Why you can still holiday on the Reef

Food for people...or cars

New ACTU President, new uranium stand

Trees you won't see next year
An opportunity like this rarely presents itself in a lifetime. We recently signed the Chinese Government to allow a trekking party into Tibet.

The trek leaves from loss of suitable for outdoor use even in the worst weather conditions. The modern Trangia burner system provides maximum strength, good handle designed to:

1. Provide maximum strength.
2. Obviate utensil damage.
3. Provide maximum strength. a) Provide maximum strength.
b) Obviate utensil damage. c) Provide maximum strength.

27. The 25 model has the larger capacity. Both models include a a) Provide maximum strength.
b) Obviate utensil damage. c) Provide maximum strength.

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. 3. The Trangia has no fuel contamination of hands, food or clothing. 4. Methylated Spirits can, however, be used to extinguish your hands. 5. Methylated Spirits is readily available throughout Australia. After wood it is the next most easily determined renewable fuel. 6. Very few parts can be lost. Replacements if required are low cost.

25. FOE (NSW) members are invited to become subscribers. Subscription details are on page 28.

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. 3. The Trangia has no fuel contamination of hands, food or clothing. 4. Methylated Spirits can, however, be used to extinguish your hands. 5. Methylated Spirits is readily available throughout Australia. After wood it is the next most easily determined renewable fuel.

The professional, licensed outfitter in Kosciusko National Park since 1977, offer a holiday program of Cross Country Skiing and Snowshoeing in Winter, and Walking Canoeing and Bicycling in Summer.

For a brochure please write to: Wilderness Expeditions C.P. Post Office Berridale Berridale NSW 2620.
Hazardous wastes

little has been done in Australia and perhaps because there has been no Love Canal type disaster here industry continues to carelessly dispose of chemical wastes regardless of contamination of rivers and ground water. For example if Industries response to criticism of its dumping of heavy metals in the Derwent River in Tasmania has simply been to take the wastes out to see a short distance and dump them there.

In Tasmania: “There is no specific body that is willing or has the facilities, to dispose of specific hazardous chemicals. The situation generally is that the persons who use them are responsible for ensuring they are handled safety and in accord with the laws of the State. According to the Royal Australian Chemical Institute: A House of Representatives inquiry has been set up to examine the handling of dangerous chemicals.

The Love Canal is an abandoned hydro-electric canal in Niagara Falls USA which was used during the 1950’s for dumping of pesticide residues and industrial chemical wastes. A housing estate was built above the dump site. From the mid 1970’s serious health problems emerged and the area was finally evacuated. The cost of the clean up is now approaching US$300 million.

The Love Canal has sparked off major concern around the world about hazardous wastes. The USA government has established a US$1.2 billion fund to start cleaning up thousands of dangerous toxic waste sites. Money spent will be recovered from companies and individuals held responsible for the pollution. The Senate Finance Committee is also considering a US$4.2 billion fund which requires industry to contribute 80% of the fund regardless of the origin of the toxic sites. Some chemical manufacturers have been fighting this bill vigorously. Both funds cover compensation for persons harmed by hazardous wastes. The Environmental Protection Agency also expected to require manufacturers to purchase for the first time non-sudden pollution insurance to cover waste site leaks.

So far however, very

South East Land Council

An Aboriginal Land Council has been established in South East Australia. The South East Land Council covers tribal area in Victoria and crosses into New South Wales and South Australia. An executive committee of fifteen people has been formed with Len Clarke as Chairperson and Roy Blow as Secretary. Meetings will be held in country areas over the next four months at which Aboriginal people will be invited to participate. One of the main tasks will be to acquire funding.

For more information contact the Aboriginal Affairs Information Centre, 2 Candy Street, Northcote, VIC 3070. Telephone (03) 831 2127.

The discovery of the first supermarket molybdenum on the summit of Mt Everest, November 1980

WORLD LAW

and the

Last Wilderness

By Dr. K. D. Suter

Second Revised Edition

By Dr. K. D. Suter

Second Revised Edition

IN OUR OWN HANDS

While agreeing with the majority of your comments concerning the book In Our Own Hands, we would like to point out some inaccuracies in the chapter on abortion. As you have mentioned, the whole book and this chapter in particular, is very Melbourne oriented and would give women a misleading picture of abortion services in other states. For example -- Ms Hull states that local anaesthesia is rarely used in Australia - this is not so -- over half the abortions performed in NSW are done with local anaesthetics. Also, in Sydney, there are two feminist run, non profit abortion clinics offering a very sympathetic and supportive service. We would also disagree with her statements regarding pathology tests, IUD insertions and aftercare instructions in relation to abortion. The whole tone of the abortion chapter is very negative and we feel it would have been much better if Ms Hull could have included information about the feminist clinics in Sydney. This would have given more correct and widely applicable information and would also have offered a model which Melbourne women could follow to set up similar services there - this would be more in keeping with the title of her book In Our Own Hands.

Jeanne Rudd for the Beatie Collective
The Beatie Smyth Foundation
The Powell Street Clinic
Cnr. Powell Street and Wentworth Road,
Homebush, NSW, 2140

LEAFLETS AGAINST URANIUM

I think that if we are to stop uranium mining we must consider what are the most effective ways of using our limited resources and energy to get the information flowing to change the minds and sway the heart.

I believe that one of the most effective and simply organised ways is that of leafleting. Leafleting makes it possible for many people who might otherwise never come into contact with the arguments of our movement.

The pamphlets must be fact-sheets, avoiding throatiness, wordiness and complexity. They must be concise, yet comprehensive. Obviously it would be more

LETTERS

You are invited to write to Chain Reaction with your comments and criticisms of articles or on other issues of interest to you. We are more than happy to publish your letter if it is under 250 words. Write today to the Editors Chain Reaction, 380 Smith Street, Collingwood, Victoria, 3066, Australia.

CHAIN REACTION

In Chain Reaction No. 21 a report on the 1980-81 Budget allocation to environment groups included a major omission. The allocation was $350,000 not $31,000. And, in the how can we stop uranium mining, series we placed the wrong bylines next to two words. The piece credited to Noel Waugh was by John Camilleri and vice versa.
Franklin not unique

Close examination of the Government's expenditure on uranium mining estimates reveals a grossly inflated account of $30.4 million. The report shows that the government has divided the uranium industry and of the Australian Atomic Energy Commission in two: $10 million for infrastructure at the Jabiluka township in the Northern Territory, $6.9 million for protection of the environment from the effects of uranium mining, and $2.4 million for the expenses of four federal departments, heavily involved in the uranium industry and of the Australian Atomic Energy Commission.

The discussion of direct uranium and nuclear spending only; there are many other areas of related government activity such as programs concerned with the social impact of uranium mining on Aboriginal people, for which no cost figures are available. This expenditure on the nuclear industry is greater than the Government's total spending in energy research and development, which is estimated at $3.45 million in 1980-81. Spending on solar energy and energy conservation was only $4.2 million last year.

USA Trust Territory of the Pacific Islands, Icac, Enawetuk Atoll

Pacific Island clean-up

Following a three-year USA10 million nuclear clean-up of Enawetuk Atoll, the trust Territory of the Pacific Islands, the United States of America government says it is safe for the people to return to certain islands.

During the massive clean-up, thousands of cubic metres of plutonium-saturated soil were removed, and with other active debris, encased in a huge cement dome in an atomic bomb crater on Runit Island. This island is off limits to the Enawetuk people for ever. However, islands within three miles of it have been rated safe for "picnic and food gathering".

The USA government has been unable to allow the people on the northern islands, where most of the forty-three nuclear devices tested on the atoll are. Nevertheless, on the basis of a scientific study prepared by the Micronesian Legal Service, a government sponsored group representing the Enawetuk people, the people have voted to return to all the islands.

The objectivity of this study has been questioned by several organizations and scientists. Dr. Rosalie Bertell, a consultant to the New York State and Wisconsin Medical Associations, and to the Div. and St. Manual Setting for the USA Nuclear Regulatory Advisor, said, "The study: "The population of Enawetuk has the right know that a value judgement has been made for them, namely that induction of cancer is their only concern. They way, it has informed" hyperventilation aplastic a...
Sun right legislation

The Total Environment Centre is establishing a project in New South Wales to draft legislation which will protect the citizen's right to sunlight. Preliminary work was completed in 1978 by the South Australian Law Reform Committee, which suggested ways of framing a sun right:

a) A right attached to the land itself in which the owner of a solar system has a right to an arc of space, flowing from the collector.
b) Implementation of solar energy use zones that could be superimposed on existing land-use districts. Such legislation would be an important move towards greater implementation of solar energy.

For more information contact the Total Environment Centre, 33 Argyle Street, Sydney, 2000. Telephone (02) 2747175.

Geiger counters for Country Fire Service

A study by Women of all Red Nations (WARN) links high miscarriage and cancer rates at Pine Ridge, South Dakota Indian Reservation and contamination of the water supply by uranium tailings from nearby mines. The WARN study shows that in one month during 1979, 38% of pregnancies at the Public Health Service hospital at Pine Ridge resulted in miscarriages and 60 to 70% of live births were complicated by breathing difficulties or jaundice. Levels of nineteen and fifteen picocuries per litre have been found in the reservation water supply. The Public Health Service stated that levels of over five picocuries are dangerous.

Environment axe

A sub-group of the Australian Legal Workers Group is working with Friends of the Earth (Collingwood) to review the effectiveness of Australian environmental legislation. The first report from the group is on the Victorian Environmental Effects Act. It identifies a string of deficiencies in the Act and points to procedures adopted by the government in contradiction to the Act which result in many projects not being assessed. In the two years prior to the Act, 35 environmental effects studies were prepared yet in the two years since only fifteen have been done on public works. The group intends to do further work on the last estate and to find out where its efforts have been directed in the past. Contact: FOE Collingwood (03) 419 8700.

WARNING

Ranger withdrawal

In 1970 the Movement Against Uranium Mines published a dossier attacking the Australia and New Zealand Banking Group for its involvement with uranium companies.

When the Federal Government decided to sell its share of Ranger, the other partners, Peko-Walland and EZ Industries, decided to create a new company to buy the share. They naturally approached the ANZ, their major banker, to help raise the US$235 million loans the new company would need. But the ANZ declined to enter the banking syndicate which funding Energy Resources of Australia (ERA). Neither did it open a branch at the Jabiluka site.

Apparent as a result, Peko-Walland has dropped the ANZ as its banker.

NUCLEAR FREE PACIFIC

Reports from around the Pacific, including a special study on the role of Australia and New Zealand.

ENVIRONMENT EDUCATION

We have started gathering information for a series on secondary and tertiary environment education. Please, let us know about any workshops, activities or other new ventures.

So we can find more people to work with us for its success.

Backstage

It is important that readers understand the thinking behind this magazine's decisions and actions. If you like Chain Reaction we want you to be able to work with us for its success.

Backstage will appear frequently in the magazine. Whatever your thoughts, please give your comments to us – for example, through the Letters page, or with the questionnaire sent out with this edition.

Chain Reaction

COMING SOON

We hope to make the magazine more punchy and accurate. Contact us if you know something of what is going on – or ought to be – contact us (02) 2648037) or Melbourne (03) 1418/700.

Daisy, one of the people working on the magazine in Melbourne, is going through the returned questionnaires to see what you think of CR. Some of the questions, which he and others dream up, may seem tortuous or odd, but please take a few minutes to give us your comments. Even if you think the question is absurd – say so – and that gives some insight.

We would like to know what you use the magazine to know about new and activities you see and how you see it, as part of your life and activities. It is important for us to know a little of your way of working, so we can find more people to buy the magazine, and it is a fairly safe bet that if is possible to extend the circulation of the magazine and so many more people will read a magazine's plans. For years now, Friends of the Earth has been tremendously lucky with its work – people making generous donations, giving important information, etc. Much of what has been achieved could not have been forecast.

So we remind people that donations to either of these efforts are welcome. We would like to under take a mail-out to all environment groups and stressing the importance of such groups ' news and views. That is going to cost a few hundred dollars.

So we remind people that donations are welcome. We would like to undertake a mail-out to all environment groups and stressing the importance of such groups ' news and views. That is going to cost a few more hundred dollars.

We hope to make the magazine more punchy and accurate. Contact us if you know something of what is going on – or ought to be – contact us (02) 2648037) or Melbourne (03) 1418/700.
Winds of change at ACTU

The day after Cliff Dolan took over from Bob Hawke as President of the Australian Council of Trade Unions, he called a press conference to discuss the question of uranium. The occasion signalled a change in direction of ACTU policy on uranium and raised once again the question of whether the union movement could take effective action against the development of nuclear power.

Mr Dolan, 60, came to the ACTU from the Electrical Trades Union. He had been senior vice-president of the ACTU since 1973 and played the leading role in maintaining the ACTU's policy against the mining and export of uranium at the 1979 Congress in Melbourne.

From the beginning of his presidency, Mr Dolan said he would operate the ACTU as a team effort and encourage other ACTU officers to be active in presenting the union view to the public. He made it clear that he was not interested in Mr Hawke's LTD and took up part-time residence in Moonee Ponds. During this interview with Michael Gordon, he discusses the new direction in ACTU policy, his ideas on how it can be worked, his impressions during a recent tour of Northern Territory mines and his thoughts on the anti-uranium movement.

What problems were you able to identify in the area of health and safety of workers when you visited the Northern Territory sites?

We met a number of people, mainly company people. They showed us the various checking devices for monitoring radioactivity which were supposedly set up around the mine sites at Ranger. In discussion with some of the blokes there, they indicated that they'd never seen any of these monitoring devices. But I'm not saying they were wrong. They probably didn't appreciate what they were doing. Talking to a number of people, they weren't aware of the devices and again, I'm not saying they were correct — but they weren't aware of any safety checks being carried out on them. They knew they had to wear this device which measures certain radiation; and that it was checked periodically. They are not advised of the dosage that they've got.

I think one of the greatest dangers is that the people who are employed at Ranger at the present time, are being employed on a relatively short term basis. The average employment is about three months, and then they could be anywhere in Australia, and nobody seemed to know about what followed? There was no or could be so far as these people were concerned.

At Narbalek where the processing is going on, with a bit of a smile about it, they pointed out to us that the operators on the plant were required to go through this 'dirty' area and remove their working overalls, which were laundered daily, and then go into the 'clean' area and pick up their own clothes. They made a great feature of this. However we walked all around the plant for more than an hour I suppose through the various sections, and there was no suggestion that we should have a check or that our feet should be washed.

What role does the Federal Government play in supervision of health and safety standards as far as Ranger and Narbalek?

They have a senior officer in the area — and I'm not quite sure as to whether there is only one — many of the responsibilities in the area of health are decided on the Northern Territory Government Mines and Energy Department. The Commonwealth has left the field to a great extent, and one doesn't know the competence of the Northern Territory people. How effective is the educative campaign to get workers out of the industry. Is there any evidence that the campaign is working? I think what makes this most difficult to do is that the Aboriginal people on the plant were not mining experts and didn't understand the problems of deep pit mining that took place at Narbalek. There was a case where the ore was mined in six months and 500 people, of course, who did the mining have all gone. There's only a total of 90 people employed over the whole of the shifts at Narbalek now, in the processing area.

How effective have the threats of the Electrical Trades Union and other unions like the AMWSU to expel blacklist members for working in the industry? Well it hasn't been very effective to date. There was a case in the Queensland court in relation to Mary Kathleen, but I'm not aware as to whether that decision has been made. It was a challenge by the Queensland Government to the rules of the Queensland branch of the union. There's been no actual threat really to anyone, either by the ETU or by the AMWSU. But it is still very much a matter of education and its not only so far as the people in the mining area are concerned, but the people who go up there from Queensland, New South Wales or even Victoria to seek employment for a short period of time.

The Australian Railways Union has announced that from January next year it will ban the transportation of uranium. What attitude would the ACTU executive take to that action?

The ACTU would be bound to support the ARU in this action. If non-union labor was used to load the uranium it would be much easier to transport the uranium could any action be taken?

That would certainly be a situation to consider. A lot of the material for these mines is of course being transported. The Darwin branch of the WWP, perhaps contrary to the policy of the Federal WWP, has placed a ban on the export of uranium. Now Queensland Mines have had yellow cake stored both at Narbalek and somewhere in Darwin. I think one of the significant things is that they have up-dated the air strip at Narbalek.

The November executive meeting of the ACTU considered a strategy of imposing bans away from the mines. What hopes do you have for that action to be effective, given the lack of success so far?

This is going to be up to the unions. There has been some success in Queensland in that equipment that was being manufactured for Ranger was not manufactured at a particular shop up there, but where it went to nobody seems to know. There are a number of the contractors involved at Ranger at the moment and that list will be circulated to the unions involved.

In the fact that the policy has failed in the last couple of years a handicap to success at this time?

Yes. I think perhaps we are two years behind. And even within the resolution that was carried at the 1977 ACTU Congress, we should have been doing more about the implementation of that.

What role does the Federal Government play in the super-vision of health and safety standards as far as Ranger and Narbalek?

They have a senior officer in the area — and I'm not quite sure as to whether there is only one — many of the responsibilities in the area of health are decided on the Northern Territory Government Mines and Energy Department. The Commonwealth has left the field to a great extent, and one doesn't know the competence of the Northern Territory people. How effective is the educative campaign to get workers out of the industry. Is there any evidence that the campaign is working? I think what makes this most difficult to do is that the Aboriginal people on the plant were not mining experts and didn't understand the problems of deep pit mining that took place at Narbalek. There was a case where the ore was mined in six months and 500 people, of course, who did the mining have all gone. There's only a total of 90 people employed over the whole of the shifts at Narbalek now, in the processing area.

How effective have the threats of the Electrical Trades Union and other unions like the AMWSU to expel blacklist members for working in the industry? Well it hasn't been very effective to date. There was a case in the Queensland court in relation to Mary Kathleen, but I'm not aware as to whether that decision has been made. It was a challenge by the Queensland Government to the rules of the Queensland branch of the union. There's been no actual threat really to anyone, either by the ETU or by the AMWSU. But it is still very much a matter of education and its not only so far as the people in the mining area are concerned, but the people who go up there from Queensland, New South Wales or even Victoria to seek employment for a short period of time.

The Australian Railways Union has announced that from January next year it will ban the transportation of uranium. What attitude would the ACTU executive take to that action?

The ACTU would be bound to support the ARU in this action. If non-union labor was used to load the uranium it would be much easier to transport the uranium could any action be taken?

That would certainly be a situation to consider. A lot of the material for these mines is of course being transported. The Darwin branch of the WWP, perhaps contrary to the policy of the Federal WWP, has placed a ban on the export of uranium. Now Queensland Mines have had yellow cake stored both at Narbalek and somewhere in Darwin. I think one of the significant things is that they have up-dated the air strip at Narbalek.

The November executive meeting of the ACTU considered a strategy of imposing bans away from the mines. What hopes do you have for that action to be effective, given the lack of success so far?

This is going to be up to the unions. There has been some success in Queensland in that equipment that was being manufactured for Ranger was not manufactured at a particular shop up there, but where it went to nobody seems to know. There are a number of the contractors involved at Ranger at the moment and that list will be circulated to the unions involved.

In the fact that the policy has failed in the last couple of years a handicap to success at this time?

Yes. I think perhaps we are two years behind. And even within the resolution that was carried at the 1977 ACTU Congress, we should have been doing more about the implementation of that.
URANIUM

'I think we can win eventually. We've still got a long way to go.'

In terms of resources for the educational section, what you think they should be increased?
No. The campaign will involve further efforts being prepared and distributed.
The budget of $22,000 for the financial year. Is that sufficient?
I think it can be done within that. Those unions who are particularly interested will need to use some of their resources both in manpower and in relation to educational pamphlets.
Given Bob Hawke's argument at the last Congress on the prospect of the ACTU standing against uranium becoming a national "Newport", do you think the union movement can win on this issue?
I think we can win eventually. We've still got a long way to go, and as far as I know, we're probably a couple of years too late in starting.
How does the election result effect the ACTU position on uranium?
That would have made a complete difference, because the ALP policy is very different from our own. It calls for a moratorium on mining of uranium until such time as a complete safeguards is established in regard to waste disposal and the like.
Having the Fraser Government what are you doing?
Well their policy is just mine it and hell with everyone.
What are your impressions of the anti-uranium movement and its role?
I think the problem of the people who are involved in the anti-uranium movement is that they are inhibited by lack of funds. That's the main problem.
Do you think the trade union movement is realising something constructive working relationship with organisations such as MAUM?
Oh yes, I have fairly close contact with them. I'm prepared to assist them as much as I possibly can and I think they are us.
Do you see a role for organisations like MAUM in developing attitudes in the workplace, and if so, do you think this should have happened earlier?
I see a role. I think they've been restricted because of finance from doing all the things that they would like to have done. In the past the place has been antagonism between sections of the trade union movement and environmentalists. Do you think this has been broken down?
Yes. I don't think - well, except for some unions. I don't think that is a real problem in regard to uranium. It still is in a number of other areas and it will be something that will continue to some extent into the future. It's a very difficult position to get this balance between development and conservation - in other areas mining, and mining for instance.
What attitude does the trade union movement have to the resources boom which has been emphasised by Mr. Fraser?
I think it is in many ways very similar to the situation that has been emphasised by Mr. Fraser.
It's nonsense to say that many of these developments are real employment creating projects. They are very short term and of course the eventual employment opportunities are minimal. I referred to Nalba, for instance. Now that the mining has been done there's only six people per shift and a total of just over 90 people, and that includes staff, management, and so forth employed at that project. I think the figure so far as operational people at Ranger, which is much bigger, will be something about 850. On the question of land rights. Given what has happened at Noonkanbah, do you think the ACTU can still play a role to protect interests of Aboriginal communities?
The ACTU will continue to support the Aborigines by industrial action if that is appropriate and necessary. In most cases we accept that their rights were being ridden roughshod over, as they certainly were at Ranger. The linking of aluminium developments and plans for coal-fired generation schemes in Queensland and Victoria is that they may result in the development of nuclear power to meet energy needs in Australia. Does this pose any dilemma for the ACTU?
That could be. I know there's talk about a nuclear power station at Portland for Alcoa's expansion. In New South Wales it's a complimentary development to use Hunter Valley coal for the aluminium smelters there. And there's plenty of coal in Queensland for power generation. There's just not the necessity for nuclear power in Australia. It is still much more expensive to build a nuclear power station than a coal burning thermal station.
You wouldn't see the problem arising for some time, though?
No. But if it does, well then we'd be opposed to building nuclear power stations here in Australia.
Would you be more confident that that opposition would be more effective than opposition to uranium mining and export?
Yes, I think that would be because you would have real community involvement. If it was decided to build a nuclear power station at Portland, for instance, then I imagine the people of Portland would be more concerned about it.
On the question of nuclear waste. What do you see any role for the ACTU in the international arena?
Yes, if we were to need to get involved in that in contract the ACTU would certainly be getting involved with national colleagues. The New Zealand Federation of Labor has a very strong anti-nuclear policy and we certainly co-operate with them. But it also means cooperation with countries from the new Pacific nations who are also opposed to it.

FOOD FOR PEOPLE OR CARS?

Chart 1

<table>
<thead>
<tr>
<th>Subistence Diet</th>
<th>Affluent Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>182</td>
<td>726</td>
</tr>
</tbody>
</table>

Typical European Automobile** 2815
(11,270 km/yr at 11.3 L/100km)

Typical U.S. Automobile** 6638
(16100 km/yr at 18.8 L/100km)

*(Based on average world grain yields in 1978, according to the U.S. Department of Agriculture. 1 kgm = 2.2046 pounds.)*

†(11,270 km/yr at 11.3 L/100km)

‡(16100 km/yr at 18.8 L/100km)

Some Attraction of Crop Alcohol

• Automobile engines can readily burn a petrol-chemical mixture of alcohol without any adjustment.
• The commercial production of alcohol for industrial purposes is already a well established industry and the technology for converting energy crops is well developed.
• Energy crop production and alcohol distillation are far more labour-intensive than are oil production and refining.

Brazil and the United States of America (the world's largest grain exporters) have announced major programmes to convert crops into alcohol. Other food exporting countries such as Australia, New Zealand and South Africa are considering the conversion of crops into fuel alcohol on a commercial scale. Energy crops initiatives must be evaluated.

The Story So Far

Energy crop production and alcohol distillation are far more labour-intensive than are oil production and refining.

Brazil and the United States of America (the world's largest grain exporters) have announced major programmes to convert crops into alcohol. Other food exporting countries such as Australia, New Zealand and South Africa are considering the conversion of crops into fuel alcohol on a commercial scale. Countries with practical, pilot programmes for energy crop potential include Kenya, Sudan, Thailand and the Philippines. Feasibility studies are under way in the Dominican Republic, Guyana and Jamaica.

Says Lester Brown: "Even without the subsidies, the international energy crops, the world will be hard pressed to avoid a decline in per capita food production during the 80's. It is against this backdrop that the emergence of national and international energy crops initiatives must be evaluated."
Forced Brazil into looking to increase its own production of fuel from crops. This follows on from the alcohol fuel programme launched in 1975.

The Brazilian programme is based largely on sugarcane, the most efficient of all energy crops. Although only 2% of Brazil’s total land area would need to be planted with sugarcane to achieve the goal of automotive fuel self-sufficiency, this would equal half the total land area currently planted to all crops. That equals 16.9 million hectares of sugarcane – more than is planted in the 65 other countries that grow the crop.

The Brazilian decision to turn to energy crops, Brown says, is "part of a drive to grow food prices upward thus leading to more severe malnutrition among the poor. In effect, the more severe one-fifth of the population who own most of the automobiles will dramatically increase their individual claims on cropland from roughly 0.5% to at least 1.5 hectares, further squeezing the millions who are at the low end of the Brazilian economic ladder.

An article by German development issues writer Dieter Brauer in the German development magazine Development and Co-operation this year draws similar conclusions. Brauer maintains that even larger land areas are bought up and used for alcohol production resulting in small farmers being driven from the soil and the neglect of foodstuffs production. The social implications were likewise acknowledged by a group of Brazilian scientists and technicians in a confidential 1978 study subsequently suppressed by the government.

In Brazil, the price for maintaining the automobile society is paid by:

• the small farmer whose land is bought up
• the rural worker whose wages remain low (necessary for feasible production)
• the environment, damaged by the promotion of giant monoculture (exclusive single crop development)
• 70% of the population (at the poorest) as food production decreases and food prices increase.

United States of America

The USA’s alcohol fuel programme is corn based. Their government’s goal is to produce 2,250 million litres of ethanol for fuel in 1981 – at least six times the amount produced in 1979. For the mid-1980s the goal is 9 billion litres. This would require 20 million tonnes of corn or its equivalent.

Net Imports (fig. in million tonnes)

Eastem Europe & USSR

Western Europe

Latin America

Africa

Australia & New Zealand

North America

Source: Food and Agriculture Organization, U.S. Department of Agriculture, and World Institute.

But again the whole issue of a country being food dependent on another is raised and as food and power critic Susan George has said "if a country is importing more than the amount that is used for other purposes then the more likely it is that it is being produced in whose interests it is developed, its environmental consequences and whether it can avoid competing directly with food production.

1. Food or Fuel: New Competition for the World’s Cropland. Worldwatch Paper by Barry R. Brown, March 1980. (The Worldwatch Institute describes itself as "an independent non-profit research organization and produces some excellent research. However he conclusions and analysis in their work are sometimes politically dubious, this being not translated to the fact that they receive funding from the Rockefeller Foundation, the Ford Foundation and the United Nations."


3. It is worth noting that ethanol could not become the dominant fuel source outside the USA if produced from grains. Converting the entire USA grain harvest into alcohol would yield more than 15 billion litres, or 20% of the USA’s annual period consumption.


6. The Potential for Liquid Fuels from Agriculture and Forestry in Indonesia by Dr. J. C. J. van der Putten, published in Half Day Pragmat 1979 pp. 115-120.


9. Unibef information obtained from the Environment Council of the Northern Territory, PO Box 120, Darwin.

1. Food or Fuel: New Competition for the World’s Cropland. Worldwatch Paper by Barry R. Brown, March 1980. The Worldwatch Institute describes itself as an independent non-profit research organization and produces some excellent research. However the conclusions and analysis in their work are sometimes politically dubious, this being not translated to the fact that they receive funding from the Rockefeller Foundation, the Ford Foundation and the United Nations. They also state that "the US government remains guarded and argues that private enterprise should take the lead and the public should just finance the research."


3. It is worth noting that ethanol could not become the dominant fuel source outside the USA if produced from grains. Converting the entire USA grain harvest into alcohol would yield more than 15 billion litres, or 20% of the USA’s annual period consumption.


6. The Potential for Liquid Fuels from Agriculture and Forestry in Indonesia by Dr. J. C. J. van der Putten, published in Half Day Pragmat 1979 pp. 115-120.


9. Unibef information obtained from the Environment Council of the Northern Territory, PO Box 120, Darwin.
Chipping into Tasmania

By Peter Thompson

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson

Chipping into Tasmania

By Peter Thompson
Conzinc Riotinto of Australia (donor of it may signify that some other the Great Barrier Reef and Lake Pedder, years ago showed that CRA was critical issues, or will it be an old body of stature is about to collapse."

A foundation set up by mining and WWF to wildlife projects. This one million dollars has been committed via the WWF to conservation organizations, but what is said to always maintain the spirit of constructive balance which emanates from research-established knowledge rather than from emotional enthusiasm."

The WWF programme of conservation is not an attractive. To date, one million dollars has been committed to the development of North tropical rainforest areas in the north-western Territory. The mines are situated in the middle of Kakadu National Park, a World Heritage area.

Peko Wallendo ($5,000) is a partner in uranium mining with ETL and trustee of WWF. Broken Hill Proprietary Co Ltd ($49,000) is the largest donor to the WWF - it has interests in the Ok Tedi mining site in Papua New Guinea, the North West Shelf gas project and coal and steel milling in Western Australia and New South Wales. BHP has interests in the Worsley aluminium/bauxite project in WA. This project has been approved by the West Australian government against the advice of their Environmental Protection Authority. The Premier, Sir Charles Court stated that if the EFA’s recommendations were to be ignored the project could not go ahead. The project threatens the great forests of WA. Bauxite mining in the Jarrah forests has been criticised by many sections of the community, including the WA Institute of Foresters, Sir Robert Law-Smith and Mr I Gordon. Daunting directors of BHP are both trustees of WWF.

CRA Australia Ltd ($3,000) proposes to build a petrochemical plant near Rockingham in Victoria. Its construction threatens the habitat of the rare orange-bellied parrot. CRA has contributed heavily to the WWF project to study the parrot. The Environmental Effects Statement prepared by ICI for the proposed project was endorsed by the Victorian Fisheries and Wildlife Preservation, Environment Protection Authority, Port Phillip Authority and the Royal Australian Geologists. My R Donald Malcolmson is a trustee of WWF and director of BMI ($4,000) is the owner of Allen Taylor and Co Pty Ltd a company which has several sawmills along the NSW coast, and is heavily involved with the NSW North Coast woodchip scheme which threatens wildlife habitat.

CSR ($3,000) owns Pymbleboard at Tumut NSW. The pine plantations around Tumut have caused the clearing of large areas of native forest, including large areas of the Murray catchment. The mine is a major source of dust and noise. The Monaro Shire councillor said to me in the world. "As increasing numbers of people come to the coast they have to be provided with water and sewerage, roads, accommodation, food, and services like entertainment, medical care and garbage disposal. As one employee of the Eurobodalla Shire Council said to me "It all makes the Shire a bigger place. Its what we seem to consider progress."

You can see them all along the coastline: the advertisements for real estate developers. Land is subdivided for the purpose of setting up caravan sites or motels or providing for the market in holiday homes, and in the midst of such development how can the sweet especi rural scene of the South Coast be prevented from being irretrievably trampled upon and spoiled? There is to take an example, a Coastal Protection Act in NSW which sets out to guard against the exploitation of the coastal strip by those who only have profit making in mind. But planning mechanisms alone are insufficient to control this hunger for recreation. The resolution of this problem requires an overall use of the land and its conservation to happen as part of an overall and more fundamental change in our whole productive process.
How will the Great Barrier Reef be saved? Why should it be saved? How do those campaigning to save it work? What success have they had? Pauline Taylor from the Save the Barrier Reef Campaign discusses the campaign's history, goals, strategy and tactics.

For thousands of years the Great Barrier Reef existed without interference from people. It is the largest, most diverse and most complex reef system on the face of the Earth, being made up of about 2,500 individual coral reefs. On the Reef scientists are still discovering many new plant and marine animal species. How can we hope to ever understand the complicated web of life existing in this area, when we don't yet know its full extent and when it is under threat from:

- oil and mineral exploration and mining and oil spills from tanks and other vessels
- over-fishing of the marine life population
- damage from mainland water run-off which contains pollutants from "civilization" and silting from land development
- damage from concentrated tourist use of the Reef

It is from people that the threat to the Reef Region comes. Environmentalists, however, do not believe that humans must therefore be excluded from the area. On the contrary, they believe it is from people that the threat to the Reef Region comes. Environmentalists, however, do not believe that humans must therefore be excluded from the area. On the contrary, they believe that people can take steps to become a part of the ecological world and stop putting ourselves apart from it.

The natural value of this biological wonder is from people that the threat to the Reef is not popular.

The goals of the campaign to save the Reef are to:

- the entire region declared a Marine Park, thus containing pollutants from "civilization" and protecting the Reef from exploiters
- the entire Reef region listed on the World Heritage List

GOALS

The goals of the campaign to save the Reef are to:

- the entire region declared a Marine Park, thus containing pollutants from "civilization" and protecting the Reef from exploiters
- the entire Reef region listed on the World Heritage List

The Age, 17 May 1979

Oil conducted an opinion poll, through its branches in Brisbane and country centres now swelled by concern for the Reef's future. Of 5,000 replies, 90% (for the State as a whole) opposed any oil industry on the Reef or in its waters! By publicizing these results the campaign was able to make both the Queensland and Federal governments aware that they would lose massive support for oil exploration, but because these were not advertised, the public remained ignorant of this danger.

This episode illustrated two points. The campaign began as a reaction to a threat to an area for which many people had a deep concern. It also illustrated the fact that when the public is denied information it cannot express concern. At this stage the environmentalists were alerted to the threats of oil exploration, and the initiative was taken to carry out campaign research. The environmentalists set to work to research the possible and probable effects of spills and pollution on the Reef's marine life and to publicize what they had discovered. The campaign was starting to take the initiative in terms of research and public education.

1969. When money, labour and media coverage are limited, public education programmes can be very slow. Often the immediacy of critical problems can mean that such education is too slow. In February 1969 a disaster struck which was to prove the most effective catalyst for gaining public support – a heavy well blow-out off Santa Barbara in California.

The effects on Santa Barbara's beaches, sea birds, fish and tourist industry of the flood of oil that came ashore in those months were spectacularly illustrated in newspapers all over the world. They effectively aroused Australians to join the campaign against oil drilling on the Reef. Thousands of letters to the Press and politicians followed.

Later that year, in October, the next drill holes were due to go down off the Queensland coast. The Commonwealth government was extremely reticent, and in fact took no overt action to prevent the Queensland Government allowing this exploration. This was because the oil industry already had offshore oil industries and it chose to fight one particular State government which would have presented many legal and political problems.

At this point the environmentalists took action. The decision was made to go ahead. On its own initiative the Wildlife Preservation Society of Queensland conducted an opinion poll, through its branches in Brisbane and country centres now swelled by concern for the Reef's future. Of 5,000 replies, 90% (for the State as a whole) opposed any oil industry on the Reef or in its waters!
and if they considered endangering the Reef.

1970. In January 1970 environmentalists took another step in order to pressure the governments of the day. They approached Queens­land, New South Wales, Victoria and South Australia with a written appeal asking that there be no activity related to oil drilling in the Reef region. This was looked upon favourably and resolutions to that effect were passed (The Australian Court of Trade Unions also supported such measures and in 1979 declared black bans on oil exploration and mining in the region.).

The Queensland ban had an immediate effect. When faced with the prospect of having to con­front the oil industry, company involved offered $5,000 towards the cost of a public inquiry into the issue. Because the Queensland government could do nothing to prevent the black ban coming into operation, it was forced to accept an offer to settle any such inquiry. Prime Minister Gorton, personally opposed to oil drilling, used this opportunity to turn the public inquiry into a Royal Commission. The black ban was therefore a threefold success.

In July 1970 the Royal Commission began taking evidence from scientists, oil companies, geologists, environmentalists and the general public. Its final inconclusive report did not appear until November 1974. Two commissioners considered some drilling might be allowed in specific parts of the region, while the chairman contended that both long and short term research was necessary before any permits should be issued. 1974 saw the Whitlam government in power. It was now up to the Royal Commission findings as the basis for drawing up legislation to protect the Reef. In 1975 the Great Barrier Reef Marine Park Act was passed. The park was declared and established a government agency, the Great Barrier Reef Marine Park Authority, for the protection of the whole Reef Region (see box page 22).

The Great Barrier Reef Foundation immediately initiated an action committee in New South Wales called Reef Action. Any group in Eastern Queensland (Queens­land) contacted Environment Alert, a Melbourne group, and the Save the Barrier Reef Campaign was organised. A massive campaign along the east coast was launched as well as a postcard campaign. Slogans such as "Don't spoil the Reef With the Barrier Reef" and "A GREAT Barrier Reef Marine Park now!" were thought up. These activities caught the media's attention, educated the public, enlisted further help on the campaign, and pressured the government.

During this time a national opinion poll was taken by Irving Saulwick and Associates. This poll, published on 17 May 1979 found that 66% of Australians totally opposed any oil drilling activity in the Reef Region. Publication of these results gave the campaign a great moral boost, and probably caused the government concern. The disclosure of the fact that the Queensland government was about to declare the Reef a Marine Park was scheduled for June 1979 when the Minister for the Environment was due to meet with the Prime Minister. This meant the onus then fell on environment­alists in two ways. The campaign had to take up all tactics which would force the issue upon the Federal government and thus into the media's eye (as with the black ban), and it had to be ready at all times with a current analysis of the situation in case a response was needed (for example to any government decision). If the avenues for using the first choice were exhausted and if the second option did not present itself then the campaign was left with a third alternative — public awareness and united public opinion to make sure whatever could be afforded. This included publication production and distribution of newsletters, booklets, posters, press releases outlining the environmentalists' interpretations of events, their demands and their achievements. To achieve these "significant" in the eyes of the media, these releases were reported and groups were contacted for comment. Questions were asked in federal parliament by members sympathetic to the campaign; contradictory and confusing answers were given, embar­rassing the federal government and again receiving press coverage. More campaign materials were produced and distributed, newsletters and book­lets providing background information as well as current events analysis also appeared. Simultaneous­ly public meetings were held in Melbourne, Sydney and Canberra. A petition campaign was launched as well as a postcard campaign. Slogans such as "Don't spoil the Reef With the Barrier Reef" and "A GREAT Barrier Reef Marine Park now!" were thought up. These activities caught the media's attention, educated the public, enlisted further help on the campaign, and pressured the government.

Victoria Save the Barrier Reef Campaign, 118 Errol Street, North Melbourne, 3051. Telephone (03) 329 5519.

National Australian Conservation Foundation, 67B Glenferrie Road, Hawthorn, Victoria 3122. Telephone (03) 819 8888.

There are many other conservation groups which actively support the Reef campaign. This is only a list of primary contacts — the many other groups who will be happy to give you more detailed and local contacts.

Information

Queensland

Australian Littoral Society (Queensland Division), P.O. Box 498, Toowong, 4066. Telephone (07) 378 6077.

Queensland Conservation Council — Environment Centre, 147 Ann Street, Brisbane, P.O. Box 346, North Quay, 4000. Telephone (07) 221 0188.

Townsville Regional Conservation Council, 819 Flinders Street, P.O. Box 364, Townsville, 4810. Telephone (077) 71 6226.

New South Wales


Victoria Save the Barrier Reef Campaign, 118 Errol Street, North Melbourne, 3051. Telephone (03) 329 5519.

National

Australian Conservation Foundation, 67B Glenferrie Road, Hawthorn, Victoria 3122. Telephone (03) 819 8888.

Lizard Island — one of the 2,446 reefs still unprotected.

Federal governments to allow oil exploration and drilling, and have provisions to declare the whole region as a Marine Park. The legislation was welcomed by the environ­mentalists but was seen as a "stepping stone" to more time in which to find a solution to the Reef issue. But the Queensland government was actually permitting seismic exploration to resume. When documented evidence was released on 9 May 1979 which proved that the Queensland government was prepared to allow oil companies to define Marine Park boundaries the Australian Conservation
World Heritage List, this carries no legally binding commitment.

On 8 July the Reef Region, comprising islands which are not national parks, was listed on the Register of the National Estate. Such a listing confers a legal responsibility on the Australian Conservation Foundation, not to allow any project which could have a significant environmental impact, unless there is no prudent and feasible alternative. However, as this is an extremely loose provision, dependent upon ministerial judgement, degree of interest, and bias, it is not regarded by environmentalists as providing adequate protection.

How has the campaign organized its finances, offices, and the distribution of information?

Queensland

The Reef campaign is one of the major issues pursued by the Australian Littoral Society in Brisbane. The ALS is a national association for the study and conservation of aquatic life. The group employs two full-time staff members. It is funded, a nation-wide mailout to over 1,300 environment groups asking them to write to the Prime Minister about the Reef. The Australian Littoral Society (NSW division) assists Reef Action - Send A Fish To Fraser.

National Campaign

The Australian Littoral Society - see Queensland section (above) works nationally for defence of the Great Barrier Reef. As well, the Australian Conservation Foundation is now campaigning for the Reef's protection. The ACF campaign around many issues and has the most secure financial situation of all the groups. Therefore it has been able to produce occasional community service television advertisements to educate the public about Reef issues, but only with valuable specialist volunteer help. It can also afford to produce quality publications for sale and pay full-time award wages. It receives its funding from Federal government grants, membership, donations and publications sales. From its Save the Reef Appeal fund it was able to produce quality publications such as an illustrated colour book explaining the Reef issue to the public.

Communication between the groups is aided by holding occasional interstate meetings. The most recent national meeting was held in March 1980 in Sydney. A major misconception about campaigns is that it is to be involved one has to be a full-time activist or an expert. Of course, some full-time organisations are necessary and expertise in some fields is essential. However, most work is carried out by people who previously thought they could never be part of a campaign.

The Victorian group is comprised of several housewives, horticulturalists (with a child!), an environmentalist (who once worked for a multinational oil company), a marine science P.D. student, office workers, teachers, students and a social worker.

The countless tasks which make up the campaign include filing detailed submissions to the Federal government and Marine Park Authority. The Queensland Littoral Society council and branches of the Wildlife Preservation Society are also active on the Reef issue and offer support in fundraising, helping develop public understanding and action.

New South Wales

Reef Action, in Sydney was initiated in March 1979 by the Australian Conservation Foundation's full-time NSW Liaison Officer. It is an independent group, raising money through the sale of paintings and publications and has held a theatre night. It campaigns solely around the Reef issue and maintains regular liaison with Barry Colenso, a Labor Federal Member of Parliament and Senator Colin Martin, of the Australian Democrats. The group has also distributed information overseas and attempted to enlist overseas support. It is recently produced, and to the major extent funded, a nationwide mailout to over 1,300 environment groups asking them to write to the Prime Minister about the Reef. The Australian Littoral Society (NSW division) assists Reef Action - send a fish to Fraser.

The Save the Barrier Reef Campaign in Melbourne was initiated at the same time as Reef Action, but was set up by the Littoral Society. A sustenance wage was solicited from the ACP and in this way a full-time co-ordinator was employed for 3 months. Since that time the group has been run entirely by volunteers. It generates its own funds from memberships, donations, street stalls, film hire, and speakers' fees. It relies heavily on credit from the Littoral Society. The main thrust of the Victorian campaign is public education and encouragement of activities within local communities. It has produced introductory information leaflets and a broadsheet, and has procured resource material (video tapes, badges, stickers and postcards) for the whole campaign. It also initiated the Reef postcard "Send A Fish To Fraser" campaign.

Great Barrier Reef Marine Park Authority

The three-member Authority, established by the Marine Park Act, comprises a full-time Chairman, Graeme Kelleher, a part-time member nominated by the Queensland Government, Mr Sid Schubert. The principal function of the Authority is to make recommendations to the Commonwealth Minister for Science and the Environment in relation to the care and development of the Marine Park within the Great Barrier Reef region. The Authority recommends sections of the region which should be declared as part of the Marine Park, prepares zoning plans and plans of management, arranges research and investigation relevant to the Marine Park, and makes recommendations as to the regulations to apply to the sea, seabed and coral reefs, as well as the airspace above, within the Marine Park. The paramount aim of the Authority is to set aside zones in the Marine Park for such purposes as preservation, research, recreation, fishing and shipping, to allow reasonable human activities to continue in ways which conserve and protect the Great Barrier Reef.

Joint Ministerial Council

The Council consists of four members, two from the Federal government and two from the Queensland government. Its function is to oversee the Great Barrier Reef Marine Park Authority. Obviously in this situation a deadlock situation over critical decisions can easily result; there being no member with a deciding vote. Normal procedural practice in this situation is for the negative votes to carry the decision.

Queensland

The Reef campaign is one of the major issues pursued by the Australian Littoral Society in Brisbane. The ALS is a national association for the study and conservation of aquatic life. The group employs two full-time staff members. It is funded, a nation-wide mailout to over 1,300 environment groups asking them to write to the Prime Minister about the Reef. The Australian Littoral Society (NSW division) assists Reef Action - send a fish to Fraser.

National Campaign

The Australian Littoral Society - see Queensland section (above) works nationally for defence of the Great Barrier Reef. As well, the Australian Conservation Foundation is now campaigning for the Reef's protection. The ACF campaign around many issues and has the most secure financial situation of all the groups. Therefore it has been able to produce occasional community service television advertisements to educate the public about Reef issues, but only with valuable specialist volunteer help. It can also afford to produce quality publications for sale and pay full-time award wages. It receives its funding from Federal government grants, membership, donations, and publications sales. From its Save the Reef Appeal fund it was able to produce quality publications such as an illustrated colour book explaining the Reef issue to the public.

Communication between the groups is aided by holding occasional interstate meetings. The most recent national meeting was held in March 1980 in Sydney. A major misconception about campaigns is that it is to be involved one has to be a full-time activist or an expert. Of course, some full-time organisations are necessary and expertise in some fields is essential. However, most work is carried out by people who previously thought they could never be part of a campaign.

The Victorian group is comprised of several housewives, horticulturalists (with a child!), an environmentalist (who once worked for a multinational oil company), a marine science P.D. student, office workers, teachers, students and a social worker.

The countless tasks which make up the campaign include filing detailed submissions to the Federal government and Marine Park Authority. The Queensland Littoral Society council and branches of the Wildlife Preservation Society are also active on the Reef issue and offer support in fundraising, helping develop public understanding and action.

New South Wales

Reef Action, in Sydney was initiated in March 1979 by the Australian Conservation Foundation's full-time NSW Liaison Officer. It is an independent group, raising money through the sale of paintings and publications and has held a theatre night. It campaigns solely around the Reef issue and maintains regular liaison with Barry Colenso, a Labor Federal Member of Parliament and Senator Colin Martin, of the Australian Democrats. The group has also distributed information overseas and attempted to enlist overseas support. It is recently produced, and to the major extent funded, a nationwide mailout to over 1,300 environment groups asking them to write to the Prime Minister about the Reef. The Australian Littoral Society (NSW division) assists Reef Action - send a fish to Fraser.

The Save the Barrier Reef Campaign in Melbourne was initiated at the same time as Reef Action, but was set up by the Littoral Society. A sustenance wage was solicited from the ACP and in this way a full-time co-ordinator was employed for 3 months. Since that time the group has been run entirely by volunteers. It generates its own funds from memberships, donations, street stalls, film hire, and speakers' fees. It relies heavily on credit from the Littoral Society. The main thrust of the Victorian campaign is public education and encouragement of activities within local communities. It has produced introductory information leaflets and a broadsheet, and has procured resource material (video tapes, badges, stickers and postcards) for the whole campaign. It also initiated the Reef postcard "Send A Fish To Fraser" campaign.

Great Barrier Reef Marine Park Authority

The three-member Authority, established by the Marine Park Act, comprises a full-time Chairman, Graeme Kelleher, a part-time member nominated by the Queensland Government, Mr Sid Schubert. The principal function of the Authority is to make recommendations to the Commonwealth Minister for Science and the Environment in relation to the care and development of the Marine Park within the Great Barrier Reef region. The Authority recommends sections of the region which should be declared as part of the Marine Park, prepares zoning plans and plans of management, arranges research and investigation relevant to the Marine Park, and makes recommendations as to the regulations to apply to the sea, seabed and coral reefs, as well as the airspace above, within the Marine Park. The paramount aim of the Authority is to set aside zones in the Marine Park for such purposes as preservation, research, recreation, fishing and shipping, to allow reasonable human activities to continue in ways which conserve and protect the Great Barrier Reef.

Joint Ministerial Council

The Council consists of four members, two from the Federal government and two from the Queensland government. Its function is to oversee the Great Barrier Reef Marine Park Authority. Obviously in this situation a deadlock situation over critical decisions can easily result; there being no member with a deciding vote. Normal procedural practice in this situation is for the negative votes to carry the decision. In this way the Queensland government is given the opportunity of veto power over the Federal government where no such power existed previously. This is a deliberate and direct action by the Federal government to protect the Great Barrier Reef.
This is the first in a series by the Friends of the Earth/Doctors Reform Society Radiation Working Group. This series aims to highlight and explain issues around x-rays and radiation which are pertinent to our everyday lives, and ultimately to our health and well-being.

Compared to Axial Tomography (CAT) is the process of taking x-rays at different angles through the body, in order to obtain a focused picture of the organ in question. These pictures can be likened to "slices" of the organ. The CAT scan, by taking pictures from numerous radii, builds up a picture of what is inside a "slice". A CAT scan is ultimately capable of taking a 360° x-ray through an organ.

The first experimental CAT scan pictures were taken in 1971 by researchers who later won a Nobel Prize for their work. EMI (U.K) was the first company to manufacture a CAT scan; EMI has since been taken over by General Electric (USA) and Siemens Industries (West Germany).

A basic CAT scan machine costs in the order of $350,000. A full-body CAT scan sells for around $90,000.

Catscans are mainly used for disorders inside the skull, because there is supposedly no other "completely safe" means of visualizing the interior of the skull.

Catscans are believed to be a "non-invasive" technique. That is, non-invasive compared to other techniques such as air venography, where air is injected into the veins of the brain, and an ordinary x-ray is taken. Air venography causes very bad headaches in patients, and is held to be all-round an undesirable technique.

The Fri means a police blockade in the Netherlands, 1980.

Plans are underway to again sail an "action ship" in the Pacific for the Nuclear Free Pacific Movement's campaign.

In Europe the Fri and the Rainbow Warrior, a Greenspeace ship, have been and are still actively engaged in opposing nuclear waste dumping in the Atlantic Ocean. Both vessels have gained wide publicity and support in Europe. On 13 November the Rainbow Warrior escaped from 'arrest' in Portugal where it has been interestingly avoiding whaling boats.

There is not now, however, an action ship to do similar work in the Pacific. It is important to now raise funds for such a ship. Previous protest voyages in the Pacific have added to the growing public campaign against nuclear tests and the dumping of radioactive waste into the ocean or on some of the region's islands and atolls. The Fri, currently still in action, with Greenpeace III, made a protest voyage to the French nuclear bomb test site at Mururoa (Polynesia) in 1973.

Failing the necessary funds to buy a vessel, the Nuclear Free Pacific Movement proposes to investigate the possibility of leasing a vessel for a period of at least six months.

The Nuclear Free Pacific Movement (NFPM) asks your support for their appeal to raise funds for the acquisition and employment of an action ship. This motorship, to be operating by 1981, is to be used for non-violent patrol of the Pacific region. In Australia several groups have already pledged their active support.

Please send any donations for the NFP action ship to:

The Fri Collective, C/- Environment Centre of W.A., 537 Wellington Street, Perth, Western Australia. 6000. Telephone: (09) 321 5942, 321 2269.

Rien Achterberg
For SF / Fri
Solar lighting systems

ECONOMY SYSTEM
Consists of:
- One 8 Watt solar panel, extruded aluminium base, tempered low iron glass cover.
- 40 solar cells of 3" dia half circles.
- Suitable for charging 12V batteries.
- Two 8 Watt fluorescent lights, complete with diffuser and built-in switch.
- This system will light one fluorescent light for 9 hours, or all three for 3 hours.
- Five metres of cable.
- Includes:
  - One 8 Watt solar panel, extruded aluminium base, tempered low iron glass cover.
  - 40 solar cells of 3" dia half circles.
  - Suitable for charging 12V batteries.
  - Two 8 Watt fluorescent lights, complete with diffuser and built-in switch.
  - This system will light one fluorescent light for 9 hours, or all three for 3 hours.

DELUXE SYSTEM
Consists of:
- One 33 Watt solar panel, lightweight construction, tempered low iron glass superstrate with aluminium frame all around.
- 33 solar cells, 100 mm dia full cycle, second generation.
- Three 13 Watt fluorescent lights, complete with diffuser and built-in switch.
- This system will light one fluorescent light for 9 hours, or all three for 3 hours.
- Normally $395 now $100 OFF, only $295.

A FREE Installation Kit comes with another system, consisting of:
- Five metres of cable.
- Two battery clamps.
- Two cables for extra reliability.
- All pre-assembled.
- Tube of silicone rubber to protect terminals against the weather.

Call 02 411 1323 or write to Trish Barnes, 81 Chatsworth Road, Prahran, 3181. Telephone (03) 514020.

INSIGHT MEDITATION COURSE

A ten day course in Vipassana Meditation will be held from 6 February 1981 in Ringwood, Melbourne. It will be conducted by Mr. John Coleman, who is an authorised teacher in the Tradition of Saya Li Ka Khin of Burma.

For information contact Mike and Trish Barrew, 81 Chatsworth Road, Prahran, (03) 514020.

One shipment of chelkat skins recently confiscated in Hong Kong was worth $1,000,000, and represented 10% of the world chelkat population (319 skins).

A ozone coat in West Germany sells for $40,000. A single Amazorian parrot can fetch $5,000. Rhinoceros horn is worth more than its weight in gold. Shipments of Amazorian parrots (paroecanthus), the highly endangered Golden Shouldered Parrot (from Northern Queensland) worth millions of dollars each, regularly leave unknown ports in the far north, bound for eager customers in the USA. The same is true of the penalties low. What's easier, pushing drugs or pushing wildlife products?

Admittedly, trying to stop shipments of parrots from leaving the vast wilderness of the north is an easy job, but efforts must be stepped up if these species and others are to survive.

During the last eighteen months, the following species products have been sighted in Sydney shops and newspapers:
- Amphibians
- Reptiles
- Birds
- Mammals
- Insects
- Waterfowl

It has been more than seven years since the Convention on International Trade in Endangered Species of Flora and Fauna (CITES) was signed in Washington DC. It is more than five years since CITES came into force internationally, and four years since Australia ratified CITES via the Customs (Endangered Species) Regulations.

Despite a membership of over 60 nations, all is not well with the implementation of the convention, either within Australia or overseas, and the consequences of this fact may in the long run prove catastrophic for all wildlife populations. Here in Australia there have been at least 16,000 confiscations under the regulations, and yet not one prosecution has taken place. One has to ask the question - why not?

It cannot be said that the convention is still too young for any judgements to be made on its effectiveness. But how long do we wait? For how long can wildlife populations sustain great losses while the convention finds its feet?

The convention depends upon the co-operation and co-operation of government bureaucracies to take on the job. Cooperation not only between departments within governments, but also between those of one nation and another is absolutely essential. Species are dealt with in three categories; appendix 1: highly endangered, no trade permit required; appendix 2: vulnerable, licensed trade; appendix 3: species which individual states protect at home. The whole convention revolves around a system of licensing for import and export of wildlife products and live specimens, and it is the enforcement of this system that FOE is advocating for record of detection that is currently giving great cause for alarm.

The Australian National Parks and Wildlife Service and the Bureau of Customs jointly take responsibility for the implementation. How have they fared in their duties? The answer, at least with respect to Customs, is that they have failed dismally. As was mentioned earlier, no prosecution has taken place during the four year life span of the Customs (Endangered Species) Regulations. Investigations by Friends of the Earth have turned up some very disturbing facts about the lack of enforcement, and these investigations are continuing until FOE can present a case with damaging evidence to the Federal Government. It is hoped that this can be done before the end of January 1981. It is believed that the Australian National Parks and Wildlife Service have carried out an indepth study of the implementation and administration of CITES, and has produced a report that is fairly sweeping in its recommended changes, and is currently before the Prime Minister and Cabinet.

What is evident from our investigations, and from recent press reports of unrest within the Bureau of Customs is that the people on the floor, the rank and file officers at airports and docks, are doing the best that they can under trying circumstances. It is the apparent lack of action and apathy in the Customs hierarchy that is proving the root of the problem. The higher echelons seem to be oblivious to the requirements of the law. Not only endangered species, but also poisonous and illegal items, particularly narcotics, are passing into Australia with apparent ease. Customs officers have become so frustrated at the situation that they are now seeking the backing of their own department, FOE Customs, to undertake the necessary action.

A number of cases have come to the attention of FOE, Customs or the National Parks and Wildlife Service, which can be said to be typical of the situation.

In many cases the retailers claim that they were imported before the ban of 1976, or that they have valid licences. It is impossible for FOE to verify these claims.

In the main, species products involved in the trade emanate from South America, South East Asia, Africa, and to a lesser extent Australia. The main source countries are in the United States of America, Japan, France, Belgium, United Kingdom, West Germany and Italy. The question must also be asked of course - who buys these products?

Despite an assumed awareness on the part of the public, at large, a walk through Australia's cooler capital cities, on a cold, windy winter day, will reveal a vast array of fur coats representing many different species, particularly the spotted cat. Australia is perhaps also importing a significant amount of turtle products, to a point where the National Parks and Wildlife Service in Canberra have instructed Customs to remove all turtle products from Australian tourism who continue to bring these items in oblivious to the law (quite clearly stated in a Customs handout booklet). Snake skin and fur skin handbags and wallets are common in Sydney shops, Australian parrots are subject to the desires and whims of well-to-do collectors in the USA and Europe. Business circles gladly oblige and serve the demand.

Big business and public ignorance are equally to blame.

Under recent scrutiny, Australia seems to be importing slightly in certain areas, particularly in respect to further import restrictions, instigated by the Australian National Parks and Wildlife Service. The scope for improvement is vast, however, for no matter how tough our laws on paper, without full enforcement they mean little. FOE has instigated many investigations by Customs into possible breaches of the regulations, some successful, but the majority not. We have also been lobbying extensively for new and more effective legislation, as well as investigating the role of the Bureau of Customs itself.

Public awareness and help is essential if the situation is to be improved. For more information, see your nearest Customs office, contact your nearest Customs office and tell them to look into the problem. If you prefer to contact us, we will be glad to provide any assistance we can.

A list of species can be obtained from the Australian National Parks and Wildlife Service.

A final somewhat provocative action is to verbally abuse those people who wear such articles. Cruel but effective, and bad but necessary, and ultimately practiced in the USA and UK.
THE SOLAR CELL

Basically, a photovoltaic (solar) cell is a thin wafer of silicon to which has been added a controlled amount of boron during the crystal formation. This material is called a P-type silicon and is the negative pole and the N-type material now becomes the positive pole of the solar cell. Sunlight falling on the solar cell will cause current to flow through the panel. This current is usually less than 5mA and a 100mm diameter cell produces about 1.5mA for each 1 Sun, which is 100 mW/cm. Increased cell size or greater light intensity will give greater current output.

The voltage of each solar cell is always between 0.4 to 0.45V, which is the voltage of a silicon P-N junction. This voltage is the voltage of a silicon P-N junction. The output of solar cells and panels are measured at a standardised intensity of 1 Sun, which is 100mW/cm² and a 100mm diameter cell produces about 1.5mA for each 1 Sun.

HOW TO USE A BUYING A SOLAR PANEL

Electrical Considerations

How many cells does it have and how are they interconnected? Solar cells are very fragile and need to be protected. Most solar panels these days have the cells completely encapsulated in a clear silicone rubber. This prevents moisture, dust and salt water from getting near the cell. It also acts as a cushion against shock and vibration.

Blocking Diodes

In smaller panels, a blocking diode is usually built in. It acts as a one-way valve and prevents the battery discharging through the panel at night.

Mechanical Considerations

How are the cells interconnected? Solar cells are very fragile and need to be protected. Most solar panels these days have the cells completely encapsulated in a clear silicone rubber. This prevents moisture, dust and salt water from getting near the cell. It also acts as a cushion against shock and vibration.

Note the fins on this aluminium extrusion. Do not mount solar panels directly on top of hot objects but allow air to circulate and cool these fins.

Continued page 31
Your community group can support her struggle for justice by distributing World Development Tea.

Uranium. For richer? Or poorer? In sickness? Or health? Or till death do us part?

After Harrisburg, thousands of Australian doctors believe, more than ever, you need a second opinion.

In a special reprint of issue 7 of New Doctor, the journal of the Doctors’ Reform Society, we examine the issue of uranium and your health.

The prognosis is not good. You’ll want to know the reasons why.

This much sought-after, now updated issue of New Doctor, is available again from selected newsagents, bookshops and health food stores, or New Doctor for S3.

Planning the size of your solar installation

The larger the panel, the lower is the cost-per-watt. There is also less work involved in joining them together, and electrical interconnections which reduces the potential trouble spots.

The smaller panels, on the other hand, are more modular and should one panel get damaged, the replacement cost would be lower.

Installation and maintenance

To get the maximum output, solar panels have to face the Sun directly. There is usually an abundance of sunshine in summer but a shortage in winter, hence the panels for maximum output in winter. We suggest the following inclination angle relative to horizontal.

Calculating the required size of your solar installation

This guide will give you a rule of thumb which is adequate for most installations.

STEP 1 What is your load requirement each day?
Assume you want a solar installation to run the following:

2 fluorescent lights @ 8 Watts
1 transistor radio @ 1 Watt, 5 hours
1 portable television @ 25 Watts, 3 hours

Total = 128 Watt hours

STEP 2 Convert your power requirement to Amps hours per day.
Assume you use a 12-volt lead acid battery. The Amp hour required per day is: 128 x 12 = 1.5 Amp hours per day.

This gives a total of 12.8 Amp hours per day, which has to be couped in one day from the solar installation. Using a rule of thumb, one can expect an equivalent of 5 hours of sunshine each day which has an intensity of 1 Sun, along Eastern and Southern seaboard of Australia.

The solar installation then has to produce 12.8 x 5 = 64 Amps. A 65 Amp hour battery would be suitable for this installation.

What you now have is an installation with an abundance of power during the summer, but insufficient to cope during winter months. There are several ways of overcoming this summer-winter discrepancy:

a. add more solar panels to cope in winter
b. add more batteries to store the summer excess
c. Add a small wind generator to the system, as these give highest output during winter.
d. Cut your power consumption during the lean months.

Uranium. For richer? Or poorer? In sickness? Or health? Or till death do us part?

Environmental Considerations

Depending on your application, check the performance of the panel in the environment you want to use it in, e.g.: What wind loading will it stand? Will it stand hail storms? What maximum or minimum temperature will it cope with? Are the terminals rust-proof? How is it to mount the angle you need?

Calculating the required size of your solar installation

This guide will give you a rule of thumb which is adequate for most installations.

STEP 1 What is your load requirement each day?
Assume you want a solar installation to run the following:

2 Fluorescent lights @ 8 Watts
1 transistor radio @ 1 Watt, 5 hours
1 Portable television @ 25 Watts, 3 hours

Total = 128 Watt hours

STEP 2 Convert your power requirement to Amps hours per day.
Assume you use a 12-volt lead acid battery. The Amp hour required per day is: 128 x 12 = 1.5 Amp hours per day.

This gives a total of 12.8 Amp hours per day, which has to be couped in one day from the solar installation. Using a rule of thumb, one can expect an equivalent of 5 hours of sunshine each day which has an intensity of 1 Sun, along Eastern and Southern seaboard of Australia.

The solar installation then has to produce 12.8 x 5 = 64 Amps. A 65 Amp hour battery would be suitable for this installation.

What you now have is an installation with an abundance of power during the summer, but insufficient to cope during winter months. There are several ways of overcoming this summer-winter discrepancy:

a. add more solar panels to cope in winter
b. add more batteries to store the summer excess
c. Add a small wind generator to the system, as these give highest output during winter.
d. Cut your power consumption during the lean months.

Uranium. For richer? Or poorer? In sickness? Or health? Or till death do us part?

Environmental Considerations

Depending on your application, check the performance of the panel in the environment you want to use it in, e.g.: What wind loading will it stand? Will it stand hail storms? What maximum or minimum temperature will it cope with? Are the terminals rust-proof? How is it to mount the angle you need?

Calculating the required size of your solar installation

This guide will give you a rule of thumb which is adequate for most installations.

STEP 1 What is your load requirement each day?
Assume you want a solar installation to run the following:

2 Fluorescent lights @ 8 Watts
1 transistor radio @ 1 Watt, 5 hours
1 Portable television @ 25 Watts, 3 hours

Total = 128 Watt hours
Five million tonnes of Australian forests are woodchipped and exported every year. There are applications before the Federal Government to export a further two million tonnes per annum - and these trees are to come from the Northern Territory and all States (except South Australia). This is aside from domestic wood production. East Gippsland in Victoria is one of the centres of expansion of the industry. Linda Parlane and Michael Lockwood report:

The Harris-Diashowa company operates the Eden woodchip scheme in southern New South Wales and now threatens to extend its dragnet into East Gippsland in Victoria. The company's application to increase its export of woodchips includes re-cutting a further 200,000 tonnes per annum from New South Wales and 400,000 tonnes per year from East Gippsland - a 70% increase of their present operations.

Pulpwood companies such as Harris-Diashowa have long had their eyes on East Gippsland. Until now one of the major factors which has saved these forests, as well as public opposition to woodchipping, has been competition between rival companies for access to the forest. Along with the Victorian Alps, East Gippsland forms the last major tract of forest land in Victoria not covered by legislated pulpwood agreement. For the forestry industry it is a last frontier.

Since its settlement East Gippsland has been the source of high quality sawn timber, but not for much longer. Overcutting of forests has meant that short rotation times (the time between two consecutive fellings) are necessary, ostensibly to maintain a forest based industry in the area. In fact the short rotation times allow the conversion of the forests to a pulpwood resource.

That is to say, conventional economics dictates that sawmilling of eucalypts is uneconomic in the long term. Harvest all you can now, even to the point of exhausting the mature resource and your economic return will be greater than for a long term sustained yield.

So what do you do when left with whole forests full of young eucalypts which won't be mature for another 40, 50, or even 60 years? Pulp the lot! And this is precisely what Harris-Diashowa plans to do with the East Gippsland forests.

In industrialised countries pulp-mills are recognised to be amongst the most polluting of industries. As well as serious air pollution, the effluents which are discharged include huge quantities of cellulose fibre, lignin (which causes severe discoloration of water) and mercury. Each of these would poison the river beside which the pulp mill is built, its estuary and coastal waters.

The effects that woodchipping has on forests are fairly well known. Woodchipping involves clearfelling, which means that huge areas are stripped of all vegetation, exposing soil to wind and rain. Soil washes away, silting rivers, and nutrients are lost after the wholesale removal of vegetation. Animals and birds die through lack of normal shelter.

National forests are needed to preserve the forests. Victoria's three existing National Parks in the area allow logging, grazing and mineral exploration.

Four National Parks have been proposed. The first in the Errinundra Plateau - Mt Ellery area, will protect magnificent eucalypt forests of Shining Gum, Alpine Ash and Mountain Ash, themselves rich in associated plants and animals, and will also provide shelter for the high elevation "jungles" (sassafras forests) which grow underneath and alongside them.

Long footed potoroo - endemic to East Gippsland and only recently discovered.

The second, Croajingalong National Park, will ensure the protection of such features as Ewing Marsh and Lake Currip, both particularly valuable breeding and feeding areas for wetland bird species. As well as rare plant species such as the cabbage tree-palm at Cabbage Tree Creek over 300km from its nearest other known occurrence, the leafless tongue orchid and many others. The heaths and associated woodlands west of Bemm River provide habitat for the smoky mouse, long-nosed bandicoot and the potoroo.

In the north-east of East Gippsland is the Mt Kaye - Coopracambra - Upper Genoa River proposed National Park designed to protect the magnificent scenery of the Mt Kaye - Upper Thurlow River Region as well as many important plant species including the long club moss, club rush, dainty wedge pea and the lowland rainforest of the Mt Drummuir area.

The fourth proposed park is that in the Mt Tingariny / Snowy Gorge - Bowen Range area. The Bowen Range - Yalmy River area, east of the existing Snowy River National Park, with its rugged mountains and relatively undisputed forest eco-system remains virtually unaltered since the time of European settlement. It is essential that this and areas further south, including the Mottle Range where the only known stand of spotted gum in Victoria occurs, be immediately included in the National Park.

As well as being crucial for nature conservation, the parks have an important tactical function; by removing the availability of a potential pulpwood resource, the planned pulpwood scheme would become economically unviable. The pressure to use areas outside the parks for woodchipping is therefore reduced.

However the woodchip industry is a threat not only to the natural systems of East Gippsland but also to the small locally based sawmilling industry. Sawmilling should continue, with the forests managed on a very long rotation time, restricted to those areas outside national parks where its operations do not constitute a threat to the plants and animals in the area.

The only real future for East Gippsland is that of maintaining the National Parks and keeping the small labour-intensive sawmills - a future that reflects East Gippsland beauty, not big business destructiveness.

People interested in the campaign to save East Gippsland should contact the Native Forests Action Council (Victoria) c/o Environment Action Centre, 181 Errol Street, North Melbourne, Victoria 3051. Telephone (03) 329 5519.
Four generations — From With Courage in their Cases


I came from Italy to Australia when I was five years old and grew up in an inner suburb of Melbourne, returning to Italy only after I had left school. As I was reading With Courage in their Cases, particularly the last and longest section, “Post-War,” I felt part of the book. The experiences described in it were common to almost every Italian immigrant I know who came here in the 1950s and 1960s.

Like life itself, the experiences described had variety, light and shade. They covered work, school, social and family life as seen through the eyes of just men and women and children as well. Some were hilarious, when Nick and Franco, unable to speak English, mimed their way home from St Kilda to Northcote; others were movingly sad, as when Anna, alone in her window, and hearing it come every five minutes, knew she was not coming.

The book opened up new frontiers for me. I knew little about the Italians who came here pre-war, and the chapters about case-cutting and farming, internment and prisoners of war widened my horizons.

The regional governments of Tuscany and Umbria have undertaken to translate the book into Italian. An Italian immigrant I know who came here in the 1950s and then moved to Australia is in Italy, unable to understand some of the experiences described, so that older immigrants in Australia who still have difficulty with English can read a book of great relevance to them. Many are looking forward to the Italian edition.

Things are much easier now for migrants than when we arrived twenty years ago. There are more interpreters, more English courses, foreign language courses and more accepted. Yet, even a friend of the Indo-Chinese Refugees’ Association in Victoria asked the publishers, the Federation Italiana Lavoratori e Attivisti Lavori, that the book, with the Federation of Workers and the Civic Action Movement, be distributed to Chinese and Vietnamese communities so that the book could be translated into Vietnamese so that Australia’s newest immigrants would know that a previous group had already gone through and survived the same problems.

The experiences described had variety, light and shade. The book opened up new frontiers for me. I knew little about the Italians who came here pre-war, and the chapters about case-cutting and farming, internment and prisoners of war widened my horizons.

The regional governments of Tuscany and Umbria have undertaken to translate the book into Italian. An Italian immigrant I know who came here in the 1950s and then moved to Australia is in Italy, unable to understand some of the experiences described, so that older immigrants in Australia who still have difficulty with English can read a book of great relevance to them. Many are looking forward to the Italian edition.

This simple process was the first premise - the library of times. It led to a multi-billion dollar battle between a host of nuclear multinationals. The documents from MUKU/CRA contained highly classified information. While senior executives at these companies were getting paid millions of dollars for their work, their counterparts at Westinghouse were delighted. For the surfacing of the documents was a great victory for the movement to disarm.

The book by Taylor and Yokell provides a clear, readable account of the events up to early 1979. Along the way a few red herrings and energy wattage, reduction of vegetable varieties and how to fight back, factory farming, energy saving kitchen utensils such as thermostats for cooking, metal poisoning, cooking with coal, and growing your own.

The Wealthy by Counter Information Services, London, Australian distributor in AllBooks, 28 pages, $2.55 (booklet).


I came from Italy to Australia when I was five years old and grew up in an inner suburb of Melbourne, returning to Italy only after I had left school. As I was reading With Courage in their Cases, particularly the last and longest section, “Post-War,” I felt part of the book. The experiences described in it were common to almost every Italian immigrant I know who came here in the 1950s and 1960s.

Like life itself, the experiences described had variety, light and shade. They covered work, school, social and family life as seen through the eyes of just men and women and children as well. Some were hilarious, when Nick and Franco, unable to speak English, mimed their way home from St Kilda to Northcote; others were movingly sad, as when Anna, alone in her window, and hearing it come every five minutes, knew she was not coming.

The book opened up new frontiers for me. I knew little about the Italians who came here pre-war, and the chapters about case-cutting and farming, internment and prisoners of war widened my horizons.

The regional governments of Tuscany and Umbria have undertaken to translate the book into Italian. An Italian immigrant I know who came here in the 1950s and then moved to Australia is in Italy, unable to understand some of the experiences described, so that older immigrants in Australia who still have difficulty with English can read a book of great relevance to them. Many are looking forward to the Italian edition.

This simple process was the first premise - the library of times. It led to a multi-billion dollar battle between a host of nuclear multinationals. The documents from MUKU/CRA contained highly classified information. While senior executives at these companies were getting paid millions of dollars for their work, their counterparts at Westinghouse were delighted. For the surfacing of the documents was a great victory for the movement to disarm.

The book by Taylor and Yokell provides a clear, readable account of the events up to early 1979. Along the way a few red herrings and energy wattage, reduction of vegetable varieties and how to fight back, factory farming, energy saving kitchen utensils such as thermostats for cooking, metal poisoning, cooking with coal, and growing your own.

The Wealthy by Counter Information Services, London, Australian distributor in AllBooks, 28 pages, $2.55 (booklet).


I came from Italy to Australia when I was five years old and grew up in an inner suburb of Melbourne, returning to Italy only after I had left school. As I was reading With Courage in their Cases, particularly the last and longest section, “Post-War,” I felt part of the book. The experiences described in it were common to almost every Italian immigrant I know who came here in the 1950s and 1960s.

Like life itself, the experiences described had variety, light and shade. They covered work, school, social and family life as seen through the eyes of just men and women and children as well. Some were hilarious, when Nick and Franco, unable to speak English, mimed their way home from St Kilda to Northcote; others were movingly sad, as when Anna, alone in her window, and hearing it come every five minutes, knew she was not coming.

The book opened up new frontiers for me. I knew little about the Italians who came here pre-war, and the chapters about case-cutting and farming, internment and prisoners of war widened my horizons.

The regional governments of Tuscany and Umbria have undertaken to translate the book into Italian. An Italian immigrant I know who came here in the 1950s and then moved to Australia is in Italy, unable to understand some of the experiences described, so that older immigrants in Australia who still have difficulty with English can read a book of great relevance to them. Many are looking forward to the Italian edition.

This simple process was the first premise - the library of times. It led to a multi-billion dollar battle between a host of nuclear multinationals. The documents from MUKU/CRA contained highly classified information. While senior executives at these companies were getting paid millions of dollars for their work, their counterparts at Westinghouse were delighted. For the surfacing of the documents was a great victory for the movement to disarm.

The book by Taylor and Yokell provides a clear, readable account of the events up to early 1979. Along the way a few red herrings and energy wattage, reduction of vegetable varieties and how to fight back, factory farming, energy saving kitchen utensils such as thermostats for cooking, metal poisoning, cooking with coal, and growing your own.

The Wealthy by Counter Information Services, London, Australian distributor in AllBooks, 28 pages, $2.55 (booklet).


I came from Italy to Australia when I was five years old and grew up in an inner suburb of Melbourne, returning to Italy only after I had left school. As I was reading With Courage in their Cases, particularly the last and longest section, “Post-War,” I felt part of the book. The experiences described in it were common to almost every Italian immigrant I know who came here in the 1950s and 1960s.

Like life itself, the experiences described had variety, light and shade. They covered work, school, social and family life as seen through the eyes of just men and women and children as well. Some were hilarious, when Nick and Franco, unable to speak English, mimed their way home from St Kilda to Northcote; others were movingly sad, as when Anna, alone in her window, and hearing it come every five minutes, knew she was not coming.

The book opened up new frontiers for me. I knew little about the Italians who came here pre-war, and the chapters about case-cutting and farming, internment and prisoners of war widened my horizons.

The regional governments of Tuscany and Umbria have undertaken to translate the book into Italian. An Italian immigrant I know who came here in the 1950s and then moved to Australia is in Italy, unable to understand some of the experiences described, so that older immigrants in Australia who still have difficulty with English can read a book of great relevance to them. Many are looking forward to the Italian edition.

This simple process was the first premise - the library of times. It led to a multi-billion dollar battle between a host of nuclear multinationals. The documents from MUKU/CRA contained highly classified information. While senior executives at these companies were getting paid millions of dollars for their work, their counterparts at Westinghouse were delighted. For the surfacing of the documents was a great victory for the movement to disarm.

The book by Taylor and Yokell provides a clear, readable account of the events up to early 1979. Along the way a few red herrings and energy wattage, reduction of vegetable varieties and how to fight back, factory farming, energy saving kitchen utensils such as thermostats for cooking, metal poisoning, cooking with coal, and growing your own.

The Wealthy by Counter Information Services, London, Australian distributor in AllBooks, 28 pages, $2.55 (booklet).
Australian Premiere

Friday

36

6:00

STRICTLY LIMITED SEASON

Australian Premiere

THE E STREET BAND • JAMES TAYLOR

S O M E M A T U I A J U Y

8:00 pm

GRAHAM NASH • BONNIE DANNY GOLDBERG · ANTHONY POTENZA

PARENTAL

SCOTI-HERON

CROSBY, STILLS AND NASH

BRUCE SPRINGSTEEN AND JESSE COLIN YOUNG

I E

S U S T A I N

DANNY GOLDBERG

FD JI CN IL OIIEN

"NO NUKES"

PRODUCED BY JULIAN SCHLOSSBERG

DANNY GOLDBERG

DIRECTED BY JULIAN SCHLOSSBERG

DANNY GOLDBERG · ANTHONY POTENZA

A MUSE FILM [DISTRIBUTED BY WARNER COMMUNICATIONS]

Warner Communications

some ways similar to Labor policy, in state intervention to challenge the labour movement.

This report makes a major contribution to the oil industry and governmental interests in military technology, often funded under cover of little strategic value. It is primarily military research (eg. "High Power Broadly Tunable Laser Action on Ultra Violet Spectra") for development of weaponry-lasers with increased damage effectiveness. There are some interesting accounts of what it is like to work as a scientist (particularly if you are a woman), and finally there are suggestions for ways of liberating science so that it becomes a tool benefiting people and not the military and big business. It should be noted that the articles were on average published in the mid-80's, and I would have preferred to see the original publication dates printed clearly at the beginning of each article rather than some- what obscurely in a list at the beginning of the book. However, the issues that the book covers certainly have not dated, and I recommend it to both the scientist and non-scientist. It is essential for people to be informed about these crucial issues and not reject science in general by excusing into ignorance and mysticism.

Lesley Rogers


Science and Liberation attacks the myth of science being neutral and "value-free", and able to solve all problems. It is a collection of articles almost all of which have been published previously by the USA Science for the People magazine or in various feminist journals or books. The first group of articles examines how some so called scientific theories are used to propagate political aims (eg: socio-biological theories for biological casation of a range of human behaviours like aggression and sex differences in behaviour). Other articles look at how most scientific research conducted both inside and outside of universities is financed by big business, governmental interests and military technology, often funded under cover of little strategic value. It is primarily military research (eg. "High Power Broadly Tunable Laser Action on Ultra Violet Spectra") for development of weaponry-lasers with increased damage effectiveness. There are some interesting accounts of what it is like to work as a scientist (particularly if you are a woman), and finally there are suggestions for ways of liberating science so that it becomes a tool benefiting people and not the military and big business. It should be noted that the articles were on average published in the mid-80's, and I would have preferred to see the original publication dates printed clearly at the beginning of each article rather than some- what obscurely in a list at the beginning of the book. However, the issues that the book covers certainly have not dated, and I recommend it to both the scientist and non-scientist. It is essential for people to be informed about these crucial issues and not reject science in general by excusing into ignorance and mysticism.

Lesley Rogers


This latest publication of Berger's work brings together twenty-three essays that have already appeared in magazines and journals. It has three sections: Why Look at Animals, Art and Revolution, and Art and Social Change.

Why Look at Animals is of the altered relationship works of a variety of painters eg. Laslo Moholy-Nagy, Arp, Naum Gabo, Dali, etc. The essays on photography and art criticism indebtedness and responsibility to the scientist and non-scientist.

At least it deserves. It is a collection of articles almost all of which have been published previously by the USA Science for the People magazine or in various feminist journals or books. The first group of articles examines how some so called scientific theories are used to propagate political aims (eg: socio-biological theories for biological casation of a range of human behaviours like aggression and sex differences in behaviour). Other articles look at how most scientific research conducted both inside and outside of universities is financed by big business, governmental interests and military technology, often funded under cover of little strategic value. It is primarily military research (eg. "High Power Broadly Tunable Laser Action on Ultra Violet Spectra") for development of weaponry-lasers with increased damage effectiveness. There are some interesting accounts of what it is like to work as a scientist (particularly if you are a woman), and finally there are suggestions for ways of liberating science so that it becomes a tool benefiting people and not the military and big business. It should be noted that the articles were on average published in the mid-80's, and I would have preferred to see the original publication dates printed clearly at the beginning of each article rather than some- what obscurely in a list at the beginning of the book. However, the issues that the book covers certainly have not dated, and I recommend it to both the scientist and non-scientist. It is essential for people to be informed about these crucial issues and not reject science in general by excusing into ignorance and mysticism.

Lesley Rogers

John Berger

About Looking


This latest publication of Berger's work brings together twenty-three essays that have already appeared in magazines and journals. It has three sections: Why Look at Animals, Art and Revolution, and Art and Social Change.

Why Look at Animals is of the altered relationship works of a variety of painters eg. Laslo Moholy-Nagy, Arp, Naum Gabo, Dali, etc. The essays on photography and art criticism indebtedness and responsibility to the scientist and non-scientist.

At least it deserves. It is a collection of articles almost all of which have been published previously by the USA Science for the People magazine or in various feminist journals or books. The first group of articles examines how some so called scientific theories are used to propagate political aims (eg: socio-biological theories for biological casation of a range of human behaviours like aggression and sex differences in behaviour). Other articles look at how most scientific research conducted both inside and outside of universities is financed by big business, governmental interests and military technology, often funded under cover of little strategic value. It is primarily military research (eg. "High Power Broadly Tunable Laser Action on Ultra Violet Spectra") for development of weaponry-lasers with increased damage effectiveness. There are some interesting accounts of what it is like to work as a scientist (particularly if you are a woman), and finally there are suggestions for ways of liberating science so that it becomes a tool benefiting people and not the military and big business. It should be noted that the articles were on average published in the mid-80's, and I would have preferred to see the original publication dates printed clearly at the beginning of each article rather than some- what obscurely in a list at the beginning of the book. However, the issues that the book covers certainly have not dated, and I recommend it to both the scientist and non-scientist. It is essential for people to be informed about these crucial issues and not reject science in general by excusing into ignorance and mysticism.

Lesley Rogers

John Berger

About Looking


This latest publication of Berger's work brings together twenty-three essays that have already appeared in magazines and journals. It has three sections: Why Look at Animals, Art and Revolution, and Art and Social Change.

Why Look at Animals is of the altered relationship works of a variety of painters eg. Laslo Moholy-Nagy, Arp, Naum Gabo, Dali, etc. The essays on photography and art criticism indebtedness and responsibility to the scientist and non-scientist.

At least it deserves. It is a collection of articles almost all of which have been published previously by the USA Science for the People magazine or in various feminist journals or books. The first group of articles examines how some so called scientific theories are used to propagate political aims (eg: socio-biological theories for biological casation of a range of human behaviours like aggression and sex differences in behaviour). Other articles look at how most scientific research conducted both inside and outside of universities is financed by big business, governmental interests and military technology, often funded under cover of little strategic value. It is primarily military research (eg. "High Power Broadly Tunable Laser Action on Ultra Violet Spectra") for development of weaponry-lasers with increased damage effectiveness. There are some interesting accounts of what it is like to work as a scientist (particularly if you are a woman), and finally there are suggestions for ways of liberating science so that it becomes a tool benefiting people and not the military and big business. It should be noted that the articles were on average published in the mid-80's, and I would have preferred to see the original publication dates printed clearly at the beginning of each article rather than some- what obscurely in a list at the beginning of the book. However, the issues that the book covers certainly have not dated, and I recommend it to both the scientist and non-scientist. It is essential for people to be informed about these crucial issues and not reject science in general by excusing into ignorance and mysticism.

Lesley Rogers

John Berger

About Looking


This latest publication of Berger's work brings together twenty-three essays that have already appeared in magazines and journals. It has three sections: Why Look at Animals, Art and Revolution, and Art and Social Change.

Why Look at Animals is of the altered relationship works of a variety of painters eg. Laslo Moholy-Nagy, Arp, Naum Gabo, Dali, etc. The essays on photography and art criticism indebtedness and responsibility to the scientist and non-scientist.

At least it deserves. It is a collection of articles almost all of which have been published previously by the USA Science for the People magazine or in various feminist journals or books. The first group of articles examines how some so called scientific theories are used to propagate political aims (eg: socio-biological theories for biological casation of a range of human behaviours like aggression and sex differences in behaviour). Other articles look at how most scientific research conducted both inside and outside of universities is financed by big business, governmental interests and military technology, often funded under cover of little strategic value. It is primarily military research (eg. "High Power Broadly Tunable Laser Action on Ultra Violet Spectra") for development of weaponry-lasers with increased damage effectiveness. There are some interesting accounts of what it is like to work as a scientist (particularly if you are a woman), and finally there are suggestions for ways of liberating science so that it becomes a tool benefiting people and not the military and big business. It should be noted that the articles were on average published in the mid-80's, and I would have preferred to see the original publication dates printed clearly at the beginning of each article rather than some- what obscurely in a list at the beginning of the book. However, the issues that the book covers certainly have not dated, and I recommend it to both the scientist and non-scientist. It is essential for people to be informed about these crucial issues and not reject science in general by excusing into ignorance and mysticism.

Lesley Rogers

John Berger
In Defence of Living Things by Christine Townsend, Wentworth Books Pty Ltd, Sydney, 1980, 125 pages, $5.75 (paperback).

In Defence of Living Things is a passionate indictment of exploitation of non-human animals. Through extensive research Christine Townsend exposes the institutionalised atrocities of the Australian meat industry. The laming of cattle in transport, the forced feeding of chickens and the de-beaking of chickens and the instances. In her view vegetarianism is a more than a backdrop: the music is the message. Last year a group of well known musicians combined their energies and talents to produce on a series of concerts at Madison Square Gardens in New York. The concerts made musical history as the artists involved came together not for profit but to collectively sing and shout out their abhorrence for nuclear energy.

One of the incredible features of the film is to see such superstars as Jackson Browne, James Taylor, Carly Simon, The Doobie Brothers, Bruce Springsteen, Bonnie Raitt and many more.

The Theme for this year’s Confest is: “Celebrating and Exploring a New Age”. The Festival will be held on the Glenlyon Reserve near Daylesford from 23 to 26 January 1981. The Theme for this year’s Festival is: “Celebrating and Exploring a New Age”. The Festival will be held on the Glenlyon Reserve near Daylesford from 23 to 26 January 1981.


In No Nukes the music is more than a backdrop: the music is the message. Last year a group of well known musicians combined their energies and talents to produce a series of concerts at Madison Square Gardens in New York. The concerts made musical history as the artists involved came together not for profit but to collectively sing and shout out their abhorrence for nuclear energy.

One of the incredible features of the film is to see such superstars as Jackson Browne, James Taylor, Carly Simon, The Doobie Brothers, Bruce Springsteen, Bonnie Raitt and many more.

The Theme for this year’s Festival is: “Celebrating and Exploring a New Age”. The Festival will be held on the Glenlyon Reserve near Daylesford from 23 to 26 January 1981.


In No Nukes the music is more than a backdrop: the music is the message. Last year a group of well known musicians combined their energies and talents to produce a series of concerts at Madison Square Gardens in New York. The concerts made musical history as the artists involved came together not for profit but to collectively sing and shout out their abhorrence for nuclear energy.

One of the incredible features of the film is to see such superstars as Jackson Browne, James Taylor, Carly Simon, The Doobie Brothers, Bruce Springsteen, Bonnie Raitt and many more.

The Theme for this year’s Festival is: “Celebrating and Exploring a New Age”. The Festival will be held on the Glenlyon Reserve near Daylesford from 23 to 26 January 1981.


In No Nukes the music is more than a backdrop: the music is the message. Last year a group of well known musicians combined their energies and talents to produce a series of concerts at Madison Square Gardens in New York. The concerts made musical history as the artists involved came together not for profit but to collectively sing and shout out their abhorrence for nuclear energy.

One of the incredible features of the film is to see such superstars as Jackson Browne, James Taylor, Carly Simon, The Doobie Brothers, Bruce Springsteen, Bonnie Raitt and many more.

The Theme for this year’s Festival is: “Celebrating and Exploring a New Age”. The Festival will be held on the Glenlyon Reserve near Daylesford from 23 to 26 January 1981.


In No Nukes the music is more than a backdrop: the music is the message. Last year a group of well known musicians combined their energies and talents to produce a series of concerts at Madison Square Gardens in New York. The concerts made musical history as the artists involved came together not for profit but to collectively sing and shout out their abhorrence for nuclear energy.

One of the incredible features of the film is to see such superstars as Jackson Browne, James Taylor, Carly Simon, The Doobie Brothers, Bruce Springsteen, Bonnie Raitt and many more.
Dear Friends of the Earth

Please find enclosed my membership fee of $10.00 or what you can afford.

Name
Address
Postcode
Telephone

Please find enclosed my gift membership fee of $10.00 or what you can afford.

The gift membership subscription is for:

Name
Address
Postcode
Telephone

Make cheques payable to Friends of the Earth. Return membership fee to your State group listed above. Contact us for details of tax deductible contributions.

I would like to help in the following areas:

Uranium
Alternative Energy Sources
Oceans
Food Co-op
Shop
Land Rights
Publications

I have the following skills/resources:

[List of skills/resources]

About
Send patenting?
Endangered species?
Hazardous chemicals?

Who cares

You

Can help
Make a gift subscription
You may already be a member of Friends of the Earth, but why not make a gift membership subscription for some of your like-minded friends? A larger membership makes for a stronger Friends of the Earth!

Donate
By becoming a member or making a donation you help keep Friends of the Earth active fighting campaigns, lobbying, researching and producing new publications to communicate to the public. Contact us for information on tax deductibility of donations.

About
Endangered species?
Hazardous chemicals?

Who cares

Make a gift subscription
You may already be a member of Friends of the Earth, but why not make a gift membership subscription for some of your like-minded friends? A larger membership makes for a stronger Friends of the Earth!

Donate
By becoming a member or making a donation you help keep Friends of the Earth active fighting campaigns, lobbying, researching and producing new publications to communicate to the public. Contact us for information on tax deductibility of donations.

Australian capital territory

Canberra: PO Box 1875, Canberra City 2601.
Telephone: (062) 47 3004

New south wales

Sydney: PO Box 421, Sydney South
2000; 223 Castlereagh Street, Sydney
2000.
Telephone: (02) 61 93 3327

Northern territory

DARWIN: PO Box 2120, Darwin 5794.
Telephone: (08) 216222.

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: The Environment Centre, 102 Bathurst Street, Hobart
7000.
Telephone: (02) 3455662.

Victoria

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

Western Australia

PERTH: C/- Environment Centre
537 Wellington Street, Perth 6000.
Telephone: (09) 321 8942, 321 2269.

Northern territory

DARWIN: PO Box 2120, Darwin 5794.
Telephone: (08) 216222.

Queensland

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

Tasmania

HOBART: The Environment Centre, 102 Bathurst Street, Hobart
7000.
Telephone: (02) 3455662.

Why pay more?

Contraceptives by mail

Today’s new, ultra sensitive condoms are one of the most effective, non-prescription forms of birth control known. Now sample ALL nationally available condom brands like Horizon Stimula, Ched-mate and Durex Feltersite. Eleven different types including ribbed, shaped, coloured and textured. Send for your order today. We offer fast efficient service and complete privacy. Cash, cheque, money order or Bankcard.

Stamford hygenics

P.O. Box 91, Unley, S.A., 5061
1408 King William Road, Hyde Park, S.A.
5061
$6 for 24 mixed (4 types) $11 for 48 mixed (8 types) $30 for 144 mixed (11 types)

Name
Address
P/code

A/C No Expiry Date

Signature

[Form fields for addressing and payment details]
### NEW BOOKS FOR A NEW YEAR

**Vanishing Birds** — Tim Halliday.
Examines both extinct and threatened birds, including those of Australia. $7.95 — Penguin.

**Vanishing Birds**

**The Greenpeace Chronicle** — Robert Hunter.
Story of the first 7 years of the famous movement which fought against nuclear tests, whalers, oil consortiums, pesticide manufacturers and politicians. $8.95 — Picador.

**The Greenpeace Chronicle**

**At Home With Alternative Energy** — Michael Hackleman.
A comprehensive guide to creating your own systems. $10.95 Peace Press.

**At Home With Alternative Energy**

**Friends Of The Earth Cookbook** — Veronica Sekules.
A cookery book to help all friends of the earth make the best use of our plentiful and not so plentiful resources. $5.95 — Penguin.

**Friends Of The Earth Cookbook**

**The Greenpeace Chronicle**

**At Home With Alternative Energy**

**Gould League birds of Victoria** — $1.00
Franklin River (TWS) — $3.00

**Greeting Cards**

- **Peace to all** — Produced by FOE Perth. $1.00 set of 10 cards.

- **Native animals** — Line drawings — set of 5 $1.00. Produced by Conservation Centre (SA).

**Posters**

- **Gould League birds of Victoria** — $1.00
- **Franklin River (TWS)** — $3.00

**Posters**

**Calendars for 1981**

- **Tasmanian Wilderness** — $4.95
- **Wilderness Flight Calendars** — $4.50
- **Victoria’s National Parks** — $5.00
- **Victorian Alpine** — $4.70
- **Wildlife of arid Australia** — $2.50

**Calendars for 1981**