

NIMBIN & RAINBOW NEWS

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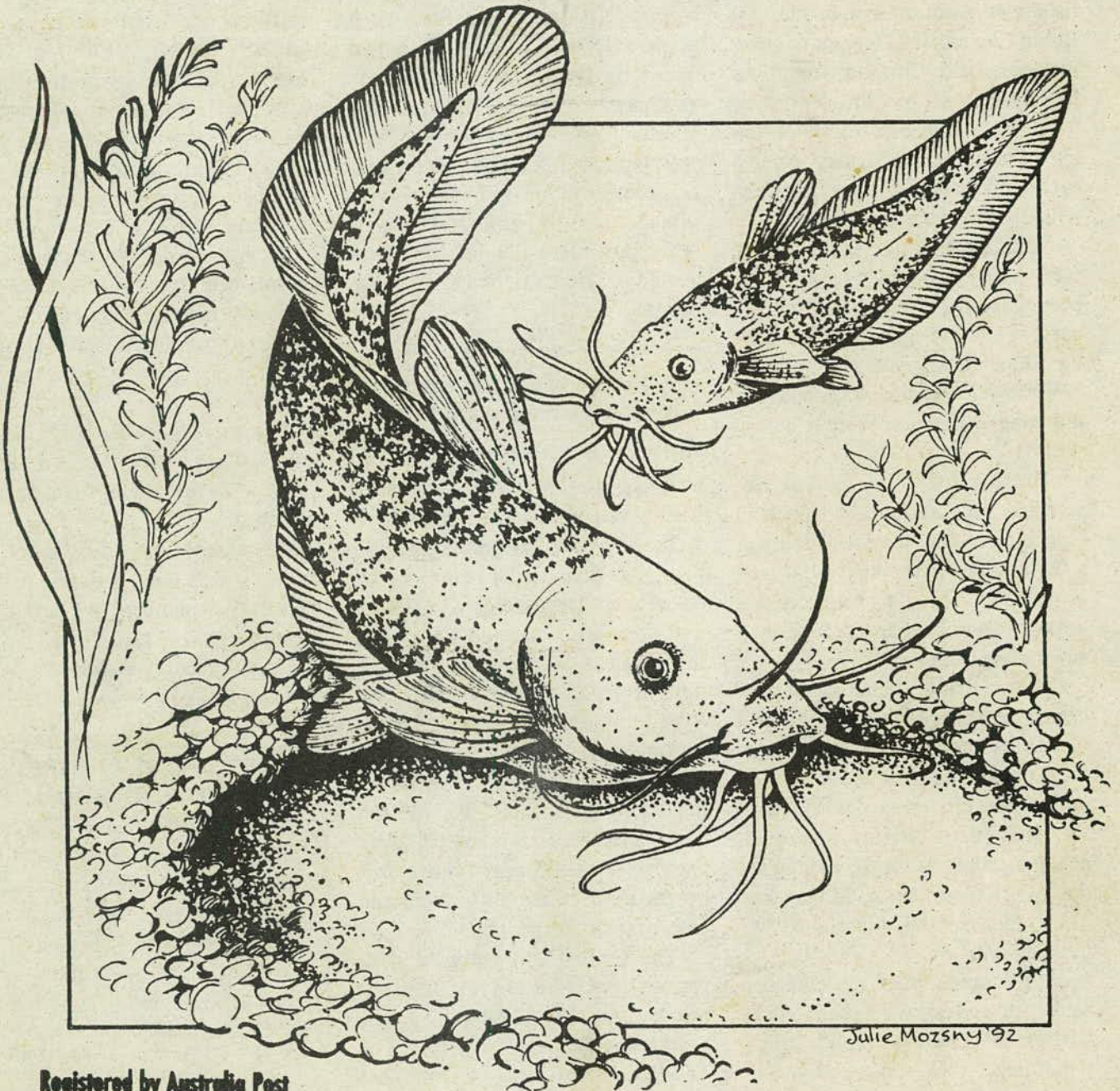


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Environs

IN THIS ISSUE:- Overfishing, Rivercare Project, Forest Furphies, Paulonia Problems? Reaction to R.A.G.E. Bonville Mortgage.

the north coast environment magazine



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TOO MANY FISHERMEN

not enough fish

Government authorities and professional fishermen on the North Coast who met on July, 22 at an industry Open Day at Urunga, seem to agree that there's too many fishermen and not enough fish. Mr Robin Claxton, the Director of NSW Fisheries, said that too many of our fish species are on the downward trend. He said that stocks are declining at the moment and if they're going to continue to decline, then fishermen will lose their jobs.

"We must restore the stocks so they're up on a level where we can keep going on and on with a sustainable harvest. We're going to have to introduce management", he said. "We haven't got time to stand back, not take action and watch stocks decline".

The Minister for Natural Resources, Ian Causley also spoke in agreement. "It's the responsibility of a Government to ensure the resource is on-going. The facts are coming through. There does appear to be pressure on the resource."

He said that the commercial fishermen were between a rock and a hard place but if they didn't want management the alternative was for them to go broke as the resource declined.

"I have never seen in my life, such changes proposed for the fishing industry. They are dramatic changes. They must be thought through." Mr Causley said.

A fisherman from the audience said: "for ten years we've been telling Fisheries there's too many fishermen." He suggested a \$10

license fee on amateurs to help commercial fishermen get out of the industry with dignity...." a parachute not a golden handshake".

It seems management will take the form of a Management Plan being prepared for each Fishery. The 'Prawn Trawl' has been done and others such as 'Spanner Crab Fishery' are being done now. The 'Beach Hauling Plan' was promised for this season but, according to Coffs Harbour Fisheries officer, Mr Tony Nissan, (when contacted last week), it had not been started yet. He said it was number one priority.

too many of our fish species are on the downward trend

Mr Nissan also said the Nambucca River was a multi-species fishery and would have a multi-species management plan done for all species in the river except crabs which would have a separate plan. He said the Management Plans should be done by sometime next year (1993). He believes: "the mud crab fishery plan is needed urgently."

A recent research project by Fisheries tagged 11,000 fish from the Nambucca. The study is now complete but Mr Nissan said tagged fish are still out and it will be another year or more before results are written up.

The Open Day continued with various speakers identifying the many pressures on the industry. Mr Athol Clarke, the Chairman of Region 3 of The Regional Advisory Committee,

stretching from Laurieton to Woolli in the north, said there was pressure from recreational fishermen for closures of rivers to commercial fishing.

Mr Vince McDonall, executive officer of the Commercial Fishing Advisory Council (CFAC), said recreational fishermen were growing in numbers. He also mentioned pressure from conservation groups and various environmental reports, and said that fishermen were aware of such problems as pollution.

A fisherman from the audience complained that looking after the environment was too low on the NSW Fisheries priorities. He said "a host of things were picking away at the environment".

Fisheries Director, Robin Claxton said there were a lot of forces out there trying to develop things that impact on fisheries.

"Maybe we should have got the balance years ago, between fishermen and fish numbers. We haven't at the moment," he said. "That's why we're now facing changes."

reported by Lyn Orrego

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South Arm Bowraville Rivercare Project Launched



July 16, on the eroding banks of the South Arm of the Nambucca River, an Always Hire tent flapped gently around a table full of morning tea cakes, covered and waiting... The paddock filled with cars.

The occasion was the launch of the Department of Water Resources Rivercare initiative on the North Coast, a project designed to help remedy the effects of river degradation by cooperating with landholders through Rivercare Groups.

At the South Arm property of John and Nola Ryan, eight different kinds of river erosion controls will be trialed - from rock facing of eroding banks to revegetation of banks. According to Mr Alex Purviss of Water Resources the trials will be documented, their success evaluated and field days held in the future.

Speaking at the launch, the Director of Water Resources, Mr Millington, said that 1,000 hectares a year of good country are lost in NSW from severe bank erosion (like the South Arm spot where the launch was held). He valued this loss in the \$millions annually and

\$6 million in capital value. "Our natural resources are under severe threat," he said.

The Minister for Natural Resources, Mr Ian Causley, said there was no doubt that interference by man has exacerbated the riverbank erosion situation. "Problems caused unwittingly in the past are up to us to fix now," he said.

He said Water Resources have put out a video showing how important sand and gravel in the bed of a river are to dissipate the energy of the river.

Water Resources also launched their set of pamphlets on the day, called *Riverwise* which give advice on how to solve common river problems.

Riverwise pamphlets can be obtained from Department of Water Resources by phoning (066) 420 568.
L Orrego

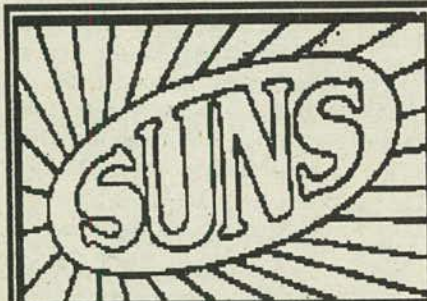
ENVIRONMENT

Dying for a fag?

Every acre of Virginia style tobacco 'wood cured' in the developing world requires one acres worth of wood for fuel. In one state of Brazil, tobacco farmers must deforest 1.5million acres to cure one years tobacco crop.

Growing tobacco depletes soil fertility at an alarming rate. In the developing world this means moving on to deforest another plot.

Tobacco also requires heavy use of pesticides and herbicides.



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Claims made by the Forest Industries in their advertisements are not 'Forest Facts' but:

FOREST FURPHIES

Two reports dealing with our native forests have been recently released by the Resource Assessment Commission and the Royal Zoological Society. These reports show that the following claims made by the Forest Industries in their advertisements are not 'Forest Facts' but 'Forest Furphies'.

After logging the animals come back. MISLEADING

Of course some animals will come back but what matters ecologically is which species of animals come back and how many.

Logging removes too many of the large hollow bearing trees which provide shelter for animals like the Yellow-bellied Glider and the Sooty Owl. It has been shown that almost 90% of possums and gliders are eliminated from forest that is logged (3).

Research has also shown that adequate hollows do not start developing in eucalypts until they are 150 years old and large hollows do not form until the trees are at least two hundred years old (4,5).

The Forest Industry plans to log regrowth forest after 60 to 120 years (6).

Even shorter rotations are planned as part of more intensive woodchip operations. Clearly this is too short a time for sufficient hollow-bearing trees to regrow. So the truth is the animals dependent on old growth forests are simply not allowed to return.

In addition large areas of native forest controlled by Forestry agencies are subject to regular, so called, 'fire hazard reduction burns'. These are low intensity fires that are lit in Autumn. This is very different to the natural fire regime. The natural fire regime is characterised by infrequent high temperature fires in Spring or Summer. The change in the fire regime to frequent, low intensity Autumn fires has been shown to eliminate the diversity of the forest understorey (7). Such a change reduces the numbers of native animals such as the Eastern Pygmy-possum and encourages the invasion of introduced species such as the Feral Cat (7). **Logging is the same as wild fires. WRONG**

There are a number of differences between logging and natural wildfires. For instance a wildfire leaves a much greater

number of old trees (8). These old trees are crucial for animals dependent on mature forest for food and shelter.

Another difference is that logging disturbs and compacts the soil while wildfire removes vegetation cover without compaction (8). Furthermore more nutrients are lost from logging combined with regeneration burning compared to wildfire (8).

Logging native forest reduces the Greenhouse Effect WRONG

In fact there is evidence from North America that it increases the Greenhouse Effect (8).

The forestry industry argues that because regrowth forest absorb more carbon dioxide, old growth forests should be logged. However this ignores the fact that old growth forests are an enormous carbon store. This carbon is lost to the atmosphere as carbon dioxide when the forest is logged and the forest products like paper decompose. In fact the Resource Assessment Commission (RAC) found that logging old growth forest increases the amount of carbon dioxide released into the atmosphere (8). The RAC has



also stated that establishment of plantations, rather than logging old growth native forest is a better way of combating the Greenhouse Effect (8). This is yet another good reason for plantations.

References:

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 - (2) Lunney D. (1991) Conservation of Australia's Forest Fauna, Royal Zoological Society of NSW.
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 - (5) Mackowski C.M (1984) pages 553-567 in Possums and Gliders, Australian Mammal Society.
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- by Stephen Taylor
The Wilderness Society
(Canberra branch)
from the Pegasus
Network

PAULOWNIA

Miracle tree or another weed?

Is Paulownia about to become the next major infestation of an exotic species introduced for the fast buck in the name of "earth repair"?

I strongly suspect that Paulownia will prove to be if it's adopted with the unequivocal enthusiasm being encouraged by the tree's promoters. The potential for it to become a rampant pest indicates a need for great caution and thorough research before Paulownia is promoted as an answer to this devastated country's denuded landscapes.

My experience of tree-growing for more than ten years in Northern New South Wales raises serious reservations for such a possibility. Working with fruit, timber, ornamental and rainforest species, four out of the five species which have tended to rampancy are indigenous to



China. (Fortunately I haven't had to deal with Slash Pine yet, although its rapid spread throughout the area is

alarming). Like the Paulownia; the four culprits have been Camphor Laurel, Chinese Aralia, Tung Oil and Chinese Privet. I don't doubt for one moment that the Paulownia could quickly join this list, with its proven ability to multiply by root suckers, and birds feasting on its prolific seeding.

While recognizing the need to address our timber needs and explore the potential for export of sustainable forest and plantation products, the notion of relying on any fast-growing exotic species to achieve such sustainability is short-sighted at least, and ecologically dangerous at worst. We have so many species perfectly adapted to this unique land, to fit every niche and climate, yet we forever reach out across the oceans for the answers to our problems: the cultural cringe seems to extend into a botanical cringe. So many species here remain barely recognized, both physically and in terms of their potential to offer genuinely renewable resources.

Do we really need Paulownia to add to our ecological degeneration, or is it possible that we can serve this old land far more wisely by directing our energy towards understanding and utilising the indigenous gene pool.

J.B. Button

Tweed River Environment Echo (TREE) April 1992.



DID YOU KNOW?

Australia's salt lakes are home to the microalga *Dunaliella salina*, which produces Beta-carotene, or provitamin A. This has been extracted for use as a vitamin supplement, anti-oxidant and orange food colour. Australia is presently the world's largest producer of algal beta-carotene, with total export sales exceeding \$2 million in 1990.

Organic compounds which have medicinal uses have been isolated from marine organisms found in Australian waters; including a topical anti-inflammatory agent from the sponge *Luffariella variabilis*; possible HIV virus-inhibiting compounds from the sponge *Dysides avara*; anti-cancer compounds from a tunicate *Trididemnum* species and from a bryozoan *Bugula* species.

* 19

Fugitive Carbon Dioxide:

6 greenhouse predictions assume that the processes at work today will go on operating. 9

Missing: 3 to 4 billion tons of carbon every year. May be hiding in the ocean or on land, in plants. If found, contact geochemists and terrestrial ecologists trying to understand how carbon cycles through the atmosphere, ocean, and biosphere. Reward: a better prediction of future greenhouse warming.

The fugitive carbon is the difference between the 7 billion or so tons that spew as carbon dioxide from smokestacks and burning tropical forests and the 3.4 billion tons known to stay in the atmosphere. Finding the other 3 billion or 4 billion tons has frustrated researchers for the past 15 years.

Any forecast of global warming has to be based on how much of the carbon dioxide released by human activity will remain in the atmosphere, and predictions vary by 30% depending on the mix of oceanic and terrestrial processes assumed to be removing the gas.

Researchers are increasingly convinced that the oceans certainly take up some, but not all, of it. A group of oceanographers reports that the first attempt to track down the missing carbon in the oceans using its isotopic markings has turned up on about 2 billion tons. That leaves a billion tons or more still at large and fuels suspicions that plants have been taking up the rest. If so, plants may be helping to fend off global warming for now. But for how long?

What's more, those predictions assume that the processes at work

today will go on operating. But not knowing where all the carbon is going raises the unnerving possibility that whatever processes are removing it may soon fall down on the job without warning, accelerating any warming.

Such concerns add urgency to the question of whether the ocean harbors the missing carbon. But there's no simple way to find out. The obvious strategy might seem to be to measure the carbon content of the ocean repeatedly to see how much it increases year by year. The trouble is that

Missing: 3 to 4 billion tons of carbon every year.

several billion tons of added carbon, though impressive on a human scale, are undetectable against the huge swings in ocean carbon that occur from season to season, year to year, and place to place.

Fortunately, the carbon emitted by human activity carries a distinctive tag, by which its movements can be followed. The tag - a kind of isotopic fingerprint - consists of the ratio of carbon-13 to carbon-12. Both fossil fuels and plants contain a smaller proportion of carbon-13 than atmospheric carbon dioxide. As a result, the carbon dioxide emitted when the fuels or plants are burned is depleted in carbon-13 - a signal that migrates through the atmosphere and penetrates the ocean as it exchanges carbon dioxide with the atmosphere. The rate at which the signal increases from year to year should give a measure of

how fast the ocean is taking up manmade carbon. Researchers calculated a global ocean uptake of 2.1 billion tons of manmade carbon per year. That leaves the carbon auditors with at least a billion-ton shortfall.

Although geochemists and oceanographers continue to dicker about the exact numbers, these recent results only strengthen their conviction that the ocean is in no position to take up all the missing carbon dioxide. That leaves the terrestrial biosphere, where plants absorb carbon dioxide and lock it away in their tissues. Terrestrial ecologists have little evidence that the biosphere is currently taking in more carbon dioxide than it releases. Some speculate, though, that temperate forests, still growing back after being leveled in the 18th and 19th centuries, may have tipped the balance toward carbon dioxide uptake. Others suggest that vegetation in the tropics, "fertilized" by the rise in atmospheric carbon dioxide, might be stowing away some of the missing carbon.

Whatever is going on, researchers are eager to sort it out before one or more of these mysterious sinks stops working. The fertilizing effect of carbon dioxide, for example, might run up against some physiological limit. Then the excess carbon would come out of hiding, suddenly turning up in the atmosphere. That is not how researchers want to find their fugitive.

by Richard A Kerr. Taken from an article in *SCIENCE*.
Vol 256. 3 April 1992

AUSTRALIA'S FORESTS

Federal government's latest paper

For the first time, Australia is to take a coordinated national approach to the sustainable management and use of Australia's forests... a vision of Australia's forest and forest industries into the next century. The cornerstone... is the principle of ecologically sustainable development.

So says the 'blurb' on the just released Draft National Forest Policy Statement: *A new focus for Australia's Forests*, emanating from the Federal Government.

The Statement has been prepared by Commonwealth, State and Territory officials under the auspices of the Australian Forestry Council and the Australia and New Zealand Environment and Conservation Council, and has yet to be endorsed by Governments. The process to completion involves a two month period for public comment, after which officials will prepare a final document for consideration by the

Commonwealth, State and Territory Governments.

The North East Forest Alliance welcomes the Federal Government's attempts to develop a national forest strategy that accounts for the environmental values of forests, but considers that there needs to be more consultation with the community and not just the industry.

Spokesperson for NEFA, Mr Dailan Pugh, said that the Federal Government's draft strategy is a good basis for rational approach to resolving forest conflicts and that NEFA will gladly partake in negotiations to ensure that it is not subverted by those

who only want export woodchipping and world scale pulp mills.

"It is the National Party and the timber industry who are trying to subvert any rational solution to conflict in the forests. Both have consistently refused to enter into meaningful dialogue with NEFA and attempt genuine conflict resolution." Said Mr Pugh.

Mr. Pugh said that it is only after a proper assessment of old growth forests has been done throughout NSW that rational decisions about the fate of old growth forests can be made and ecologically sustainable logging achieved.

A new focus for Australia's Forests - draft national forest policy statement. July 1992 - is available at NVCA's office.

Closing date for comments is:

7 September 1992

Copies are also available from:-

The Secretariat

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new forest studys reveal

A multiplicity of insects



Our everyday existence suggests that we share our planet with a great many insects and yet, even if we could bring to mind all the species which impinge directly on human affairs, we would have just a few thousand species. There are over a million named species of insects and few entomologists will dispute that the known and named are exceeded by the unnamed (and largely unknown) by at least as many again.

Since the early eighties insect ecologists studying the canopies of tropical rainforests have discovered that earlier estimates of the total number of species of insect on Earth may be hopelessly low. Instead of the two to three million that we anticipated previously numbers as much as ten, thirty or eighty million have now been advanced. Of course it is quite impossible to arrive at such a figure with any real accuracy although heated debate has been generated - but even more conservative entomologists are now talking of between five and ten million!

This great jump in the size of our estimates was a result of the development of techniques that knock down a large proportion of the insect inhabitants of patches of rainforest using organic pesticides dispensed from machines that are hauled or carried into the high canopy. In Australia, Professor Roger Kitching and his co-workers have been applying these approaches to cool, temperate, subtropical and lowland rainforest canopies over the last few years. Early results of the canopy studies include:

6 Instead of the two to three million that we anticipated previously numbers as much as ten, thirty or eighty million have now been advanced.



• an estimate of 4.6 million insects (and related animals) from a single hectare of subtropical rainforest canopy

• estimates of between 50 and 90% unnamed species within particular groups;

• distinctive 'profiles' of each forest type in terms of the proportions of different groups of insects that live in them; and

• distinct differences between the upper and lower canopy both in terms of numbers of individuals, their distribution across groups, and their response to drought conditions.

From these results and many others like them we conclude that there is a species richness in our rainforest canopies to match that seen elsewhere in the world's.

Techniques for sampling and sorting have been developed to allow rapid assessment and the results of such assessments, properly applied, will introduce a new and important dimension into the 'impact assessment process' and will allow for a long overdue increase in the efficiency of environmental decision making.

The overall impression, as elsewhere in rainforests, is of a highly diverse, largely unknown biological world that we are only just beginning to understand but which we neglect at our peril if we have genuine concerns for biodiversity.

from an article by: R L Kitching,
(Dept of Ecosystem Management,
UNE). In *BIOLINKS*, Issue no 3
April 1992

Richard Laxton

B.Comm ACA (NZ)



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Letters to the Editor

R.A.G.E. REACTION

Dear Editor,

What is this organisation calling itself Residents Against Green Extremists?

What do they mean by green extremists? Are the Chaelundi blockaders extreme. The Court found that they were defending the law. The Forestry Commission was breaking the law.

Are people who oppose ocean sewage outfalls green extremists? Or are these people those who wish to surf in clean water and lie on clean beaches

Only some 5% remains largely untouched. Now "they" want that 5%.

and who resent the waste of resources by pouring them into the sea?

Is seeking wilderness areas a sign of green extremism? A balance is required claimed a spokesperson for RAGE. In the past two hundred years some 95% of the State has been dug up, chopped down, eroded, ploughed, planted, covered with concrete, networked with roads. Only some 5%

remain largely untouched. Now "they" want that 5%. Where is the balance? Where is the compromise?

There are groups of citizens all along the North Coast who want to protect its beauty - the very thing that attracts the visitors - from the zealous (or greedy) developer. Are these people green extremists?

Perhaps it is a ploy of developers to enlist the average resident's help to have Government alter laws. These laws protect the environment and the valuable natural assets of this region on which the tourist industry thrives and provides the base for other industries and the lifestyle of the region.

In the early 1980s there were a few committed residents fighting to save the rainforests and they were fighting a very lonely battle and were being called green extremists. Now those very rainforests are listed as World Heritage and are attracting visitors from all over the world and bringing dollars to the very developers who now have the hide to criticise the green movement. Think about it. Hypocritical?

Yours faithfully,

James L O Tedder,
Secretary NCEC Inc

TETRAPAK RECYCLERS

Dear Environs,

We read with interest Craig Walter's article on TetraPaks in last month's Environs. Although we agree that milk cartons are not as environmentally sound as glass bottles they are at least better than plastic ones, and we, at the Worm Farm are trying to do our bit to recycle paper cartons in at least a small way!



We have been packaging our red wriggler and tiger worms in milk cartons for about three years now, and find them to be a strong, water-proof, convenient, and eventually bio-degradable container for our compost worms which we mail order all over Australia. After our customers have deposited the worms in their compost heaps, they can also throw in the box.

To facilitate recycling, we would like to encourage consumers to drop off their washed 2 litre cartons at the top of our drive on Valla Road, or, if they wish to purchase worms, to bring their own paper milk cartons with them. In this way, we hope to re-use the ubiquitous waxed paper cartons at least once and therefore extend their value.

Contributions welcome. Also if you have any newspaper you would like to feed to our worms, bundle it up and drop it off too. The worms and we, thank you.

Jaqui Sosnowski Worm Farm Valla 2448

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Permaculture

6 annual income is sometimes as much as ten times higher than

An elderly man on a rusty bicycle saw the Vietnamese people growing hungrier as past wars and the communal monoculture farms contributed to a dwindling food supply. He looked back at history - before the French invasion - and saw at least one thousand years of sustainable, non-polluting, small scale adequate food production. He and a few friends sought out elderly people, who remembered how these old farms had been managed. He drew plans and took notes.

The group then applied their modern knowledge of nutritional requirements for protein, energy and minerals. They designed finely-tuned gardens which used traditional strategies and new species. They found that farmers

were anxious for this knowledge as the old communes were disbanded. Early experiments showed these strategies could guarantee that, over a six month period, on 2000 square meters, a poor, malnourished family of six people would have a full and adequate diet, and after twelve months there would be surplus for cash crops.

In 1986 a non-governmental organisation was formed: VAC VINA. VAC is the acronym for the three basic components: VUON - the garden or orchard. AO - the fish pond, and CHUONG - animal housing for pigs and poultry. Together they make for a highly intensive method of small scale farming that makes optimal use of land, water and solar energy. Plants are used for food, for fibre, and for

fuel and all waste products are passed into the production cycle. The Association currently has branches in 33 of Vietnam's 44 provinces and works to promote VAC development.

Mr Man still rides his rusty bicycle, but today about 60% of the farmers in the Red River Delta use some or all of these VAC methods with a large and measurable increase in total food available for their families.

How does it work?

Farmers have traditionally had garden around their houses for growing produce for their domestic needs. Such gardens form the model for VAC farming.

Initially a hole is dug in the ground. The soil from the hole is used for the foundations on which the house and the animal sheds are built and to build up banks around the garden beds. The hole itself becomes a pond, as a result of rainfall and the high water table. A well is dug for fresh water for the household.

Plants are grown in the garden in a system of tiered cultivation, in which various species are intercropped and overlapped to make full use of solar energy and soil nutrients. Fruit trees are interspersed with vegetable and legume crops that will grow in the shade. Other legumes are grown around the perimeter of the garden and timber trees and rattans are planted to form green fences.

A variety of fish are reared in the pond, so that food resources are fully used at different water depths. For example, Tench feed at the top, Roach

Rosemary Morrow is Australian. She has a conventional agricultural science degree, and has studied sustainable agriculture, land rehabilitation and permaculture. She now works as a freelance consultant and teacher and is deeply engaged in caring for the earth and life on it. She has worked in Lesotho, India, Nepal, Hong Kong refugee camps, Vietnam and Aboriginal communities. Her work in Vietnam was funded by Quaker Service Australia (QSA) with support from the Australian International Development Assistance Bureau.



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in Vietnam

derived in the same area from growing two rice crops per year.

in the middle and Carp and Tilapia at the bottom. Taro is planted around the pond and on part of its surface. Gourds are grown on trellises just above the water.

Sweet potato is cultivated as pig feed. The pigsty and the poultry shed are close to the pond. Manure is used for fish food and various garden products are used to feed the livestock and the fish. During the dry season the pond provides nutrient rich water and sludge to irrigate and fertilize the garden. Surplus fish are fed to the pigs, or sold. The whole VAC system is operated by the farmer's family. They consume meat, eggs, fish, fruit and vegetables and in turn they contribute waste products to the system.

Lifestyle changes

VAC income constitutes 70% to 90% of farmer's incomes and their annual income through VAC farming is from three to five times higher (and sometimes as much as ten times higher) than that derived in the same area from growing two rice crops per year.

VAC leads to the creation of pleasant, peaceful landscapes with little or no agricultural pollution. No artificial chemicals are used and tree planting is encouraged. Employment is provided for people of all ages, because hard manual labour is not required. Vietnamese women commonly work on the roads, in lime kilns and in distant rice fields. VAC offers them the opportunity to work in a healthy environment close to home so enabling them to care for their children.

VAC activities also result in a variety of by-products. Food can be salted, dried and preserved. Crafts such as weaving, spinning and basket making contribute significantly to family income and the quality of life.

Adaptations

The original VAC model has been modified to suit Vietnam's three principal climatic regions and further modifications are being made to suit particular conditions such as in cyclone susceptible coastal areas.

In coastal areas protection from wind, salt and sand is necessary and trees are densely planted on mounds around the garden. Fish and prawns are raised in brackish ponds and canals. Livestock includes buffalo, cattle, pigs and poultry, especially ducks.

In the delta area people dig canals around their gardens to achieve better drainage and to wash salt from the soil. The fruit trees are selected according to their suitability to the available water and the type of soil. They vary from coconut palms, intercropped with bananas, guavas, citrus, pineapple, and rambutan to citrus species

intercropped with coffee, cacao and pepper. Beehives are kept beneath the tree canopy, in addition to the pigs and poultry.

In the foothills and mountainous regions timber trees are grown with coffee and tea planted lower down. Peanuts, pulse legumes, medicinal herbs and tuber crops are planted beneath shade trees such as Cassias. A series of small ditches and contour banks are built along the slopes to prevent soil erosion. Pineapples are grown along the banks. The house is built near the bottom of the hill, surrounded by bananas, orange trees and herbs. In front of the house is the vegetable garden, with the fish pond at the foot of the hill with the animal sheds nearby. If there is a stream, fish are often raised in cages in the running water.

by Rosemary Morrow

(Quaker Service Australia (QSA) support the VAC VINA Association. Your contributions will help. If you would like further information please contact the QSA office, PO Box 119, North Hobart 7002.)



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Proposed Bonville Coastal Park already publically owned

NWS State Bank called on to hand over morgage

Coffs Harbour Environment Centre has issued a call for the NSW State Bank to hand over the first mortgage, on the Bonville Beach Hardwoods land at Bonville, that it holds on behalf of the people of NSW, to the National Parks and Wildlife Service.

Speaking for the Environment Centre, Mr Trevor Pike said, 'the people of NSW have millions of dollars invested in this environmentally sensitive land; and it's high time the people's bank abandoned its environmentally destructive ways and handed the first mortgage to the National Parks and Wildlife Service for proper care control management and the establishment of Bongil Bongil Coastal Park.

In addition to Koalas the proposed park is known to have many other endangered species including, Dwarf Crown Snake, Diamond Python, Ospreys, Little Tern, Pied Oyster Catcher, Jabiru and others.

The land required for the proposed park has become known as the Bonville Beach Hardwoods (BBH) land following public investment of \$5 million in 1987 to finance the BBH purchase of the land to develop a Japanese Township Resort housing 10,500 people. In 1988 The NSW Investment Corporation purchased 57.5% of the shares in BBH.

Then in 1989 the Greiner Government invested many more millions in this land when it used more public money to finance the privatisation of the Investment Corporation.

'The general public has paid for this land three times over, it's about time the Government and the State Bank acted in the public interest to protect the unique values of this land.' Mr Pike said.

More recently the Coffs Harbour City Council paid over \$35,000 for 150 hectares of flood prone Environmental Zoned land in North Bonville. The council however has made no provision for public access to and enjoyment of this land. The council and the National Party Planning Minister, Robert Webster MLC, recently rezoned large areas of koala habitat and flood prone Wet Coastal Heath and Swamp Forest which adjoins the Environmental Protection Zone, for urban development.

In April this year the Department of Planning advised Coffs council that it has a total of 10,500 urban lots available on land zoned for urban development but not yet developed. With such a gross oversupply of urban land there is no need to even consider urban development in the Bonville Catchment, Mr Pike said. People need to understand that at the

moment BBH is little more than a front for the NSW State Bank, and as the State bank is the real decision maker it should be pressed to do the right thing by the people who own it, the people of NSW, Mr Pike said.

from the Coffs Harbour Environment Centre

first published in the Holiday Coast Times

WHAT YOU CAN DO

Write to:

The Manager
State Bank

Coffs Harbour 2450

Demand that the State Bank adopt environmentally responsible investment policies generally and demand that the first mortgage for the BBH land at Bonville will be handed on to the National Parks and Wildlife Service.

Transfer half your funds in the State Bank accounts to an Ethical Investment Fund/Bank or Credit Union and to threaten to transfer the other half to another bank unless the BBH mortgage 'hand over' occurs quickly.

LEO PARTY



7 pm Friday 14 August

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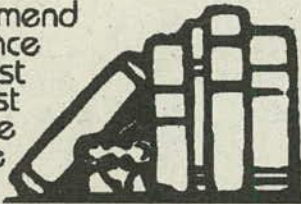
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What's New in the library

New Publications available at the NVCA Office:

1. Urban and Rural Residential Capability Survey of the Nambucca Shire. (May 1992) A report, plus appendices, prepared for the Nambucca Shire Council by the Dept of Conservation and Land Management. Commissioned to help Council allocate land more wisely between urban, rural residential and agricultural uses.

2. Australian Trust for Conservation Volunteers (1992)

The ATCV is a conservation group dedicated to practical conservation it provides a co-ordinating role in conservation projects, and this booklet describes many of its successful projects together with letters and newspaper articles testifying to high levels of community satisfaction.

3. Grassy Head Biophysical Study (1992) Three Valleys Branch of the

National Parks Association (83 pages plus appendices and maps). This study was undertaken with the following objectives: - to bring together existing studies of the area; - to gather information on biophysical attributes such as geology, soils, fauna and flora, as well as other aspects such as the history and recreational appeal of the area; - to identify threats to the environment; - to consider the intrinsic value of this land and future land use options.

4. "Overshoot" 1980 Chapter 6: "The Processes that Matter" A 20 page excerpt from a book by US environmentalist William R Catton Junior, outlining a theory for the 'Ecological Basis of (R)evolutionary Change'. A clever look at humans from an ecological point of view.

The NVCA (*Nambucca Valley Conservation Association*) has its office upstairs at the Pioneer Community Centre at Bowraville. Opening hours are variable, so please phone beforehand on (065) 647808 or contact our secretary, Alison on (065) 647056. As well as the new publications to read there is an extensive filing system of information and a small (but growing) library on environmental, social and health topics. You may wish to help in the office or use the facilities to work on a specific environmental project. NVCA has its monthly meetings here on the first Monday of the month at 7.30pm. You are welcome to visit and get involved!

Ulitarra Bushwalkers

August 16 Beach walk - Woolgoolga to Sapphire This delightful stretch of coastline comprises eight headlands with beaches of individual character in between. The leader, Murray Borrell should be contacted on (066) 536 495.

September 12-13 Overnight Campout - Chaelundi Old-Growth Forest Possibly a spotlighting session at night. Camp at Misty Creek. Walks medium to hard, no tracks. Please advise leader John Turbill in advance on (066) 554 189.

MEETINGS



NCEC AGM

North Coast Environment Council Incorporated will hold its Annual General Meeting at Grafton 10am on 12 September 1992. Arrangements are being made to hold a workshop the following day on strategy and policy making, facilitated by Peter Cummings.

For further details contact the Secretary on (065) 690 802

National Parks Association Three Valleys Branch AGM

The Annual General Meeting of the Three Valleys Branch of the National Parks Association will be held at the Nambucca Neighbourhood Centre, Wallace Street, Macksville at 7.30 pm on Saturday, August 8, 1992. All members are welcome. Please bring a plate for supper.

For further details phone Marshall on (065) 690 558.

TAG Meeting

Next Toxin Action Group (Inc) Meeting will be held on Monday, August 10, 1992 at Bellingen Neighbourhood Centre at 7.30 pm (2 doors uphill from the Yellow Shed) Everybody welcome

For further details contact David on (065) 644 033.

Heart Politics Conference



This is the fourth Heart Politics Conference.

Building on the successful tradition of previous gatherings it will explore new methods of political communication and action. The Conference is a unique blend of relaxation and stimulation. The schedule allows for plenty of informal networking also swimming and healing. Issues encompass the social, spiritual, environmental, economic and political. There will be workshops offered by participants in areas of interest and expertise. There will be opportunities for people to participate at many levels and in many ways.

It is an opportunity to:

- clarify your unique role as an agent of positive social change
- Explore the myths and tyranny of 'the economy' and 'economic rationalism'
- develop structural analysis skills
- share experiences, ideas, skills, resources, successes and difficulties in your work
- find courage and strength to initiate and continue appropriate actions
- develop support networks and alliances

- develop strategies to avoid burnout and disempowerment and take heart from others who care

The Conference will be taking place at Camp Drew, Lennox Head on September 18-21. The location is a short walk to a tea-tree lake and very close to the ocean beach. It is a great place for our purposes. Cost of the Conference depends on your ability to pay and ranges from \$150 to \$230.

For more details of the Conference contact Carol Perry on (066) 886 269.

Organised by:

INTERHELP Australia which is part of a worldwide network aiming to assist people to acknowledge their deepest concerns about the threats which face our world, and find ways to transform fear and powerlessness into effective action.

For Sale: EVERHOT 150 Slow combustion stove with hot water jacket \$800 ono. Phone (065) 690 802 evenings.

Forestry's Weedy Problems

The Nambucca Total Catchment Management Committee (TCM) will write to the Forestry Commission asking them to control noxious weeds such as Parramatta Grass prior to logging operations so that logging trucks won't spread the weed out onto farmland. They will also ask them to use Roundup, as opposed to more toxic chemicals, such as Frenock.

The Forestry Commission has previously claimed it doesn't have enough money to control weeds. A new Noxious Plants Bill will be introduced to Parliament in the next session with a clause that 'Binds the Crown'. This means public authorities such as

Forestry and National Parks & Wildlife Service will have to control noxious weeds in State Forests and National Parks.

While farmers might like to see Government authorities forced to get rid of noxious weeds as they are, conservationists certainly would not like to see forced spraying of National Parks and State Forests along with the harm it could do to wildlife and native flora.

Perhaps the solution is to only require Forest and Park Managers to control the spread of weeds outside their lands, onto farmland, so only perimeter control would be necessary and could be done with the method they choose.

Lyn Orrego



Help preserve rainforest in your area - Join our network of seed collectors

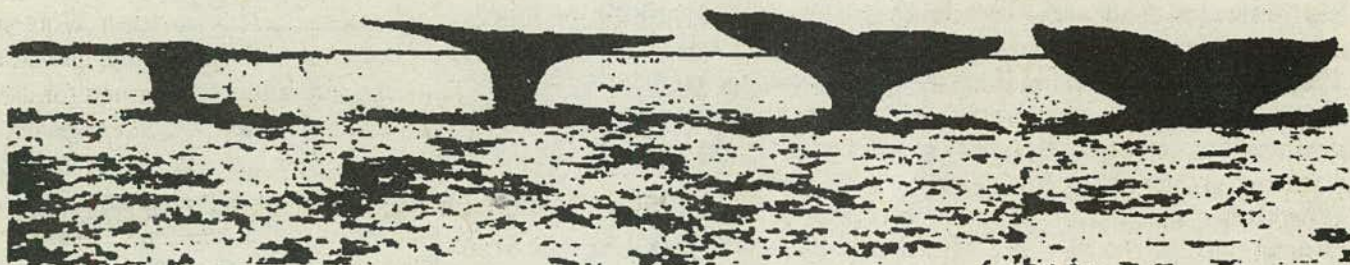
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19

Seal Rocks WHALE RESCUE



At various times over the five days and two nights of the whale rescue, members of the Maitland Friends of the Earth, including myself, Meta, Rhonda, & John were privileged to be part of this fantastic and heartwarming effort. As the media gave the event huge coverage, I'll just note a few aspects of the rescue that impressed us.

The Whale:

Wonderfully gentle, cooperative creatures with whom one couldn't feel a moments worry. We mused at length on the obvious empathy between humans

and whales which seems to run deeper than just the "they know we're trying to help them" theory. They are also HEAVY even in the water and some were prone to wanting to roll over or making little dashes for freedom or the beach. My most enduring memory is of one man who spent an hour with an obviously bored baby whale trolling it up and down the fenced-in area, tripping over rocks and being submerged by the occasional big wave, but happy as a lark.

The Volunteers:

All ages, types and conditions of men, women

and children. Most at the end of a night or day stint were completely exhausted and many worked overtime snatching a few hours of sleep here or there. By the second night people seemed to have organised themselves into shifts, a much more sensible idea. The organisation by National Parks & Wildlife was wonderful as was the feeding of the 'troops' by the Salvation Army.

The Conditions:

For a mid-winter beaching the whales could not have picked a better time - school holidays, an accessible area, warm days, cool

clear nights and a full moon. The water temperature must have been in the 14-16 degree range and if you did not stay too long at the one time in the water hypothermia should not have been a problem.

All in all it was an experience none of us will forget. Who could forget watching the moon set while the sun rose, standing chest deep in chilly water cradling a whale?

by Wendy

Maitland Friends Of The Earth

July 1992 Newsletter



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THIS MONTH'S COVER

Short-tailed Eel Catfish - *Landanous tandanus*.

Eel tailed catfish used to be plentiful in our coastal rivers, creeks and inland waterways. They are considered to be among the best eating of our freshwater fish, readily accepting a baited hook making them an easy catch for anglers. Another reason for their decline in inland waterways of the Murray, Darling, Lachlan and Murrumbidgee Rivers, was the introduction of Carp and Redfin. In coastal areas the use of chemical fertilisers, pesticides and herbicides, and the siltation of our waterways due to land clearing and logging in catchment areas contributed to the reduced numbers of this strange looking species.

The Short-tailed Catfish I've illustrated has eight barbels or whiskers around the mouth, nostrils in the upper lip and a blotchy brown or olive slippery skin. Its dorsal fins and pectoral spines can inflict painful wounds which can cause numbness and throbbing for hours.

When breeding, the male gathers small stones in his mouth to build a large circular 'nest' on the river bed where he coaxes the female to lay her eggs, which he then protects until they hatch - about a week later.

Catfish are bottom dwellers, seeking crustaceans, molluscs, insects and insect larvae for their food supply, which helps to place them on the potentially vulnerable list as these organisms are most affected by build-up of chemical residues in the sediment on the river bottom.

BUILDING ADVICE

plans drawn up

minimal impact
structures in timber, earth,
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Editorial contributions are welcomed. They should include the authors name and phone number and should be sent to: Environs, PO Box 123, Bowraville 2449. Subscriptions are \$12 for 12 issues. Advertisements may be lodged with Julie Mozany by phoning (065) 695 360. Editorial for Environs is by Carol Margolis and the Environs team. Layout and typesetting is by Mike Holland. Cover artwork is by Julie Mozany.

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