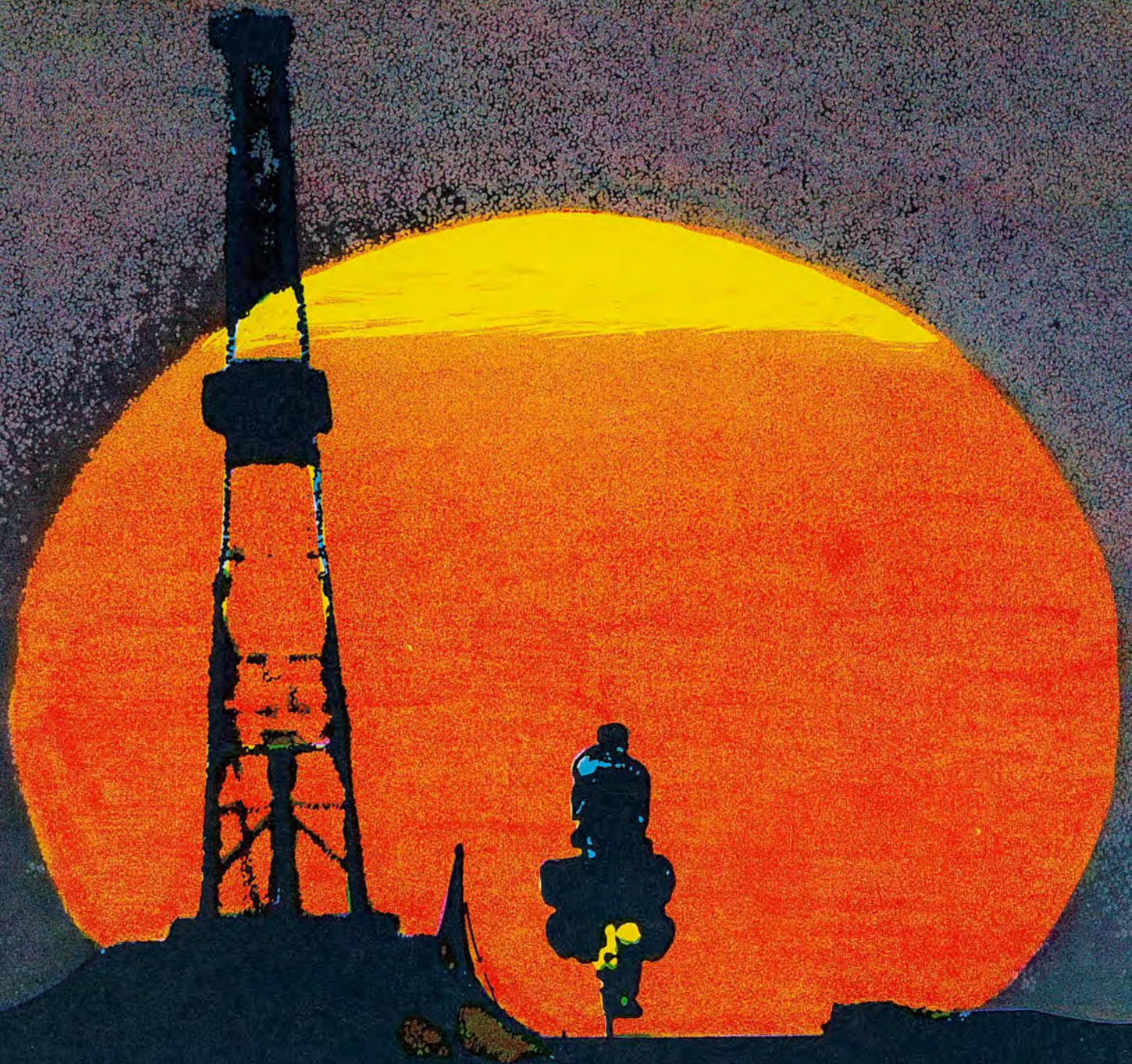


Freewheeling

NUMBER 7 \$2.00



ENERGY CRISIS

ISSUE 7 APRIL '80 PRODUCTION

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AUTHORS & CONTRIBUTIONS: Well
researched articles (preferably accom-
panied by photos or graphics) are wel-
comed by the publisher. The text should
be typed double-spaced and black and
white photographs should be accom-
panied by captions. Touring articles
should come with a clear map of the
route described. These will be returned
to authors after publication.

Letters for the reader's column *Write on*
are also welcomed - typed if possible.

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Freewheeling

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INTO YEAR THREE - A PROGRESS REPORT

Since this magazine began in January
1978 we have stated that we are a quar-
terly publication. However as only six
issues have been published over our
two years in existence we feel it is
necessary to bring our previous ex-
pectations in line with current reality
and advise that we will continue to
publish three not four issues per year.

In the past twelve months we have
managed to get the magazine onto a
regular production schedule so we can
now advise that in future our three
publication dates are April 1, August 1
and December 1. It is hoped that one of
these issues will be an enlarged issue.

For those of you interested in the wel-
fare of *Freewheeling* and who support
our efforts a word or two about our
current state of operations:

Production: Like most specialist journals
Freewheeling is produced by a small
but dedicated group of people working
on a voluntary basis. For all of us it is,

and has been, an incredible learning
experience. Anyone can join us and
share the experience and cycling can
only benefit as a result.

Subscription Department: This is also
run by our volunteer efforts and as we are
sometimes caught up in the work load
involved in getting the magazine to the
printer we sometimes get behind in this
department. We appreciate the incredible
patience shown by some of our sub-
scribers when our system gets delayed.
This system as you may have realised is
labour intensive. (No computers here
folks.)

Finances: Unfortunately our finances are
still in the red but we manage to survive
because: we have subscribers; one of the
production group put up the initial
money to kick the magazine off; and
because the people we have to pay for
services (printing, typesetting etc) re-
cognise our efforts and give good ser-
vice and prices.

Our failure to break even up to this
time is mainly due to our inability to
attract sufficient advertising revenue. It
seems that some of the manufacturers,
importers and distributors in the industry
have the attitude that they are doing so
well from the bike boom that they don't
need to advertise, especially in a magazine
mainly devoted to Bicycle Touring.
Admittedly the Australian market place
is small and the touring sector is smaller
still, but we believe that this *I'm alright
Jack* attitude will be to their disadvantage
in the long term. We can only urge all of
our readers/supporters to consider the
products and services offered by our
regular advertisers before regarding any
others. These firms are the ones who are
concerned with the present and future
well being of bicycling (in particular of
bicycle touring) in this country.

Availability: We are aware that in some
places *Freewheeling* is not available in
your newsagent or bicycle shop. If your
shop doesn't have *Freewheeling* ask them
to get it in for you. A list of distribution
sources appears in the production details
on this page for the use of retailers. If
you still have no success why not sub-
scribe and get your copies home delivered.

The Future: Our viability continues to
rely on the points described above: our
subscribers, our advertisers, our counter
sales, our dedicated production group,
and our generous printers and typesetters.
What hasn't been mentioned are our
contributors. We are very grateful for the
support given to us by people sending us
quality articles for publication. It's the
content that most of the positive feed
back we receive is concerned with. And
it is after all the content that mostly
describes our existence and our need to
continue.

Warren Salomon



Freewheeling

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Cover graphic by Alan Parker.

Photograph this page by Jim Smith.

Peddalling through an overgrown section of the Newnes railway.

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* Recommended retail price only.
This magazine is registered for posting Category B.

Changes in Nunawading

Recently, the Eastern Bicycle Touring Club has been through a general lack of interest by members and prospective members. Faced with folding, the committee decided recently to change the concept and orientation of the club from a family club for all ages to an organisation specifically for genuine tourers and people with a real interest in learning about touring. Through this new orientation geared towards the more dedicated, we hope to raise membership figures in the new year. Finally, our club contact is now Jamie Lobley and no longer Peter MacAlister. Jamie's phone number is 878-0245 (home).

Our club recommends your magazine very highly and we feel it is getting better each issue. It's great to see such competent advice available for Australian cyclists.

Richard Routley
Publicity E.B.T.C.
Nunawading 3131

Technical Titbits

With regard to 'Waiting for the Green-light — It Could Take Forever' (*Freewheeling* 5) may I point out that there is a very simple manoeuvre that never fails to work. The loop will always be tripped if the cyclist makes a point of riding along one edge of the loop instead of across the loop. This trick is originally attributed to John Forrester.

Bicycle chains: Even with a lot of love and care, bicycle chains do wear out. Generally in doing so, they encourage the gear cluster to follow their bad example. It is quite common to find that when you finally get around to replacing the chain that it refuses to mate with the cluster. The only solution to the problem, is to buy a new cluster.

To access if a chain is worn is somewhat difficult without removing the chain from the bike (except for cases of gross neglect). So when you are cleaning it and have it off the bike, hang it up on a nail and measure it against an unused chain. If it has more than 1% total extension (approximately ½" or one link) then throw it in the scrap metal bin.

To eke out the life of both your chains and clusters it is a good idea to have two or three chains which are used turn about on say, a bi-monthly basis or even more often, depending on what sort of riding conditions are encountered. While one chain is on the bike, the dirty one is soaking in kero waiting to be cleaned and lubricated,

whilst the third is ready for replacing the first. This sort of routine will make both the chains and clusters last very much longer.

Some chains are better than others. One of the most common chains is the Shimano Uniglide which is an excellent chain for smooth changing but suffers from a very short life, mostly less than 2,000km. The most successful chain I have used is a Sedis Delta Course which is obstinately refusing to wear out and so far has done about 15,000km. However, from experience, it does not like changing on some chain wheels, especially T.A. So you pay your money and take your choice.

Chas Coin
Wallsend 2287

HANDY HINTS #37



Pats on the Backs and Cycling Bliss Dept.

Congratulations for producing such a fantastic cycling magazine. I was fortunate to pick up a copy of *Freewheeling* 4, the first I had seen. Basically a racing man all my cycling life, (started 1939), I am interested in all matters regarding cycling.

I am now 53 years of age and still get immense pleasure and physical satisfaction of just getting out on the bike and 'putting in the miles'. Did a trans-Australia ride in 23½ days, in 1977, and intend doing more marathon rides in the future.

Was extremely interested in your East Coast Bicycle Route production. Those caught up in the rat race of a modern, affluent society don't realise the immense joy and health benefits we acquire from biking. Keep up the good work.

Jasper Tullock
President
Illawarra Amateur Cycling Club

Thanks for a great magazine. I hope you can do better than break even in the future. I wish that more people would read your magazine and take cyclists a bit more seriously than they have up till now.

Still, with the rising petrol costs and the 'abomination' that is the car, killing more and more people each year, I'm sure that soon everyone will be riding bikes and subscribing to *Freewheeling* instead of rubbish like "Popular Mechanics" and "Wheels" and other assorted garbage.

Thanks again,

Steven Heath
Essendon North 3041

Toe Clips

Paul Dimmock's article, "Toe Clips and Safety", *Freewheeling* No 5, left out a point which I feel might be very significant to many cyclists. I have used toe clips for many years, and found on longer rides my left knee began to pain. Figuring it was from pushing too high a gear, I refitted my bicycle with a triple crankset of lower, closer gears. It still hurt. It was only by *not* using the left toe clip that I eliminated the problem.

Some preliminary medical reading revealed that people with knock knees, bow legs or pronated (twisted) feet, are more likely to have knee injuries when cycling, even if the anatomical variation is slight. These all put strain on the knee ligaments and fluid sacks.

Allowing my left foot to turn slightly (ten degrees) out, as it does when walking, I stopped the pain. Other solutions are possible — the use of arch-support shoes, building up the side of the pedal and the realignment of cleats, if fitted. It is far better to see a good sports orthopedist now than to risk crippling yourself later by insisting that the trouble will 'go away'.

N. Plume
Randwick

Cyclists should be planners.

For persons interested in planning for the safety of cyclists, an excellent physical

planning report is now available from the Cyclist Action Groups of WA and VIC for 50 cents a copy.

The report was prepared at the request of the Newcastle Cycleways Movement as a guide to physical planning in Newcastle where a bicycle plan along the lines of the successful Geelong Bike Plan.

As Michael Scott was full time team-leader of the Geelong Bikeplan and part-time planning consultant for the Melbourne Strategy (Bayside sector), he is probably the most qualified person in Australia to prepare this report.

He has previously visited Newcastle at the invitation of the Interdepartmental Committee and was eager to demonstrate that a less costly and simplified physical planning process was possible in that city.

The report is entitled *A Planning Process for Bicycle Engineering Strategies in Established Urban Areas*. Michael Scott is also concerned about the lack of effective planning for cyclists and some of the less obvious reasons for this. He believes that informal links between bicycle planners in all States can significantly reduce the

cost of bicycle planning and ensure the Geelong Bikeplan and the Newcastle plan can fully compliment one another and collectively contribute to the encouragement of cycling in Australia. He also believes that using private consultants results in a loss flexibility in planning and that cyclists should be employed to do much of the planning work.

For copies of this report write to Alan Parker, Secretary of the Cyclist Action Group (VIC), 1A Packer St., Murrumbeena VIC. 3163.

Prices including postage: 1 copy — 50 cents, 2 copies 80 cents, 10 copies — \$1.00.

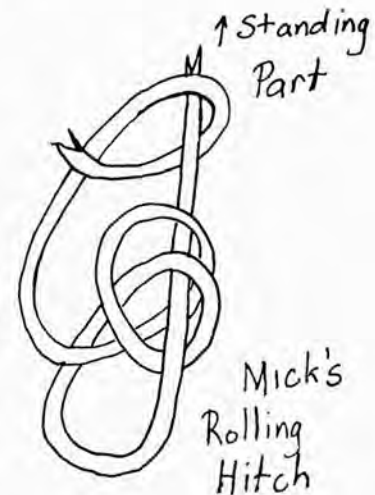
MUNCHIES ON THE ROAD

Congratulations on an excellent magazine. I appreciate especially the articles on practical things such as Getting the Most out of the Body/Bike Union. (*Freewheeling* No. 5). I was also interested to read of the "fuel" used by the riders across the Nullarbor. I too have found

that meatless foods are more than adequate for strenuous riding. I haven't eaten meat for ten years now, and I have ridden to Canberra four times, Sydney once and around Tasmania once.

The most strenuous and rewarding ride so far was the return trip to the Cotter River, "Down to Earth Festival", via the Brindabella Valley, the Snowy Mountains and the Barry Way. We had meusli each morning with fruit, veges and fruit with biscuits at midday and a cooked meal each night of rice and lentils (for protein) and vegetables. We used soy bean powder as milk and of course had the usual snacks of nuts and raisins, and carob "chocolate" throughout the day.

I would however like to correct an error in your first issue, re. setting up a tent with rolling hitches. The hitch is incorrectly shown and I have drawn the correct method as per accompanying diagram.



This crossing over is important. It looks untidy but is the characteristic of the rolling hitch. Tension is applied to the standing part, causing the area at the hitch to distort and lock firm. Yet on knocking down on the hitch it will still slide. On releasing tension, the hitch can be slid up to take up slack.

We at Friends of the Earth, Melbourne have also produced a leaflet that may be of interest to readers. One side is "Puncture Repair Hints for your Bike", and the other is a gear chart. Copies are available from F.O.E. Collingwood or I could post one if people write to me enclosing a stamped, addressed envelope.

Mick McKean
6 Fellows Street,
Hughesdale 3166.

THERE IS A LOT OF TALK ABOUT CYCLING HELMETS

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RAMBLING

FOUR LEGGED DRIVE

If you feel that your bicycle is costing you money, what with new chains, clusters and tyres, spare a thought for the camel owners in India. Camels are now costing \$400 each — that's \$100 each legged drive — and \$3 a day to feed, so only the wealthy Indians can afford them. The villagers are selling their camels and buying bicycles and tricycles. I wonder how much "trade in" the villagers are getting on their "one owner, low mileage" beasts of burden? An unconfirmed rumour from New Delhi has it that one former camel owner said of his new bicycle "The iron horse, sahib, very cheap to keep". So be it.

SEAT STIMULATION

Yet another benefit has been found from bicycle riding which is more pleasurable than other benefits mentioned by bicycling enthusiasts.

Dr. Rokuro Koike, Professor of Urology at Kyorin University in Tokyo, has found that increased sexual vigour is linked to cycling, and he urges people to commute by bicycle daily because it is sexually rejuvenating.

According to the Japan Bicycle Promotion Institute's Bulletin, Dr. Koike says that one reason why bicycling is better for male sexual activity, than jogging or swimming, is that the bicycle saddle massages the Coopers Gland and stimulates it, and Coopers Gland functions during erection.

Also when cyclists stand up on the pedals and sprint the unique action of that physical movement also stimulates Coopers Gland. Another reason is that there is also indirect massage of the prostate which Dr. Koike says also has a close relationship with erection.

So if anyone is interested in saving oil reserves by getting people to ride bikes, the way to do it is to sell the real benefits of cycling.

Alan A. Parker
Melbourne

In reply to the above letter we have only this to add: We have spent some time living with avid male cyclists . . . therefore we have "first-hand" experience on this subject. If the Coopers Gland was stimulated by bicycle riding we would be constantly enthusing our sexual partners to pedal much faster, more

4 FREEWHEELING

often and much further . . . no doubt there are plenty of virile young males just busting to test their Coopers Glands after a strenuous day of standing up on their pedals! Our opinion is that this would be a very sexist form of bicycle promotion — and from our experience false advertising!

The Tried, Tested and Untrue Collective

LONG, LONG LANE

There's a handy, if well used, old American saying that goes "It's a long, long, lane that doesn't have a turning."

In Schenectady, New York some ten years back, the railway station was closed and torn down so that a car parking station could be built. Some six months ago the city elders managed to persuade Amtrak — the giant American railroad company — to resume passenger

services. Problem was where to find room in the city for a new railway station. The answer was ironical, a disused large service station standing right next to the same parking station. After only four days renovation the railway station was proudly opened for business — I hope they remembered the bicycle racks and lockers. Now to turn a disused car factory into a bicycle factory . . .

"BUGGER" — AUSTRALIAN STYLE

"The Bugger" is a well known brand of American bicycle trailer, which is not available in Australia. Seen recently at Winmalee (Springwood N.S.W.), was an enterprising teenager with his Australian "bugger". This consisted of mum's shopping trolley hooked under the seat post of the banana seat of his hi-riser bicycle and trailing on its own wheels behind the bicycle. The combination worked well, much to the surprise of a party of bicyclists watching the scene with great interest. Fortunately the teenager did *not* make the obvious remark "Bugger you Jack. I'm alright".

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BICYCLEWAYS IN THE AIR

With the growth of cycling as a means of transport in the cities more people have become aware of its accompanying dangers. All benefits aside, most readers would be well acquainted with these. City cycling and especially commuting goes hand in hand with the risks of injury or death in mixing it with cars on the road. This extremely negative aspect of cycling has precipitated action by various clubs and cycling organisations to express the cyclists point of view. Up until now the results, particularly in the larger cities have been, in practice, negligible.

With this conclusion in mind, a group of concerned cyclists in Sydney have formed the Bicycle Activists' Group, with the intention to instigate changes to the cyclist's road conditions through government or the actions of the group itself. The emphasis of B.A.G., is to achieve real objectives by physical and lobbyist means, with tangible results. At the time of writing, B.A.G. had produced a series of four five minute radio programmes for 2SER-FM in Sydney. These programmes are scheduled for each Thursday evening at 8.40 p.m. throughout February. Regular fortnightly programmes at this timeslot are in the process of production through the following months.

The emphasis of these radio productions is to both encourage people to use bicycles as a real means of transport, but further to make it quite clear what the problems are as well. Hopefully, by both encouraging cycle use as well as offering advice and facts as to what road conditions are really like current and would-be cyclists will be better equipped to deal with the negative aspects of present day riding.

As with *Freewheeling*, production work is of course, done voluntarily. Listeners to "Pedal Radio" or readers of this article, who have enthusiasm and

a sense of humour are welcome to help out in developing future programmes and projects.

For information and meeting times contact Neil Jones — ph: (02) 660 7331.

TRAFFIC

Split in the German Cycle Movement?

The bicycle is becoming organizable. In 1979 two nation-wide bicycle organizations were established. To the question of why two exactly, the following article from the Kassel *Staatzeitung* no 48 gives no answer; good however about the goals and programmes of the pedallers.

AT LAST: BICYCLE POWER

On the 13/10/79 in West Berlin, Green Cyclist Groups and other Citizens' Initiative groups linked together into a nation-wide organization *Green Cyclists in the National Association of Citizens Initiatives for Environment Protection* (*Grüne Radler im B.B.U.*)

Already at the beginning of the year in Bremen, the *General German Bicycle*

Club (A.D.F.C.) was founded by Jan Tebbe. Why now two national German cyclist's associations, when it concerns one and the same thing, namely to promote the issues of unmotorized traffic participants, especially bicycle traffic?

For the goals of the *A.D.F.C.*, an extract from a leaflet:—

Why A.D.F.C.?

We cyclists have been for decades the annoying step-children of the automobile society, disposed of by politicians and planners with the left hand. Detours, accidents and damage to the environment were the consequences, but we are still there, even in growing numbers . . . The A.D.F.C. will be concerned for the welfare of all cycling citizens, whether members or not, e.g. for the cycleway network, safety, rights on the roads, shorter routes (one way streets), route markers, traffic education and so on.

Especially for its members, the A.D.F.C. will build up services e.g. legal advice (through contracted lawyers), theft protection, parking places, bicycle conveyance on the railway, bicycle way maps, touring and social organizations, and so on.

In contrast, a citation from the press statement of the *Grünen Radler im B.B.U.*:—

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PHONE 818 7241

... aim of the new citizens Initiative organization is for the concerns of pedestrians and cyclists especially and demands public transport. The car oriented traffic plan must be clearly corrected, as even today, the non-motorised traffic with over 55% of the proportion of traffic is the most important means of movement. The "Grüne Radler (B.B.U.)" with its members, who are getting together with local citizens' initiatives and cycle initiatives, as well as active individuals and passive promoters, will especially propagandaize cycling, because it is the only means of transport which does not destroy our environment and at the same time helps towards greater mobility. Cycling contributes in principle to quietening the traffic.



In 1980 according to the Initiative a Year of the Bicycle will be carried out with the following main points:

- The giving out of an information service for members and those interested
- Newly acquired recommendations on cycle traffic planning should give institutions and politicians important pointers towards quietening the traffic.
- Support for the building of decentralized bicycle self-help work shops.
- Action week Citizens for the bicycle in

the cities and communities with town celebrations and peoples' festivities. Bicycle demonstration on Environment Day in June 1980 in the whole of the Federal Republic of Germany.

The giving out of city bicycle maps and travelling maps, legal advice and legal protection for the non-motorized, is planned, as well as a bicycle congress in early 1980.

Is the difference in goals or working methods of the bicycle groups now leading to a similar split as that in the anti-atomic movement or the Green Party movement? Certainly not!! The goals of the two groups are in any case of the same type. There are differences at the most in the working methods and methods of approach. Jan Tebbe has built up an organization with the A.D.F.C., modelled on the A.D.A.C. (equals N.R.M.A.), which is strongly organized from above to below, and raises the impression that the participation of individuals is hardly possible.

The Grüne Radler im B.B.U., as opposed to this are committed to the cooperation of every individual. While the A.D.F.C. prefers to turn away from the Citizens Initiatives the Grüne Radler are building a representation of interests in it.

Seen in the long term, the A.D.F.C. and the Grüne Radler im B.B.U. will be speaking to groups with different aims, and as such, both groups can exist next to each other with complementary sets of aims.

For more detailed information:-

- A.D.F.C. Jan Tebbe, Postfach 101123, 29 Bremen 1.
- Grüne Radler (B.B.U.), Werner Zeiss, Schelpshede 39, 48 Bielefeld 1.

Equal Incentives

The November, December 1979 issue of *Bicycling* reports that Wayne Powell, editor and publisher of the *Evening Sentinel* in Carlisle, Pennsylvania is taking the fuel crisis seriously. He is giving his employees 15 cents a mile (25 cents a kilometre) to cycle to work - the same rate they get for using their cars. Editor Powell also runs free classified advertisements for bicycles selling under \$75. That's good news - perhaps our Australian politicians - are you listening Malcolm? - could conserve our scarce fuel resources by making bicycle commuting to work a tax deduction. A flat rate allowance of 20 cents a kilometre seems reasonable, especially when you think of all the freeways they won't have to build after making an offer like this.

ENERGY CRISIS

The term 'Energy Crisis' as regular bicycle riders will be aware, needs some clarification. From a historical standpoint the present crisis only concerns one form of energy – fossil fuels, or does it . . . In this special study for *Freewheeling* WAYNE KOTZUR outlines our present difficulties with supply of liquid fuels and explains why for our survival so much depends upon supply and not on vague policies related to the price of the stuff. Bicycle riders, those energy efficient fringe dwellers, will also be effected if these supply problems are not faced and dealt with in a realistic manner. As a coda to this important article Wayne outlines the role the bicycle can play in averting a real energy crisis. The time to act however, is now.

Original cartoons by Bill Gannon.



**riding
a
bicycle
just
isn't
enough**

Australia is entering a crisis period. No longer can we expect the plentiful supplies of the petroleum that ran our lives so comfortably. We will be thrust into the '80s with a shortage of fossil fuel, and a dire shortage of government and commercial energy policies to alleviate the problems.

Historically, Australia has led a relatively isolated existence from the world oil crisis. We have been shielded by the domestic production from Bass Strait and our natural gas and LPG reserves. That era will end this decade: our domestic production will peak in 1980 and it is expected to halve in the next ten years (figure 1).

What will this mean? Already Australia is a net importer of energy. The coal we export predominantly is a raw material used for steel making, and not an energy rich fossil fuel. As our production falls (we must remember that the remote discovery of very large deposits will only forestall the situation by a few years) Australia will be forced to import more and more overseas crude. It will be expensive and discontinuous. Currently the most vital areas of our economy — transport, industry and agriculture are completely dependent upon continuous supplies of refined oil. This is a vital point. The energy crisis will not occur when we run completely out of the particular resource. It will be felt as soon as the rate of energy supply falls behind demand. Reassuring statements that "there's plenty left in the ground" are irrelevant. Some of the Western world has had a foretaste of the '80s — in the 1976-7 U.S. winter severe gas shortages occurred when supplies could not match the particularly high demand in a time of bitterly cold weather, creating widespread hardship. They still had large gas reserves. So the energy crisis cannot be discussed solely in terms of potential reserves, but must encompass the mechanics and politics of distribution and the rate of consumption.

Australia is a small fish in a very large economic ocean. We do not have the pull that Europe, U.S.A. and Japan have on the international oil market. A number of factors suggest that we will find it increasingly difficult to locate overseas sources of oil.

Many OPEC countries, notably Saudi Arabia, will find it in their interest to keep oil prices high by leaving much of their reserves in the ground. This is understandable, as it guarantees a long-term income, and it is a better investment against inflation than the assets they have already accumulated in the developed world. This way the oil exporting countries can stabilise their gains without releasing much more oil than they are currently processing and exporting.

Multinational companies also have a stranglehold on oil supplies, distribution and pricing. It seems, energy crisis or not, that big business will continue to raise its profit levels (see box). Indeed our energy crisis is forcing many smaller independent oil suppliers to the wall, leaving large business to grow larger.

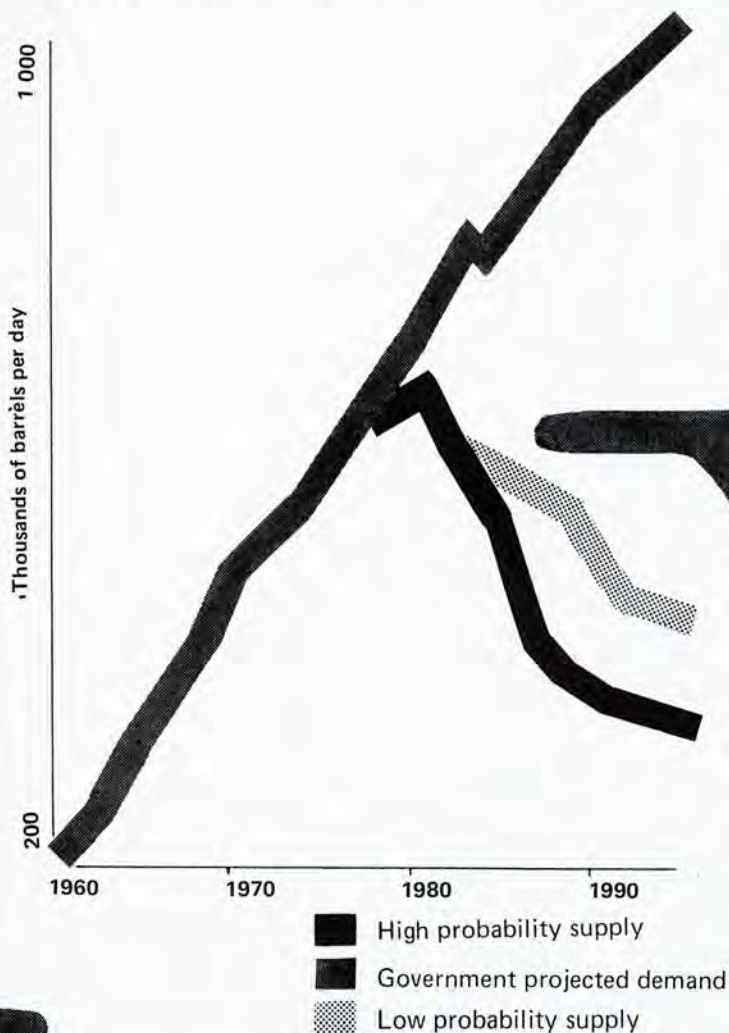
There is plenty of evidence that the tightness of oil supply stems partially from the policies of the large oil firms. They are content to leave oil in the ground, since it is worth more the longer it remains there. Ironically, they then demand higher prices to act as an incentive to explore and develop our domestic reserves. In the U.S.A., oil

companies have demanded US\$1 trillion over the next decade as an incentive.

Australia, however, cannot expect much oil exploration in the near future — especially not while cheaper fuels overseas in underdeveloped countries can be more profitably exploited. This means that our small reserves will be depleted rapidly to make up the shortfalls in imports that are bound to occur.

Governments the world over obey the ancient maxim of not interfering with big business. This means that we have no total picture of the world's fossil fuel situation. We must rely on the data supplied by oil companies — companies whose interests must lie apart

Fig 1.
PROJECTED AUSTRALIAN OIL
DEMAND AND LIKELY
AVAILABILITY



Seeds of Change Patchwork 1978

from those of government. Overseas markets with more purchasing power have at times led to the redirection of oil supplies bound for Australia. It is not difficult to imagine Australian oil being shipped out without anyone the wiser to gain higher spot market prices elsewhere. In a similar way to Australia, much of the poor Third World countries will not be able to buy the oil that their limited development requires. Rich, developed countries will be able to conserve their own fossil fuels, import a poor country's oil and waste it.

Finally on the international scene, we can but note the revival of the Cold War. This will divert oil and money from potentially useful purposes to the production and upkeep of military hardware, and the stockpiling of enormous reserves of fuel to sustain a conventional war.

National Issues

The world situation indicates that overseas oil is not going to be as easy to secure as the Federal Government claims. We will be forced to rationalise our current energy practices. This is going to be difficult considering how continuous cheap energy supplies underpin our system.

Unlimited access to fuel has enabled the developed countries to waste and otherwise use, inappropriately, a dwindling resource. In recent times the world's energy consumption has been doubling every ten years, mostly in oil. Capitalist economies need industrial growth powered by energy consuming technology. Oil, which is energy intensive and easy to

distribute and use, has become increasingly relied upon to deliver the goods.

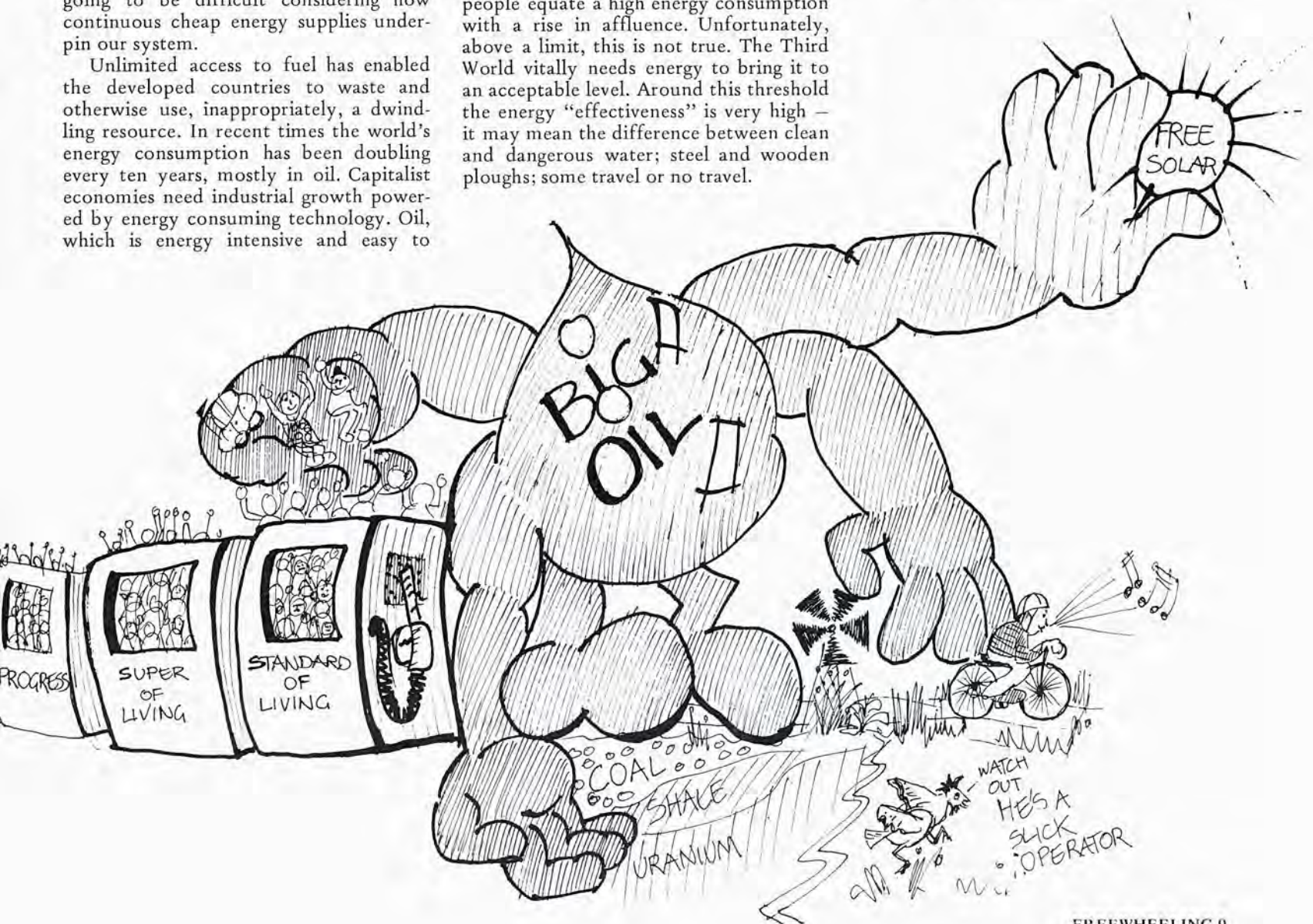
BIG OIL: Company Profits for first quarter of 1979 — compared to first quarter of 1978

SHELL (US)
up 37% to \$US 995 million
GULF OIL
up 61% to \$US249 million
BP
up 229% to £281 million
TEXACO
up 81% to \$US307 million
Standard Oil of California
up 43% to \$US347 million
Standard Oil of Indiana
up 28% to \$US349 million
MOBIL
up 81% to \$US437 million
EXXON
up 37% to \$US995 million

Australia's domestic consumption has been rising steadily (figure 1). Most people equate a high energy consumption with a rise in affluence. Unfortunately, above a limit, this is not true. The Third World vitally needs energy to bring it to an acceptable level. Around this threshold the energy "effectiveness" is very high — it may mean the difference between clean and dangerous water; steel and wooden ploughs; some travel or no travel.

Australia has long surpassed this point. It would be no exaggeration to claim that at least three-quarters of our energy is wasted without improving our living. How much better is a life with aluminium cans, sales promotion, over-powered cars, plastic packaging and paper to spare? High energy use is inevitable in Australia today. Our industrial development during a period of cheap, easily available oil has meant that our institutions and social structure incorporate this origin. Consider the vast suburban sprawls of Sydney and Melbourne; they could not have arisen without the automobile to transport people to and from work; to visit friends and to provide the goods and services to this conurbation. Now, of course, oil is more expensive — but since the planning and construction and institutional codes reflected the versatility and mobility of the car you cannot find good public transport or the local corner shop. In short, lack of insight into energy matters made for a system that requires enormous amounts of energy just to service itself.

A similar situation exists in housing.



Homes are constructed using energy intensive materials like aluminium, concrete and bricks. The materials are very infrequently local, and require transporting and processing. This is in addition to poor house design. Poor insulation, orientation and neglect of our needs in planning mean that most houses in Australia need auxiliary heating and lighting — even when there is sufficient outside. The waste and inefficiency is even more obvious in the large urban centres with high rise buildings using the equivalent of a town's energy supply.

NOVEL CONCEPTS

The energy crisis doesn't have a technical solution. Technology to utilise energy is only a part of the issue. For too long financial interests and technical feasibility have combined to dictate our life-style.

Important social and environmental questions are left unasked and unanswered. Not asking the questions, of course, doesn't mean that energy policy and use have no social and environmental consequences. These however are novel issues to our planners who see supply and demand as a critical area of concern. Let us examine some of the issues that are never raised in conventional energy debates.

Equity:

- Who gets the oil?
- Who pays the costs?
- Will increasing the world's total energy use make for a more equal distribution?

We hear the old argument that as energy consumption rises then the standard of living rises correspondingly. The implication is the standard of living is closely related to quality of life — and this will somehow give everyone a greater share. The situation is much more complex than that simplification would allow. Those who can pay get the oil; those who cannot must suffer the costs of having insufficient energy. Visions of international airports amongst cardboard and tin ghettos without power are frequent in the Third World. Or consider the oil refineries and coal stations in poor areas of Australia where land is cheap (and power is still expensive).

All societies need energy. Enough energy. Australia has long passed the point where energy use dramatically improves the quality of life. We should be seeing that it is spread more equitably.

Environment:

The West is just discovering what much of the East has incorporated into its philosophies millennia ago. Oneness has been put on a firm basis with the introduction of ecological thought. The basic ecological principle is that every action



has an effect directly or indirectly on the surroundings. No longer can we ignore environmental questions, since these impinge on our lives and health. It seems that degradation of the eco-system, which we need in order to survive, is proportional to our energy consumption.

Fossil fuels have unfortunately taken us out of touch with nature. The ability to stay warm with the flick of a switch or to move incredible distances quickly, have isolated us from the consequences of our actions. "We are safe within our walls".

On the most crude level people assume that new resources of energy will always be developed; our ways can be maintained indefinitely. However there are natural and unalterable limits to growth. The ultimate limit would be set by the amount of heat liberated by all this energy waste. (All energy is degraded to heat as it is utilised.) Probably long before the world overheated we will be threatened by other consequences of our ignoring the environment — industrial contamination of our food and water; the widespread use of carcinogenic materials; climatic changes; resistant plagues of insects; and air we cannot safely breathe.

Common Sense

It has been said that common sense isn't very common, and looking critically at our society one might be left wondering if it isn't already extinct. We see human sewerage running into the sea, while we

make artificial fertilisers and dispose of islanders of their phosphate-rich land. We see people motoring besides cyclists. We see mile upon mile of near-identical streets. We see oil — containing energy — consuming items that are used only once a week. We see aluminium cans, mined in Queensland, refined in Tasmania, shaped in N.S.W. and sold in W.A.

In short, we see a society that isn't seeing. Our use of air, water, minerals, space and energy isn't the open-sighted rationalism that science claims, but myopic irrationalism. Common sense must be considered a priority for the future.

Dependence

Fossil energy was promised as a slave. Something to decrease our vulnerability to natural processes. The situation has turned full circle. We are all now dependent upon oil for life.

No one can be complacent. Even those who seem to use little energy depend upon it. This magazine runs on oil. Additionally, energy is taking an increasing share of the national income. There are still far better areas where this money could be used — housing, public transport and the Third World.

What To Do

Ultimately the problem isn't energy per se — it is what we are doing with it, and how much we are using. Energy,



like everything else, has its socio-political element: plentiful energy is being used to guarantee the profits and life-style of a few while making life for most less meaningful. We need energy technologies that offer greater decentralised potential and individual choice.

TOWARDS A COMMON-SENSE POLICY

From the above, we can see an effective energy policy must contain many elements traditionally left out of policy making. It is in our interests to demand an equal share of sufficient energy, and that associated energy technologies don't cause irreversible environmental damage. It must include an analysis of the end uses of energy as well as reliable data on natural resources we have.

In the short term conservation efforts must be expanded. It is the most effective option open to us. In most cases a dollar invested in preventing waste will bring a better energy return than a dollar invested in finding more oil. It is thought that a ten percent reduction in Australia's

total energy consumption could be achieved every year without any loss of jobs or comfort. By using as little as necessary, increasing the efficiency of most current plant and sharing commodities a 30% saving is not inconceivable in the short term. Energy wastage is often so prodigious that a large reduction in energy consumption will not inevitably lead to a return to a primitive lifestyle based on drudgery and deprived of pleasure.

"With no new technology, no large investment of capital, no reduction in material living standards, no major improvements in house design or construction or disruption of the typical family life-style, the energy consumption of a typical Melbourne household could be reduced by at least 50%."

(Seeds for Change, Patchwork 1978)

Conservation also has the least impact on the environment; a criteria that is rightly gaining support. If for no other

reason, this would impell us to reject nuclear power. Not only is it an inappropriate and centralising form of power, but its ecological consequences are immense. The long term effects of mining, processing and disposal are probably problems beyond human capability. We haven't the time to develop technologies that seem to be beset with many problems.

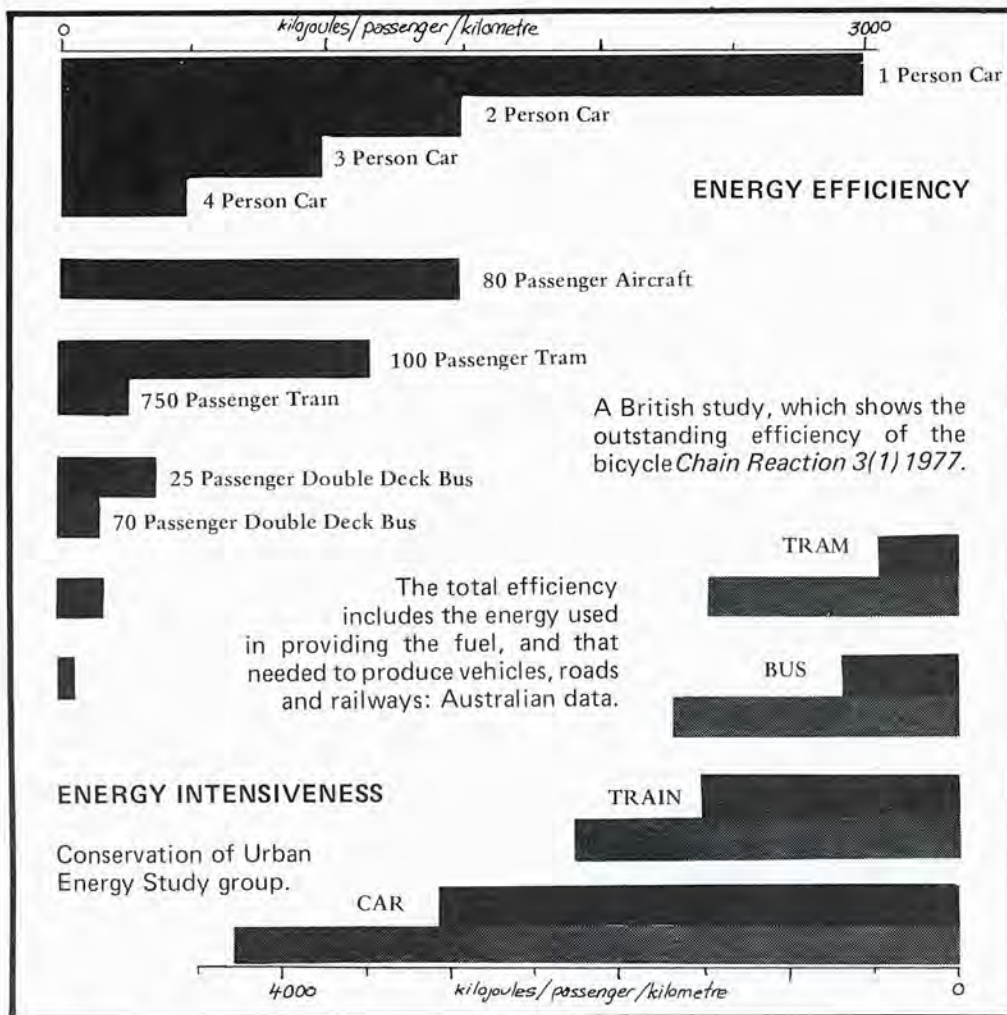
Earlier we noted that damage to the environment seems to be related fairly directly to the magnitude of energy use. Large powerplants have much more effect than smaller, diversified energy systems. Additionally less energy is used in transport. Widespread low scale enterprises cause disruptions below the recovery power of the environment.

We have had the capacity to 'go Solar' for many years. It has been demonstrated both theoretically and practically as possible, and is relatively simple. A solar collector or windmill isn't going to present the possible problems that a conventional or nuclear power station may.

A great danger with all these alternatives is monopolisation. Multinational oil companies are diversifying rapidly; moving into all areas that generate and handle energy. As the essential energy suppliers they can ask their own price — and supply power only to those who can afford it. Centralised control, too, tends to miss or ignore possible environmental consequences that may impinge upon their profits unduly.

Perhaps the single most urgent need is to make agriculture independent of fossil fuel. Everyone needs food. Obeying the simple recycling laws of nature can mean that land can be productive forever. The abandonment of monoculture practices, and the implementation of low maintenance perennial ecosystems are called for. This is especially important for the city — space is currently under-utilised. It must be capable of quickly absorbing a large labour force if oil is cut to essential farming during the transition.





grew up around the car, public transit systems are at a disadvantage. Cities have sprawled beyond the historic radial pattern of train lines. More flexible busing and inter-station travel will have to be provided. Figure 2 clearly shows that getting higher numbers of passengers for each trip is the major step in improving efficiency, which is applicable as much to buses and trains as to cars.

As the car is still a useful and versatile vehicle if used correctly, steps must be taken to increase its efficiency by designing smaller cars, joining car pools and limiting its use to areas not otherwise serviced by public transport.

STRUCTURAL CHANGE

In our daily lives the use of excessive transport isn't an example of the miracle of modern technology, but a symptom of failure. Planning, if there is any, has failed to provide maximum access with minimum mobility. Everyone considers it obvious to arrange a home so that all the elements are accessible without inconvenient travel — this logic, unfortunately, is not applied externally. In the long term, we are looking for structural change. The creation of lesser distances; lower energy demands; semi-independent decentralised regions; better communications and committed community involvement. Many energy issues today cannot be solved without the full participation of the population; since they require political judgement. For example, the balance between motoring freedom and pollution, and the conflict between private housing and public space.

We are in a unique position. We can see how energy supplies can enhance life, and we have first hand knowledge of what a danger it can be. Now is the time to decide what level of risk and reward we expect from energy in the post-petroleum age. Riding a bicycle just isn't enough.

Another large area of concern — and probably more relevant to *Freewheeling* readers — is transportation. About 55% of our oil is used for transport and the majority of it goes into the private automobile. There are large potential savings in this field — especially since these promise to conserve our most useful fuel — liquid petroleum.

The bicycle is, of course, to be recommended unreservedly. Its sheer

efficiency places it well to the front of many transport energy strategies. It also has a part to play in mixed mode travel and this will probably be its main contribution. (See 'Dual Mode in *Freewheeling* No. 5.)

Public transport will need backing as well. It provides a service to those without the disposable income to acquire a private car, and does it at an efficiency beyond the car. Since the urban system



Transportation in Australia is almost totally dependent on oil. Even though suburban railways using electricity from coal or gas and move a great number of people each day, the overwhelming usage of large cars with only a driver in them consumes so much petrol that 99.5% of transport energy comes from oil. Throughout the world the necessity to have national energy conservation policies is being realised, and in many countries these include the promotion of bicycling. Cycles can enable this country to be less dependent on overseas oil supplies by:

- substituting for short car trips
- integrating bicycles and public transport modes to replace longer car trips especially in urban areas
- using the bicycle as a leisure vehicle.

Whether the trip is short or long, *Free-wheeling* believes that all possible favourable conditions for encouraging cycling should be made. There should be safety while pedalling, ample parking facilities in urban centres, security of parking, special cycleways to negotiate special places and intersection control. Specially-fitted compartments in trains (and large buses) to carry cycles, strollers and luggage could be devised. The possibility of providing tricycles for old people or invalids, and/or power-assisted bicycles or tricycles should be explored. Since they are useful and either need no fuel, or only negligible amounts for the power-assisted varieties, every possible device should be employed to facilitate the rapid growth of their use.

A combination of methods, especially the growth of vital local centres, could add significantly to the present increasing popularity of cycling, opening up the pleasant prospect of short pedalling distances. Many feel daunted by the prospect of long, arduous journeys to get anywhere worthwhile. The bicycle can make a significant contribution but it cannot be the universal panacea of transport. Some people are too young, too frail, too sick or too pregnant. There is an urgent need for a complete review of Australia's transportation system.

Why the bicycle?

Bicyclists appreciate the multiple benefits of cycling. Most non-cyclists have yet to grasp the potential that it offers to short energy conservation and long term convivial transport.

Efficiency

Cyclists outstrip the efficiency of not only all machines but all other animals as well. This high conversion is the key to the employment of the bicycle as an energy conservation tool. Since the average car delivers only 8% of its

the role of the bicycle

fuel energy to the driving wheels, its speedy replacement will greatly increase the duration of fossil reserves. In the capital cities, 40% of all home-based car trips are less than 6km.



Availability

The initial cost of a bicycle is low, especially in comparison to the years of useful life and miniscule cost per kilometer. There are nearly two million bicycles in Australia already.

Durability

Bicycles aren't rendered obsolete at the stroke of a designer's pen. Remember learning to ride on your grandfather's bicycle?

Dual Mode

For the same physical effort as walking, cyclists can go $3\frac{1}{2}$ times as fast, and cover 10 times the distance. Using bicycle to feed the rail system increases the catchment areas of railway corridors by 4 to 10 times, depending upon the station spacing.

Australia has a large amount of coal, and thus can maintain an electrified public transport system until it is replaced by new developments. Rail transport has a good energy efficiency, but the rail services increasingly do not go where people want to go. In a low density areas such as Melbourne only 15% of the population is within convenient walking distance of the station; but 85% of Melbourne's population is within convenient cycling distance. Reliance on the dual mode system of transport, given the infrequent rail services prevailing today, cannot compete with the private car on a time basis. However, compared to using public transport without a bicycle it is an enormous improvement. The level of service provided by public transport systems in the middle and outer suburbs of the large Australian cities is so bad that no-one will use these services unless they have to. Vast improvements in parking, security and fare structures are vital.

Pedal Power

Some domestic reduction in energy consumption can be anticipated by the introduction of pedal power. Largely suited to the kitchen, the farm or the tool shed, the development of a modular energy cycle could power food grinders, mills, knife-sharpeners, water pumps, lathes, potters' wheels, etc. Often claimed as unsuitable for load carrying, bicycles and pedal powered machinery have been operating satisfactorily carrying quite large weights. Tricycles, trailers and specially geared multi-personed have been built and used. They just await widespread use.

The vital contributions to Education, Enforcement, Engineering and Encouragement made by the Geelong Bike Plan must be pursued and implemented in the wider community immediately. The role of the bicycle in energy conservation could start today.

Cycles and Transport Energy

by Malcolm Crompton

More spurious thinking and misuse of facts concerning cycling has come to light in the published work of officialdom. This time, it occurs in the June 1979 Annual Report of the W.A. Director General of Transport (DGT), who, over the years, has generally established an excellent reputation for breaking down barriers of conservative thinking in transport.

In a short article on page 18 of the Annual Report called *Cycles and Transport Energy*, the amount by which Perth Metropolitan car use could be replaced by cycling is estimated. This is done by looking at a graph of "Cumulative car-km as a function on maximum trip length for Perth Metropolitan Region" and comparing it with figures for the average and upper limit of cycle trip lengths. The published graph showed about 2% of car-km in the metropolitan area being made up of trips of 2km or less; about 10% of car-km made up of trips of less than 6km and 50% of car-km being trips of less than 15km. The figures on cycle trip lengths are taken from European data published in 1975 by the OECD in the conference papers on *Better Towns with Less Traffic*. As quoted in the Annual Report, the average trip length was "between one and two kilometres" and 6km was "exceeded by few cyclists in Europe". Thus it was concluded that with a potential conversion maximum of 10%, only about 1-2% of car-km would be actually replaced by cycling. Fuel saving would similarly be 1-2%. The 1-2% figure allowed for the well known deterrents of "heat in the summer and rain in the winter"; "the cycle is not very suitable for carrying large quantities of shopping"; "many people do not relish exercise" etc.

The misuse of facts comes in comparing European and Australian figures, when it is well known just how much more dispersed are the cities of Australia compared with those in Europe. If a comparison of the type being made in the DGT Annual Report is to be made, then figures for comparable cities must be used.

In fact, figures for Australia's most dispersed city, Canberra, are available and are much more validly comparable with the situation in well spread out Perth. In 1978, GHD-Parsons Brinkerhoff undertook a *Survey of Canberra Cycle Paths, 1978* for the National Capital Development Commission (Planning Brief 78/11). In Report No. 1, the August Usage Surveys, the average week-

day cycle trip length (both road and cycle path users combined) was found to be 6km and about 4% of the trips were over 15km. (Compare with the European figures of 2 and 6km!) Using the logic of the DGT Annual Report, the Canberra figures suggest a potential conversion maximum of 50% and an actual conversion of, say, 10% of car-km to cycling.

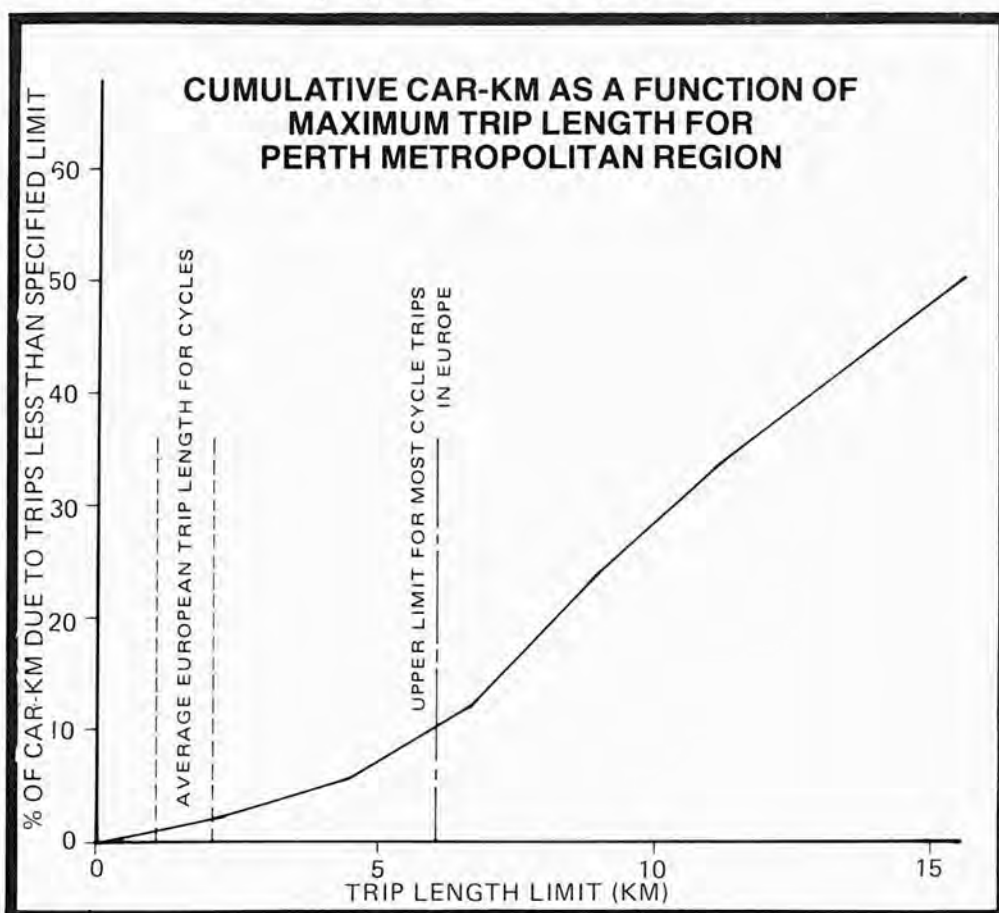
The GHD notes that the figures just quoted may be biased towards inter-town travel in Canberra, and so "may not be truly representative of total cycle usage patterns in the Metropolitan area". In particular, GHD mention that inclusion of school cycling trips, which would be shorter, would affect the average. However, if we are talking of replacing car trips (i.e. those made by adults) then the most representative figures is the one which excludes children's school journeys.

The spurious thinking in the DGT Report comes in the assumption concerning the future. The basic assumption is that there will be very little change in people's attitudes or behaviour. On that basis, ten years ago nobody in the U.S.A. or Australia was expecting anything but

a continued decline in cycle use. Instead we have seen a massive increase. Also, the average cycle trip length in Canberra ten years ago was probably shorter than 6km. What will the situation really be in ten years from now?

The following quote from the DGT Report, used to justify the future insignificance of the bicycle, will show the quality of argument used regarding behaviour and attitude: "It must be emphasised that a journey which is feasible by cycle will only be undertaken if there is no preferred alternative". A truism — nobody does anything if there is a "preferred alternative". Substitute the word "car" for "cycle" in the sentence — does it justify more/less the same/anything about car use?

In summary, if all Australian figures are applied to the argument used in the DGT Report, the conclusion reached is the reverse of the one published there: cycling could, on a conservative estimate, reduce urban car fuel used by at least 10%. This is a significant percentage when compared with some of the other fuel saving programs already underway such as the traffic management schemes to improve traffic flow.



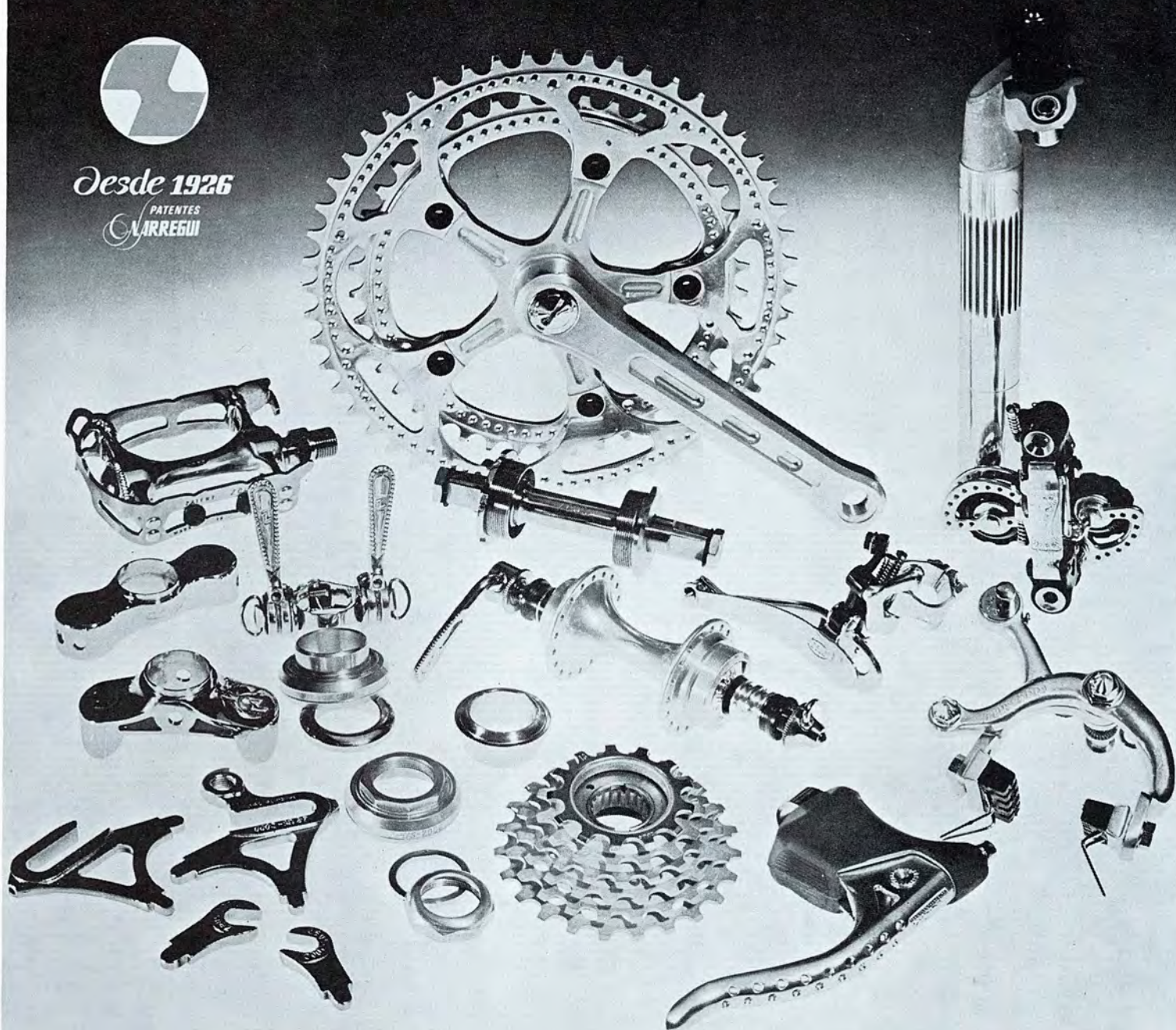
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The Bicycle Brigade

Story and Pictures by Janene Porter and Mark Cherrington.

The advantages of a pedal-powered courier service in crowded city streets and in an age of rapidly-rising fuel prices may be obvious to the converted, but Bicycle Brigade manager Julie Law met a rather sceptical reaction when she first began seeking clients in Sydney's central business district.

As she pointed out, many found it hard to believe at first that a bicycle can move faster through the city than the ostensibly-faster panel vans used by most courier companies.

Julie approached firms in the Sydney business district to gain the Brigade its first clients. However business is now coming in through word of mouth or by the Brigade impressing other companies with its service.

"We often do a delivery, the receiver notices how quick we are, and they start using us," she said.

After a fairly slow start, which included cash problems due to the fact that riders have to be paid weekly and accounts only go out monthly, the Bicycle Brigade is now breaking even with about 40

customers, and more coming in every week.

Julie believes the Brigade will prove a very lucrative business, but she can't see it ever becoming an empire.

The Brigade had its beginnings in January 1979, when it was set up, as a partnership.

"I've always thought a bicycle courier service would be a good idea. In San Francisco they've had them for years, using messenger boys with baskets on the front of their bikes," Julie, one of the partners, said.

And because Sydney's crowded streets mean bikes are the fastest vehicles through traffic, she thought it would be a great idea for the city.

Also, at the time there was talk of closing off some inner city streets (such as Pitt Street) to traffic — thus access for bike-based couriers would be so much quicker and easier.

The Brigade started up business in May 1979, with four riders. Julie and Bronwyn Coward man the office and

handle the accounts.

Riders were recruited through newspaper advertisements and the Bicycle Institute of NSW. At present there is a team of eight riders, part-time and full-time, male and female.

The riders prefer to use their own bikes — all 10-speed or 15-speed — rather than ones supplied by the Brigade, as was the original intention. A bike is kept for emergencies, but is hardly ever used.

As far as carrying equipment goes, the riders use baskets, racks with octopus straps or a locking bag such as a pannier or a back pack.

Most consignments are documents for such clients as real estate agents (L.J. Hooker was the Brigade's first), solicitors, accountants and printers. Also carried is clothing for city boutiques, large pieces of artwork for art suppliers and movie film cannisters for a film distributor.

No actual weight limit has been put on consignments carried by bike, but about 10 kg is about the maximum that can be carried easily. However as the great majority of pick ups are small urgent items, this is not a great handicap.

The area served by the bicycle riders is basically the inner city — that is an area bounded by Surry Hills, Ultimo, Pyrmont, Kings Cross and over the Harbour Bridge as far as Crows Nest. The riders boast being able to get from one end of the city to the other in 10 minutes (something a car *might* manage at 3am on a weekday) and getting over the Bridge even at peak times takes a mere 15 minutes — with no toll to pay. The standard around-town delivery charge is \$1.50 plus an extra 50c for over the Bridge. Higher rates apply for urgent deliveries, but Julie said the standard deliveries are normally carried out within an hour.

A paging device is used to notify riders of pick ups when they are out of the office; when it starts bleeping, the rider concerned simply phones the office for instructions.



Left: Spot the courier. One of the brigade does a delivery amid Sydney traffic. Right: The Bicycle Brigade outside their city office.

When the Bicycle Brigade first started advertising for riders, Julie expected to get a lot who would do it on a part-time basis, such as uni students. However most of those applying have turned out to be highly-enthusiastic riders interested in the job on a full-time basis. They work on a contract basis, being paid 60% of the charge on each drop. Jobs are allocated as evenly as possible, although each rider has his or her preferred area to work in.

Uniforms are provided, consisting of army-surplus shirts and trousers with the Bicycle Brigade logo on the shirt pocket. Full wet weather gear and vests with bright orange X stripes are also provided.

Riders with a fairly neat appearance are preferred — not because of any particular prejudice on the part of the Brigade, but because they are delivering to accountants and solicitors working in a more conservative environment.

Julie told a frantic search one lunch-time for a rider considered presentable enough to take some urgent documents to a client dining at one of Sydney's more exclusive restaurants.

Sydney's smog hasn't proved a real problem, although one rider who was asthmatic couldn't go out on the really smoggy days the city is renowned for; others sometimes come back with black faces.

As yet there have been no pushbike accidents, although the riders have all experienced the usual car driver care-

lessness: those sudden door openings, left hand turns and lane changes.

They do take out insurance, although most prefer not to wear helmets.

So far wear and tear on the bikes themselves hasn't been excessive. From time to time there is a run of flat tyres, but not much else. All the riders carry basic puncture and repair kits, there's a tool kit in the office and a bike shop nearby for anything really drastic.

When doing pick ups and deliveries, the riders chain their bikes to a handy post or rest them against a building if it's a quick job. Theft while doing drops hadn't proved a problem yet either.

Adverse weather conditions don't really affect business. In winter a well-wrapped up pushbike rider is warmer than a motor cyclist any day.

The Bicycle Brigade is also gleefully immune to those ever-increasing fuel prices to which your average courier service is victim, holding a little celebration each time they rise. This aspect of course will make such a bicycle-based service ever more competitive as price rises continue.

However the Brigade does admit to using three motor cycles and a van — more through necessity than intention.

"We found it very hard to get clients to use us just for around the city and another company to do suburban drops as they wanted one courier to do the lot," Julie said.

The van is used for regular client jobs where the consignment is too large to be handled by bicycle (or motor bike).

Incidentally the Bicycle Brigade may be employing the only female motor bike courier in Sydney — no other company believed a female capable of doing the job.

As far as publicity goes, there hasn't been much: a couple of items in the Sydney Morning Herald's Column 8 and an interview on 2UE and cinema advertisements. Canvassing and word of mouth continues to be the main way of gaining extra business.

"We're hoping to get bigger — but not too big, because then the service falls down," Julie said.

Future plans are for a weekend telephone messenger service, also bike based. A personalised service would be provided for birthdays, people returning from overseas and those without phones. It would be run from the city, with suburban bases to carry out deliveries and would involve part-timers.

The Bicycle Brigade (propelled by human energy), cheap, efficient and fast, is proving a viable concern in a city which has an almost cut-throat courier service environment.

Its size and flexibility account for its appeal to customers, while its range and speed of delivery make it a popular and competitive alternative.



Melbourne cyclists

To put the report in perspective, we asked bicycle activist **ALAN PARKER** to comment. His remarks appear below.

MORE CYCLIST INVOLVEMENT IN PLANNING

In bicycle planning the role of the professionals has been to put the plans together as workable proposals for action. They do all the survey work, accident analysis, liaison with local councils, investigations of special aspects and a lot of other detailed work that must be done before the insight of experienced cyclists can be turned into planning guides that non-cycling civil servants can work from in confidence. This is essentially what planning is about. The Geelong style planning process itself, did not start with the planners at all, like technicians everywhere they are trapped within a limited political environment. It all started in Melbourne with the establishment of the Bicycle Institute to act as a lobby group for cyclists and with the assistance of its founding Patron, Brian Dixon, the BIV made a lot of things happen. The BIV was established 2 years before the State Bicycle Committee. What happened was that cyclists approached the government who gave the go-ahead for the civil servants to translate cyclists' needs into policies and programmes.

The summary of the Bayside Bikeplan explains the basic cycling ideas that are built into it although it may be difficult to detect cyclist influence due to the lack of acknowledgements. My purpose here is to appeal to cycling groups, racing, touring or recreational to give their support to the plan and at the same time point out a few other cycling needs not dealt with in the plan for political reasons.

A CONSULTING SERVICE NOT PROVIDED

A good example of how good planning can be ruined is to be found in a recommendation of the Bayside Report, on page 95 it states: *It is recommended that a map be produced to give cyclists immediate benefit from the work done in the Bayside sector. It should show the recommended arterial road network and bicycle arterial network for the Bayside sector.* This statement is ridiculous. It was their job to prepare the route map. What they are referring to is the modern concept of a *bicycle route map*, which is produced by professional planners in the United States, who offer the service of producing bicycle route maps as part of their consulting services. The real reason that a bicycle route map was not produced by the people who ought to have done it, Loder and Bayley, is the fact that the steering committee and the consultants for the Bayside sector refused to accept that route maps were important. The Bicycle Institute of Victoria had made a whole series of submissions to the State Bicycle Committee that a route map be prepared. To rub in the point, the only professional on the steering committee who could be called an experienced cyclist, Michael Scott, wanted a bicycle route map but was overruled by the

non-cycling administrative types. Now the whole ritual has in part to be gone over again and if a bicycle route map is produced for the Bayside sector before 1981 I shall be surprised.

WESTGATE AND EQUALITY OF ACCESS

The Bayside Bikeplan states (page 23) *Use of the Westgate Bridge: The Westgate bridge provides a potential opportunity for the barrier of the Lower Yarra of the Yarra River to cyclists to be breached. The feasibility of allowing cyclists to use the bridge is currently being investigated in a study for the Ministry of Transport.* This is nothing but nonsense, the study done for Victorian Cabinet on Cyclist Access to the Westgate Bridge was finalised months before the consultants were officially asked by the BIV to make reference to it in their report. Prior to this the biggest potential cycling shortcut ever built in Melbourne between the top end of the Bayside sector and the Western suburbs was going to be ignored for political reasons because the Ministry of Transport objected to it.

40 KPH RESIDENTIAL SPEED LIMIT

The Bicycle Institute campaigned for this measure four years ago and was successful in persuading the Minister then responsible for bicycle planning, Mr Dixon, of the need for a 40 KPH experiment. A 40 KPH experiment in Corio was undertaken (under the wrong conditions) to see if the speed limit above would have any effect. For reasons known to the BIV at the time, this experiment was doomed to have limited success because it was wrongly designed and subsequent to this (ROSTA) Road Safety & Traffic Authority put it about interstate that the 40 KPH speed limit had no value at all. Cycling organisations please note that ROSTA has made all state motoring organisations aware of their faulty conclusions to their badly designed experiment and stopped any further experimentation in W.A. last year.

BIKE-RAIL DUAL MODE TRIAL

This is the first time that such a planning study of bicycle/train travel has been done in Australia for a Ministry of Transport and what makes it especially important is the testing out of equipment for actual use by Victorian Railways. Most of the contents of the study refine and develop the basic ideas, previously written on this subject by this writer in various journals. Full co-operation existed for the conduct of the experiment following my selling the State Bicycle Committee on the need for such a study and anybody interested in this aspect can best inform themselves by going to Box Hill, Nunawading and Mitcham stations to look at the equipment installed. The main recommendation built into this report is the need for a marketing study to sell dual mode travel to potential rail patrons, which for some peculiar reason is not spelled out in the summary. Out of the work conducted

for the dual mode study came the 45 page report on bicycle security storage systems and it is with the preparation of this report that there is serious fault. The report is good, however it needed something else as well. Five lockers used in the trial were of poor design.

In the consultants brief originally prepared for the dual-mode trial and bicycle storage systems by Michael Scott, a much more practical approach was developed and overruled by the steering committee. Instead of spending several thousand dollars on a 45 page report above, it was suggested that \$2,500 of it be spent on buying samples of the best US equipment on the market and forming a standing exhibition with them. The purpose of buying the actual equipment was it makes it easy for local manufacturers to come with measuring tapes and copy them or crack the patents on them. The non-cyclists ignorant of the world of industry and cycling would not accept that the principal task was not just to show a need for more secure and thief-proof storage systems, but to actually do something about it as quickly as possible.

CO-ORDINATING THE ACTION

Despite all the recommendations for action in the Bayside Bikeplan, its greatest failure as a plan is to recommend the kind of organisational structure needed to do the planning properly. What is required has been previously worked out in detail in reports prepared for the State Bicycle Committee by Don Hurnall and Warwick Pattinson in October 1978. Without the full time staff recommended in that report to man the *State Bicycle Planning Group* all the different things that need to be done for cyclists, just will not happen. There is no way that the CRB, ROSTA, Education Department, etc., will go away and do what is in the plan. Without full time staff to go out and ensure adequate representation of cyclist interests on the hundreds of committees involved in all the various agencies, little will happen. The Ministry of Transport has promised one person full time and one person half time to co-ordinate etc. They must be joking.

The problem is that there is nothing to act as an overall control point, despite the talk about integrating bicycle planning into the planning process. The principal recommendation of the Geelong Bikeplan has been ignored. This was to set up a permanent State Bicycle Planning Group to do the planning and co-ordinate with local Councils. I would like to see Councils demanding that the Bicycle Planning Group be set up. This is the kind of policy that is necessary and needs supporting by local Councils.

PUSH THE PLAN

In spite of its short comings it is important for cycling groups to make sure that the plan is implemented. During the last two years the Bicycle Institute of Victoria has had to fight very hard to first get the funds provided for the Bayside Plan to be produced and to ensure that the Ministry of Transport finish off the job and start planning the rest of Melbourne.

to get their first bikeplan

Because of our interest in matters relating to urban cycling we often come across documents relating to the various planning projects currently underway in our cities. Recently one such report has fallen into our hands. Due to the nature of this report and its implications on the future of cycling in Australia, we feel obliged to publish its summary in full in an effort to keep bicycle riders actively involved in the planning process. The report is entitled *Report on the Bay Sector Engineering Strategy and Bike-Rail Dual Mode Trial* and was prepared by the consultancy firm of Loder and Bayly for the Victorian Government.

The dramatic increase in bike ownership and usage in the seventies, the health benefits to the individual cyclist, the environmental benefits for the community, and the unacceptably high rate of bike accidents create an urgent need for planning and implementation of programs to ensure that bike use and safety is increased.

There are almost a hundred personal injury accidents reported in the Bay Sector each year, almost half involving 12-17 year olds. Many more accidents are unreported. Dangerous and unattractive conditions on many roads are inhibiting cycling in the sector. Comprehensive action is needed now to cater for the current and growing amount of cycling in a safer environment.

Engineering, education, enforcement and encouragement programs (the 4 E's) will comprise the total Melbourne Bicycle Strategy. The Bay Sector Engineering Strategy Study concentrated on the engineering aspects and developed a framework and methodology for engineering aspects and developed a framework and methodology for engineering programs in the remaining sectors of Melbourne. It represents the first stage in meeting the Government's commitment, following the preparation of the pilot Geelong Bikeplan, to prepare a strategy for Melbourne.

This summary highlights the principal findings of the study and briefly summarises the recommended actions and implementation responsibilities and costs.

Goals, Objectives and Principles

Four objectives have been defined towards the overall goal of improving cycling conditions and increasing bike use:

- To increase cyclist safety
- To improve the riding environment
- To increase accessibility by bike
- To increase bike security.

The basic principles for the Bay Sector Engineering Strategy stress the need to improve cycling conditions *on the road system*.

Investigations and Key Findings

The Bay Sector Study adds to the extensive information on cyclist attitudes and characteristics obtained in Geelong with selective investigations of specific Bay Sector characteristics.

Cycle Use

A survey of secondary school students in the sector showed that over 18,000 (80%) owned or had a bike readily available for use. Over 10,000 of these students were regular cyclists and 4,000 of them regularly rode to school.

Estimates in the Bay Sector suggest there are over 20,000 regular cyclists in the sector as well as many thousands more residents who cycle intermittently.

On-Road Cycling

The Bay Sector findings endorse the Geelong conclusion that . . . "Every street is a cycle street". Route information from public submissions and secondary school surveys and the wide distribution of bike accidents emphasise how all classes of roads throughout the sector are used by cyclists.

This widespread bike travel on all roads together with an average trip length of approximately 3 km. means that it is not feasible to cater for cycling by a network of off-road paths. Even if funds and space were available to build a network of bike-paths throughout the Bay Sector at a spacing comparable to the arterial road network, only 50% of bike trips could use the network for more than 50% of their trip length. Provisions for cyclists must therefore concentrate on assisting the bike to safely take its legitimate place on the roads.

Arterial Roads

Despite high traffic volumes, often travelling at fast speeds and including a significant proportion of trucks, many cyclists use the arterial roads because of their directness, continuity, frequently smooth riding surface and signalised intersections with other arterial roads. Many trip destinations are also, located along the arterial roads.

Arterial roads are used by cyclists for all ages. Heavily trafficked roads such as Chapel Street, Prahran; Centre Road, Bentleigh and Hawthorn Road, Caulfield, are amongst the most frequently used

roads for non-school trips by secondary school students.

A survey of all arterial roads in the sector showed that there are many which have not received basic traffic management treatment such as lane markings. The opportunity therefore exists through low-cost measures to achieve more effective traffic management on such roads to benefit all traffic using those roads including cyclists.

Non-Arterial Roads

Many cyclists seek to avoid the arterial roads and restrict trips largely or wholly to the local street network where stresses from motor traffic are much lower.

Much of the Bay Sector is characterised by a rectangular street network with continuous streets paralleling the arterials. This provides the major potential to develop routes which offer many of the advantages of the arterial roads without their disadvantages to encourage further cycling and enable safer cycling in the sector.

Off-road paths should be used as an important but subsidiary component of the strategic provisions. They are appropriate and important to bridge gaps in the road network, provide short-cut paths and provide an attractive environment for recreational cycling.

Cycling Accidents

The large number and increasing occurrence of bike accidents in the sector emphasises the need for action to increase cycle safety in the sector. There have been more than 100 reported bike accidents in the sector each year. Over 80% of these have involved personal injury. Evidence from Bay Sector and Geelong surveys show that reported accidents are only about 5% of the total bike accidents involving personal injury of the cyclist. The number of reported accidents each year has been increasing at an average rate of approximately 14%.

Over 70% of reported bike accidents in the sector occur at intersections and 75% of these at an intersection with an arterial road.

Strategic Barriers and Opportunities

Specific major barriers are the large golf courses at the southern end of the sector, the Albert Park Lane and the major in-

dustrial developments and the Yarra River at Fishermens Bend. The arterial roads throughout the sector are deterrents to cycling. The widening of the Nepean Highway between Gardenvale and Moorabbin and the provision of the associated bikepath will remove the worst section of arterial road for cyclists in the sector.

The foreshore provides a major opportunity in the sector for an exceptionally attractive recreational bike-path. Investigations showed that a foreshore path could be provided between Port Melbourne and Ricketts Point, requiring the provision of only a few short sections of structure.

Strategic Proposals for the Bay Sector

The Strategy proposes a three-strand approach to make cycling safer and more attractive in the Bay Sector. Measures proposed are centred on integrating the bike into the total mix of road traffic:

1. Arterial Roads

Improve the cycling environment on the arterial road network;

2. Bike Arterials

Develop a network of bike arterials¹ using non-arterial roads to provide alternative routes to the arterial roads;

3. Local Streets

Improve the cycling environment on the local street network throughout the sector.

Arterial Road Measures

Four major engineering measures are proposed to improve cycling conditions and the level of safety for cyclists along the Sector's arterial roads. They are:

1. Comprehensive marking of traffic lanes on 160 km of arterial roads so that all 260 km of arterial roads are lane-marked and, wherever feasible, have a wide kerb-lane to accommodate parked vehicles and cyclists. Not a single traffic lane on any primary or secondary arterial road in the sector would be taken to implement this.
2. Implementation of strategic actions to help cyclists circumnavigate the extensive weaving of motor vehicles at major intersections such as St. Kilda Junction.
3. Provision of traffic signals at four specific arterial road/arterial road intersections.
4. Removal of squeeze points at three specified mid-block locations.

Bike Arterial Network

A 200 km network of bike arterials is recommended, based on non-arterial roads which offer similar directness and continuity to the arterial roads. Network spacing approximates that of the arterial road network with bike arterials at

approximately 1.5 km intervals south of Glenhuntly Road and between 1 and 1.5 km north of Glenhuntly Road.

Five key actions are proposed to implement the bike arterial network:

1. Provision of over seventy protected cyclist crossing points, such as median refuges and signalisation, where bike arterials intersect arterial roads.
2. Construction of over twenty short lengths of path totalling approximately twelve kilometres through parks, along verges, or along easements to link roads in the bike arterial network.
3. Provision of extensive locations and directional signing of the network throughout the 200 km bike arterial network.
4. Implementation of improvements such as intersection realignment and channelisation at fourteen locations on the bike arterial network.
5. Construction of a 20 km bike path along the foreshore from Port Melbourne to Beaumaris as a major recreational resource and part of the bike arterial network.

Local Streets

Five key recommendations are made with respect to planning for improved cycling conditions on local streets:

1. Integration of local bike planning with overall local traffic management planning.
2. Implementation of local traffic management planning on an area basis, not a street basis, with the local traffic area² bounded by arterial roads as the basic planning unit.
3. Planning of local traffic management measures to enhance cycling conditions to and along the bike arterials passing through each local traffic area.
4. Breaching of local barriers, and the detailing of traffic management measures which restrict accessibility by motor vehicles, so that the convenient passage of bikes is permitted.
5. Provision between adjoining local traffic areas of at least one facility such as a median refuge or signalised intersection on the intervening arterial to make a protected cyclist crossing point.

Other Measures

Five important supporting recommendations are made as follows:

1. Provision of improved storage facilities at stations in the Sector should be

1 A network of non-arterial roads with good continuity and facilities such as signalisation or median refuges at intersections with arterial roads to provide routes which offer cyclists many of the advantages of the arterial roads without the disadvantages.

2 A local traffic area is an area bounded by arterial roads and containing only non-arterial roads.

made in the light of the final conclusions of the current Bike-Rail Dual Mode Study.

2. Local bike planning should include the siting of bike storage facilities and the selection of storage types with particular attention to any trade-off between the level of security provided and ease of use of the equipment.
3. Local bike planning should specify sites for both recreational circuits and educational circuits.
4. Signing should be in conformity with the guidelines being developed for use in Victoria.
5. A Sector map should be produced for cyclists showing the bike arterial network and the safety level on arterial roads.

Bike-Rail Dual Mode Trial

As part of the first stage of the Melbourne Bicycle Strategy Study, improved bike storage facilities were installed in June 1979, at Box Hill, Nunawading and Mitcham stations. This provided the basis of a trial to assess the performance of and use of alternative facilities and their influence on attracting people to bike-rail dual mode travel.

Interim results after three months of the twelve month trial indicate:

1. The bike locker is the type of bike storage preferred by most dual-mode cyclists.
2. Weather protection is almost as important a factor as security in influencing storage type preferences.
3. Almost all new bike-rail travellers already travelled by train.
4. Installation of the new storage facilities has freed a small number of parking spaces at the trial stations.

Monitoring of the use and performance of the new equipment by Victorian Railways will continue until June 1980 before final conclusions are drawn.

IMPLEMENTATION

Implementing Bodies

Most of the recommended proposals are simple street and traffic control management measures that should be part and parcel of everyday engineering works programming and best dealt with under Country Roads Board, RoSTA and local government programs. The strategy therefore recommends that:

1. Existing procedures should be used, as far as practicable, to apportion costs and responsibility for works between government agencies and local authorities involved in funding and works.
2. The Ministry responsible for bike planning should be responsible for co-ordinating works for the Bay Sector Strategy.

- Construction authorities submitting programs for road construction and management to the Ministry of Transport should be required to itemise the provision for cycling prior to approval for funding of works.

Costs and Funding

It is recommended that costs be shared as follows:

- For measures such as traffic signals, lane marking and median refuges on the arterial roads, funding to be wholly by State Government agencies.
- For measures to implement the bike arterial network, other than the arterial road cyclist crossings included in 1 above, funding to be on a 3:1 basis, that is, \$3 State to \$1 matching local contribution.
- The foreshore bike path is recommended as a regional facis but it will particularly benefit local cyclists. Its primary use would be recreational and funding should be apportioned between the Ministry of Transport, the Department of Youth Sport and Recreation and the municipalities through which it passes on a 1:1:1 basis.
- For local measures within local traffic areas which are provided primarily for cyclists, funding to be on a 1:1 basis.
- For the provision by municipalities of public bike parking facilities, funding to be on a 1:3 basis.

The average annual costs of the proposed actions shown on the 10 year Action Plan are estimated to be \$65,000 for arterial roadworks, \$34,000 for the bike arterial network and \$36,000 for the foreshore route. Additional measures for cyclists are proposed within the local traffic areas in conjunction with local traffic management. Adopting an estimated average expenditure of \$8,000 on such measures in each of the Sector's approximately 110 local traffic areas, an annual expenditure of \$88,000 would be required. An average expenditure of \$40,000 per municipality on bike parking facilities, would require an annual expenditure of \$36,000 over the whole sector. Apportionment of this estimated expenditure is summarised in the following table:

These costs require an average annual expenditure from and through State Government Departments of approximately \$170,000 and by each municipality of approximately \$10,000 for a ten year implementation program. (See 10 Year Action Plan after page 59). Priority works to be implemented in the first two years are shown on the plan following page 90.

State Government costs for the sector of \$1,675,000 can be regarded as an average figure for all the sectors except the central sector. Allowing a sum of \$2 million for the central sector, this indicates a total State Government funding of the order of \$12 million to implement

the *engineering* program of the Melbourne Bicycle Strategy.

Benefits

The Strategy will benefit all pedestrians, cyclists and motorists. The measures for cyclists will also cater for a future growing moped population. The Strategy is a low cost solution with high benefits to the whole community. Implementation will require only a small fraction of the annual transport budget to meet the needs of a growing sector of the city's traffic.

Implementation of the recommended works will bring major benefits to all components of traffic.

- the many thousands of existing regular and casual cyclists in the sector will gain a safer, more attractive and more convenient cycling environment and more secure bike parking.
- new cyclists will be encouraged to enjoy the improved conditions and benefit from increased transport options and mobility and improved fitness.
- motorists will benefit from improved traffic management on arterial roads, particularly where provision of a wide kerbside lane for cycling and parking leaves the other lane free of slow cyclists.
- pedestrians will be greatly helped to cross busy arterial roads by the many median refuges and signalised crossings, the signalisation of some intersections and the re-alignment of others. They will also benefit greatly from the bridging of existing barriers within local traffic areas.

The community will also benefit generally from the reduced accident costs arising from a safer cycling environment and the reduced pollution, traffic congestion and fuel consumption and increased level of fitness arising from a transfer of some travel from car trips to bike trips.

The Rest Of Melbourne

The Bay Sector study has developed a strategic approach applicable to the development of the engineering strategy for each of the other sectors of Melbourne.

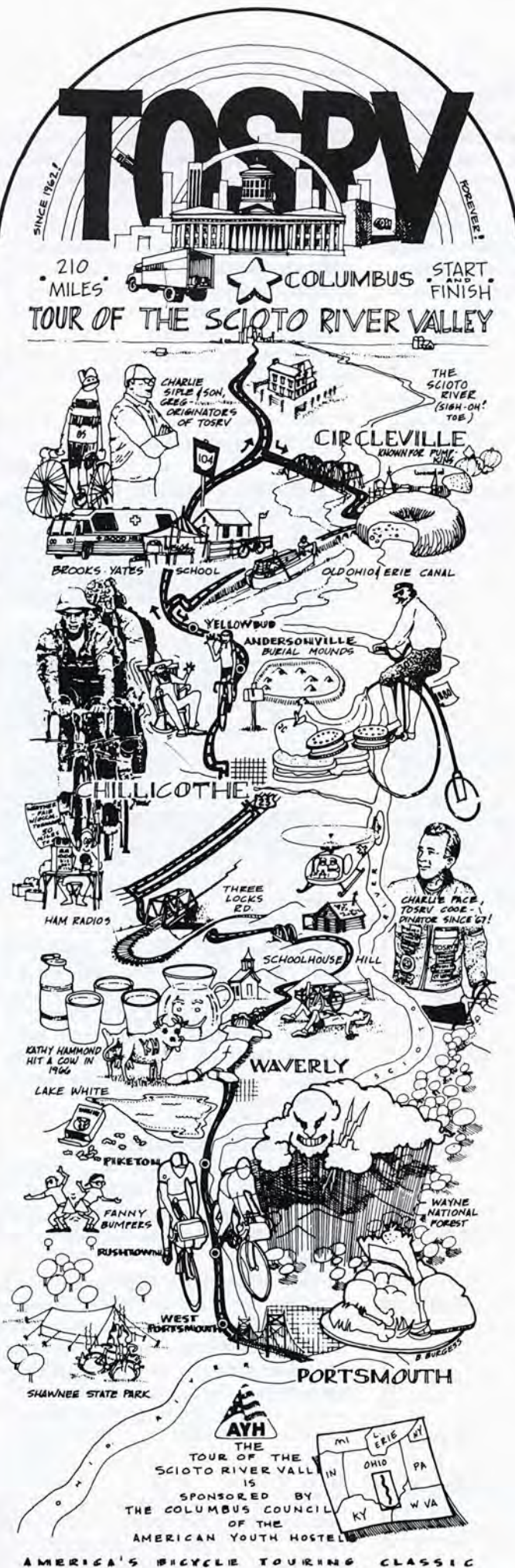
This established approach, together with the data and guidelines developed in the Bay Sector, mean that the strategy can be much more directly developed for subsequent sectors. Investigations can immediately focus on an inventory of arterial road conditions and characteristics and the identification of potential bike arterial routes which can then be assessed in the field.

The process followed in the Bay Sector as the pilot study for Melbourne conditions can therefore be considerably abbreviated in completing the engineering strategy for Melbourne.

ESTIMATED COSTS OF ENGINEERING PROPOSALS IN 10 YEAR ACTION PLAN

MEASURES	ESTIMATED COST	Apportionment		
		State Govt.*	Local Govt.	Average Cost
1. Actions on arterial roads, both declared and unclassified roads, e.g. lane marking, signalisation.	\$650,000	\$650,000	\$ —	\$65,000
2. Actions on bike arterial network other than on arterial roads, e.g. link bike paths, signing.	340,000	255,000	85,000	34,000
3. Construction of foreshore recreational route.	360,000	240,000	120,000	36,000
4. Actions for cyclists in and between local traffic areas including provision of recreational and educational circuits.	880,000	400,000	440,000	88,000
5. Bike parking facilities	360,000	90,000	270,000	36,000
Average Annual Costs	\$259,000	\$167,500	\$91,500	\$259,000
Ten Year Totals	\$2,590,000	\$1,675,000	\$915,000	
*Includes Federal funds dispersed by State Government Departments.				

NINETEEN



Article by Greg Siple and TOSRV

Photography by Greg Siple

Ever since bicycle touring began to grow in the United States in the early 1960's, the Tour of the Ohio-Scioto River Valley has grown along with it. This annual two day, 210 mile ride was started in 1962 when a father and son, Charlie and Greg Siple, made the round trip down the valley. Nineteen years later TOSRV, as it is more commonly known, is still going and has grown to be a 3500 rider event.

It is America's classic bicycle tour and draws riders from over 30 of the 50 states every year. The tour offers a number of services for a reasonable entry fee including food and beverage, a spot to spend the night at the turn around point, and an equipment shuttle so riders don't need to haul their sleeping bags and extra clothing. Many TOSRV riders establish similar tours in their own area based on the same organizational framework.

TOSRV is sponsored by the Columbus Council of American Youth Hostels under the direction of Charlie Pace, a Columbus banker, who has been director of the event since 1967. Much of the success of the tour can be attributed to Charlie's genius for organization and the long hours he puts into it every year. He co-ordinates about 400 volunteers who are needed to make the tour work. Their tasks include food preparation and serving, baggage shuttle, first aid, radio communications and computer-assisted registration. TOSRV has developed into a masterpiece of organization.

If you're wondering what it would be like as a rider, the following article appeared in the *Colorado Bicyclist* June 1978.

AND STILL GROWING



Like me, you probably aren't too interested in pain and suffering in the pursuit of a good time either. Well, TOSRV is the answer.

This is the ride of all rides in the United States and successfully attracts both family riders and fast-moving club groups. TOSRV is sponsored each year by the Columbus Council of the American Youth Hostels in the person of Charlie Pace. Charlie is a boyish banker of about fifty from Columbus, Ohio, who has sustained enthusiasm for this ride after being the chief organizer since 1967. The tour goes from Columbus, Ohio, to Portsmouth, Ohio, and back to Columbus, a 210 mile round trip. For the first time rider, the night before can be a time of sincere reflection, like "What am I DOING HERE?"

Your fears are dispelled to some extent when you find (at 6 a.m.) that three thousand people are really prepared to do the trip, and many of them are not any better prepared than you are. Most of the people were sleepy but enthusiastic and owned every conceivable brand of bicycle. There were more than a few pot bellies, young children, and 3-speed

bicycles. Confidence grows. You are not alone in this event, and you won't finish last.

Four large U-Haul trucks for luggage were posted near the starting point at the Ohio State Capitol in Columbus. Police officers at each intersection going out of the city provided traffic control, and an impressive array of radio communications equipment on the support vehicles all kept in touch with Charlie Pace. He, by the way, rides the entire trip each year with a CB set close at hand. The tour is supported by a local CB club which provides constant communications from Columbus to Portsmouth and at many points along the route. In addition to sag wagons and local and state police help, National Guard units supply ambulances (just in case). Getting lost is impossible. I was never at any time during the two days out of sight of 50 to 100 cyclists. The eight food stops along the route make this trip the "longest continuous meal in the world." You can make a pig of yourself and not even consider damage to the waistline. The 25 or so miles between these fuel stops consume

Above: A family rest stop during some clear weather.

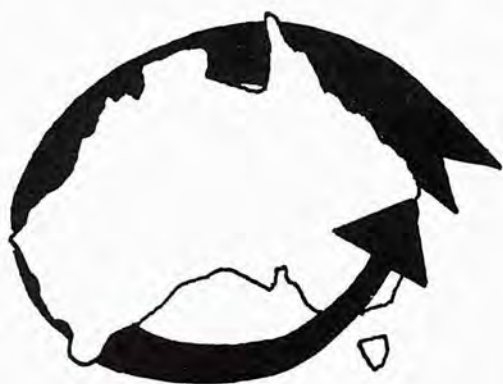
enormous numbers of calories no matter how slowly you choose to travel.

A typical distribution of food at TOSRV includes: 1800 pounds of bananas, 6780 oranges, 5000 apples, 9000 cupcakes, 650 loaves of bread, 180 pounds of peanut butter, 40 gallons of pickles, 10000 slices of cheese, 12000 breakfast rolls, 8640 packages of raisins, 500 pounds of bologna, 500 pounds of spice loaf, 3 cases of honey, 4000 packages of candy, 2160 gallons of drink mix, 540 gallons of hot chocolate mix, 8000 candy bars, and 180 pounds of potato chips.

Tour Begins In Rain

To start the trip each rider simply dropped off his luggage on one of the U-Hauls, waited for a few friends and took off. There are no more mass starts, 1973, with over 2000 cyclists, was the last year for that. Congestion for the first 25 miles and the accompanying problem with safety were the main reasons for doing away with it.

Even so, I miss the big start. The



Dr. JOAN JOESTING
 ROUND AUSTRALIA CYCLIST
 SAYS: *I don't think any other
 bike than my SWEET RALEIGH
 would have hung together on the
 whole trip.*



SPECIFICATION

Record Mixte 21½ Frame
 10 speed, Suntour VGT;
 Rigida steel 27 x 1¼;
 Weinmann Centre-pull brakes;
 Raleigh FFS/PPS Chainwheel;
 Raleigh gum wall tyres;
 Brooks leather saddle;
 Karrimor panniers and racks;
 Cycle nett weight 32 lbs;
 Loaded weight approx. 90 lbs.



RALEIGH

thrill of being part of the solid, flowing river of cyclists winding its way out of Columbus on Saturday morning is something not easily forgotten.

Unfortunately, the weather was dismal. Ohio looked a little swampy for someone accustomed to dry air and sunshine, but no one seemed to be deterred. Riders collected at the intersections, shared a joke over the weather, and rode off.

Strong head winds on Saturday slowed riding speed for most people to about 10 miles per hour, with frequent rest stops. The rain let up the rest of the day, and the lush green of rural Ohio opened up. There were no hills to speak of and the food stops were ready with sandwiches and hot chocolate for the tired travellers.

Starting up each time wasn't easy, but no one seemed to be giving up. We even had a little sunshine before and after lunch.

In Portsmouth we found the most encouraging mob of bicyclists I have ever seen. The general outlook was one of weariness and hunger and TOSRV was all ready for us. We ate chicken dinners served by volunteers from Portsmouth and drank beer at a city high school. Everyone had a story to relate, and we spent a lot of time tracking down our friends in the beer hall. Riders filled all the motels in the city, plus the free sleep-on-the-floor places.

Weather Co-operates on Sunday

The early riders on Sunday were gone before 6 am again, and by 7.30 am Portsmouth was deserted. It was cold, dark and raining, but there was no significant wind. By 9 am the rain ended, and good weather prevailed for the day. The ride offered rolling hills and beautiful river valleys to make the tour very scenic. Our spirits rose as we anticipated the first food stop. After that we joined a pack of club people who had come from Canton, Ohio, and we churned up the next 20 miles in about an hour. The average speed, however, is 10-12 mph.

While we were having lunch, the first returning riders were checking into Columbus at 11.30. Our group reached the finish by 3.30 pm. The underground lot at the Capitol was jammed with people and bicycles. The check-in counter produced a certificate to reinforce a new personal pride at having participated.

TOSRV Spirit Outstanding

Charlie Pace reported that at 11 pm on Saturday night he was out in the saw-wagon trying to pick up stragglers in the dark, and many refused the free ride. There was one broken leg, many scraped hands and knees, and the hungriest load of riders in history. Almost everyone finished, in spite of the worst weather

in memory. There had not been a single careless act by a motorist along the route and few by cyclists. Riders kept to the right hand shoulder or in the far right lane of traffic for most of the trip, and courtesy won out over irritation. Charlie said, "I will begin organizing TOSRV '79 in about a month." If you need a little challenge along about next spring, call him up!

Another description of the 1978 ride offers a slightly differing perspective;

Headwinds and rain all the way down to Portsmouth. Those who missed this exhilarating experience can capture a simulacrum by placing a sawhorse in the bathtub, straddling it, turning on the shower on cold and bouncing up and down for 13 hours (my time to Portsmouth) and then going to bed without any din-din. It would help to have a tape cassette saying "On your left." I heard it 2999 times on the return leg - the one guy who said "On your right" as he passed on the left was almost as tired as I was.

Despite the traditional rain and winds, generally 85% of the starters finish the tour, and about half of the riders each year have ridden a TOSRV before. The many riders who return year after year testify to the popularity of the weekend. Cyclists from Europe have been in the ride, but no one yet has claimed to be from Australia, so this could be your chance at a 'first'.

It is best to contact TOSRV before February is over. The ride is the first weekend in May.

Below: This temporary bridge was hurriedly built after a bridge washout.



the good gear for the touring cyclist from your bike shop



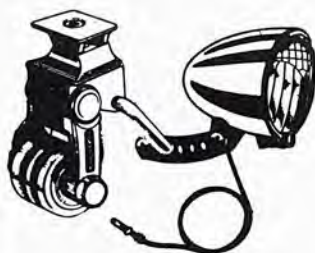
Bell Helmet

America's premier bicycle helmet: over one million in use. Tough lexan shell with ventilation scoops. Additional sizing pads also available. Complete range of sizes.



Anatomic Saddle

A new design with padded *bumps* to provide support. Designed to fit the human anatomy. Two models to suit the individual pelvic structure of men and women bicyclists. Choice of suede or vinyl coverings.



Sanyo Dynapower

Bottom bracket mounting. Works directly off tread and it has less drag than conventional generators.



Phil Wood Bottom Bracket

Fully sealed bearings by well known american manufacturer. Maintenance free . . . fit and forget.



Bata Bikers

The american cycling shoe with stiffened sole. The ideal touring shoe. Available all sizes. Colours: black, blue.



Berc Tail-light

Sensible quality. Cheaper to operate than most battery lights. Uses two D cells. Light body screw fixes to bicycle and reduces risk of theft.



Berc Headlight

The brightest battery operated head light. Cheap to operate: uses D cells. Handy mounting, can be used as a torch.



Handy Tour Tyre

Flexible nylon beading allows folding of tyre into small bundle (the size of a tube). The only way to carry a spare tyre.



Touring Tights

For winter riding. Fleece lined tight fitting with chamois inserts. Cyclist designed.



Sun Tour Ultra 6 Clutch

These 6 and seven speed clutches provide *ten-speed* simplicity with *fifteen-speed* gear range. When used with the Ultra 6 chain these clutches make for reliable high performance touring.



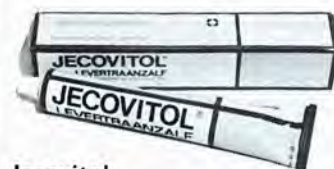
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BACKROADS

by Warren Salomon.

Above: The mountains in a typical mood. In the foreground is the igloo hut as seen from the road and behind it is a lone fig; a remanent of the rainforest. Mt Superbus is in the cloud to the extreme left, Teviot Gap is the low point in the distance above the hut and Wilsons Peak is the prominent peak further to the right.

Outside the tent the air was white and swirling. Small shafts of horizontal sunlight occasionally darted from hidden crevices in the cloud. There wasn't a wind worth mentioning yet the dawn mountain air was filled with movment. Occasionally I would catch a glimpse of the heavily rain forested mountain slopes across the valley from our tent site. Tent Site! It could hardly be called that. We had arrived at the lookout (the high point of our journey) just after sunset and had to search about anxiously for water and a possible campsite.

Of the former we had only half a litre between three persons – hardly enough for even a *dry* campsite. So we searched about. I cycled back down the road to see if a shepherd's hut we had passed on our way up was concealing a tank, while Rosie trudged about in waist-deep grass trying to get down to explore another hut. Rosie's hut produced the tank while mine revealed nothing.

Soon we began unpacking the bicycles in a small grassy area next to a paddock fence and separated from the road by about three metres of scrub. (In the bush vernacular scrub will generally refer to rainforest.) It was hardly protection from the eyes and intentions of possible marauders along a lonely stretch of road but as we were all nearing exhaustion it seemed the best that a desperate situation could offer.

That night our dinner was a furtive affair. We were half afraid our fire would attract some motorised monsters. Both Sue and I had been harassed on a bicycle trip once while camping within sight of a road and the experience had made both of us cautious ever since . . .

Now it was dawn. With a comfortable car-less night behind us the morning was beginning to take on a distinctly romantic flavour. Everywhere the long grass was cloud coloured. This made searching for breakfast firewood a wet and soggy task. When at last our night-time fire was revived the smoke swirled and mixed with the atmosphere in shape and smell.

In the mountains one can easily get carried away. Waxing lyrically always betrays the ardent romanticist. Especially here at 1000 metres looking down over the head of the Condamine River out to Wilsons Peak or over to mysterious rainforest clad Mt Superbus. Teviot Gap sags down from the cloud base sharply silhouetted by the still low angle of the sun. Somewhere out there to the east it is probably shining down through only broken cloud onto a dryer coastal plain. The damp swirling mist doesn't bother us, for after all it wouldn't be real mountain weather without it.

Opposite left: Daggs Falls, about 200 metres off the road. A pleasant spot for a breather during the climb up to Queen Mary Falls. *Right:* Sue on the road from The Head to Teviot Gap. The cliffs of the Condamine Gorge can be seen above her.

MOUNTAIN MAGIC



One of my favourite mountain back-roads runs across the Great Divide from Warwick and Killarney on the Darling Downs to Boonah and the eastern coastal plain. It is the only through road to penetrate the mountains of the Main Range and cross the Divide south of Cunninghams Gap where the New England/Cunningham Highway goes through.

The best direction to travel this road is from west to east. This avoids the rough steep climb up the escarpment to Teviot Gap. An approach from the west can be made from the large town of Warwick on the Downs along a good bitumen road to the town of Killarney.

Killarney is the best place to get provisions for the trip as most kinds of food and refreshment are available there. Access is also possible from Tenterfield and Woodenbong in NSW via the Mt. Lindesay Highway to Legume and then over the low ridge which marks the border. The turnoff to The Head and Boonah is about halfway between the border gate and Killarney on this road.

From this turn off the road begins its climb up and onto the Acacia Plateau to Queen Mary Falls National Park, where the bitumen surface stops. There are two nearby waterfalls along this road. Near the track leading to Brown's Falls there is a picnic area on the creek

where camping is possible. This picnic area is visible from the road though.

The picnic area at Queen Mary Falls is a popular lunching spot for the weekend motorised tourist but during the week visitors to this place will have it to themselves. The graded track to the bottom then becomes the domain of the local forest inhabitants.

The border ranges area of Queensland contains a number of small National Parks, and the ranger responsible for these is stationed at Q.M. Falls. Most N.P.W.S. rangers like the one we met there are keen naturalists and will happily provide information on parks and wildlife in the area. Some live solitary lives



and will enjoy a chat over a cuppa.

Camping is not permitted in the picnic area. There is a caravan park opposite. It is not your idyllic National Park campground so ask the ranger if he knows of some better spots further up. There are usually unmarked camping reserves near creeks. We later were told that a Lands Department map would show these.

The road from Queen Mary Falls winds slowly up onto the top most area of Acacia Plateau. Deep red hued soils, yellow green kykuya grass and dark silent rainforests line the way. The highpoint is reached less than a kilometre west of a lookout which offers views (fitting to grace any postcard) down onto the head waters of the Condamine. Around to the north west is the beginning of the Condamine Gorge and densely-forested ridges inbetween streams flowing westward to evaporate eventually on the flat western plain.

To the east is the beautiful valley with lonely old Wilsons Peak at its head. Sunrise can be exciting from these heights.

The lookout is at the beginning of a small pasture clearing on the northern face of the plateau. Possible sources of water are the spring fed tanks for the cattle not far from the igloo like hut.

Part of the road down off the plateau is sealed and there are roadside springs about halfway down. Before the main part of the descent there is a dirt forestry track off to the south. About 500 metres along this is a locked gate in the border rabbit fence. The damaged tank in back of the nearby shelter hut is a possible



source of water for camping use. The cleared area is large enough to allow a number of tents to be erected.

Further down the main descent there is a walking track off to the south east. This track is signposted. The short walk down to a lookout is worthwhile, for the views out of the rainforest across to Wilsons Peak.

Down in the valley the walls of the plateau and the mountains to the north tower around. The gorge of the Condamine is marked by a gap of tall straight cliffs dividing the plateau from the big ridge to the north. There is an old road through the gorge, though to motorists it is impassable. Where it once forded

the river it is now washed away. One local person I spoke to said he herded some cattle up through the gorge to avoid the route we had taken over Acacia Plateau. All other enquiries suggested that it would be passable to adventurous bicycle riders. Local knowledge will be necessary to locate the start and finish of this road.

The Head Valley is a wondrous place. Trees that grow and once grew here are enormous. High up the valley walls where the clearing finishes, huge light-coloured trunks stand in line like a gigantic paling fence. The valley floor is still high up (700m) and so clouds often come down from the mountains and fill the air with



their cold whiteness. The climate here is always cool to cold whenever the sun is obscured by wet clouds. It can be very cold at anytime of the year. Winter is usually the drier season with bracing, frosty mornings followed by clear skies and warm winter sun. On such mornings woollen mittens will be a welcome gear addition and when the clouds roll down they will be needed during most of the day as well.

At Teviot Gap the road reaches the eastern escarpment of the Great Dividing Range (or Main Range as it is known here) and then descends to the headwaters of Teviot Brook an eventual tributary of the Logan River. The Condamine, a tributary of the Darling also rises nearby. The area is a geographical focal point and its centre is Wilsons Peak. From all directions it is an interesting mountain that seems to seek solitude. Here the divide arcs around to the west (Acacia Plateau is part of the divide also) and the Macpherson Range crossing the QLD/NSW border from the Pacific Ocean, complete with rabbit fence, joins from the east.

At Teviot Gap there is a grid and a small grassy area to the side of the road which overlooks Teviot Falls and the valleys to the north-east. Before this grid is crossed there is a track off to the north. This is a forestry road. About 2km along it crosses Teviot Brook some distance upstream from the falls. Camping is possible in the vicinity of the bridge or further back if water is carried. The road is made of thick red soil which clogs

bicycle mudguards in wet weather.

The road down from Teviot Gap is very rough and rocky. Coming up this road would require either good walking shoes, an extra low, low gear, strong nerves and muscles, or all of these things together depending on whether you left the kitchen sink at home. Water can be caught from springs beside the road not far from the top.

At the foot of the descent there is a beautiful grassy campsite beside a small creek. As this is not the main creek it will sometimes be dry. Water is always available further along at the first forded crossing of Teviot Brook — a good place to get your feet wet. This is a good campsite as traffic volume along this road is generally about 6 cars per week-day. Signs further down the road say 'No camping without Permission'. The house to ask permission at is 2.5km downstream from this first creek crossing. From this campsite at the foot of the gap the road follows the creek down stream criss-crossing it at wonderfully slippery fords. It eventually joins the bitumen Carneys Creek Road 26km south of Boonah.

Before the house previously mentioned is reached a new section of road by-passes some difficult river crossings to the south. The old road though washed out in parts is well worth an exploratory traverse, as the creek here is particularly beautiful and secluded.

The bitumen marks the junction with the road through to the Burnetts Creek Valley, Maroon Dam and White Swamp Road through to NSW. Direct

access to the Head area is also possible off this road from the NSW side. The turnoff is mentioned in the distance section following. Thirteen kilometres along the bitumen towards Boonah is another road junction. This is the East Coast Bicycle Route and provides good access for bicycle riders to Ipswich in the north and Rathdowney and NSW towns in the south.

Distances	km
Killarney	4
Border Gate	3
Road Junction	0
Brown's Falls	2.5
Dagg's Falls	3.5
Queen Mary Falls	8
Lookout	16
Road Jct at the Head	22
T/O to White Swamp	23.5
Teviot Gap	27
Creek Crossing Teviot Brook	31
Rd. Jct Boonah White Swamp Rd	37
Rd. Jct East Coast Bicycle Route	50
Boonah	64

Distances are approximate.

Times: If you take less than two days to travel this road then you have probably been travelling too fast to really soak up the wonderful surrounds.

Maps: Warwick 1:250 000. A beautiful new style metric map — recommended. Better detail is available from the Warwick and Mt Lindesay 1:100 000 maps. Lands Department maps are available from the Lands Department Map Office, George St. Brisbane. RACQ maps of the area are also very good.

Opposite: Rosie of the mountains. Behind her is an outcrop of rock on Mt Nielsen and behind that is Mt Roberts on the Main Range. Teviot Gap is out of the photo to the left. *Below:* Some of the magnificent countryside surrounding Teviot Brook. Teviot Gap is on the far left.





Fred Green



Above: From an old print showing loco emerging from the Newnes end of the glow-worm (No. 2) tunnel circa 1910. Right: The author about to enter the Bell end of the number one tunnel 1979.

FOLLOWING THE RAILWAY TO NEWNES

by Jim Smith

Bicycles and trains have one thing in common. They don't like steep hills. In America there is a movement to convert abandoned railway lines into bicycle paths (see "FROM RAILS TO TRAILS" in the bibliography). In the Blue Mountains we have an abandoned railway line which has the potential to become perhaps the most scenic ride in N.S.W.

Completed in 1907, the privately owned railway came from Newnes in the Wolgan Valley. It ascended 1 000m over about 50km up to Newnes Junction, the highest railway station on the Western Line. The trains carried the products of the oil shale refineries in the valley up to the main line. The engines hauling the kerosene, oil, wax and ammonium sulphate were "Shay" type steam locomotives with unique vertical pistons driving gear shafts connecting directly with the engine wheels. One railway functioned 'till 1926, had a brief resurgence in 1932 and was then dismantled. Competition from multinational oil companies was one of the reasons given for the decline of this local energy industry.

To begin this ride, start at Newnes Junction railway station. There is still a platform there, and some train drivers can be induced to stop at it. Otherwise you will have to get off at Bell, further down the line, the nearest official stopping place. I did this trip four years ago, and at that time, there was an obvious beginning to the ride. But, when I set out with Fred Green in December 1979, recent developments by the Clarence colliery had created a maze of access tracks round the station. As we made our way round these, we eventually came to a sealed road connecting the colliery depot with the highway. After a right angle bend in this road, it starts to descend steeply toward the main western railway line. At this point, and opposite the end of the guard rail on the bend, is a dirt track rising steeply to the right. The cutting above this track is also marked by a broken pipe. This dirt track is the start of the ride.

The route almost immediately passes through some spectacular cuttings which were part of the original western railway of 'Zig-zag' days, abandoned in 1910. Turn right at the timber mill. The first part of the old railway track has been obliterated and a dirt tracer (without the convenience of cuttings) today goes roughly parallel to its course. The scenery along this first part of the route has deteriorated in recent years with the expansion of pine plantings in the Newnes state forest and extensive clearings beside the road for a new power line. At any doubtful intersections there is a sign pointing to the "glow worm tunnel" track.

Soon after passing the prison farm area the pines peter out and the original railway bed is picked up. The occasional sleeper or dog spike is not the only reminder that fifty years ago steam trains chugged along here. For the grades are generally level or downhill and never more than one in thirty against the cyclist. Combined with the surroundings of thick forest full of wildlife, this makes for top class cycling.

There were two tunnels on the line. Soon after passing through the first, there is a spot where most of the road has washed away. Cars have to stop here and so the track becomes a true bicycle path. It is the section between the two tunnels known as the Penrose gorge that makes the ride so exceptional. Tall cliffs tower beside the road, strange isolated pagodas of rock stand surrounded by forests of huge gum trees. Ravines, gorges and streams appear unexpectedly. And, all the while the massive earth and stoneworks of the old railway bed main-

tain a gentle downhill grade, just enough to make pedalling unnecessary. All too soon, this cyclists dream comes to an end, as the second tunnel looms up. 400m long, and curved the tunnel is completely dark in the middle. It has been colonised by the largest known population of the glow-worm *Arachnocampa Richardsae*. Their gnat larvae have a green fluorescent light in their tails which is used to attract flying insects into a trap of sticky threads. They may be found in many damp sheltered situations in the mountains. The glow-worm tunnel is special, however, as here they can be seen during the day and in such large numbers that they form an illusion of a starry night sky. A torch is desirable when negotiating the tunnel as there are pools and boulders on the floor.

Emerging from the tunnel the soot on the portal is a reminder of days gone by. It was to avoid this soot, that the more fastidious train passengers would walk round the tunnel to rejoin the train on the other side. This pathway, through

'Bells grotto' will be noticed close to the cliff face on the loft of the tunnel exit. Good camping spots can be found on either side of the tunnel. The remaining section of the Penrose gorge is filled with tall trees and tree ferns right on the old railway track, showing nature's power to reclaim areas cleared by man.

Coming out of this moist forest, there is an unforgettable view of the Wolgan Valley, whose floor is still many hundreds of metres below the track. The railway took a daring line across the cliff face, and its path is still mostly rideable. A few km from the tunnel a gate is reached. Here there is a choice. You can either descend the steep coal truck road to the valley floor or continue along the cliff face following the remains of the old railway bed right to the site of Newnes original platform.

There are at least three large washouts on this last section. Negotiating them is not easy. Carrying a fully laden bicycle down the loose eroded surface of a wash-out gully has its dangers. My companion



Fred Green

Fred slipped on the first one and tumbled ten metres before coming to a stop. I had to extract a sliver of wood from his gluteus maximus muscle with a pair of pliers. This incident made the contractions of this vital muscle somewhat painful, so we had to go back and down to the valley floor via the sensible route.

Once Newnes is reached, days can be spent exploring the ruins of kilns, coke ovens, refineries and resorts. The only intact building of the original Newnes township is the famous hotel.

The valley's road from Newnes to Lithgow is dusty and monotonously hilly. As it is so unprotected from the sun, it is perhaps best negotiated early in the morning, if travelling in summer. The final climb out of the valley is absurdly steep. Cyclists should reconcile themselves to an hour's walk beside their bicycles. On the final sealed sections into Lithgow, those coal trucking enemies of cyclists are to be found in abundance. Be careful.

Left: Riding through one of the cuttings near Newnes Junction. *Right:* Fred carries his bicycle past a wash out. There are at least three such wash aways after the second tunnel.



Jim Smith

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What are the chances of establishing a bicycle path along the railway line? Action would be needed soon. In the four years since I last did this ride, the number of washouts has doubled. It would be a pity if this tracer, which has lasted almost 50 years, were to become unrideable now. Voluntary labour by cyclists could provide some elementary erosion control and preserve the most scenic ride in the Blue Mountains.

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Right: Passengers wait for train at Newnes railway station one cold winter morning about 1915. *Below:* Riding along the railway bed high above the Newnes Valley.



Jim Smith

Having just completed a solitary five month 13600km journey around Australia I admit to having become a bicycle fanatic.

It all began almost a year ago back home in Tampa, Florida. I had to get away from a very violent husband so I chose Australia. The reasons were three: English was the main language, a low crime rate and the place was relatively isolated. My initial plan was to jog around Australia as I had been a competition runner for some seven years. However I could not arrange for a sponsor to provide and carry water for me on the long out-back stretches. My plans were further upset when I was hit by a car injuring my leg. This definitely put jogging out of the question.

At the last minute the local bicycle club (with who I had often ridden while getting over other running injuries) helped me choose a ten-speed bicycle. At that point my travels well and truly began.

My bicycle and I arrived in Sydney in June. I started my journey following highway one north and out of the city. The traffic was awful and remained so throughout the weekend. Every day of the trip in the early stages I can honestly say that I wanted to give up. I had formerly been afflicted with alcoholism and so I knew there would be bad times even on good days. As it turned out, there were no completely bad days for the entire trip.

It's changed my life

by Joan Joesting

I rode that first day believing I would never get out of Sydney. Towards sunset I came to a caravan park where I stopped and put up my leaky tent, or so I discovered (it was later replaced).

It just happened to be the Queen's Birthday so there was a free Bar-B-Q. With a continually intense appetite which bothered me throughout the trip, I ate like a pig. My first morning on the road greeted me with mist rising above a nearby lake, like a picture of New Zealand from all the travel books I had read before leaving the US.

There was much traffic and hills between Sydney and Brisbane, and my left leg was almost worthless. It slowly healed as my hometown medical doctor had predicted. He had insisted that I not get toe clips for a month, but I was able to get them at a bike shop in Tweed Heads. The straps were put on in Adelaide.

Slowly, I learned to ride further between night stops, staying in bed and breakfast hotels, youth hostels and caravan parks. Being completely inexperienced with cycling, I was dreadfully afraid of riding in the rain and the wind, and walked up many hills.

In all the books I had read in the US about Australia, every book had said Australia was flat, but I discovered the only flatness is the pub floors.

In Brisbane, I was elated, and thought I was the first American woman to have ridden from Sydney to Brisbane. At the youth hostel the warden told me of the



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many women who had ridden the distance, including a Canadian woman. Undaunted, I yelled at the Brisbane traffic and rode on north to Townsville.

Just north of Mackay, after I had ridden three days from Rockhampton with a male friend who had explained that Jesus had called him to ride the so-called murder stretch with me, I could feel that my old alcoholic cravings were returning. Whenever alcohol overtook my thoughts I found Alcoholics Anonymous people, who took me to meetings and took me into their homes. In Townsville, I came down with a fever, and was upset by the horror tales of the road beyond. Wild tales of the road are common in Australia and all cyclists must laugh off the local "humour".

As the distance between towns and petrol stations was increasing, I had to fit my bicycle with front panniers and had an almost impossible time, doing so. Fortunately, I met a wonderful female bicycle mechanic in Hughenden, Queensland, who helped me repair my first puncture, and ordered the new front panniers for me. I knew nothing about bicycle repair or maintenance, but slowly adjusted to grease blackened

hands and learned how to use the simple tools which I carried with me.

As the distances between the towns grew greater and greater, I had to carry more and more water. Finally, I had to ride 220 kilometers between Mt. Isa and Cammonweal. During that ride, I had met several car loads of people who had offered me food, coffee, etc., and I had spent too much time talking. Sunset caught me near a bore I had been told about. This was the first night I had to camp out alone, and I was completely inexperienced. A truckie stopped and offered me tea or supper, and I borrowed his hammer to put up my tent. Then, after washing the dishes in his sink (his truck carried everything including the kitchen sink), he left me, completely alone. That night I was awakened by the sound of hoofbeats and I worried that an old-fashioned US cattle stampede from a western movie might be coming over my tent, but nothing happened.

I rode through the Northern Territory, land of the isolated roadhouse, 24-hour pub, red dust, 38°C heat (in August), flies, and Repco Rally. Only a few times was I forced to stay at a cattle station. Once I telephoned ahead in advance once

bothered by the heat., I had to stop, and another time, I was invited to stay.

In northern WA, I fell off my machine twice resulting in an infected knee. My rear derailleur was also damaged. After a night in the Fitzroy Hospital I left, pedalling my bicycle only to break down about 195 kilometers from Broome. I hitched with a family to the stinking town of Broome, where I drank my first and last dysentery infected tap water.

My leg became infected and dysentery took over, with me going to hospital where I was told I should have boiled the water. I ordered a new derailleur by phone from Perth, and found a ride to Port Headland. At Port Headland, I began the head wind afflicted ride to Perth, riding daily between roadhouses, friendly. Arriving there on a Friday, I read about a 200km ride on the following Sunday, did some telephoning, and ended up being the second woman in WA to ride 200km in 9 hours and 14 minutes. To think, that a year before, I had been unable to ride more than 50 miles.

After Perth, there was the Nullabor which was no big deal, if one can cope with the bastard-like behaviour of a few of the staff members at the roadhouses. I carried three days supply of water, used day and night special soap for mighty hot showers, and actually gained one-half stone.

The worse was yet to come when I hit cold head winds from Adelaide to Melbourne. With some planning I managed to spend my 42nd birthday in Port Arthur, Tasmania, as I was born in Port Arthur, Texas. My bicycle gave me a present of a puncture.

The rest of the trip was between Melbourne and Sydney, with awful Hume Highway traffic, but I survived.

During my trip around Australia, I have regained my youth, freedom, and a love of bicycling, which I love to enthusiastically expound to even people who don't want to hear it.

Most of all, I have proven to myself, that a 42-year old like me, with very little physical co-ordination (I still can't get on my bike properly), petite size, female (am the mother of a 21 year old), recovering alcoholic, recovering prescription drug addict, jobless, talentless, can, through planning, some money saved, and very little encouragement, tour Australia and benefit from the experience. If I can, you can, and like me, you will be a better person for doing it. I did it on \$900 of US traveller's cheques for five months. Try to live in Australia on this!

Touring on a bicycle has changed my life, and it could change yours, also. Do it! But plan carefully, and have a good time!

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BACK ISSUES

We are sorry, but issues 1 and 2 are out of print. We have sold out completely and it seems unlikely that we will be able to reprint them for some time. Readers will be notified in future issues when reprint copies become available.

Issues three, four and five are still available. Issue three is \$1.35 per copy (including postage and handling) and issues four and five cost \$1.85 (including postage and handling). Fill out the order form and send it with your cheque or money order. *Freewheeling* back issues make great gifts for cycling friends.

OFFPRINTS & GUIDES

Freewheeling Australia Offprints are reprints of single articles featured in issues of the magazine. They have been printed in booklet form and are available at a low cost.

Getting Started in Bicycle Touring: A simple guide to beginning bicycle touring. Gives good basic info like: what to take, what kind of bike suits best, plus hints on where to go and what food to carry. 8pp magazine format. 20 cents

Sydney and the Bush: A guide to the Central NSW section of the East Coast Bicycle Route — Maitland to Goulburn. Covering directions, camping areas, food supplies and access to Sydney. 12pp magazine format. 50 cents.

We are out of stock of the *Geelong Bike Plan* offprint from *Freewheeling Two*. This offprint will not be reprinted, though we may be able to do another run of *Freewheeling Two*. Watch this space. Meanwhile, refunds are being sent to those who have sent money for the offprint.

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How to Fix Your Bicycle by Helen Garvey, Shire Press, San Francisco, 3rd Edition 1977, 63 pages, line drawings by T. White. \$1.50.

Don't confuse the title with the Intertec Publications book also reviewed in this issue of *Freewheeling*. This is a brief book written by a female bicycle mechanic — a refreshing change in the male dominated world of bicycling.

In such a small book the text is naturally very condensed and at times generalised. All the usual routine adjustments and fault finding are fairly well illustrated and described. To get the best out of this book, which is often bought by inexperienced mechanics, you need a good working knowledge of a bicycle and its parts. It is full of useful hints for adjustments and maintenance, which the fairly good bicycle mechanic will find helpful.

Bicycles, How they Work and How to Fix them by Ajay Budrys, Better Way Books, Rand McNally, 1976, 98 pages illustrated by photographs and "exploded" line drawings, \$2.75.

This is a large format book which covers an extraordinary amount of material in its 98 pages. Throughout, the text is brief but very well illustrated. It starts off with bicycle tools and moves on to forks and headsets. The next few sections cover handle bars, seats and seat posts, wheels, hubs and tyres and front sprockets, cranks, pedals and chains. Cables and controls follow and this covers replacement and adjustment of derailleur cables and hub gear cables — again well illustrated. Rim brakes and drums are the subject of the next section — brief, but to the experienced mechanic this is no real drawback.

The next chapter, front and rear derailleurs and freewheel clusters, tends to be rather generalised — not good enough for the "would be" home bicycle mechanic. Back pedal brakes are next and the principles of these and the dreaded 3 and 5 speed Sturmey Archer hub gears are carefully explained and detailed with superb line drawings. The Shimano 3 speed hub gears are dealt with likewise.

There are three unusual appendices — transmission information for adult tricycles, exercise bicycles and tandems — as always, briefly covered but the principles are outlined and the illustrations are good. So once again, to sum up, this is a book for the fairly experienced bicycle mechanic or a very mechanically minded person who wants some helpful

information on 3 speed hubs or back pedal brakes, adult tricycles even — that is not covered by Richards or Anybodys Bike Books.

Still on the subject of bicycle maintenance books let's see how a few others compare with the indispensables — *Anybody's Bike Book* by Tom Cuthbertson and *Richard's Bicycle Book*.

How to Fix Your Bicycle, Intertec Publishing Corporation U.S.A. 1973, 104 pages illustrated \$5.95. This abbreviated maintenance manual is a product of the '72 — '73 great American bicycle boom — and shows it. It has been written for the experienced mechanic — so much of the information is compressed while quite a lot is omitted and taken as common knowledge.

A brief run down on bicycle tools makes the point of noting the difference between British, French and Italian bolt threads. This followed by a brief but good frame and cycle identification section, which includes the description and mechanics of the bicycle. Chapters on General Adjustments, Inspection and Periodic Maintenance follow. The Service chapter covers rear wheel hubs, back pedal brakes and Shimano Sturmey Archer hub gears. Derailleurs are covered model by model for some of the better known brands.

The diagrams and photographs in this book are small and difficult to read so that the compressed style of the text is made more difficult by the illustrations. If you want useful information on back pedal brakes and hub gears then John McFarlanes *It's Easy to Fix Your Bicycle*, Clymer Publications, *Fix Your Bicycle* or Glenn's *Complete Bicycle Manual* will be worth buying.

The Australian Bicycle Book by Ian Christie. Cassell Australia, 1979, 95 pages

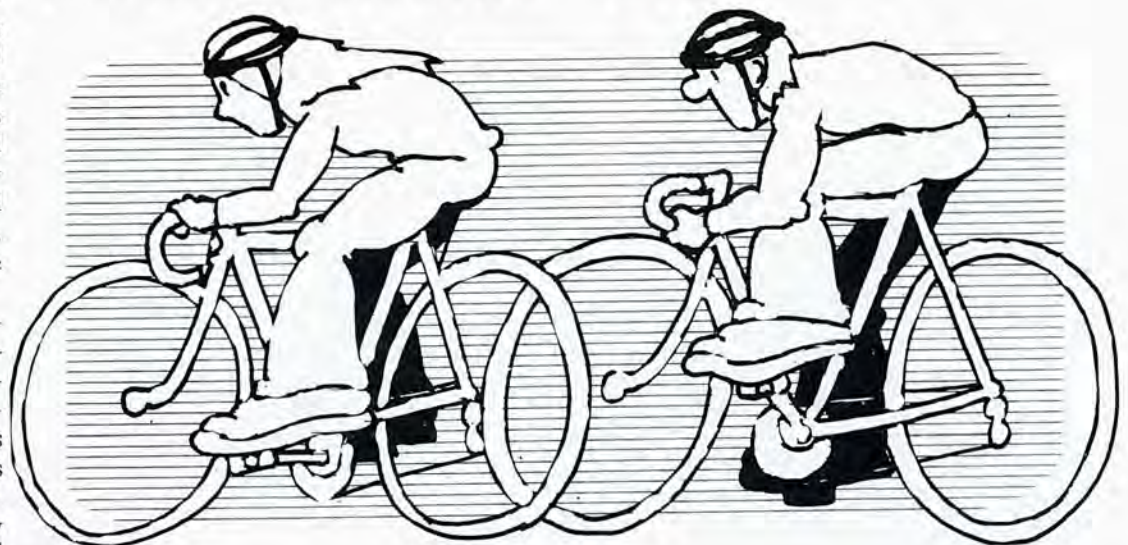
illustrated and indexed. Sydney edition \$7.95. Ian Christie is a well known Victorian cyclist who teaches bicycle maintenance in Melbourne. The book has been structured to follow the same order as his classes.

His first chapter is on choosing a bicycle and offers some useful guidelines to the would-be bicyclist. The next chapter is also good — it's on tools and their uses for bicycle maintenance. Tools is a subject usually inadequately covered by most bicycle maintenance books. Bearings are the subject of the next chapter — but the lack of sufficient illustrations and sub-headings, to make the useful text more readable, make this chapter a little hard to follow. The following chapter on derailleurs is also poorly illustrated and although the information is good it is not easy to follow or to look up again afterwards.

The introduction to the book suggests that hub gear maintenance is included in the book, but the only serious mention of that subject is for oiling and cable adjustment. Back pedal brakes are not mentioned in the maintenance section. The next chapter on brakes and wheels is well illustrated and interesting. Wheel building hints and puncture repair are also well covered in this chapter.

Accessories and Bicycle Safety are the two concluding chapters, and are quite good. As a supplementary section there are eight one day bicycle tours around Sydney. These tours have a strip map and a short description of the ride, which range from 6 to 30km.

Frankly this book would be excellent in a classroom situation, but as a bicycle maintenance book of bicycle mechanics — beginner or expert — it's one of the "also rans".



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