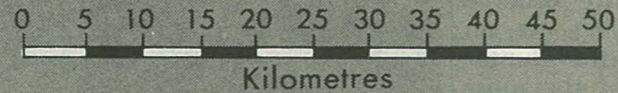
ALUMINIUM SMELTERS

33. Kurri Kurri
34. Kurri Kurri (expansion)
35. Lochinvar
36. Tomago

DAMS

- | | |
|---------------------------|---------------------------|
| 37. Glenbawn | 44. Brushy |
| 38. Lowstock | 45. Rouchel Bk |
| 39. Chichester | 46. Fal |
| 40. Liddell | 47. Allyn R |
| 41. Grahamstown Reservoir | 48. Salisbury |
| 42. Kerrabee | 49. Chichester (enlarged) |
| 43. Wybong Creek | 50. Tillegra |

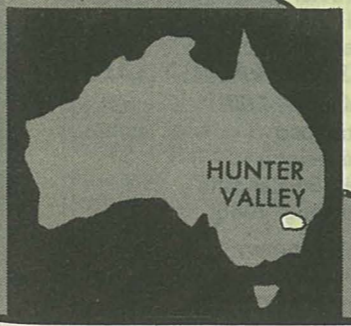
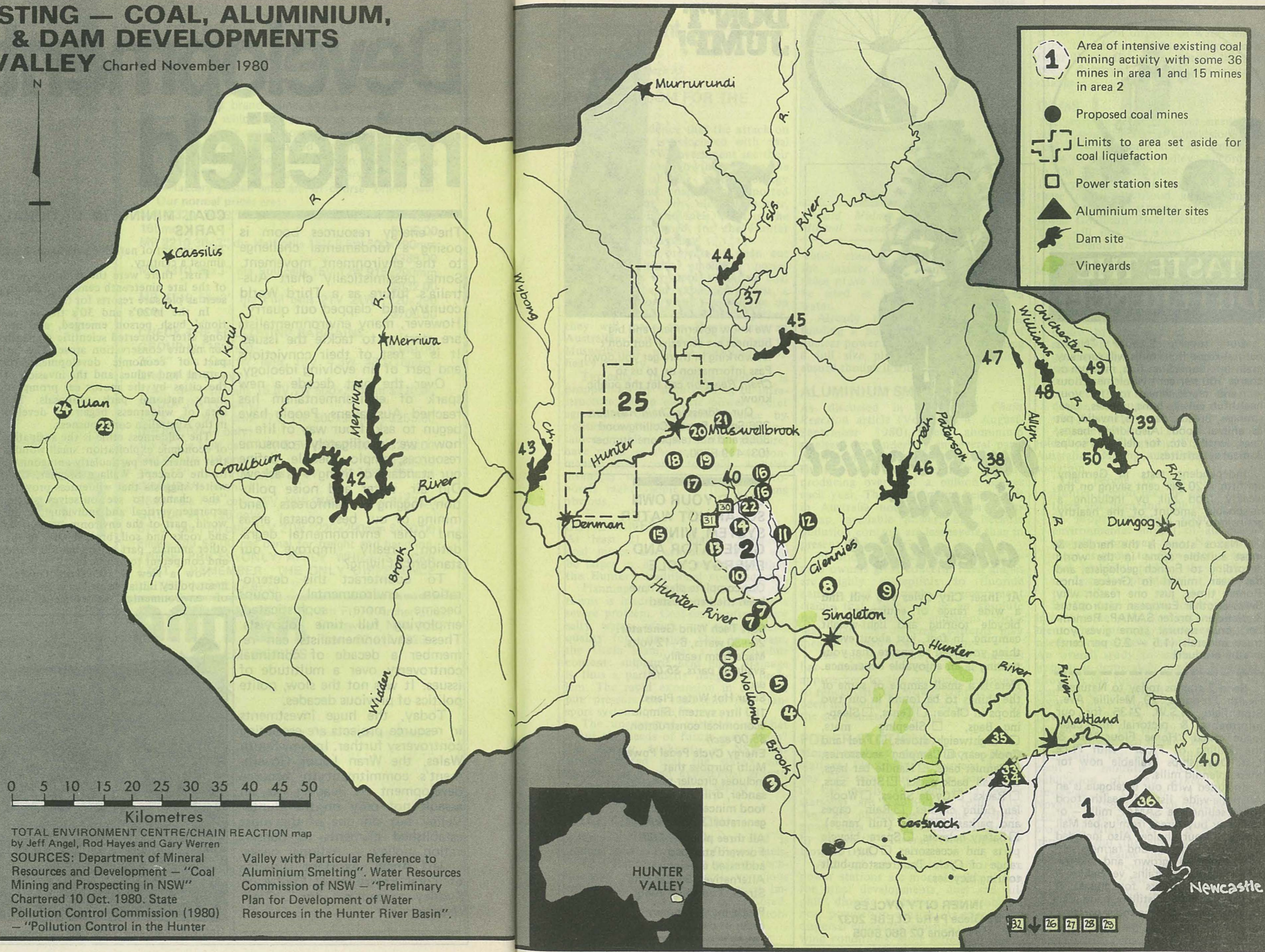
NOTE: Many of the new developments are on a bigger scale than existing installations.

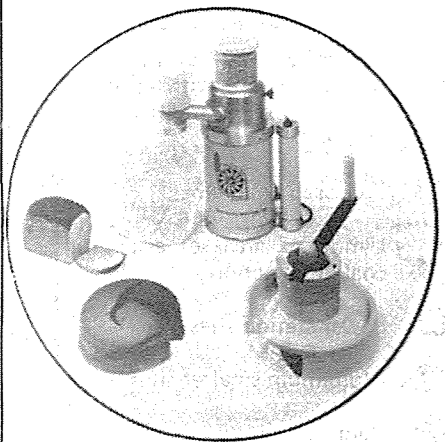


TOTAL ENVIRONMENT CENTRE/CHAIN REACTION map by Jeff Angel, Rod Hayes and Gary Werren

SOURCES: Department of Mineral Resources and Development — "Coal Mining and Prospecting in NSW" Chartered 10 Oct. 1980. State Pollution Control Commission (1980) — "Pollution Control in the Hunter

Valley with Particular Reference to Aluminium Smelting". Water Resources Commission of NSW — "Preliminary Plan for Development of Water Resources in the Hunter River Basin".





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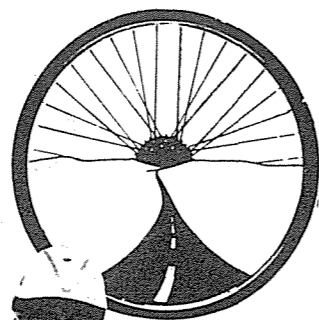
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Development minefield

Continued from page 35.

ENERGY BOOM FOR THE HUNTER

It is no coincidence that the attack on national parks is associated with coal mining. The NSW government see their major chance for growth being in the development of the state's energy reserves — black coal, to be exported directly, burnt for electric power, processed for liquid fuels. Most of the projects are planned for the Hunter Valley, north of Sydney.

The mass of projects — open cut mines, aluminium smelters, power stations, dams to supply water to coal developments and expanded towns, a coal liquefaction plant — are shown on the map (pages 36–37). Together, they will make the Hunter into an Australian "Ruhr Valley"; the town of Muswellbrook will be surrounded by heavy industry.

Typically, the industrialization is propped up by state funding of infrastructure, cheap electric power, secret agreements and staunch defence by politicians. Only recently, under sustained public and media pressure, have some of the social and environmental costs come to light. A brief inventory of the Hunter Valley proposals makes some of the problems obvious.

COAL MINES

At least 21 new, mainly open-cut, coal mines are scheduled. They will be larger in size and production than the Hunter's traditional coal industry.

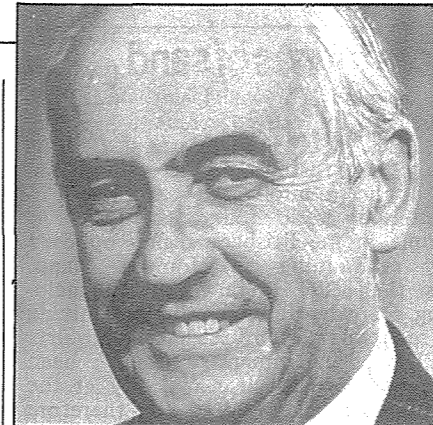
Planning of buffer zones near the towns is inadequate. Dust could be a severe problem. Coal seams often carry salty water, which may affect water quality for irrigation. One coal seam, the Greta seam, has a high sulphur content: sulphuric acid mine drainage is thus a particularly dangerous problem. The rapid expansion in coal will put pressure on road and rail transport systems in the Hunter.

The unanswered question is: what about the needs of future generations? The Energy Authority of NSW has already stated that the state's coal reserves, under an exponential growth regime, could be in short supply in the not too distant future.

COAL LIQUEFACTION

Adding to the pressure on coal is interest in it as a source of liquid fuels.

Coal liquefaction is a massive technological undertaking and voracious consumer of coal. Environmental impacts are only starting to be explored. Toxic emissions could be a major problem.



Ronald Mulock, NSW Minister for Mineral Resources and Development

water, creating land use conflicts in the mainly rural Hunter Valley. If these prove insuperable, the plant may be sited at Newcastle and use sea water.

Already the NSW government is funding a pilot plant. The spectre of nuclear power as an option for powering a full size plant is already looming, absurd though it sounds.

ALUMINIUM SMELTING

As discussed in an earlier *Chain Reaction* article (Vol 5 No 4, August-September 1980), new aluminium smelters are underway in several parts of Australia. By the late 1980's, the Hunter Valley will have three smelters producing over half a million tonnes each year. The smelters are being built in Australia not only because of its cheap, available power, but because pollution controls are less severe than in present host countries.

Fluoride emissions are causing vineyard owners great concern. Their grapes are highly susceptible to fluoride damage, and although the government claims that there will be an absolute reduction in fluoride emissions, critics fear that the dispersal patterns may mean increased local pollution.

The hidden subsidy to the smelters has finally surfaced, and NSW approaches to the smelting companies to renegotiate the power contracts have been met with a refusal and a threat by the companies to pull out.

POWER STATIONS

More smelters mean more power stations. Electricity consumers, due to pay 17% more this year in power bills (a rise partly to fund extra power stations), are beginning to realise that they are paying part of the smelters' power bills — a conclusion confirmed by Newcastle University economist, Dr Howard Dick.

Although environmental controls on power stations are more advanced than for other developments, dust and sulphur dioxide emissions are problems near population centres. As ever, good dispersal emissions depends on the right wind conditions. More serious, perhaps,

is the effect of disposal of warm water from the stations. In Lake Munmorah (near Newcastle) much aquatic life has been destroyed by the temperature change.

DAMS

The steep increase in water needs for power generation, coal conversion, and coal washing means at least nine new dams in the Hunter Valley. According to the Water Resources Commission's 1979 plan for the Hunter River Basin, these dams will flood good farming land, woodland, streams, and the proposed Goulburn River Nature Reserve. They will also cost a lot — effectively more subsidies for industry.

In November 1979 the Hon. R. Mulock, Minister for Mineral Resources and Development told the official of the Hunter Valley No. 1 colliery:

"Large parts of the Hunter Valley will have changed out of all recognition by the end of the 1980's and it will be up to industry and the government, working together, to ensure that all of these changes are for the better; it will be up to us to see that the changes do not debase the quality of life of those who live in this area . . ."

And on 19 June 1980 Mr. Mulock told the Fourth National Conference of Australian Mining and Petroleum Association

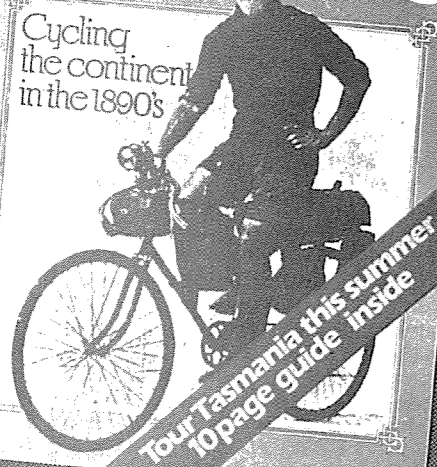
"The people of the Newcastle/Hunter Region may be assured that there has been and will continue to be proper attention given to the environmental impact of all major projects approved . . . No government is going to allow such a large and beautiful part of the State to be despoiled physically or alienated politically."

So far only separate environmental impact statements for each development and internal, piecemeal, social needs surveys have been carried out. An overall study to assess cumulative impacts is desperately needed. It would allow for the foresight that is needed to plan to be developed. Ironically, the NSW Labor Government achieved power in 1976 by promising such an overall study for energy port developments proposed for Botany Bay.

Pressure for such realistic assessment is mounting, however. The publication of *Who Asked Us?* — (reviewed in *CR* No. 21, October-November 1980), a much more detailed critique than possible here, plus some proposed alternatives — is one such initiative. But the environment movement must realise the severity of the test which is looming. The movement stands to lose some of the gains of the last hundred years. If it does not resolutely meet the challenge, then it cannot hope to fulfil the promise it has for our often polluted and dispirited urban lives.

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(CR)

More tonnes of sand from p17.

to 20% of Moreton Island and it is believed that the government is trying to cater for these interests without provoking further public opposition. A public opinion poll conducted in November 1980 found that 67% of people in the Brisbane region opposed any sandmining on Moreton Island, less than 20% were in favour including 6% who favoured limited mining as recommended by the public inquiry.

The Government having been returned with a clear majority at the last State elections, and therefore having another three years before facing the voters again, may be prepared to weather the storm of adverse opinion and give the go-ahead to mining.

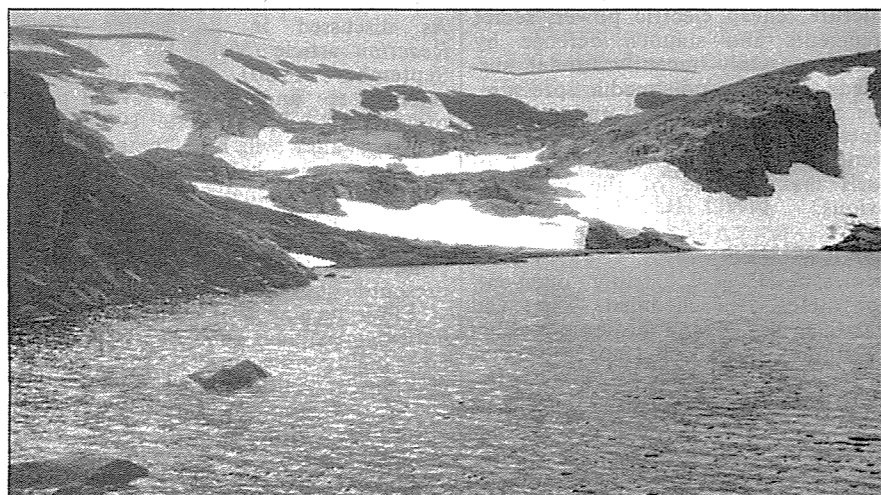
The Liberal Party has endorsed the findings of the public inquiry as their policy. Fortunately both the Labor and Democrat Parties have adopted policies more consistent with public feeling on the issue and are totally opposed to mining.

However, the mining companies would still have to gain export approval from the Federal Govern-

ment before they can proceed. They almost certainly would have to produce an environmental impact study before any decision could be made and this could be expected to take at least six months. Moreton Bay was recently included on the Australian Heritage Commission's Register of the National Estate and this will add weight to the argument against the granting of export permits.

The campaign to save Moreton Island is being spearheaded by the Moreton Island Protection Committee which was established in 1978 to lobby for a national park. Over the whole of the unsettled part of the island, the committee has drafted a management plan and is prepared to implement it to ensure that recreational damage is minimized. It also organises weekend trips to the island to allow members and visitors to see and enjoy the beauty of the island.

The Moreton Island Protection Committee can be contacted at PO Box 238, North Quay, 4000. Telephone (07) 221 0188. Membership of the committee is \$4.00 and donations are always welcome.



Low point for highest waters from p18.

Thredbo and include a convention centre, shopping complexes, restaurants and so on.

Sewage in the resorts is a big problem. On a peak skiing day at Perisher, 2.5 million litres of sewage flow into Perisher Creek and down to Guthega Dam. The NPWS expresses concern also about the impact of sewage flowing into the Thredbo River, particularly that from Lend Lease's proposed expansion!

In other waterbodies, it is a problem too. Albina Lake has been found to contain many thousands of times the recommended safety level of "organic matter". The source of the pollution is the Albina Hut, which is almost certain to go.

Blue Lake, Kosciuszko National Park

Water pollution in the park has become such a problem, that the Plan of Management is likely to include a voluntary code for hikers and campers to camp a reasonable distance from waterways. Bodies representing such people, it should be noted, are ready to fully co-operate in this scheme. As one ranger readily agreed, there is no profit-motive involved.

That is the difference between the reaction of those groups and the likely howls of protests and mountains of pressure which will come from the skiing organizations and resort entrepreneurs when the State government prepares to consider proposals such as those as limiting accommodation to approximately 9,000 in the next Plan of Management.

REVIEWS

Film

Takeover, directed by Judith and David MacDougall. Australian Institute of Aboriginal Studies, Canberra, 1980. 16mm, colour, 90 minutes. Purchase \$1,350, hire \$63.

The reality of Aboriginal affairs is purely a matter for arrangements between governments, and the wishes of black people have no place in this.

That is the message of *Take Over*, a film record of events at the Aurukun Aboriginal Community during March 1978. This is the period when the Government of Queensland moved to take over the community from the Uniting Church.

As the movie tells the story, the State Government action was bitterly resented by the Community and clearly expressed in the apparently endless series of community meetings with politicians and public servants. Yet the State got its way in the end.

The State Government is the obvious "baddie" in the movie, but the real villain of the piece is the Federal Government, represented by Ian Viner in meetings with the people at Aurukun. Its dealings with the Aurukun people represent the most shameless act of duplicity I have ever encountered. Twice the Community were offered

Federal support against the State Government and twice Viner's Government agreed to compromises which completely ignored the expressed wishes of the Community.

After viewing *Take Over*, I was left in no doubt about how little our governments care about people.

It is not just a film for Land Rights supporters — all Australians who care how we are governed should see it.

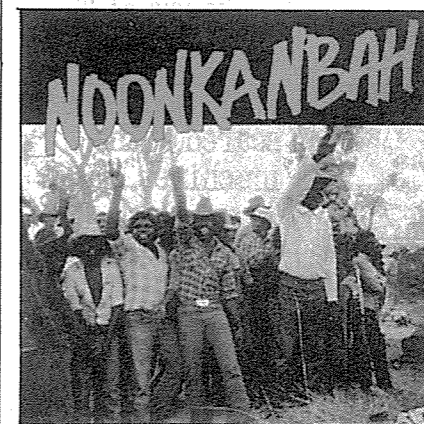
One note of caution. Be prepared to concentrate for the film is long (about 90 minutes) and the audio quality is bad in parts.

Ken Butler

For more details write to AIAS, Post Office box 553, Canberra City, Australian Capital Territory, 2601.

Record

Noonkanbah by R U Ready. Larrikan Records, Sydney, 1981, single, \$2.50.



The two songs on the record *The Noonkanbah Scabs* and *The Road to Noonkanbah* are powerful and important to Australian political culture. The dramatically describe the events, and the aspirations and struggles of Aboriginal people facing the plunder of their land by profit-hungry corporations.

R U Ready (the real singer prefers to remain anonymous saying "it is the issue which is important, not the singer") was involved in the pickets and protests in support of the



Francis Yunkaporta in *Take Over*

Yungngora people of Noonkanbah Station last year.

Geoff Evans

Books

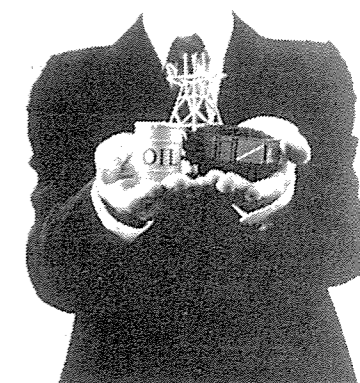
Energy in Australia, Politics and Economics by Hugh Saddler. George Allen & Unwin, Sydney, to be released in May 1981, 212 pages, \$7.95 (soft cover).

ENERGY IN AUSTRALIA POLITICS AND ECONOMICS HUGH SADDLER

ENERGY IN AUSTRALIA

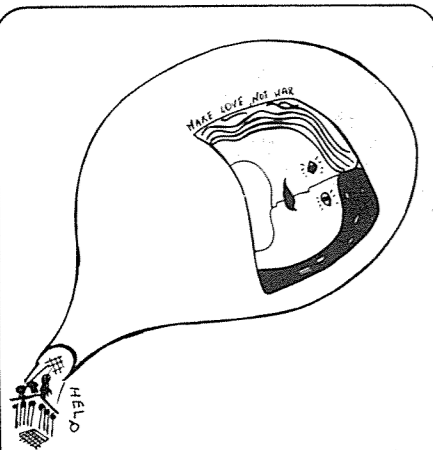
POLITICS AND ECONOMICS

HUGH SADDLER



It's amazing the extent to which Australia's energy policy has been dominated, even to the present day, by an essentially colonial attitude. This is one of the strong impressions I was left with after reading Hugh Saddler's soon to be published book *Energy in Australia*. The book has a wealth of historical detail on the technology, economic structure and social relations of Australia's energy industry. And it is from this material that Saddler builds a highly convincing but deeply disturbing picture of our resources being sold out to foreign energy giants.

The book however is not just a critique of past policy and practice. It develops a very useful framework for looking at our energy future, and a number of major action proposals are put forward. Saddler argues strongly



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REVIEWS

for a state run national oil company so that we can learn the facts about the industry, and so that the average citizen can obtain a share of the oil revenues. He also makes it clear that while energy cost will continue to rise, a programme of conservation and a shift to a renewable energy future will enable present and future generations to enjoy a reasonable standard of living.

I was tantalised by a number of references made to the aluminium and other high energy industries. Clearly Saddler is quite aware of the drawbacks of the 'energy boom' and yet there is a hint that he believes that, at least for a time, Australia's relative energy richness should lead to a more energy intensive economy. I would have liked his thinking on this to have been spelled out more clearly.

Philip Sutton

Some People Seem Scared of the Machines...

A Study of Technology and Work
by Kim Windsor. Unemployed Workers
Union, Northcote, Victoria, 56 pages,
\$4.50 (soft cover).



"Some people seem
scared of the
machines..."

A STUDY OF
TECHNOLOGY & WORK

by the
Unemployed Workers Union

Last year there was an Inquiry into Technological Change in Australia which resulted in four fat volumes of discussion papers, weighty conclusions and little else. So much for public debate... but if you still want to inform yourself about micro technology and the likely effects it's going to have on jobs then I suggest you get a copy of *Some People Seem Scared of the Machines*... This publication is a well written, well researched overview of the arguments, myths and machines in the 'technology debate'.

The emphasis is on Australia. As well as a lucid explanation of the issues, the book contains interviews with workers whose jobs are threatened by the new technology; case studies of

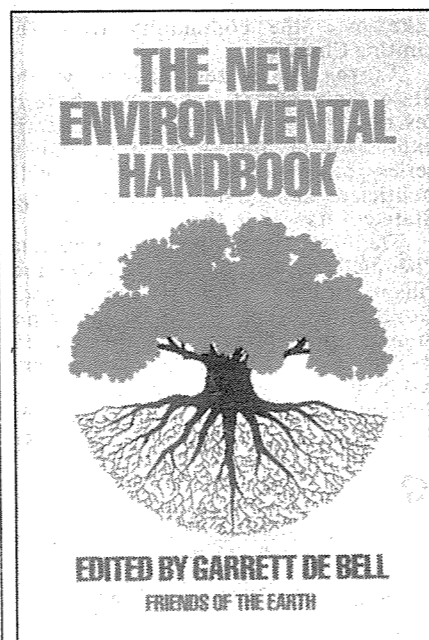
certain industries and companies, plus short profiles on new machines such as Point of Sale Terminals and Automatic Telling Machines which will soon be commonplace in Australia.

Some People Seem Scared of the Machines... is also a very snappy looking publication (bright yellow cover!), full of pictures, cartoons, graphs, photo montages etc. which are designed to break up the text and generally enliven the reader's interest. This book is good value for all people who want to read about technological change without falling asleep and in particular to church groups, unions, unemployed groups, students and of course all Space Invader players.

Jane Elliot

Copies of this book are available from the
UWU, 194 High Street, Northcote, Victoria,
3070.

The New Environmental Handbook
edited by Garrett De Bell. Friends of the
Earth, San Francisco, 1980. (Aust-
ralian distributor: Second Back Row
Press.) 353 pages, \$7.50 (paperback).



The New Environmental Handbook follows on where the last one left off 10 years ago. Many of the themes of the first handbook (rarely distributed in Australia) are carried on here, though few of the authors remain the same. As biologist Garrett de Bell notes in the introduction, in 1970 it was easy to cover the environment movement because literature and public awareness were sparse. The result of the new awareness 10 years later is a broader book and an important book. It is highly readable and well laid out with many quotable quotes from diverse environmentalists.

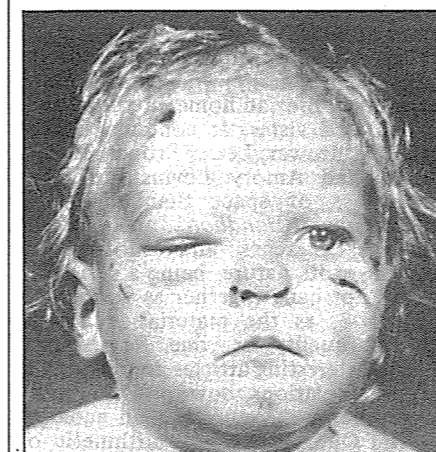
I cannot but wonder, however, if Friends of the Earth have not fallen prey to the old Swiss proverb: "All men tend to become that which they oppose", for though this book contains the same length text as the first, it is much larger with large margins and weighs twice as much. To be fair, it is easier to read and is certainly worth the money.

The book covers issues from population, inflation, energy and transport to environmental education, sensible diet, growing a herb garden, and how to bushwalk in an environmentally acceptable manner. It has an interesting but short section on toxic substances. The chapter on the "new ecopornography", i.e. the use of advertising by exploiters, has great relevance to Australia in view of the increasing amount of advertising by the mining industry.

This book amplifies on the first by stressing that wilderness is still at the heart of the environment movement. Indeed, where else can mankind look at his society and its ills in perspective? It concerns me that though the book addresses the need for energy conservation and also the problems of syn-fuels, it does not, I feel, address the problems of a growth society well enough, or the need for a steady state economy. The book has emerged at an interesting time. The foreword notes that there was no USA presidential candidate who showed an acceptable environment platform. One can but hope that Ronald Reagan will read this book and take the environment to heart.

Haydn Washington.

Children in Australia An Outline History by Sue Fabian and Morag Loh. Melbourne, 1980, 256 pages. Oxford University Press (soft cover edition, \$12.95) and Hyland House (hard cover edition \$17.50).



I have just read a book called *Children in Australia* by Morag Loh and Sue Fabian. It has lots of really inter-

esting photographs and lots of drawings too and this helps you read each page because you want to find out what the illustrations are all about. In the preface Morag and Sue say that though they wrote the book for children about children, they think there will be lots of things in it that will surprise adults too. I never knew in the old days that girls were punished if they talked too much, or swore, by having to wear an iron face mask. I thought I wouldn't like to have been a child in those days, but then when I got to the part where there is a photograph of a lovely baby and he had a closed eye, and a cut and everything to his face, and it was done by his parents, I thought that people do awful things too in 1980.

Sarah Hardy
aged 11.

The Next Whole Earth Catalog edited by Stewart Brand. Point/Random House, California, 1980, 608 pages, \$15.00. (large format paperback).



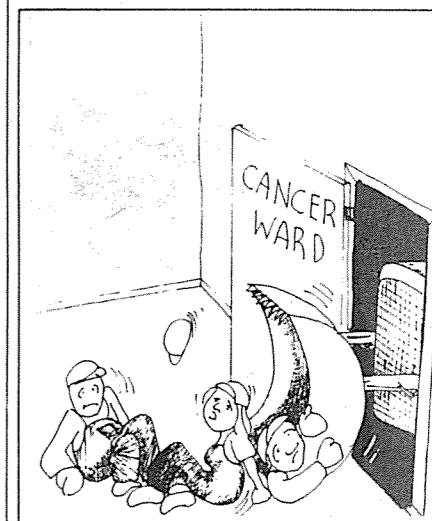
Plenty of books ignore the great inequalities which sustain the industrial nations' wealth, and most avoid taking a close look at existing political systems. But these books don't claim to be helping us to understand "whole systems" - a claim which this book makes for its first seventy pages.

While the *Catalog* is packed with interesting information, the compilers' recommendations must be treated warily. For example Stewart Brand endorses a volume by Milton and Rose Friedman in which conservative economics is used as a justification for increased inequality in countries across the world. It is difficult to imagine a more woolly-headed recommendation.

Subjects covered range from flora and fauna, through soft technology and crafts, to learning and communications. The layout of the book is extremely attractive.

Peter Browne.

Dying for a Living by Lloyd Tataryn. Deneau & Greenberg, Canada, 1980. 249 pages, \$C12.95 (hard cover).



Dying for a Living is an easily read book featuring carefully researched and analysed documentation of the tragic human and social effects of industrial disease.

The author, Lloyd Tataryn is an investigative journalist and documentary producer. Among his achievements is a documentary on mining operations at Yellowknife (gold), Thetford Mines (asbestos) and Elliot Lake (uranium) in Canada.

This book reports on the alarming incidence of occupation related diseases (mainly cancer) and the environmental pollution connected with these operations. The evidence he reveals is damning of the companies, government and other authorities. Clearly illustrated is their capacity and determination to deceive, evade responsibility and deny culpability for the results of their activities and to continue to cast workers in the role of guinea-pigs in the pursuit of progress, profits, power and 'economic growth'.

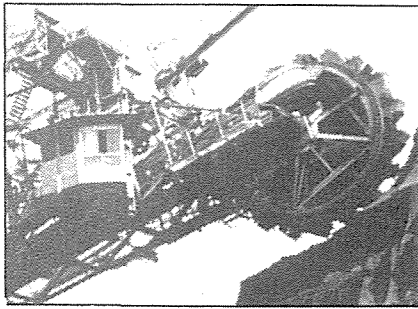
An optimistic appraisal of the situation should allow the view that most occupation related diseases are preventable. So, one would think, the most effective, economically and socially desirable course would be to eliminate the disease causing agents at their source.

Regretfully, the companies, supported by sins of omission and commission by government and other authorities are shown to spend their energies and money denying liability, frustrating investigation and instigating delay-causing inquiries. The same pattern of deceit, propaganda and government inertia is repeated wherever controversy arises around these issues.

Tataryn has identified the callous unconcern toward human welfare and environmental values, symptomised by

DARK CLOUDS ON THE HORIZON

Brown coal and the resources boom in Victoria.



OUT SOON

21 power stations, 5 oil from coal plants – these are the plans the Victorian Government has for the Latrobe Valley brown coal. Environmental groups have collaborated on a detailed report on the catastrophic environmental, social and economic consequences of the plan. Well illustrated and packed with information.

Published by the Conservation Council of Victoria with Friends of the Earth (Collingwood) and the Environment Action Centre \$3.00 rrp available from CCV or Friends of the Earth.

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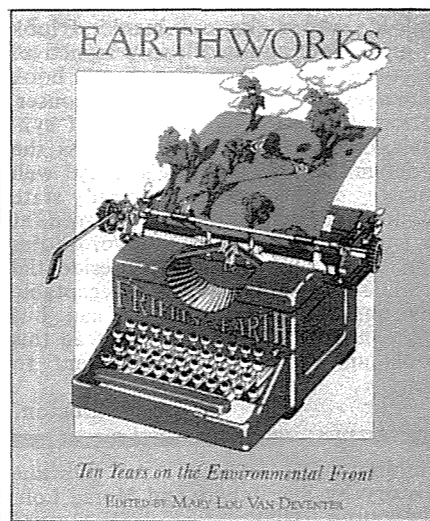
REVIEWS

the numerous premature deaths, illness and poisonous pollution, as one of the problems confronting society to which urgent solutions must be found.

Some of these companies are involved in mining ventures in Australia. Every effort must be made to ensure that they do not practice their irresponsible and negligent attitudes in this country.

Joan Shears.

Earthworks, Ten Years on the Environmental Front edited by Mary Lou Van Deventer. Friends of the Earth, San Francisco, 1980. (Australian distributor: Second Back Row Press.) 256 pages, \$10.95 (paperback).



Earthworks is a collection of the best of *Not Man Apart* over the last decade. (*NMA* is the newspaper of Friends of the Earth in the United States of America.)

The book is split into sections on campaigning, energy, wilderness, nuclear power, wildlife, at home in the world, growth and vistas. It contains articles by David Brower, Lester Brown, Garrett Hardin and Amory Lovins. It makes better use of space than *The New Environmental Handbook*, and contains cartoons, sketches and photos, but because of its nature, being a selection, it does not hang together as well as the *Handbook*, as the material is not of uniform quality or tone. Some particularly interesting articles are on the use of public relations, how to fascinate the press, energy, economics, and ecology, by H T Odum, and the arithmetic of growth.

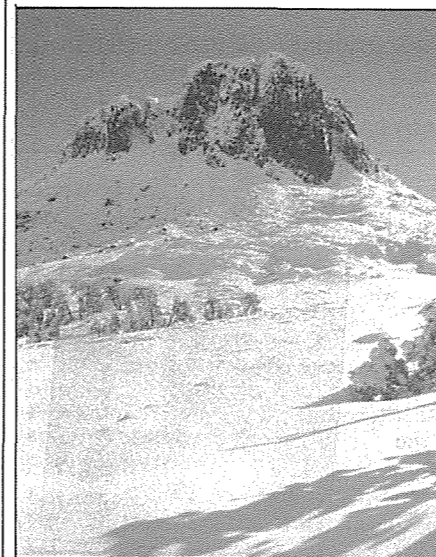
Earthworks brings out the problems of growth – it indicates the danger of exponential growth. Coal in the USA is

likely to last only 40–70 years – a similar span to our own.

Perhaps *Earthworks* is more of a collector's item in Australia, but it illustrates well the profuse and rich flowering in environmental writing over the last ten years. It also contains the best "Test your environmental I.Q." that I have seen.

Haydn Washington.

A Time to Care, Tasmania's Endangered Wilderness, photos by Chris Bell, text by Norman Sanders. Chris Bell, Hobart, 1980, pages, \$25 (hard cover).



If you did not get this for Christmas, as I hope many people did, rush out and get a copy of this wonderful book. For so many excellent photographs, very well printed, with a solid message on the need to protect this amazing area of Australia, a hard cover book at \$25 is good value, made possible by the photographer publishing it himself. It is the best book yet on Tasmania's wilderness – and there have been some very good efforts before it.

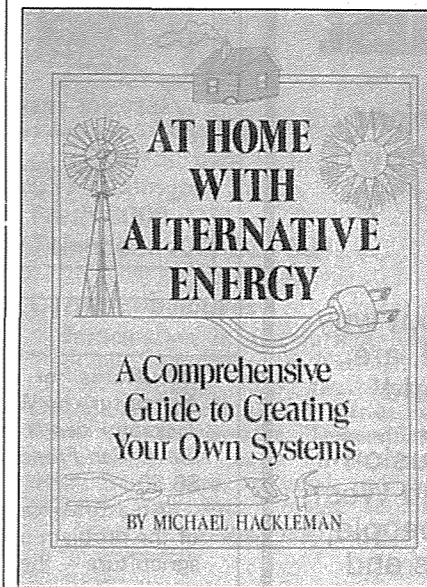
Leigh Holloway

1980 Review of Libertarian Politics and Alternative Lifestyles, edited and coordinated by Jill Taylor and Bob James. Published by the editors, Lewisham (NSW), 1980, 52 pages, \$1.50 (soft cover).

The Review is a combination of articles, book reviews and general resource guides, all written from an anarchist perspective. As a resource guide this *Review* is excellent. Every article ends with a reading list, and there are many lists throughout the *Review* setting out publications, audio-visual productions or simply the objectives of various groups. Finally there are 15 books reviewed, many of which are books about anarchists or anarchist theory.

Jenny Hocking

At Home with Alternative Energy: A Comprehensive Guide to Creating Your Own Systems by Michael Hackleman, Peace Press, Culver City, California, 1980, (Australian distributor: Second Back Row Press), 146 pages, \$10.95 (paperback).



This book won't give you all the answers, but for one who is just beginning to think about using energy from the Sun, wind, water, wood or methane, it's a source of a lot of good ideas and maybe a bit of direction.

We point out, it is not a "how to" book, filled with detailed plans for building alternative energy apparatus; rather it explains the principles for harnessing that energy and illustrates them with some basic designs. Its object is to acquaint the reader with enough information so that he can decide which systems will best satisfy his particular needs. A list of references is included for more detailed reading.

An interesting feature of *At Home* is that it is not written in a dry, text book style but rather with humour that illustrates the principles involved. For instance, Hackleman points out the importance of trapping heat in utilizing solar energy by saying "... that heat is slippery stuff, about as likely to stay around as a plateful of cookies in a room full of children".

As this book is written and published in North America, one word in the above sentence needs translating. Other aspects of the book need to be treated with caution as well, particularly in the wind energy section where costs for batteries, tower and other hardware are a bit low by Australian standards. Also we don't as yet have tax credits for wind energy installations as some states in the USA do.

Even with these few drawbacks, *At Home* is a useful tool to help one make the initial decisions about utilizing

alternative energy: should I use sun, wind, water, wood or methane? What about a hybrid system? Should I build it myself? What problems will be encountered? What principles are involved in each system? Recommended reading that will avoid learning the hard way.

Herb Fenn.

Dictionary of Environmental Terms by Alan Gilpin. University of Queensland Press, Brisbane, 1980, 191 pages, \$8.95 (paperback) and \$13.95 (cloth).

Adopted for use by *Chain Reaction*.

Eds.

Other books received:

Environmental Education in Australia by Russell Linke. George Allen & Unwin, Sydney, 1980, 230 pages, \$14.95 (hard cover).

Uranium and Workers' Health, second of a series of booklets explaining the uranium policy of the Australian Council of Trade Unions, ACTU, Melbourne, 1981, 8 pages, free on request.

The Nature of Mass Poverty by John Kenneth Galbraith. Penguin, Middlesex (England), 1979. 120 pages, \$3.95 (paperback).

The Third World Tomorrow: A Report from the Battlefield in the War Against Poverty by Paul Harrison. Penguin, Middlesex (England), 1980. 379 pages, \$7.95 (paperback).

FOE Link, Friends of the Earth International, Brussel (Belgium), January 1981. 4 pages, Free on request (broadsheet).

The Dark Side of Paradise, Hawaii in a Nuclear World by Jim Albertini, Nelson Foster, Wally Inglis and Gil Roeder. Catholic Action of Hawaii/Peace Education Project, Honolulu, 1980, 100 pages, \$4.00 (soft cover).

Class Structure in Australian History, edited by Bob Cornell and Terry Irving. Longman Cheshire, Melbourne, 1980, 378 pages, \$11.95 (soft cover).

Australian Imperialism in the Pacific, The Expansionist Era 1820–1920 by Roger Thompson. Melbourne University Press, Melbourne, 1980. \$25.00 (hard cover).

Deciding about Western Australia's Energy Future by Peter Cook, Lousie Duxbury, Peter Kaldor, Greg Smith and Dave Worth. Campaign Against Nuclear Energy, Perth, 1980. 22 pages, 30c (booklet).

Lead and Public Health in Melbourne, Collingwood City Council and Collingwood Community Health Centre, February 1981. 13 pages (booklet).

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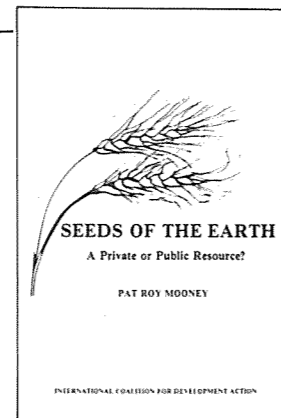
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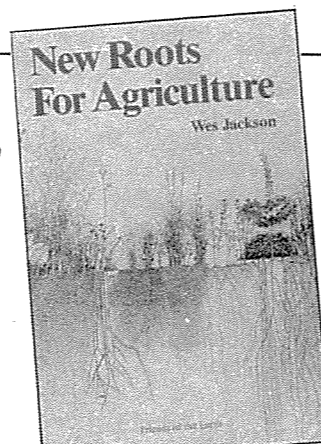


Seeds Of The Earth Pat Mooney ICDA \$5.00.

An overview of world seed industry and the attempts by multinational petrochemical firms to control world seed sales using seed patenting schemes.

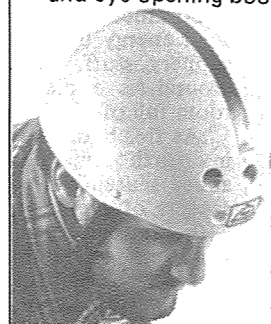
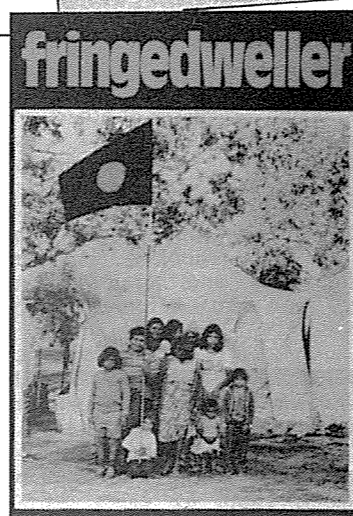
New Roots For Agriculture by Wes Jackson *Friends of the Earth, San Francisco 1980* \$6.50

An astute examination of the problem of agriculture — the fact that it will not sustain the world forever, particularly while the fertility of the soil gradually declines. Looks at some positive, ecologically natural solutions.



Fringedweller by Robert Bropho *Alternative Publishing Co-operative Sydney 1980* \$9.95

A description by the author of his life on the fringes of white communities, living under conditions of deprivation and humiliation. A moving and eye-opening book.



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PO Box 1875
Canberra City
Australian Capital Territory 2601
Kingsley Street, Acton
(off Barry Drive)
Telephone (062) 47 3064,48 0885

Current objectives

To provide a resource centre to the public in Canberra and the region. Resources include a library, a bookshop, a growing movement resources information service and meeting space for many groups. We produce a magazine, *Bogong*, which focuses on issues of regional environmental importance. Providing strategy development and action workshops.

Past activities

Environment Walk and Environment Fair, 26 October. The Walk was a cross between a walk-a-thon and an urban trail. Organising notes available. Energy and People Day, November 1979. Workshop discussion. Research on various topics is done in conjunction with other groups.

Future plans

Continue building movement resources work. Building strategy training network. Continuation of *Bogong*.

Help needed

Subscriptions to *Bogong*, regular volunteers to help with diverse tasks of Centre — research, library, group liaison, building, fund raising, publicity, layout and design. We are open to other ideas, too.

Resources available

Library on environmental issues, *Bogong*, journal of the Canberra and South East Region Environment Centre, bookshop including wide range of badges, stickers, posters, free literature, access to 38 member groups.



Friends of the Earth (WA)
c/- Environment Centre
537 Wellington Street
Perth 6000
Telephone (09) 321 5942

Current objectives

Participation in the current Senate Standing Committee on National Resources Inquiry into the bauxite, alumina and aluminium industries, with broad media coverage. Disseminating information on many environmental issues on a local, national and international basis with present emphasis on energy, whaling, lead and third world problems.

Methods

Press conferences, press releases, letters to editors, weekly meetings each Monday, personing stalls, producing leaflets and a monthly newsletter, *The Hobbit*.

Past activities

Organised marches and displays against nuclear power and the mining and export of uranium. Sent whale displays and audiovisual sets to schools and libraries. Had stalls at fairs such as the Hyde Park Festival on the Australia Day weekend. Held film nights on a wide variety of issues.

Future plans

Walk/bike ride to Wilbinga, a proposed nuclear reactor site at Easter. Hopefully with more 'person power' a shop will be opened later this year. FOE Research Foundation of Western Australia is to be established to secure funds for particular research projects, so that individuals can be employed on reasonable incomes to produce research documents for publication.

Help needed

Always more active members to help at work meetings, share workload and help in the organisation of various activities.

Resources available

Large files full of environmental information; free leaflets on whales, seals, nuclear power; slide audiovisuals on employment, solar energy, uranium mining, the Franklin River, waste and recycling; whale records and cassettes; a variety of Environmental Impact studies and Government reports.

ACTION GUIDE



Campaign Against Nuclear Power (Qld)
PO Box 238
North Quay
Brisbane 4000
Telephone (07) 221 0188

Current objectives

Keeping up opposition to uranium mining, particularly at Mary Kathleen and Ben Lomond; educating people to the dangers of enrichment plants and power reactors planned for Qld; promotion of safe, environmentally sound energy sources; create awareness of the nuclear arms race and Australia's place in it.

Methods

CANP talks to schools and other groups, and often sponsors speaking tours and film showings. Use is made of local media to respond to issues as they arise. A wide circulation newsletter tries to keep abreast of the latest developments.

Past activities

The Campaign has always emphasised the need to simply make people aware of the issue. Public meetings and large rallies were frequent at the time of the Ranger Enquiry, and later. CANP was affected by the march ban, and joined the opposition to it. Members have been encouraged to be involved in every activity of the Campaign.

Future plans

The campaign for the declaration of Brisbane as a nuclear-free city, and opposition to the planned uranium mine and enrichment plant near Townsville are to be emphasised this year. As well, our financial base will hopefully be strengthened by renewed activity, and we will try to increase and diversify ways to reach people.

Help needed

CANP welcomes everyone to participate and learn new skills at all our various activities.

Resources available

Information-style newsletter, information files and library on nuclear issues, speakers, campaign material.

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I have the following skills/resources

NB: *Chain Reaction* is supplied free to Friends of the Earth members in all States and territories (except NSW). For details see page 48

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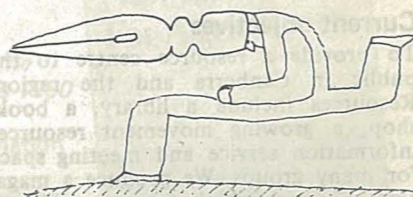
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BE INVOLVED

Join a local group near you, or come in one day a week and work in the office, the bookshop or on a campaign.

CAMPAIGN IDEAS

Become involved in a campaign of your own. This is how Friends of the Earth grows. We can help with resources.

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CANBERRA: PO Box 1875, Canberra City 2601. Telephone: (062) 47 3064.

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SYDNEY: PO Box A474, Sydney South 2000. 101 Cleveland Street, Chippendale 2008. Telephone: (02) 698 4114.

NORTHERN TERRITORY
DARWIN: PO Box 2120, Darwin 5794. Telephone: (089) 816222.

QUEENSLAND
BRISBANE: PO Box 667, South Brisbane, 4101. Telephone: (07) 44 1766.

SOUTH AUSTRALIA
ADELAIDE: 310 Angas Street, Adelaide 5000. Telephone: (08) 223 6917.

TASMANIA
HOBART: C/- The Environment Centre, 102 Bathurst Street, Hobart 7000. Telephone (002) 345566

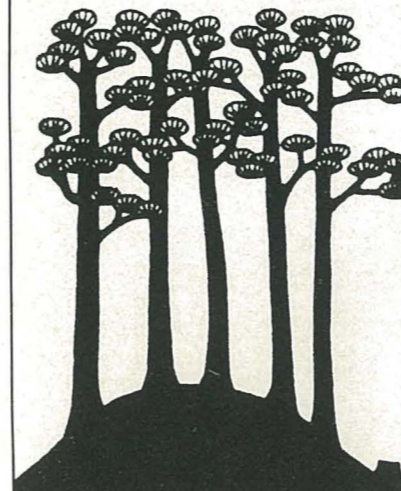
VICTORIA
VICTORIAN RESOURCE CENTRE
366 Smith Street, Collingwood 3066. Telephone: (03) 419 8700.

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PERTH: C/- Environment Centre, 537 Wellington Street, Perth 6000. Telephone: (09) 321 5942. 321 2269.

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