

Freewheeling

MAY/JUNE 1989 \$3.50 NZ \$3.95 (inc. GST)

CYCLE CITY
Canberra cycling
feature

FITNESS
Winter training
indoors
Hill climbing
technique

TRIATHLON
Taking the Forster
Challenge

SPORT
The lure of the Six
Day Race

**BMX
NATIONALS**
Story & more

**MOUNTAIN
BIKES**
A dirt road primer

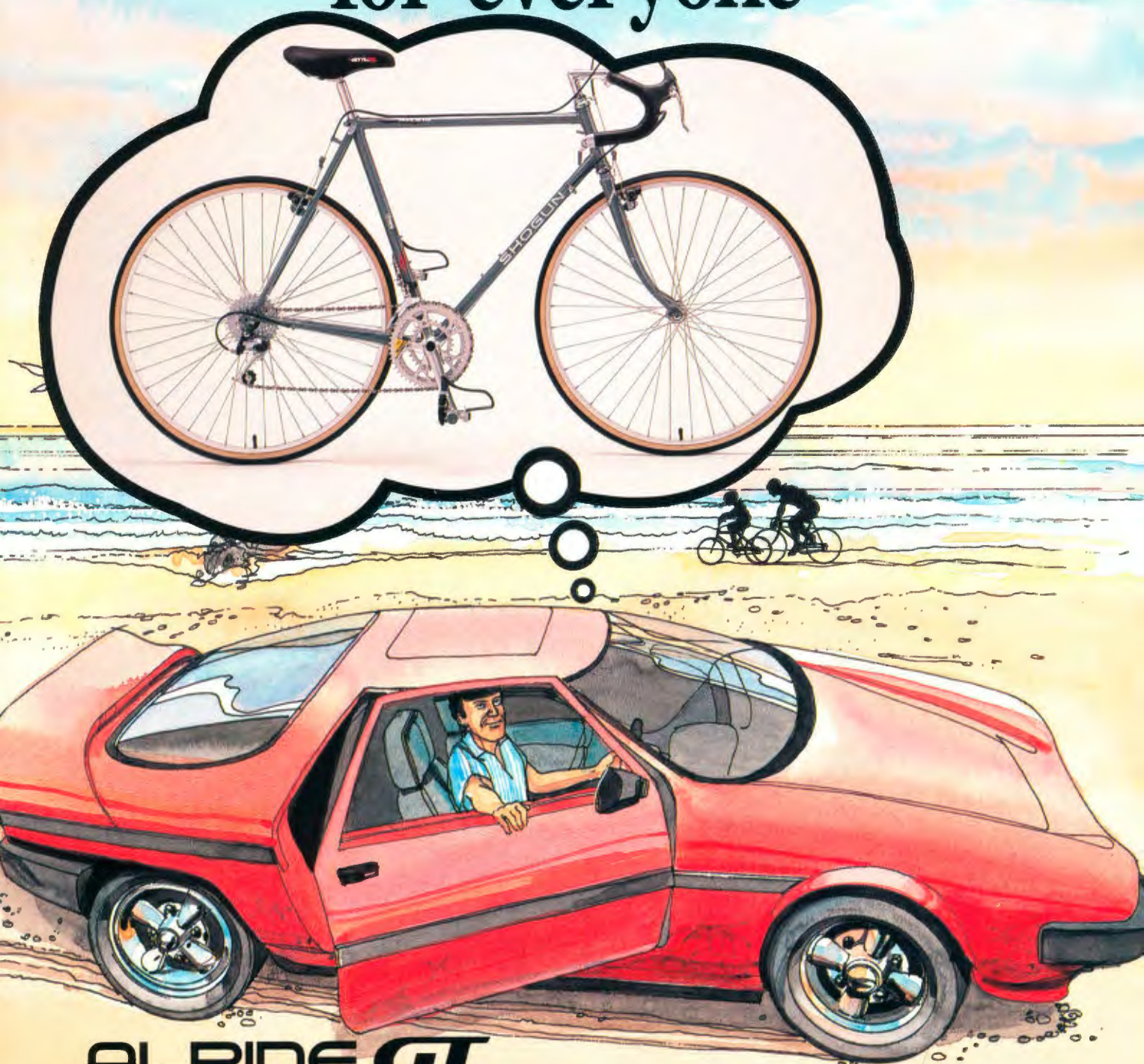
**TRAVEL &
TOURING**
Riding through the
winter

TECHNICAL
Overhauling your
bike

**IMAGES OF
INDIA**
Exploring the
Himalayas by
mountain bike



Now there's a Shogun for everyone



ALPINE GT

The new 1989 Shogun Alpine GT is everything that a top class touring bicycle should be, a perfect combination of lightness durability and comfort. It features Tange's lightweight chromoly tubing, Shimano's new 18 speed Exage Trail drive train with SIS indexing and Biopace triple chainrings and at a recommended retail price of only **\$665.00** is incredible value.

SHOGUN BICYCLES
THE TRADITION CONTINUES

Editor
Warren Salomon

Production Manager
Ian Walker

Administration Manager
Angie Daskalakis

Marketing Director
Lynda Prince

Subscriptions Coordinator
Gina Thomas

Promotions Coordinator
Phillis Agios

Group Advertising Manager
Stephen Kay
(02) 331 5006

Advertising Sales Executive
Andrew Jeffery
(02) 331 5006

Advertising Production
Brett Cheshire

Publisher
Philip Mason

Freewheeling is published seven times a year by Mason Stewart Publishing Pty Ltd in the months of January, March, May, July, September, October and November.
ISSN No: 0156 4579.

Editorial correspondence: PO Box K157, Haymarket NSW 2000. Telephone (02) 264 8544. Facsimile: (02) 264 8357.

Advertising, Subscription and Administration address: PO Box 746 Darlinghurst NSW 2010. Telephone (02) 331 5006. Telex 72964 MASPUB. Facsimile: (02) 331 6624.

Distribution: Gordon & Gotch (A/asia) Ltd Melbourne.
Typesetting: Everysize Typeart Service (02) 982 1163
Printing: Offset Alpine Pty Ltd Derby & Wetherill Sts, Silverwater NSW (02) 647 1000.

Material in this publication may not be stored or reproduced in any form without permission. Requests for permission should be directed to the Publisher. Editorial contributions including black and white/colour prints or colour transparencies on all aspects of cycling are welcomed. Send an enquiry or write for guidelines.

Copyright © 1989 Mason Stewart Publishing Pty Ltd

Cover photograph by Sally Bull. The author of this issue's India feature is pictured here at Kargel in the Himalayas with only 362 km and 3 mountain passes to go!

Regular columns

- 68 CALENDAR**
- 41 DON HATCHER**
- 7 JOHN DRUMMOND**
- 9 PRO DEALERS**
- 5 WARREN SALOMON**
- 18 PHIL SOMERVILLE**
- 68 CLASSIFIEDS**
- 10 WORLD AWHEEL**

Freewheeling

Number 56 May/June 1989

Contents

Travel and touring

- 19 CANBERRA - A CYCLING PARADISE?**
The great cycling cities
- 28 IMAGES OF INDIA**
A journey into the Himalayas
- 32 WINTER RIDING FOR THE ADVENTUROUS**
Gearing up for road and trail
- 52 RIDING RIVER TO RIVER**
More fun from the GVRB

Mountain bikes

- 41 MOUNTAIN BIKE NEWS**
Plus two fat tyre bike reviews
- 54 A DIRT ROAD PRIMER**
How to ride gravel roads

Sport and fitness

- 37 TAKING THE CHALLENGE**
The Nutri-Metics Triathlon
- 48 HILL CLIMBING TECHNIQUE**
Training for the road

- 56 TRAINING INDOORS**
Achieving peak performance
- 65 EMPERORS OF THE NIGHT**
The lure of six-day racing

Technical

- 61 FREEWHEELING MAINTENANCE PLAN 2**
The right tools
- 63 BIKE/RAIL THREATENED**
Bike thieves deter cycle commuters



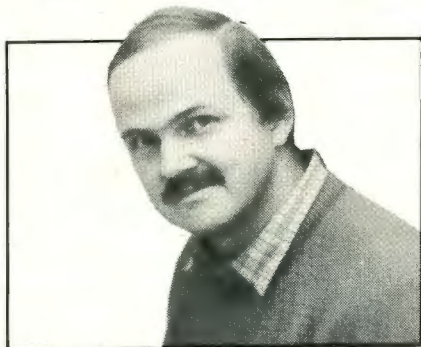
STREETRIDER

LIGHTWEIGHT PROTECTION THAT'S GOT FUN WRITTEN ALL OVER IT.

NEW



BELL®



A talkfest in fairyland?

The editor urges less talk and more action from delegates at the latest bikeplan conference.

AS THIS ISSUE goes to print I will be in Victoria attending the first full day's proceedings of a National Bicycle Workshop. The conference is being held in the provincial town of Geelong and is being hosted by the State Bicycle Committee of Victoria. The object of the seminar is to bring the state bicycle committees together along with cycling lobby group representatives to discuss areas of concern and interest. By the time this issue of *Freewheeling* hits the streets the conference will have already happened so a more detailed appraisal will have to wait until our July/August issue.

Before I set off to the National Bicycle Workshop I couldn't help remembering two similar, though much larger, gatherings held in 1981 and 1986 – the first also in Geelong and the second in Newcastle. Conferences are important events in the life of any specialist field. They bring people together to learn, to teach and to exchange ideas. They also provide a boost for the more isolated members of the community.

Conferences are always great talkfests – there is no escaping it. Even though the concept of workshops has been introduced to provide a less structured environment where almost everyone has the opportunity to contribute to the discussion the principal diet of all such gatherings mainly consists of words, words and still more words! Not only are spoken words in abundance but the proliferation of the written word means that huge amounts of paper are also consumed and this consumption continues with Published Proceedings long after the delegates have returned to their home towns.

Talkfests can be good but I am not so sure why this one is needed and why it has to be in Geelong.

Geelong, as any planner or bicycle advocate will tell you, was the first Australian city to get a bikeplan. The study was completed in the late seventies and has since been almost fully implemented. Other bikeplans have been conducted and partly implemented in cities

and towns right across the country. Why Geelong should still be an obsession in the minds of the Victorian State Bicycle Committee I do not know. The program of the current seminar is more concerned with matters of policy than studying facilities on the streets so perhaps its really nostalgia that compels the bureaucrats and planners to keep returning to Geelong.

Or perhaps there are ulterior motives. The Victorian Government has spent millions over the past decade on a far more ambitious bikeplan covering the Melbourne metropolitan area. To make the plan achieve its goals a whole swag of government agencies have to play their parts and integrate sections of the bikeplan into their works programs.

For instance: Metrail has to provide adequate bike lockup facilities for its bike/rail patrons and the Road Construction Authority has to build roads capable of being shared by bicycles as well as motorised vehicles. At this stage a number of these government agencies are sitting on their hands and playing bureaucratic games to avoid active participation in the plan's implementation.

So its better for the SBC to have its conference out of Melbourne so that too many embarrassing questions will not be asked. And as the Minister (who has proved to be indifferent to the whole bicycle transportation concept) is opening the shindig, it is better to have for his backdrop a shining example of something that worked in the past rather than the half finished mess of metropolitan Melbourne.

Geelong was a good plan in its day but as the years progress its relevance is diminishing. Better to grasp the important issues of the moment than to be given over to the warm inner glow of nostalgia.

Like all other conferences this one is to be addressed by an eminent speaker from overseas*. This time it is to be Bill Wilkinson who is the executive director of the Bicycle Federation of America. Bill's credentials are impeccable and I am looking forward to hearing what he has to say about the US scene. I don't

doubt that delegates will benefit from a speaker of such a high calibre but isn't it high time we stopped this immature practice of fronting these gatherings with an overseas import?

Australia leads the world in the field of bicycle planning so shouldn't we be exporting our knowledge to other countries and shouldn't we be spending our public money to send our own people to these other countries to demonstrate our expertise?

Without a key note speaker and located in Melbourne the National Workshop may have had the ability to bring people together to do real work and grapple with real problems. As it is the whole affair becomes a talkfest in fairyland where delegates can sit comfortably removed from the realities and hard decisions of life back home.

I am also told that a further aim of the conference is to stimulate activity in other parts of the country (Queensland and Tasmania have been mentioned) where very little is being done for bicycle riders. What happens in these places really depends on the cyclists themselves. All the good that has occurred in the past decade has only come about because the cyclists have conducted effective political campaigns which have forced the authorities to act.

Administrators only administer and that's why the 1989 Geelong gabfest will be mainly concerned with matters of policy. It's up to the cyclists of Queensland and Tasmania to campaign for greater government action – it will not happen of its own accord. And, it will not happen because some Brisbane bureaucrat happens to be sent on a junket to Geelong.

* This obsession with imported guest speakers is another example of the import culture which has been entrenched in this country for the last 200 years. Such imports are usually from the top nation of the English speaking world of the time (currently the USA but the UK was more popular in the past). Even though the Dutch and other European nations are much further advanced than anyone else to date only Americans and one Englishman have been imported. Perhaps it is not realised in Australian bureaucratic circles that many people in these foreign countries also speak very good English, albeit with an accent.



CHAIN THE WORLD WITH IZUMI CHAINS. A TOUCH OF CLASS.

Another epoch-making development in chains by Izumi.
The shift change is now. Lighter, quieter, and smoother.

IZUMI CLICK INDEX CHAIN

Features

1. The shift response is quick, and the shift point deviations are small. This derailleur chain is ideal for the index system.
2. The shift changes accurately at the same time as the click sound of the system.
3. By Izumi's original chain design, complicated adjustments can be done quite simply.
4. As the chain is of a bushless structure and the shape of the inner plate minimized, with the burring process, even while shifting the gears, running is very quiet.
5. With this lightweight parts design, the weight is reduced by 7 to 10% compared with our standard type.

In ordering, please write the things shown below.

CIC —

A Pin hard treatment

B Chain type

C Type

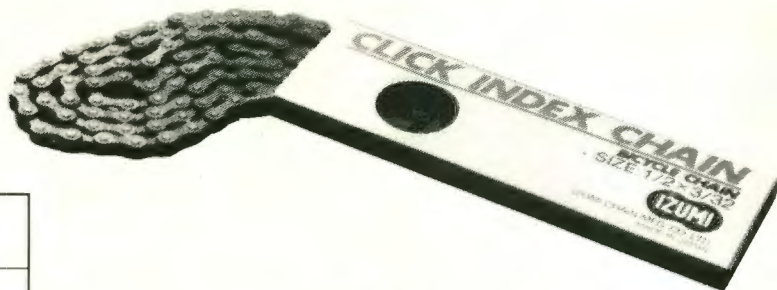
Symbol	Description	Symbol	Description	Symbol	Description
800	Carburising	W	Wide type (pin length 7.6mm)	(blank)	Standard type
1400	Hard coating	N	Narrow type (pin length 7.3mm)	S	Lightweight type

Remarks 1) You can make any selection from the above.

2) In accordance with your request, gold, silver and other combinations are available.

Hard coating

By special treatment, the surface of the steel pins is combined with metal compounds. The hardness of the pin surface is therefore very high, recorded as a vickers hardness of HV 1,400 (Diamond is HV 10,000). It has outstanding durability and wear resistance even in the endurance road races. What's more, its chain life is more than 3 times longer than the standard product. The change of the side bow due to elongation of the chain is very slight, so that a stable shift changing performance may be maintained over a long period.



Contact to:

REPCO CYCLE COMPANY

Head Office: 25 Hamilton Street, Huntingdale. Vic., 3168 Phone 568 0211

A stranger in his own country

In Europe he is mobbed by fans but at home in Oz Danny Clark is all but ignored.



Danny Clark and Tony Doyle all smiles after victory in Cologne.

his usual six-day race partner, Tony Doyle, Clark won the prestigious European Madison championship in Copenhagen. Next he annexed the European Motor Paced Championship to compliment his World Title.

In addition to winning the three top rated titles Clark won 8 Six-Day races throughout Europe out of a possible 12, five partnered with Tony Doyle. All the victories were in the top echelons of the worlds second largest sport. But unfortunately not good enough to win Australia's top sport award.

Certainly the English did the honours when Tony Doyle was summoned to Buckingham Palace to receive an MBE from the Queen following his European title win with Clark and his European Omnium championship victory. Doyle found the Queen well informed on his prowess as a Pursuit and Six-Day cyclist.

Doyle who had his first Six-Day success in September 1980 brought his total to 21 wins (18 with Clark) during the now concluded season while Clark ended with 62 wins following his dramatic breakthrough into the 'Blue Train' some 12 years ago.

Clark is always a favourite with the crowds who throng the indoor stadiums. Wherever the Sixes are conducted the name of Danny Clarke rings from the rafters yet apparently he is a stranger in sleepy old Oz.

THE 1989 TOUR DE FRANCE will mark a return to the traditional format. Most of the classic climbs of the Pyrenees and Alps are there and former stage towns are revisited in a 23 day Tour which will finish in Paris with an individual Time Trial down the Champs Elysees. This has been the traditional ending place for every tour since 1985. This years big event will be run between July 1 and 23.

Precious seconds can be won or lost right up to the final kilometre unlike the final stages of recent Tours when tour domestiques for leading riders could control the final stage. Whoever remains of the 198 starters will race against the clock for 27 kilometres from Versailles to Paris.

Accusations of chaos and falling standards of behaviour in the caravan last year have forced the Societe Du Tour De France to reshape the management, which is now headed by Jean-Francoise Carenso and Jean-Marie Le Blanc.

The number of followers will be reduced so as not to impede the riders and fewer press accreditations will be available. There will be fewer competitions and no white jersey for leading young rider or yellow caps for first teams.

Selection will be restricted to the first 18 teams of nine riders in the Federation Internationale Cyclists Professional world rankings plus four wild cards who can be invited by the organisers.

After last year's embarrassing premature leaking of positive dope tests, testing will be speeded up by a helicopter service to take the samples to the testing laboratories.

Luxembourg hosts the start with a prologue time trial, a road race stage and a team time trial all within the borders of the Grand Duchy. The Ardennes motor racing circuit of Spa Francorchamps and the city of Liege provide stage finishes in Belgium before the race crosses the border to finish in the French town of Wasquehal. A long transfer across France to Dinard in Brittany follows, where the first real test, a 79-kilometre individual time trial, takes place.

From Rennes follows a run down the western side of France, the Pyrenean climbs of the Aubisque, Tourmalet, Aspin and Peyresourde then a mountain-top finish at Cauteret, a stage town in 1953.

Bastille Day July 14, sees the Tour returning to Marseille for the first time since 1971, then it heads into the mountains for an important time trial in the Alps from Gap to Orcieres-Merlette. After a rest day the race resumes with the ascent of the Galibier and a stage finish on l'Alpe d'Huez. Another transfer by high speed train takes the race entourage to Versailles ready for the final trial into Paris.

This format will suit last year's winner Pedro Delgado. It also calls for a complete Tour rider such as the 1987 winner Stephen Roach but these two will not be the only favourites.

This issue of *Freewheeling* we present a brief history of the exciting world of Six-Day bicycle racing. The inspiration to write the feature came from the achievement of Tasmanian hero, Danny Clark who has concluded a marvellous European Six-Day race season at the age of 37, to be a finalist in the prestigious Australian Broadcasting Corporation award of Australian Sportsman of the year.

The award was subsequently won by athlete, Debbie Flintoff King on account of her 'one off' Gold Medal win in the womens 400 metres hurdles at Seoul Olympics.

No doubt, Debbie's victory made her a worthy candidate for Australia's Sportsperson of the Year Award, but the result confirmed the flawed thinking of the judges, who apparently find some difficulty in equating sports plus with minus.

That was also shown last year when Wayne Gardner, the 1987 world motor cycle champion, won the coveted ABC award ahead of the world time trial cycling champion Martin Vinnicombe. Then the judges failed to discern the difference between mechanical and human power.

But back to Danny Clark. What did he do?

Back in August of last year he proved too strong and crafty for his world class opponents when he outfoxed them to win the world motor paced championship. In early December teaming with

John Drummond

THE PROFESSIONAL CYCLISTS racing calendar has been released in Europe. Major dates are: 25 April to 15 May Tour of Spain; 21 May to 11 June Tour of Italy; 28 May to 10 June British Milk Race; 14 to 23 June Tour of Switzerland; 1 to 23 July Tour de France; 9 to 16 July World Junior Championships (USSR); 14 to 28 August World Track Championships (France); 24 to 27 August World Road Championships (France); 29 August to 3 Sept Tour of Britain; 27 Sept to 1 Oct Tour of Ireland; 17 to 22 October Sun Tour (Australia);

New Australian cycling teams

Following the announcement that an Italian based enterprise FANINI has registered a trade team with links in Australia, comes news that former amateur road champion Eddie Salas (NSW), Scott Steward (VIC), Tim Jamieson (TAS) and current professional national road champion Paul Miller (WA) have been invited to sign con-

tracts and ride in Europe for the new sponsors as professionals.

Consequently the Australian Cycling Federation has rearranged a seven man squad to contest the World Championships in France in August. The team consists of St George Club cyclists Bruce Keech and Clayton Stephenson who rode in the road team which finished ninth in the Time trial in Seoul, and 22 year old Craig Chapman of Newcastle, a former track 1000 m state champion. Chapman switched to road cycling when he joined NSW top club St George last year in search of more competition.

The lever that eased Chapman into the road squad was his effort as a member of the winning NSW team which won the Australian road time trial title last year. Other members of the team are: the 1987 national junior road champion Brunswick's Justin Grindal, son of Rome Olympian Alan Grindal, South Australia's Patrick Jonkers who represented Australia at the world junior titles last year and Queensland's Gavin Young.

In April the team will leave to race and train in Italy after which they will either race in Russia or England, possibly competing in the long established Milk race from May 27 to June 10.

The team will return from the world titles for the Australian titles and, providing they can maintain form, will provide the nucleus of the Australian road team for the Commonwealth Games in Auckland next January. Prior to departing for Europe the team will train for three weeks at the Australian Institute of Sport in South Australia under the institutes Australian road coach Shane Bannon who will also manage the team in Europe.

Dean Woods to turn professional

We understand triple Olympic medal winner Dean Woods is to turn professional by joining a newly formed West German team. Our source quotes Woods (22) as saying that with the backing of two of the biggest names in cycling Eddy Merckx and Hennie Kuiper he has signed a two year contract which would earn him \$20,000 a year plus performance bonuses.

The two stars from the past will sponsor Woods, who will join nine German and two Dutch riders to make up the team. The team's equipment sponsor will be Merckx's cycle manufacturing company with Kuiper, a 1972 Olympic gold medallist and former top level professional, as team director.



Success in great numbers

Reynolds introduce its exciting new range of "designed for purpose" bicycle frame tube sets.

These sets give the builder style, technical innovations, wider product range and most of all design options which will satisfy the demands of his customers – amateur and professional alike.

Reynolds "success in great numbers" includes winning 27 of the last 31 Tours de France and almost every other major cycle event in the world.

This unique success has been developed and refined to provide volume and custom builders with products of pedigree and performance.

We have proved our success...make sure of yours...ride Reynolds – the tube at the heart of a great bike!

For further information on the new range of Reynolds cycle frame products, send S.A.E. to the address below.

REYNOLDS

A member of the TI Group of Companies

British International Trading Pty Ltd, 69 Powers Road, Severn Hills, NSW 2147. Tel: (02) 674 4566. Telex: AA 73691. Fax: (02) 674 3854.

PRO BIKE DEALERS



**CALYPSO
CYCLES**

Takes you and your dollar further.

Our large turnover of quality stock enables us to keep our prices low.

Call in and see our extensive range of bicycles and accessories.

179 KING STREET, NEWTOWN NSW
(02) 517 1655

BONDI JUNCTION CYCLES

62 OXFORD ST
BONDI JUNCTION

OPEN 7 DAYS

Proud sponsors of Spot Anderson
Australia's No 1
Triathlete

PH. 387 8266

CHAMPION

CYCLES



Large range of spares and accessories.

Wheel building a speciality.

West Lane, St Marys NSW 2780
(Behind Kentucky Fried Chicken)
(02) 623 1157



**CENTENNIAL PARK CYCLES
ROCKDALE CYCLES**

- Full-time mechanics
- Wide range of bicycles
- Accessories

OPEN 7 DAYS

50 CLOVELLY RD. RANDWICK: 398 5027
309 PRINCES HWY. BANKSIA: 597 3981

BIKE BARN PARRAMATTA

Sydney's original triathlon shop.
Catering for triathletes and cyclists.
Our knowledge of bikes and
triathlon equipment is the best.
First class service assured.

7 Victoria Road,
Parramatta.
opp. BBC Hardware
(02) 683-5969

Open 7 Days.



**TURRAMURRA CYCLE CENTRE
TURRAMURRA CYCLE
CENTRE**

1257 Pacific Hwy Turramurra
2074

(02) 44 1479

THE NORTH SHORE APOLLO
DEALER

Comprehensive Range of Parts &
Accessories — Free After Sales
Service on All Geared Cycles.

SPECIAL TEACHER DISCOUNTS

Mon-Fri 8.30-5.30 — Thurs:
8.00pm — Sat: 8.30-12.30

BLACKMAN BICYCLES

Two outlets offering the service
you've come to know and
appreciate.

Now at 59 Queen St., St Marys
Phone 673 4017

And as always at Blacktown
5 Alpha St., Blacktown
621 8158

**BLACKTOWN
BICYCLE
CENTRE**

SPEARMAN CYCLES

WORLD OF WHEELS DEALER

**50 years of service to the
Illawarra region**

SEE YOU ON THE GONG RIDE

- Wide range of bikes: racing, touring, leisure, mountain bikes, children's and BMX — all to suit the way you ride.
- Large range of accessories, clothing safety equipment
- Expert repairs and after sales service

300 Crown St
Wollongong
042 29 2317

• Lay-by accepted



**THE FREEDOM
MACHINE**

DREAM MACHINES

**Family -Touring- Triathlon
Specialist**

**Accessories & expert
repairs.**

401 Chapel St, South Yarra
VIC 3141 Ph: 241 5014

Cranks
BIKE • SHOP



The bicycle shop on
Sydney's North Shore that
meets your individual
needs.

**Touring and Mountain bikes
are our speciality.**

92 Pacific H'way Roseville
411 5116

**BRISBANE'S BIGGEST
RANGE OF BICYCLES,
PARTS, ACCESSORIES &
CLOTHING**

• Apollo • Malvern Star • Repco • Ricardo
• Shogun

**The BEST RANGE — BEST VALUE
BIGBIKE** *Shop*

2938 PACIFIC HWY.
UNDERWOOD, QUEENSLAND

(07) 341 7444

"JUST NEAR THE BIG GUN"

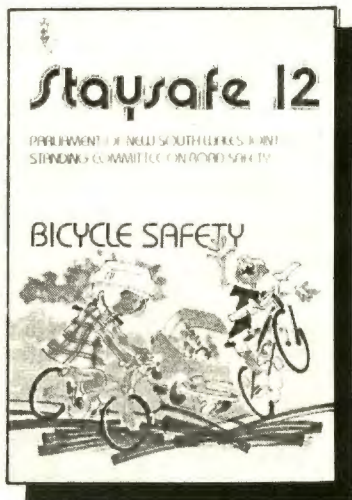
Only 12 minutes from the city

For Quality,
Range
and Value

MAROUBRA
Cycles

787 ANZAC PARADE MAROUBRA JUNCTION
PHONE (02) 349 2154

The World Awheel



NSW Government report is controversial

The report of the NSW Staysafe Committee issued late last year is proving to be a controversial document with a number of its recommendations being disputed by private and governmental groups.

Some of the most contentious of Staysafe's 53 recommendations concern bicycle helmets. Staysafe has urged the Standards Committee responsible to deal with allegations that the helmet standard AS2063 is overly concerned with engineering aspects of helmets and is failing to provide for products which are comfortable and attractive to cyclists.

The Staysafe report has upset the Standards Committee and sections of the helmet manufacturing industry. Particularly upset were those opposed to the legal introduction of the shell-less ultralightweight helmets.

With just about every major distributor clamouring to put their new models before the buying public the move to have the Staysafe ban the ultralightweights did not stand a chance and instead the committee supported the current Trade Practices requirement that helmets should all meet the energy attenuation sections of the standard.

The Staysafe recommendations have been generally well received by the bicycle user groups and *Freewheeling* editor, Warren Salomon (whose frequent helmet surveys and informative articles were praised by the committee) says that the Staysafe helmet findings represent a commonsense approach to what has become a rather emotional topic.

"Perhaps the most interesting thing to surface as a result of the Staysafe enquiry was the revelation that the Standards Committee has in been dominated by the engineers. I think some people in

the past thought it was possible to design a perfect helmet which would protect its wearer from all types of accident. What we now realise is that such a helmet is almost impossible to wear", he said.

Salomon feels most of all that the committee has conducted a very astute appraisal of the helmet scene and has come out on the side of the helmet users and wearers – the cyclists themselves. "Let's face it if you want full protection you should go down to a disposals store and buy a military helmet; what modern cyclists want is a lightweight helmet which is designed for their activity. These days such a helmet has to look good too. Cyclists are concerned about being seen alive in a helmet not dead in one", he observed.

As well as helmet issue Staysafe made challenging recommendations in other areas:

- The Police were asked to determine whether cyclists currently being caught breaking the law were able to adequately identify themselves. Bicycle confiscation would be considered as a future penalty if riders were not able to produce sufficient ID.

- The Roads and Traffic Authority should investigate current crash reporting methods and find out if bicycle related accidents are, as some cycling advocates claim, being underestimated.

- The committee urged that its research, educational and behavioural enquiries and recommendations be funded by agencies such as the State Bicycle Committee ahead of engineering projects.

- More information on the rights and responsibilities of cyclists should be included in the NSW Motor Traffic Handbook and the Learners Permit questions.

- That the current education programs like those funded by the RTA through the Department of Education be improved and continued.

- The Police should consider a plea to the public to help reduce bullying on the roads with strenuous efforts to prosecute offenders.

- Parents need to be more involved with their children to ensure better supervision, bicycle maintenance and effective road safety education.

- A working party consisting of the SBC and the Police be urgently set up to review current laws as they relate to cyclists. The committee was very concerned that some laws (riding red lights etc) are not being accepted. It also urged all government agencies with influence over cycling conditions to incorporate cycling into all future planning.

In some instances the offence of running red lights could be considered an example of cyclists ignoring an unjust law because authorities have created an untenable situation by making road sensor devices which are incapable of detecting bicycles.

- Bicycle law enforcement is clearly the responsibility of all the state's police officers.

- Parents are urged to keep their children 10 years and younger off roads with speed limits of 60 km/h or more.

- The planning of bicycle safe routes is encouraged and should be continued.



Wine and mountains in Victoria

Bogong Jack Adventures have added a new tour to their repertoire, this time a seven day tour from Albury to Seymour called "Backroads Victoria". The tour meanders in a south westerly direction calling in at the Rutherglen vineyards, and the historic gold towns of Beechworth and Chiltern. Then the route follows the foothills of the Great Dividing Range in forest and grazing country to Yea and finally Seymour.

The ride links up with Melbourne trains or you can leave your car at the operator's office at Oxley (near Wangaratta). Accommodation is in country pubs, you have pub meals at night and picnics for other meals. The average daily cycling is 57 kilometres, making a ride of 400 kilometres in total.

The tour costs \$572. You can find out more about it from Carol or Andrew Stenhouse, PO Box 221, Oxley, Victoria 3678, tel. (057) 27 3382.

Touring South Australia

Don't want to go to Victoria? Try SA instead. Two destinations worth considering are the Flinders Ranges and Kangaroo Island. Adelaide based tour operator Bike Moves has recently started taking groups into these areas. The operators provide all terrain bikes

The World Awheel



Pause for feeding on Kangaroo Island

for the trip, and the price includes transport from Adelaide, helmets, accommodation and meals.

Kangaroo Island is little known outside the state and its quiet roads make for great riding. The tour follows the coast and sights include shipwrecks, lighthouses and superb ocean beaches. You may be able to see platypuses, sea lions and unusual plant life. The pace is relaxed.

The Flinders Range tour starts in Hawker and ends at Blinman. In between these towns you ride through Wilpena Pound, Elder and ABC ranges, Bunyeroo and Brachina Gorges and the Aroona Valley. You also get to visit Aboriginal art sites and sample bush cooking.

The Kangaroo Island trip is for 6 days, departing 16 April and 3 December, costing \$395. The Flinders Ranges trip is for 7 days, departing 2 July and 24 September, costing \$465. For further details contact Bike Moves, PO Box 642, Unley SA 5061.

Biking Indonesia

News has reached us of the second annual cycling festival which will take place in Indonesia this winter. The highlight is to be a two week long parade from 16 June to 4 July which will take the form of a tour of Java and Bali. Cyclists will be treated to an insight into the cultures of the two islands – music, dance and arts and there will be nightly entertainment.

The ride will be a distance of 1300 kilometres and participation is limited to 100 riders of whom half are expected to come from overseas. The organisers would like to include ten Australians. The theme is one of world friendship and peace.

Judging by the brochure we were sent to advertise the ride it should be a great event. It doesn't sound like it's all hard work and the last three days are spent at Sanur Beach on Bali, presumably re-

cuperating, or rather preparing for the return to the cool winter back home.

Riders will be escorted by a convoy of cars and there is to be a sag wagon for riders feeling like a rest from pedalling during the day. Meals and some accommodation are provided but there are also some nights to be spent camping in the woods and on beaches so you have to bring your own tent, which is carried by the luggage car.

Daily distances vary between 64 kilometres and 128 kilometres. And if you can make it through to the end the chances are you'll have some energy left for the farewell party till dawn on the last night of the trip that the organisers are promising.

This sounds a great event and should receive good support from Aussies – after all these are our nearest overseas neighbours.

The cost is US\$200 per person plus your return airfare to Jakarta in Java. Overseas visitors are required to be in Jakarta for two days before the ride starts and will be put up in a hostel. You can get more information from the organising committee at JL. Gandaria Tengah VI – 37, Jakarta 12130, Indonesia.

We have a very limited number of information books available for distribution to serious potential participants. Please send \$2.50 (to cover postage etc) to The Editor, Freewheeling magazine, PO Box K157 Haymarket NSW 2000 and we will send you a copy.

NSW Bike Week

This year's NSW Bike Week will take place 14 to 22 October. A wide range of events are anticipated, including the

well loved Sydney Spring Cycle and the ride in the Upper Hunter starting at Dungog. Mark this week in your diary, there's always plenty scheduled in all the major NSW centres.

Bike month USA

May is Bike Month in the US. This is going to manifest itself in two ways. Specific events will be encouraged under the banner "Share the roads 89". These events include family oriented rallies to be held on May 21 in various parts of the country, bike to work days, instruction to local civic groups on how to educate children properly about the safe use of bikes, promotion of helmet usage and the Streets Are For Everyone Challenge (an opportunity to encourage local politicians to try riding a bike and see the problems cyclists experience).

The second part involves distribution of information to the media telling about this special month for bikers, the 33rd occasion. Bike Month is coordinated by the Bicyclists' Educational and Legal Foundation in conjunction with the League of American Wheelmen.

Vision Victoria fun bike ride

19 March was a wet grey day in Melbourne but this didn't deter 300 riders from taking part in the Vision Victoria fun bike ride from Mordialloc to the city, following Beach Road.

Riders had to contend with drizzle and a chilly breeze. Quite a few riders suffered punctures on a stretch of road which was being resurfaced at the time. At the end of the ride participants were treated to warm refreshments and were



Freewheeling

Look for the new look Freewheeling

THE LIGHTWEIGHT ISSUE

THAT'S HEAVY ON INFORMATION on sale July 1st.

Ultralightweight helmets – do they work?

Our comprehensive buyers guide will help you choose your next helmet

Buying a lightweight bike

Do you have to pay more to get less on your next lightweight bike?

Marvellous Melbourne

Continuing our series on the great cycling cities

Plus our regular features:

**TRAVEL, BIKE MAINTENANCE,
FITNESS, PRODUCT REVIEWS,
MOUNTAIN BIKES GALORE,
ADVENTURE, SPORT
AND LOTS MORE**

The World Awheel

entertained by exhibitions, displays and competitions put on by various cycling organisations.

Thanks must go to all the people who freely volunteered their time to make this ride a success, and to Vic-Rail for putting on extra trains to get the riders to the start, to Gas and Fuel for the use of the barbecue and to the members of the Kiwanis Club who braved the elements to act as marshals and cook the hamburgers. All proceeds from the ride went to the Association for the Blind.

Bike for Bibles

This organisation is hoping to raise \$650,000 this year to fund literacy development programs in African countries. To do so they are expecting to register 600 long distance riders who will ride several itineraries in all states in September and October.

For more details contact Bob Forrest on (02) 267 6862 or (008) 251 389 (local call fee).

WA releases detail crash data

A report has recently been released by the Western Australian Health Department on hospitalisations due to bike



accidents in that state over the period 1981 to 1987. There were 4,244 hospitalisations (4,064 separate accidents) and 45 fatalities during that period that were caused by bike accidents. The age group most affected was ten to fourteen year olds, closely followed by five to nine

year olds. 77% of the accidents involved just bicycles.

On the good side there was a significant reduction in the number of head

HILLMAN

HIGH PERFORMANCE BICYCLES (EST. 1938)

**JUST
ARRIVED**

**DEORE XT-11 7 SPEED HYPERGUIDE
+ "SLR" BRAKES TANGLE C'MO D/B
FRAME SPECTRUM ENAMEL FINISH
TIOGA STEM + TYRE, RM-2D RIMS**

★ Unbeatable Value
★ Exceptional Performance

\$ 1 2 9 5 !

ALSO AVAILABLE IN EXAGE "LX" 7 SPEED

AT WELL UNDER THE COMPETITIONS PRICE OF \$840

TAKE A LOOK, YOU BE THE JUDGE!

**ANNUAL STOCK TAKING SALE
MASSIVE DISCOUNTS — HUGE SAVINGS!
SEND S.A.E. FOR LIST (BE QUICK)**

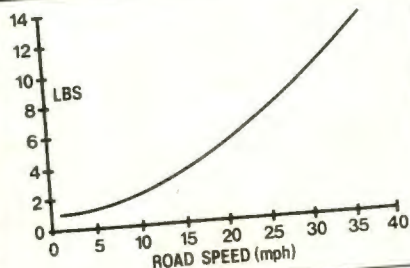
ONLY AT: HILLMAN (MELBOURNE)
846 GRANTHAM ST, BRUNSWICK VIC 3055
P H : (0 3) 3 8 0 9 6 8 5

SEE THEM AT: HILLMAN CYCLES — MELBOURNE (03) 380 9685
HILLMAN CYCLES — ALBURY (060) 21 6844
CAMPIONE CYCLES — NEWTOWN GEELONG (052) 21 1914
COMPLETE CYCLES — PORT NOARLUNGA S.A. (08) 386 0562
CRANKS CYCLES — ROSEVILLE N.S.W. (02) 411 5116
CHURCHILL CYCLES — MYAREE W.A. (09) 330 6628
RECYCLE CYCLES — ROSE PARK S.A. (08) 31 3255

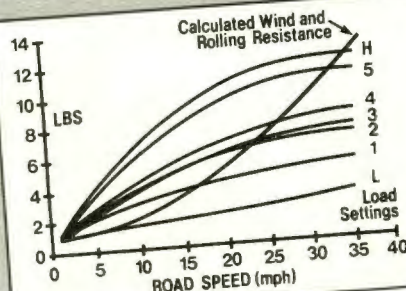
NOW AVAILABLE

AXO M / BIKER'S
NICKS & MITS

Before You Buy a New Trainer, Make Sure it Can Pass a Physics Course.



All RacerMate trainers match the wind resistance load curve exactly.**



7 drag settings of a typical mag-type trainer as compared to actual wind resistance load curve. Example: from 25-30 MPH the load barely varies, yet actual wind resistance changes drastically.**

There's an unalterable law of physics that rules your cycling. It's called $R = cv^2$ *. The law of wind resistance.

But the fact is, not many trainers, especially the new mag-types, obey this law.

Perhaps other trainer designers have lost sight of the beginnings of the "wind load" trainers. When RacerMate invented the trainer concept nine years ago, we created trainers which precisely simulated the wind resistance you face on the road. And, according to Ed Burke, Sports Physiologist and former Technical Director of the US Cycling Team, "...accurate wind resistance simulation is essential for the development of cycling-specific muscle stimulus within a rider's cadence range."

At RacerMate, we haven't compromised. Sure, you may hear that mag-type trainers are quieter - but they create the opposite load curve of real life resistance, which no number of drag settings will correct. And, that means you will not be forming muscle habits for the real test - the road.

All RacerMate trainers follow the wind resistance load curve exactly - our PiggyBack and Supra fan trainers, as well as our new super-quiet, computer-aided CompuTrainer, all provide scientifically correct training. That's why we've always published our load curves.

Think about it. If your trainer can't pass a physics course, you won't be passing a road course.

RacerMate Trainers - Serious training machines selected by serious cyclists.

RACERMATE

3016 NE Blakeley St. Seattle, WA 98105
TOLL-FREE (800) 522-3610, ext. WL

* Resistance = aerodynamic drag constant \times velocity²

** Load curve testing verified by Joseph L. Garbini, Ph.D., Associate Professor, Department of Mechanical Engineering, University of Washington.



Supplied By: **BIKETECH**

P.O. Box 152, Wallsend N.S.W. 2287 Telephone: (049) 52-4403

The World Awheel

injuries during 1986 and 1987, probably due to an increased usage of helmets. However head injuries still account for by far the highest proportion of injuries sustained, followed by fractures and lacerations.

Roughly 75% of the hospitalisations were males. For both sexes the number of hospitalisations remained constant over the period. Hopefully the survey for the 1990's will show a considerable improvement on these figures.

Still on the subject of bike accidents, the latest report of the Federal Office of Road Safety covering the period 1960 to 1988 shows that the level of fatalities of cyclists Australia wide has been constant during the 1980's. In 1986 half the 78 fatalities were in the 0 to 16 years age group.

Survive campaign

A national road safety campaign aimed at children aged from 8 to 15 was launched by the Minister for Land Transport and Shipping Support, Bob Brown, at Sydney's Royal North Shore hospital in March. The campaign has been developed by the Federal Office of Road Safety in conjunction with the Sanitarium Health Food Company. It involves a set of swap and save cards contained in Weet-Bix boxes which are pasted into a special gazette that has important road safety information on bicycles, seat belts and safety technology. A range of prizes are offered in a competition supporting the campaign, which runs until June. All packets of Weet-Bix invite children to write to the Federal Office of Road Safety for stickers, posters and leaflets.

Heading overseas this year?

If you're planning a trip to the United States or elsewhere this year you may want to take a look at the Bicycle USA Tourfinder published by the League of American Wheelmen. The sixth edition is now out and is intended to be a complete guide to bicycle tours throughout the world. It lists 130 operators offering tours in the US and 40 other countries, telling you where the tours are run, distances covered, fitness level requirements, availability of equipment, prices and schedules.

You can get your copy from LAW, Suite 209, 6707 Whitestone Road, Baltimore, Maryland 21207, USA and it costs US\$4.

Handbook for bike advocates

Bicycle activists have a new source available to them in the shape of the League of American Wheelmen's *The Bicycle*

Advocate's Handbook which is a guide to the tricks and techniques of lobbying, using the media and working with officials.

The book was partly funded by a donation from the parents of a bike crash victim to help others benefit from their loss. It is available direct from LAW and costs US\$14.95. Obtain your copy from the address above.

Cologne Show 1990

The 18th International Bicycle and Motor Cycle Exhibition was held in Cologne, West Germany from 21 to 25 September last year and was a great success. There were 170,000 visitors from 78 countries of whom one third were trade visitors. Thirty percent of the trade visitors were from overseas, principally EEC countries.

The next such fair is to be held 19 to 23 September 1990 in Cologne.

Car Wars

Sydney's most loved cycling venue, Centennial Park, has been saved from the freeway developers. Not that the park's trustees were going to cover the huge inner city green space with asphalt the problem was that its consultants wanted to turn it into a parking lot.

The story so far: In 1985 a report outlining the findings of a series of park user surveys was published. Of all the users' dislikes the top three complaints (by a big margin) were: too much litter in the ponds; too many cars; and speeding cars. Car parking was also identified as a need to be met because at least 80% of users arrived by car and wanted convenient parking.

In 1986 on peak days (good weather presumably) some 7000 cars entered and exited the park daily. The peak accumulation of vehicles in the park is around 1900 – that's a lot of cars, fumes and frayed tempers when the traffic gets thick on the one-way main drag: Grand Drive.

Obviously the governing body – the Centennial Park Trust – thought something should be done about the traffic so it hired a respected firm of traffic engineering consultants. Brilliant!

The trouble is that traffic management consultants only know about channelising traffic, improving flows and regulating speeds with engineering treatments such as speed humps, curbing and guttering.

The consultants' plan was a masterpiece that would bring genuine tears of joy (not the smog induced variety) to the eyes of any hardened Los Angeles trained freeway engineer. It proposed to restrict Grand Drive to two marked one-way three metre lanes with speed humps at regular intervals and parking all along the outside edge in constructed bays.

The walkers were to be turfed off their track and relocated on a new track right next to the roadway while the cyclists were to be given the walkers' track and banned from the roads.

The release of the plan in August last year caused such a furore that a small forest of trees was probably sacrificed to the word processors and photocopiers throughout Sydney's East and Inner West in the hope that the Trust would see reason and not proceed with the expensive consultants' recommendations. It should be noted that most of the hundred or so submissions were opposed to the consultants plans.

Late in January the Greiner Liberal government appointed a new Park Trust

comprising three very influential cyclists: former Premier Neville Wran, newspaper columnist and PR man Leo Schofield and David Lynch a company director.

All are passionate users of the park and all ride bikes there. The plan was promptly dropped down a very deep hole and promptly capped by the NSW Environment minister Tim Moore who was reported as saying that he had made it clear to authorities that the interests of cyclists and pedestrians should always take precedence over vehicles and expected that the new trust would act to protect those interests.

So what of the consultants report? Was it a huge waste of money? ►

*When you want
the best
from your body,
give your body
the best.*

Netti

Australia's Finest Cycle Clothing

Australian Distributor: Atom (02) 550 1655



The World Awheel

You can't really blame traffic management consultants for doing their job in the only way they knew how: heavy duty engineering solutions; and, get those bloody bicycle riders off the road and on to a track where they belong!

However, the consultants costs along with the sacrificial trees could have been saved if someone on or for the Trust had read the original user survey. Thirty five percent of park users suggested doing nothing, twenty three percent could not suggest improvements and only 5.2 percent wanted the traffic speed reduced. Of the eighteen other suggestions all were less than five percent of the total.

One doesn't need an engineering degree to deduce from this survey that the users wanted the status quo maintained. And with the recent appointment of the new Park Trust the traffic management status quo looks like it will remain entrenched for some time yet.

Finally, our editor would like it known that he has established his own consultancy business and will conduct studies and prepare traffic management plans which are designed to give bicyclists and pedestrians the upper hand for once. If the Park Trust wants an alternate plan drawn up he would be very happy to talk with them.

Bike education and enforcement in Victoria

It is very difficult to work out what is actually happening in the current uncertainty surrounding the Victorian State Bicycle Committee but according to Ron Shepherd who has just revised the Bike-Ed program used in Victoria the percentage of 8 to 12 year olds completing this bicycle safety course at school is still only in the region of 40% and is only increasing slightly each year.

The fatal accident and head injury rate for child cyclists is declining so it is only of academic concern that at present the SBCV has failed to monitor and evaluate what is happening. The good news is the revision of Bike-ed is now complete and copies are now available from the Victorian Road Traffic Authority. The most important recent development is the funding of teacher to develop a more advanced bicycle riding program for 13 to 18 year olds. This program was recommended in the Geelong Bikeplan way back in 1978 and it has taken all this time to get to stage designing the safety program. It will take several years to trial the program and produce a kit for teachers.

The Bicycle Offence Report system for cautioning young riders continues to decline in both urban and rural areas and only reaches about 15% of the children the program was designed for. In-

deed the overall performance in urban areas is very low except in the Frankston police district.

A new system of on-the-spot fines was introduced for 16 to 18 year olds in March this year and seems to be progressing but how effective it will be will not be known for a few months. The overall problem of police disciplining dangerous bicycle riders seems to be completely beyond the limited resources of the Victorian Police force. Again the SBCV has failed to monitor and evaluate what is actually being done and it is doubtful if any progress will be made.

The ultimate measure of bicycle safety is of course a body count and the number of cyclists killed has been decreasing over the last 13 years. Only 18 cyclists were killed in Victoria in 1988. The decline in the number of childrens' deaths is encouraging, and there were only 6 deaths last year. The overall decline in bicycle fatalities in Australia follows the Victorian pattern and internationally the trend has been for bicycle fatalities to decline.

The bicycle safety problem is slowly improving and shows that education is an effective safety countermeasure. The next step is to achieve 80% coverage for the Bike-ed program by 1996 which was the target figure set in the final report of the Melbourne Bikeplan. **Alan Parker** ●

New racing and touring saddle technology



*Gelflex saddles
eliminate
saddle soreness*



™ Gelflex by Avocet - the only saddle with Spenco gel padding.

The Spenco Medical Corporation worked with Avocet in the development of Gelflex saddles. The M-20 (men's) W-20 (women's) and R-20 (racing) saddles combine the exclusive qualities of Spenco gel plus the proven benefits of Avocet's patented cushion/support system.

Mountain Bike Headquarters

CNR. WATTLE &
HALL STREETS

LYNEHAM

AFTER ALL
WE ARE NO 1!



REFLEX

SCOTT USA

Repsco Cycles 

Plus many more.

GRAECROSS

DIAMOND BACK

CENTURION

MONGOOSE

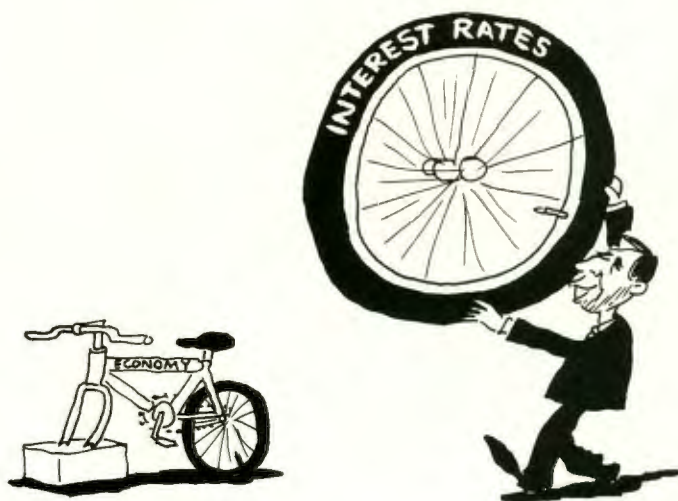
PEUGEOT

SPECIALIZED

KUWAHARA

Yes! we do stock about all brands and all models. Just **ARRIVED, TIOGA,**
FARMER JOHN, ODESSEY TYRES and componentry.

Somerville cycles Canberra



THE GREAT CYCLING CITIES

CANBERRA: A CYCLING PARADISE?

The first in a series on our great cycling cities

BY JULIA THORN

A RECENT TRAVEL article in a Sydney Sunday newspaper rated hiring a bike for the day second on a list of things to do when visiting Canberra. That's pretty high when you think about it. No other city in our country would award this accolade to the often overlooked pursuit of pedalling for pleasure.

Does this mean that Canberrans themselves ride bikes in their own city? They have good reason to. In the metropolitan area there are few unavoidable hills and the traffic is never unbearably heavy. And, of course, they have the cycleways: many kilometres of paved trails that keep you off the trafficked thoroughfares; more about these elsewhere in this issue.

Canberra has plenty of bike shops, bike hire and there are bike parking facilities everywhere you turn – sensible inverted U shaped hoops rather than those frame twisting racks. You'll see lots of people on bikes, not just the ultra fit keenies and triathletes, but also commuters, schoolkids and suburbanites out doing the shopping.

There's even a museum devoted to bicycles, the Museum of Unusual Bicycles at the Canberra Tradesmen's Club in Badham Street, Dickson. This museum claims to have Australia's largest collection of old and unusual bicycles and it is a delight to wander around. There are some amazing bikes such as the longest bike in the world (it held over 50 passengers), hobby horse bike, pennyfarthing

Freewheeling 19

and some of the weirder designs that never quite made it to your local bike shop. In addition there are some old trams on display and a restored Victorian farmhouse. Admission is free and it's open every day.

Canberra has a well established racing club which runs a program of track and road events during the seasons. The winter road season has now commenced and the club organises road events every Saturday afternoon with training rides each day of the week on both north and south sides of town. The club's classic road race The Tour of Canberra is usually run in June.

The recreational cycling organisation, Pedal Power ACT, which produces a bi-monthly journal for members offers a good program of rides most weekends. The club is also the main body representing cyclists interests with the ACT authorities and lobbies the ACT Administration for improved on road and off road facilities.

Touring in the ACT is made a little easier by the extended shopping hours. You can still get those last minute groceries on Saturday afternoons until 6 or 7pm. But park visitor centres tend to close around 4pm.

Mountain biking has received a huge boost in and around the ACT following last November's National Titles. This year the Nationals will also be staged in the ACT and local interest is expected to grow even stronger. A new club for mountain bikers has been formed and regular rides up into the nearby Brindabellas and other rugged areas nearby.

Canberra contacts

Canberra Cycling Club (track and road racing) Captain Alan North on (062) 917 779 after 6 pm.

Pedal Power GPO Box 581 Canberra ACT 2601 or telephone (062) 48 7995.

Canberra Mountain Bike Club: contact the President Mark Vardy on (062) 491 806 (w) or (062) 489 301 (h).

Commercial guided tours around Canberra and the Snowys: mountain bike tours are run by Snowy Mountain Bike Tours of Jindabyne, tel. (064) 56 2863 who do full and half day rides in the Snowy on old fire trails; Paddy Pallin at Jindabyne also organise mountain bike tours; Canberra Bike Rental, tel. (062) 41 2216 organise tours of Canberra's mountain reserves.

Bike hire: Mr Spokes Bike Hire by the Acton ferry terminal, tel. (062) 57 1188; City West Bike Hire at the Multi car park building in Marcus Clarke Street; City hire touring bikes by the hour and by the day; Canberra Bike Rental, tel. (062) 41 2216 hire both touring and mountain bikes; Adventure Canberra based at Action Travel in O'Connor, tel. (062) 49 6634 hire mountain bikes.

One of Canberra's best assets, its cycleway system, is also becoming the city's prime tourist attraction. The newly refurbished Hyatt Hotel offers weekend accommodation packages with the nearby Lake Burly Griffin cycleway as a lure.



JUST FOR BIKES

Freewheeling reviews Canberra's famous cycleway system

BY JULIA THORN

WHY DO YOUR thoughts immediately spring to bicycles when you consider visiting Canberra? Because of the cycleways. This feature came about because Canberra is a 'planned city' and it was considered a necessary part of the planning ethos to provide an off road cycleway network as part of all new urban developments from the seventies onwards. Today there are about a hundred kilometres of bike paths in and around the national capital.

The cycleways are used daily by commuters who ride into the city centre from outlying suburbs or who cross from one suburb to another. Schoolchildren use the paths to ride to and from school in safety and they are extremely popular at weekends with recreational riders. Outside working hours they attract a fair number of cyclists who are out improving their fitness or relaxing after a day's work. And of course there are the tourists in their hundreds who hire bikes by the hour or by the day to ride around Lake Burley Griffin.

It all adds up to a pleasingly high percentage of bike users among the Canberra population and a growing tourist industry for the region.

Though the system was always intended in some form or another its construction really started to gain momentum in the late 1970's when the National Capital Development Commission (NCDC) began to talk with Canberra's cycling lobby group Pedal Power ACT (founded in 1975). The NCDC also began to monitor the usage of the fledgling system and found for example that use of the Dickson cycleway had doubled between 1973 and 1977.

Since 1978 a number of new paths have been developed and the older routes have been upgraded. However, the NCDC has come in for a lot of criticism because it has designed the cycleways as multi purpose trails on which cyclists are only one type of user. It has also been accused of not discussing the

planning of the paths and other facilities with groups such as Pedal Power until after the cycle paths had been constructed.

In 1978 Pedal Power told the NCDC that the paths at that time were second rate and the funds being spent on the system were being put to poor use.

A quick look at the official cycleways map, unfortunately not updated since 1985 (but that's another matter) shows an extensive system of routes. You can travel from Macgregor in the far north-west to Wanniasa in the south without leaving the system for the roadways. The routes seem to cover Canberra fairly thoroughly so long as you do not want to go somewhere too obscure. There is a cycleway right around Lake Burley Griffin's west and central basins and also around Lake Ginninderra in the north. Many of the routes radiate from Civic and the main business centres such as Belconnen and Woden.

Where you run out of bike path the map suggests routes using footpaths (see below). Some of Canberra's regulars say that the official map is unreliable.

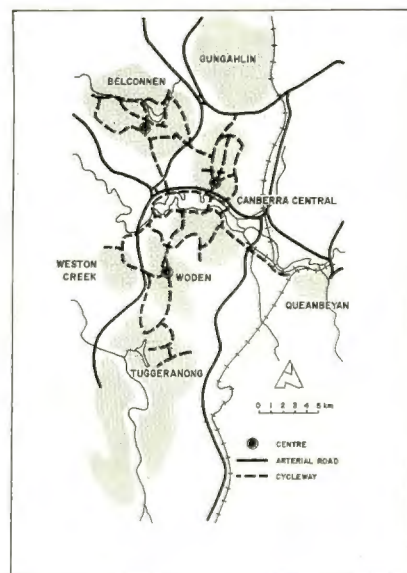
Even if you don't use the map to find the routes it's hard not to stumble across them as you cycle around the city. Recently while travelling south through Canberra I picked up the Red Hill path at Manuka and followed it to Mugga Way, then took the Athlon Drive path down to Wanniasa just because they all happened to be where I was going.

Riding these paths is generally pleasant as they are frequently tree lined and out of earshot of the noisier traffic. The biggest problem for cyclists however, are the other users of the system. Pedestrians, joggers, roller skiers, and dog walkers are all allowed to use them though motorised vehicles are thankfully prohibited.

This situation seems sensible enough as the classes of users ought to be able to coexist safely and without any undue disadvantage. But problems do seem to arise when the bike paths get congested, such as at weekends around Lake Burley Griffin. As the fastest travellers on these paths it is really up to the cyclists to see that they do not endanger other users, but at the same time the other users have to appreciate that cyclists are entitled to their share of the path.

Interestingly there are no speed limits posted on the cycleway system or rulings for cyclists using footpaths throughout the ACT.

In Canberra bicycle riders are permitted to use all footpaths. This is the only place in Australia where this is allowed. The only restrictions are that riders must dismount when they are within ten metres of an open shop doorway and it is an offence to park your bike within fifty metres of a public bathhouse. (Why?)



The Canberra cycleway network has been designed to service all the satellite suburbs.

RIDING THE CANBERRA bike paths is a pleasant way to pass the time. No hassles with cars streaming past, no need to position yourself carefully at traffic lights, no need to watch out for car doors opening suddenly as you ride by. It seems to me unquestionable that it is safer and easier to ride on the cycleways than on the roads, even with Canberra's notoriously light traffic flow.

So it comes as a bit of a surprise to find that a fair number of riders still prefer to ride on the roads rather than the paths. These are some of the reasons:

- Most of the cycleways have many dangerous corners and there is no system of warning signs to compensate for poor design.
- Where the paths cross the road network there are often "squeeze points" and dog leg bends to force riders to slow right down. Cyclists often try to avoid these with potentially dangerous results.
- In most places the paths are not adequately lit at night, as the designers tried to make cost savings by relying on existing road lighting from adjacent roads. Apart from the obvious visibility problems this matter also raises questions of safety, especially for solitary female riders. There have now been several instances of women being attacked on some of the remoter sections of bike path.
- Some of the bikepath system's own intersections are felt to be poorly designed and it has not been uncommon for riders to collide as they travel from opposite directions.
- A good percentage of Canberra's motorists are hostile towards cyclists when they attempt to use "their" roads. This attitude seems to stem from belief



that if cyclists have special paths they should jolly well use them and leave the roads to motorists.

● Some of the bike paths are felt to be too indirect and amble all over the place rather than taking the more direct (and safer) route.

● One of the most irritating problems is that bike paths in some places suddenly stop, for no apparent reason. You are pedalling along when you suddenly realise that two inches beyond your front tyre there is no more path. Did the concrete layer go home early that day?

While all these objections are bona fide the opponents of the existing system do not believe that the system should be abolished. They would like to see more on-road facilities, that is riders being allocated a lane to themselves on the proper road rather than a separate network of paths. This would allow a far greater range of areas becoming accessible to bikes without a great deal of construction work.

Admittedly there are plenty of things about the bike paths that are less than satisfactory. They aren't particularly wide so you cannot ride two abreast and carry on a conversation as you ride. If you try to do this you constantly find yourselves reverting to single file and leaving sentences unfinished.

Another problem is that there are very few signs along the paths telling you where you are or where you are going. Apparently the reason for this is that the signs all get stolen; it's a bit hard to see why people should steal them but I suppose that's what you do if you absolutely have to have a bike path signpost on your front lawn. In view of this perhaps a different type of non-removable sign should be used such as the Dutch concrete mushroom type or even signs painted directly onto the riding surface.

At present it is very frustrating for riders new to the system (like the thousands of tourists the city is attracting) to use it for the first time without the risk of getting lost. Even the now out of print official bike path map is not always of assistance.

This map has been out of print for some while and there seems to be several stories floating around as to the future of this useful piece of literature. Some people will tell you that the maps are to be revised and reprinted and then will be available from the usual outlets free of charge while others think there is going to be a fee. The pessimists are unsure if there is to be any reprinting in the near future. So if you have a bike path map, the message is hang on to it.

Though the old map did provide some orientation to the system it was difficult for visitors to use as only a few roads are named. When you come to a junction with a road it is always nice to know where you are with out having to carry an additional street directory.

The latest design Canberra bike racks are a simple inverted U shaped pipe bolted to the concrete. In the various shopping and commercial centres they are heavily used.



SO WHAT OF THE future? Planning for improvements to the network is a bit up in the air at the moment because of the transition to self-government in the ACT. The NCDC was responsible for the cycleways until it was recently disbanded, whereupon the responsibility shifted to ACT Administration.

Prior to the March elections (results are still not known), ACT Admin had prepared a construction program for the years 1988/9 to 1992/3. The program for 1988/9 involved completion of the Bruce to Kaleen and Kaleen to Lyneham routes. For future years a number of new routes are on the drawing board and also funds are allocated for maintenance and repairs on existing paths. The

focus of planning was to be directed towards completing major trunk links and facilitating access to main employment centres.

It looks good on paper but we have to play the waiting game to see what will eventuate.

At least ACT Admin realise that there is a real need for a good network of bike paths in Canberra, and they are devoting energy to encouraging what they refer to as minor mode access to the town centres and other high employment areas.

EXPLORING CANBERRA BY BICYCLE

A guide to the best places to take your bike in the ACT and surrounding regions

BY JULIA THORN

GOING FOR A BIKE RIDE around Canberra can mean anything from a leisurely push to a pretty swimming hole to a week touring the highest mountain range in the country. There are plenty of choices so there's bound to be somewhere to suit your taste.

Many of the best rides start right in the metropolitan area, while others would require you to take your bike on

the train or by car out to the starting point. There are some good opportunities for one directional cross country trips which start in one place and traverse a nice area to end in another.

Unfortunately the places that you can take your bike to on the train are diminishing in number all the time, since you are currently not allowed to take a bike on the XPT services. The centres in the vicinity of the ACT you can easily reach by train are points between Canberra and the Southern Highlands and the area between Goulburn and Wagga Wagga which includes Yass.

Other areas such as the Snowy Mountains and the south coast can be reached by long distance bus lines, who will require you to partially dismantle your bike and may object to taking more than a few at a time. They are also reluctant to guarantee that your bike will travel on the same bus as you do if there is too much other luggage so it is well worth while trying to travel outside of the busiest times of the year.

Let's look at some of the best areas to tour around the ACT and hinterland.

Day trips

The most obvious place to head to for a day ride in Canberra is Lake Burley Griffin. You can ride right around the lake through a changing environment (grasslands, forests and wetlands plus sights of historical interest) on a well

ATOM Airlite

The name says it all

The helmet designed specifically for the serious competitor in our hot Australian summers.



- * Super lightweight designed for competition use.
- * Ventilated lycra cover & air flow channels for highly efficient cooling
- * Quick-release buckle

- * Cotton lining pads absorb perspiration
- * Exceeds Aust. Standard 2063 Impact Testing & American ANSI Z90.4
- * Many other colour combinations available.

Australian Distributor: ATOM (02) 550 1655



surfaced bike path with no motorised traffic to hassle you. Points of interest are highlighted on descriptive panels along the route. You can tour one section of the lake such as the western basin or the whole lake. You can obtain a leaflet telling you all about the lake foreshore from the city tourist offices in Northbourne Avenue and in the city.

Because it gets so hot and dry in Canberra in the summer many of the most popular rides involve a visit to a swimming hole on a nearby river. For an easy day ride you could go out to one of the picnic areas along the Murrumbidgee such as Point Hut Crossing, Pine Island or Casuarina Sands. The Cotter recreation area is another good place to ride to for a swim, and after the swim you can walk along by the river or ride up to the Cotter Dam which is in a lovely peaceful setting. Out towards Cotter you can ride to Weston Creek following the Molonglo River through eucalypt and pine forests.

Near Queanbeyan there are pleasant spots at Molonglo Gorge, where you can do a bushwalk of up to six kilometres to secluded rock pools for a swim. It gets quite busy at weekends but during the week you may have the place to yourself.

Stromlo Forest has a few sealed roads but its numerous gravel trails are more suited to mountain bikes. You can ride

out to Coppins Crossing or Southwell's Crossing where swimming is possible in the Molonglo River close to a picnic area. It's a cool ride in summer with all those pine trees to provide plenty of shade.

If you want a slightly longer ride you can go out to Angle Crossing, a low level crossing of the Murrumbidgee which is reached on a dirt road (Smith's Road) from the village of Tharwa or from Williamsdale on the Monaro Highway. From either direction the going is fairly rough and hilly but it can be handled by a touring bike. The level of water in the river ford can vary considerably; I've seen it dry and also pedalled through about eight inches of water which cooled my ankles. Stop along the way for a swim at Tharwa under the impressive old bridge.

A still longer, hilly ride would take you to the Orroral River crossing on the road towards Naas at the edge of Namadgi National Park. There are many walking trails in the area and you can get full details from the park office on Boboyan Road, telephone (062) 357 216. But be warned, the area is notorious for its hills (Fitz's Hill is well known to Canberra's experienced racers and tourists).

For a ride on sealed roads into the bush there are plenty of other possibilities. You can ride to Ginninderra

Falls reserve (commercially operated so an entrance fee is charged) and walk several trails to waterfalls and rocky outcrops. This reserve has tame kangaroos and other wildlife, plus a kiosk and barbecue areas.

A hillier ride takes you into the Tidbinbilla area to the Woods reserve on Gibraltar Creek where you can leave your bike and do a kilometre bushwalk to Gibraltar Falls further upstream where there is another picnic area. The walk is pleasantly cool on a hot day and involves repeated crossings of the creek on stepping stones. It's all uphill from the Tharwa road to the reserve, and the road continues upward to the Corin Dam which is in the heart of the Brindabella range.

The ride back out of this area is worth all the effort needed to tackle the substantial climb.

There is a remarkable change in vegetation from farmland to pine forest as you climb, and you are in wet sclerophyll forest at the reserves by the creek. The Tidbinbilla Nature Reserve nearby is a popular wildlife refuge with native animals and plants in their natural environment.

Nearer the city another nice location for a day ride is Lake Ginninderra, the smaller of Canberra's constructed lakes in the north of the city. Here there is a bike path around the lake. For rather



OVER 60 EXHIBITS
Free admission — open 7 days a week
at the
Canberra Tradesmen's Union Club
 2 Badham St Dickson A.C.T.
 Ph 062 480999

Canberra Bicycle Centre

FOURTEEN YEARS A BICYCLE SPECIALIST IN
 CANBERRA & STILL A LEADER IN SALES, SERVICE, REPAIRS,
 HIRE & ACCESSORIES


48 8861

SHOGUN
 GRAECROSS
 CENTURION
 UNIVEGA
 REPCO
 MALVERN STAR

11 WOOLLEY ST.,
 DICKSON
 Open: Mon.-Sat.

HOTFOOT
 HARO
 ODYSSEY
 TORKER
 SKYWAY
 G.T.
 ARAYA
 REDLINE
 PREGRINE

HUTCH
 DIAMOND BACK
 UNIVEGA
 AME
 SPINTECH



MOUNTAIN BIKES

BANKCARD WELCOME — LAY-BYS — FINANCE AVAILABLE
 SPEAK TO JOHN LANGHAM & GRAHAM JOHNSON FOR FIRST CLASS SERVICE & ADVICE

more strenuous activity there is the chance to ride up Black Mountain. The view from the top is superb, if you can see it through your perspiration! On the way up you can stop for a look around the Botanical Gardens.

Further afield

The countryside around Canberra has a number of older villages which are well worth a visit by bike. Often you can travel off the bitumen and avoid a lot of the car traffic.

A day ride south from Queanbeyan could take you past the Googong Reservoir (good for practising hill climbs) to the pretty village of Burra where there is a natural rock arch formation called London Bridge. To return you could take the gravel road across to Williamsdale which undulates past pastoral properties, then cross the Monaro Highway and follow Smith's Road (involving a ford of the Murrumbidgee at Angle Crossing) to Tharwa and continue back to your starting point.

For a longer trip you could ride the triangle between Collector, Gunning and Gundaroo which passes through quiet countryside with refreshment spots at suitable intervals. Or you could ride out to Braidwood, a charming old town which has become rather trendy in recent times. There are pleasant cafes, antique shops to browse in and a small museum. Just eight kilometres from

Braidwood is a bridge over the Shoalhaven River near its source and the Warri reserve where you can stop for a swim and a picnic.

From Braidwood you can continue north to Tarago following a quiet dirt road in bushland through Boro and Lower Boro. At Tarago, another nice unspoilt village with a pub and a shop, you could catch the train back to Canberra.

Or from Tarago you can ride out to Oallen Ford on the Shoalhaven River along gravel roads through peaceful pastoral land and bush.

The ride from Canberra to the coast through the Deua National Park is most enjoyable. Ride to Braidwood and then continue south to Araluen (an old gold mining town at the bottom of a fabulous descent) and follow the Deua River as it winds its way to the coast at Moruya. There are picnic areas along the river and plenty of wildlife but very few people. This is a more pleasant route to take to the coast than to follow the sealed road across Clyde Mountain to Bateman's Bay which gets a lot of traffic and is hillier.

To go north from Moruya you can follow the coast to Bateman's Bay, without spending too much time on the highway. Quiet roads take you out to Broulee, Guerilla Bay and Malua Bay.

The areas to the south west of Can-

berra are also scenic but mountainous. If you have time and plenty of energy the Snowy Mountains are well worth the effort, but of course only in summer. You can bike right to the top of Mount Kosciusko along the Summit Road from Sawpit Creek, the last eight kilometres being on a spectacular dirt road.

In the summer months all the resorts take on a totally different appearance from their bustling winter image. There is hardly anyone about, the traffic isn't trying to beat any speed records and the slopes are carpeted with wildflowers.

For the complete mountain adventure you can do a loop ride around the main range in a week or so, following the Alpine Way through Thredbo, Khancoban, Cabramurra and Kiandra, with a start and finish at Cooma or Adaminaby (see *Freewheeling* 33 for our definitive guide to touring the High Country).

If you don't want to go as far afield as the Snowy Mountains but want to do your share of hill climbing then you should head for Namadgi National Park, which encloses the former Gudgenby Nature Reserve. The road south from Tharwa passes spectacular scenery and involves a climb up the renowned Fitz's Hill before becoming a gravel road from Naas to Adaminaby. You pass the old Gudgenby homestead and there are several opportunities for

ACT BICYCLE

WAREHOUSE

TWO FLOORS OF

★ BICYCLES ★ PARTS
★ ACCESSORIES ★ SHOES
★ HELMETS ★ CLOTHES

**AUSTRALIAN MADE
FRAMES AVAILABLE**

RAPID EXPERT REPAIRS

Free Parking Right Outside the Door

41 7987

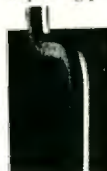
20-24 Essington Street, Mitchell

WINNING EDGE

Hoshi Bladed Spokes

Engineering excellence, the Hoshi Bladed Spokes is designed to perform.

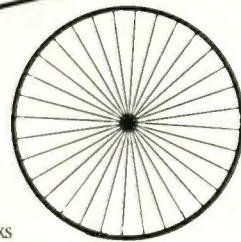
The aerodynamic shape not only looks great, the blades cut through the air with the minimum resistance, improving performance.



The hook design makes installation a simple task, just hook the end into the hub hole, once the wheel is assembled, the tension on the hook end holds it securely to the hub. Unlike other bladed spokes, the unique Hoshi Spoke eliminates the time consuming duty of enlarging spoke holes and threading. Simple hook the end into the hub hole.

The HOSHI BLADED SPOKES,
A Winning Edge

HOSHI SPOKES



hill walks along tracks leading off from the roadside.

There are several places to ride to from Yass. You can go to Burrinjuck State Recreation Area for a picnic and a swim. Or you can take the rough dirt road out to Wee Jasper and visit the caves. North of Yass are Boorowa and Crookwell, both quiet country towns on lightly trafficked roads.

Guide Books

If you're looking for a basic guide book to touring areas around Canberra and the ACT the booklet published by Pedal Power ACT called *40 Bicycle Rides around Canberra and Southern New South Wales* is a good starting point. It contains suggestions for rides both within the city boundaries and further afield, with short day rides and rides of up to a week's duration.

Maps

For riding out to spots near Canberra you can use the Canberra Cycleways map or Bartholomew's map of Canberra. The best maps to use for trips out of the city are the Natmap 1:100,000 series (which is available in a special ACT edition printed on plastic). If you plan a longer tour and don't want to be loaded down with maps there are suitable smaller scale maps covering a larger area. For example I have used Bartholomew's local maps and Craigie's maps of the south coast and Southern Highlands.

Information

Most of the books and maps mentioned in the previous section are available from the Canberra Tourist Centre on Northbourne Avenue just to the north of the main city centre on the main road in (062) 456 450 or the main office in the Jolimont Centre in the city (062) 456 464. The New South Wales tourist centres in state capital cities also provide information on the ACT and surrounding areas. Full details on all accommodation can also be obtained from these centres.

A ride to Lower Ginninderra Falls makes an easy day trip from Canberra.



MOUNTAIN BIKING THE ACT

Where to find the best trails

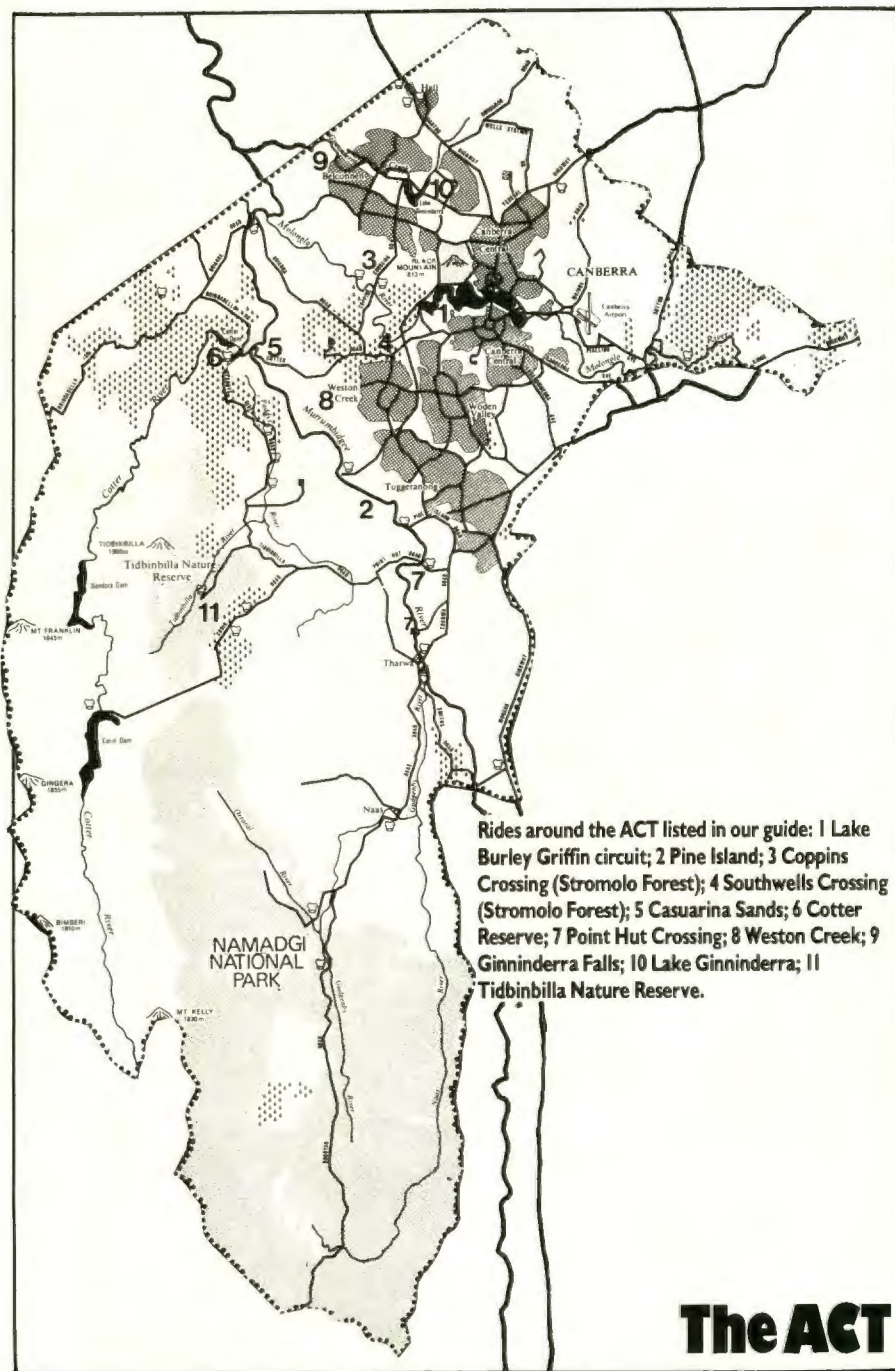
BY JULIA THORN

WHEN YOU STAND amid the bustle of Canberra's central business district, Civic, it's hard to believe that there are mountain biking trails through serene forests only a short distance away. Some of our country's most challenging terrain lies in the immediate hinterland of this modern city.

So where should you head for? Here's a selection of tried and tested areas. Remember always to take a good map – the 1:25,000 series is advisable and can be obtained from an outdoor activities stores in Canberra.

Stromlo Forest

This is a popular area for mountain biking close to the city. There are numer-



The ACT

ous gravel trails through the pine trees, which were first planted in 1915 to provide a scenic backdrop to the city. When you need to have a rest there are plenty of picnic areas and you can go for a swim at one of the Molonglo River crossings.

The Brindabellas

This range lies to the south west of Canberra and includes a variety of vegetation ranging from dry sclerophyll forest to rainforest and alpine scrub. You need low gears to travel in this area but the setting is stunning. Popular trails include the Two Sticks Road, Mount Corree and the Brindabella Road to Picadilly Circus (rather a strange name to come across up here!).

Namadgi National Park

This national park encompasses what

used to be Gudgenby Nature Reserve and extends south to the NSW/ACT border. There is only one road through this park, and a hilly one it is too, extending from the northern park boundary just past Tharwa to the northern edge of Kosciusko. From the road you get superb mountain views and there are beautiful snow gums on the higher parts.

You could make a day trip into the park or ride the whole road from Tharwa to Adaminaby in a weekend.

Kosciusko National Park

In this park you will find enough mountains to ride to keep you going for quite a while. One of the best gravel roads and an easy one to reach is the final stretch of the Summit Road which

leads from Charlotte Pass to the summit of Mount Kosciusko. This section of road is closed to motorised traffic and offers unrivalled views of the higher reaches of the Snowy River basin and the peaks of the Main Range.

For practice at a more rugged sort of riding you can coast down Crackenback on the grassy slopes down to Thredbo.

Following the Alpine Way through Thredbo, there is a 48 kilometre stretch from Dead Horse Gap to Geehi which passes beautiful scenery by the NSW/Victorian border. North of Geehi are many rough roads crossing several ranges in a real wilderness area.

Tallaganda State Forest

This forest is situated 40 kilometres southeast of Queanbeyan and straddles the Dividing Range. The vegetation varies from dry, open woodland to snow gum and there is plenty of native wildlife. You can start from Captains Flat and take your bike for a 20 kilometre "forest drive" on unimproved roads to see the best parts of the forest, including the Shoalhaven valley and the eastern slopes of the Dividing Range. Or you can pick up old logging trails (there is still selective logging here) and follow these.

Other State Forests

The Berlang and Bendoura State Forests are accessible from Major's Creek and have fire trails that can be ridden. However the trails are less suitable than those at Tallaganda. Bago State Forest has the Yellowin Forest Road which crosses from near Batlow to the scenic Lake Blowering with views of the forest and the lake.

Canberra Equestrian Trails

One set of trails you may like to explore are the equestrian trails which form a horseshoe shape around Canberra. Although intended primarily for horse riders they are open to other non-motorised users. There are some obstacles such as low fences which you will have to lift your bike over.

The total distance is about 60 kilometres in two stretches from Fraser south to Torrens and from Giralang south to Duntroon. The trails avoid towns and follow the periphery of residential areas. You can get a map of the trails from the Canberra tourist office in Northbourne Avenue.

Where to get more information

For detailed information on the National Parks contact the National Parks and Wildlife Service offices as follows: Kosciusko (0648) 62102; Morton and Budawang (044) 219 969; Deua (044) 762 798.

Forestry Offices: Queanbeyan, which covers the forest areas to the north and east of Canberra (062) 97 2044; Tumut (069) 470 222; Bega (064) 921 033; Narooma (044) 762 489. ●

SAFETY RECALL

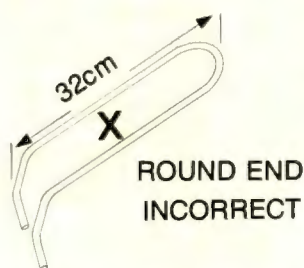
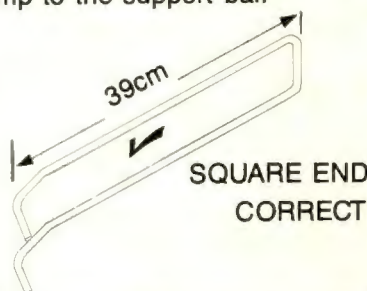
**SAFE-N-SOUND—JOCKEY CHILD BICYCLE SEAT
RE ORDER NUMBER 1330**

Serial Numbers 86650 to 86790

Purchased on or after 23rd February

During the packaging of the Safe-N-Sound "Jockey" Child Bicycle Seat, an incorrect support bar has been placed in some packs. There are less than 40 seats supplied with the incorrect support bar and these may have been purchased recently.

The use of the incorrect support bar could lead to the child seat being insecurely fastened to the bicycle as the locking assembly does not clamp to the support bar.



It is important that anyone who has purchased a Jockey seat in February or March to check the serial number on the outside of the carton to make sure it is not in the range of 86650 to 86790 or check the style of the support bar (see above)

If you have one of these seats then please contact Britax Child-Care Products to obtain the replacement part.

Contact: Kay Gibson on (03) 311 0611 for Victoria
Graeme Brown on (02) 736 2999 for New South Wales

Britax Child-Care Products Pty. Ltd.

99 Derby Road,
SUNSHINE VICTORIA 3020. or

30 Hilly Street
MORTLAKE, N.S.W. 2137.

REFLEX WINS THE PRESTIGIOUS 1988 AUSTRALIAN MOUNTAIN BIKE CHAMPIONSHIPS



REFLEX rider Werner Wohlrab annihilates the Australian Olympic Pursuit team and various other world class cyclists to win for the third successive time.

AVAILABLE THROUGHOUT AUSTRALIA AT THE FOLLOWING BICYCLE RETAILERS

REFLEX IS DISTRIBUTED BY EASTON SPORTS AUSTRALASIA TEL: (03) 419 5844 FAX: (03) 417 2251

Sydney

Crank's Bikeshop (02) 411 5116

Woolly's Wheels (02) 331 2671

Inner City Cycles (02) 660 6605

Newcastle

Gateshead Cycles (049) 437 233

Melbourne

Action Cycles (03) 572 1306

Christie Cycles (03) 818 4011

Hillman Cycles (03) 380 9685

Cecil Walker (03) 329 6892

Bike Power (03) 741 9730

Action Cycles (03) 890 1977

Adelaide

Super Elliotts (08) 223 3969

Brisbane

Edward Street Bicycle Centre (07) 229 7232

Canberra

Cycle City (062) 491 806



SALLY BULL

IMAGES OF INDIA

A mountain bike ride into the heart of the Himalayas.

BY SALLY BULL

IHAD NEVER TOURED ON A bike before I attempted the journey from Delhi to Leh, the capital of Ladakh in northern India. For four years I had studied in London working four days a week part time as a cycle courier so my Himalayan training did not go beyond climbing the hill from Ludgate Circus to St Pauls. When the time eventually came I threw caution to the wheels and set off, ready to take each day as it came.

I tried to keep my luggage to a minimum. I had four panniers and one camera bag which I strapped on the back rack. A good down sleeping bag (essential in Ladakh), Gore-tex rain jacket and overtrousers, thermal under-

wear, cycle shorts and shoes, a couple of tee shirts, sandals, baggy army shorts and long trousers, and a bag of assorted tools and spokes.

If you want to reduce the stare factor then baggy long shorts and a tee shirt (with sleeves) are more suitable than cycling shorts, and even then in Indian eyes you are under dressed. One day I had to repair a puncture surrounded by a crowd of 50 men who pushed closer and closer and I wished dearly for a pair of long pants and long sleeved shirt. After this I always kept a respectable cover up garment on my rack – even a scarf does the trick.

As for tools I hardly took any – the most useful item was the tin of oil I'd

▲ Road workers on the road to Leh. Upkeeping the road for the three months of the year it is open is a major form of employment for many Ladakhis, and despite their labours by August I'd noticed a great deterioration and a lot more potholes. Despite the heat Ladakhis always wear a lot of woollen garments and never look hot. Here the workers are quite bemused by our arrival.

Clockwise from the top left: The Ledder River, ► Pahalgam, Kashmir. The mountains in the background (to the north) are part of the great Himalayan Range which separates Kashmir from Ladakh. In contrast to Ladakh, Kashmir is wooded and fertile, although deforestation is already in evidence on the mountain slopes. Pahalgam is a popular Indian Mountain resort and often featured in Hindi movies as a romantic setting for lovers.

The Zoji La Pass at 2740 m it was the hardest of the trip. These snow canyons had been bulldozed out but were already melting fast. The second two passes had no snow on them.

The Lamayuru bends – the final descent from the high passes into the Indus Valley. The Indus River is the life blood of the Ladakh region, and from here it runs fast and furious into Pakistan.

A chai shop in Himachal Pradesh. One of India's best institutions and a real boon for cyclists, chai shops abound along nearly every road, and it is here I would stop every 3 km for numerous cups of sweet milky tea and a samosa or two. They are also great places for practising a little Hindi and meeting locals.





Let
Christie Cycles
put you in the
picture

Before you set out on your next bicycle adventure talk to Ian or Richard the touring and tandem experts at Christie Cycles. With over 25 years cumulative bicycle touring experience in 16 countries worldwide Christie Cycles can set you up for a weekend day ride or the adventure of a lifetime. So come in and experience the friendly helpful service that only a recognised expert in the field can deliver.

CHRISTIE

THE TOURING AND TANDEM EXPERTS
85 Burwood Rd Hawthorn VIC 3122
Phone (03) 818 4011

bought at Heathrow Airport service station. Indian oil is unobtainable in small cans apart from lightweight sewing machine oil. I took a spare tyre, two inner tubes, lots of tubes of glue, grease, a spare chain and wheel axle, and a large Swiss Army knife.

Apart from two or three punctures and three broken spokes (freewheel side of course) my only serious mechanical problem was a loose bottom bracket, which loosened increasingly until I found another cyclist in the Zanskar Valley with an extremely efficient tool kit.

In early May I set off from Delhi at 5 am, clean new panniers bulging new tyres singing and a dirty Delhi sunrise growing orange on the horizon. It was going to be hot!

In May the plains of India can reach temperatures of around 45 degrees, so early morning starts were essential, and I was keen to get to the foothills and beyond as soon as possible. On the second day I could see the faint outline of the Himalayas on the horizon – and my mountain training was about to begin.

From Rishikesh my companion and I rode westwards through Himachal Pradesh, taking minor roads that skirted up and down the foothills, occasionally dropping down into the heat of the plains (rather like riding down into a giant hairdrier) and then climbing up again onto a ridge.

I found the best way to cool off was to sit under a public water tap and soak – I'd be dry in 10 minutes but it helped! It was important to keep the water bottles well topped up as sometimes there would be no taps for hours or they'd be dry, so we started filling up from mountain streams. I have a stomach of iron and confess to never purifying my water (not advisable) and eating whatever came my way, except for meat, but a bottle of iodine salts is a good idea.

We would usually set off at sunrise without breakfast, stop around 7 am for tea, have a breakfast/lunch at 10 am in a local restaurant – usually chapatis and dahl, or fresh samosas, and carry on until 12 or 1 pm when we'd find a rest house and avoid the sun. This routine depended on whether there was a resthouse – we'd usually head for a town with a Public Works Department resthouse (PWD) so we would have to carry on for 2 hours in the evening sometimes to reach one.

PWD's are one of India's many delights – usually two or three roomed old colonial bungalows, set in immaculate gardens with large shady verandah and big ceiling fans. And CLEAN. They are really for visiting government employees but with a little gentle persuasion and a smile the caretaker (chowkidar) can be persuaded to let you stay for 30 rupees (\$3).

COLOUR YOUR BIKE

Our MTN racks are hand welded with the highest quality 6061 T6 aluminum and finished in tough baked on colors.

**Red white yellow
blue black & silver**

MTN-1 RACK

The rock mountain-bikers asked for – this one can take it! Specially designed for wide tires and mountain bike frames. Unique midstrut and structural platform. Extra-strong large gauge Reynolds alloy throughout. 4-way adjusting mounts. Rugged. For taller frames use MTN-2 For smaller frames use MTN-3

blackburn

Distributed by
LEISURE BIKES
PO Box 1026
Nth Richmond VIC 3121
Phone: (03) 861 6771
Fax: (03) 862 3097

Sometimes the chowkidar (caretaker) will cook you a delicious evening meal, served on china plates in the huge high ceilinged dining room, watched by inquisitive locals who cannot quite believe what you are doing here in this godforsaken town where no tourist has stopped before. And cycling – why don't you take a bus madam?

It took me a good few weeks to feel mountain cycling fit – and I soon realised cycling 8 hours a day in London does not get you fit in the same way as the Himalayas. At first my knee troubled me, but this luckily disappeared as I got stronger. By the time I reached Srinagar I no longer minded cycling uphill all morning, downhill for lunch and uphill all afternoon!

From Jammu to Srinagar and on to Leh there is only one road which for the most part is only open in summer. So during these months it is choked with supply trucks and army convoys, belching their way through the Himalayas pouring out clouds of black diesel fumes and driving on their horns rather than their gears or brakes. Sometimes a convoy of army trucks would overtake, as many as 50 or 60 at times, and for peace of mind I found the best policy is to stop and wait as they belch past.

At first we were worried about cycling along a road with so many army trucks,

and thus soldiers who hadn't seen a woman in months.

But for the most part we got cheerful waves of encouragement, and once even a yellow dog rose thrown in our path.

As the air got thinner, and cooler, the early morning start became later, breakfast became more leisurely, and we would cycle throughout most of the day. I had bought a small kerosene stove in Srinagar, and real coffee, so we would celebrate reaching the top of the pass with a good brew and dried apricots (which are readily available from Kargil onwards).

For the seven days it took to ride to Leh from Srinagar we carried basic provisions which proved essential as sometimes we'd cycle all day without passing a chai (tea) shop.

At last I felt I was in the Himalaya. Endless vistas of barren mountain, purple and brown, a cold blue river far below, a deep blue sky and jagged white line of mountain. There is no natural vegetation in Ladakh; the green oasis of a village is the result of careful irrigation. We had left the Moslems of Kashmir behind now, and passed gompas (Buddhist monasteries) perched high up on rocky precipices, and Ladakhis swathed in red woollen robes and velvet blue top hats.


Ladakh does not feel like India as its entire culture is different, its people

look and are, of another race and another mentality.

There are three passes that separate Kashmir from Ladakh – the Zoji La at 2740 metres, Namuka La at 3780 and the Iatu La at 4091 metres. The Zoji La was the most strenuous – the road being rough and unpaved – and in many ways the most exciting as we cycled through snow tunnels and forded melting rivers.

The Namuka and Iatu La are well graded and spectacular rides, especially the descent from the Iatu La which passes Lamayuru, Ladakh's oldest monastery, and then snakes down to Kalsi along the famous spaghetti-like bends. At Kalsi the road drops down to the Indus, and then follows it all the way to Leh. There are many interesting diversions along the road now, villages and gompas to visit and small valleys to explore.

My excitement mounted as we neared Leh – 28 kilometres to go and we found two small passes not marked on the map and the hardest of the whole trip! And the final seven kilometre ride into Leh from the Indus is a deceptively gentle uphill, with a final one kilometre killer – I think that last day's riding was the hardest of all. But exhausted, excited and high on the altitude and splendour of the ride, we finally pedalled into Leh, the words 'ridiculously beautiful' buzzing in my head.

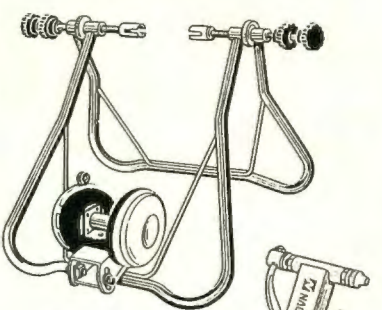


NAGAOKA TRAINING EQUIPMENT

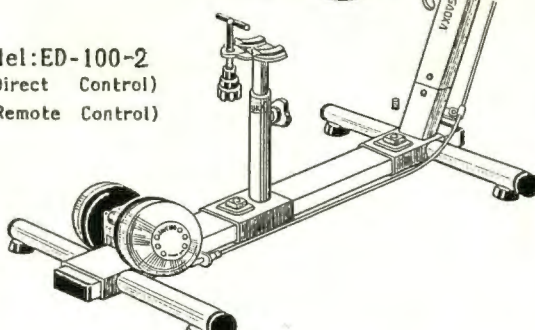
Eddy Current (Magnet) brake system trainers

Model: ED-100B-3
(Direct Control)

Model: ED-100C-3
(Remote Control)



Model: ED-100-2
B (Direct Control)
C (Remote Control)



NAGAOKA METAL INDUSTRY CO., LTD.
1-8, 1-CHO MEISHINGUCHI TOYONAKA CITY, JAPAN

BRETT RICHARDSON'S

BERRETTO BICYCLES BRISBANE

724 GYMPIE ROAD CHERMSIDE 4032
(07) 359 4923

CUSTOM MADE : FRAMES
: TANDEMS
: MOUNTAIN BIKES

FRAME REPAIRS + PAINTING FACILITIES

THIS MONTH'S SPECIAL
FRAME REPAINTS

\$65

**WE STOCK A FULL RANGE OF
PANNIERS RACKS +
TOURING EQUIPMENT PLUS
A LARGE RANGE OF
BICYCLES PARTS +
ACCESSORIES**

HIRE BIKES + PANNIERS

20 YRS CYCLING EXPERIENCE

MAIL ORDER WELCOME SEND S.A.E. FOR
PRICE LIST TO PO BOX 450 STRATHPINE



WINTER RIDING FOR THE ADVENTUROUS

A FREEWHEELING GUIDE

BY WARREN SALOMON

MY FAVOURITE CYCLINGseason is winter. In clear weather throughout eastern and western Australia cycling conditions could not be more conducive to pleasant sports or recreational riding. On good days I like to take my mountain bike and head for the hills or ride on narrow tyres down almost deserted rural roads.

Gone are the screaming motorised hordes of the summer holidays or the speeding amateur maniacs of the Easter break – in winter they are safely at home drinking themselves into obesity in front of television sets. I prefer to be out in the cooler air working up a healthy sweat.

There is nothing like the colour of the sky on a clear winter's day. Conversely there is also nothing like the suffering that has to be endured when caught out by a cold wet change in the weather. Winter can be marvellous but it can also be dangerous if you are not properly prepared and equipped.

The human body is capable of putting out enormous amounts of heat as it converts food/fuel into muscular motion. In winter as well as summer our bodies need to operate at a comfortable temperature. If we become too hot we sweat; this is our body's way of cooling down.

In summer with minimum clothing the sweat evaporates from the surface of our skin, lycra shorts or shirt. In winter it's much too cold to expose sweating skin to the chilled air so some other way

Good winter clothing is hard to come by in this country but not so in North America. This stunning womens outfit from Cannondale consists of a windbreaker jacket with large flap protection over the zipper and multi paneled winter nicks.



must be found to dispose of perspiration.

In cold dry conditions, as long as your clothing doesn't absorb too much sweat, you can easily adjust your body temperature by adding or removing layers of clothing.

Except in severe snowy conditions three layers of clothing (body layer, warmth layer and wind/rain break layer) will usually be all that is necessary for comfortable cycling in the Australian winter. On your lower body and legs two layers are often as much as you can comfortably cope with when pedalling.

Ideally each layer should pass the moisture generated in sweat away from the body and into the air as water vapour. Fabrics which retain moisture (like cotton) make it difficult for your body to regulate its temperature and keep warm when you have stopped pedalling.

A thermal vest is the most practical undergarment layer worn close to the skin. Thermal underwear wicks away the sweat from the skin and keeps the body dry. This type of garment doesn't retain body warmth so a fleecy lined jacket, pullover or other warm top is needed to cover the vest.

Wool has always been a favourite warming fabric though it does tend to retain moisture and become heavy when damp. Even so wool is one of the few materials which will keep the body warm when wet. Wool/nylon blend fabrics are usually best for the wash and wear cyclist as they don't require careful washing after every muddy trip. Pure wool if not washed and dried with extreme care does have a tendency to shrink.

Some of the newer synthetic fabrics offer the winter cyclist good body heat retention along with extreme lightness and an amazing ability to shed moisture (see equipment review at the end of this article). In Australia with our mild winters and restrictive clothing import regulations we have to look to bushwalking and ski clothing makers for the latest developments in active sports wear.

Skiers and bushwalkers are also mindful of the chill factor – the lowering of temperature caused by wind in cold conditions. For example: if the air temperature is 8 degrees and you are standing in a wind of 30 km/h the chill factor (or actual temperature caused by the wind) is minus three degrees. If you can keep out of the wind you will have a much better chance of keeping warm but there is not much chance of that when you are out riding.

To beat the wind and retain the layer of warm insulating air around your body a good rain jacket cut low at the back to cover your lower back is absolutely essential. However you still have to deal with the problem of moisture both from within (perspiration) and without (rain).

Some modern synthetic fabrics like

Goretex actually repel large droplets of moisture (like rain and sleet) while still allowing sweat vapour to pass through. Goretex is a thin membrane and can not be used on its own so it is usually sandwiched between two layers of porous nylon before it is cut and sewn into garments.

In Europe and the USA winter cycling is a much colder activity and cyclists have a greater choice of specialised garments. Outer jackets are often made of wool or synthetic warming fabrics and are faced with a windbreak material such as thin leather, neoprene or vinyl. In cold clear weather this type of jacket gives the best performance as the body can exhaust its sweat vapour through the back half of the garment while the non porous front half breaks the wind and is insulated by the warming layer beneath.

As your body warms up you may want to shed the outer layer and as the day warms up you may even shed the middle layer. It is important to adjust your layers so that you are comfortable and the moisture 'problem' does not get out of control.

Long training tights worn over normal cycling shorts are excellent for cold morning starts but in wet conditions lightweight overpants may be needed. Sure, no one likes to cycle in cold and wet conditions but the weather is a fickle entity. The day may look fine on setting out but later on a cold downpour may block the way between you and the comfort of a warm dry house. A lightweight pair of overpants in your bike bag may save the day.

In the northern hemisphere competitive and fitness riders wear winter training tights faced with vinyl or neoprene to break the chilly wind and provide some protection from light rain. Some bicycle retailers in southern Australia who specialise in racing equipment stock this type of outer garment.

Cotton or wool blend cycling shorts are a little warmer than straight lycra so when the day warms up and the long tights have to be discarded the extra thick fabric will ensure that your bottom won't freeze.

Sports riders out training for the day may want to put up with the inconvenience of wet feet for a few hours but tourers need to keep their footwear dry if they want to continue their journey without the continual misery of wet feet.

European cyclists who ride and train in all kinds of weather conditions can buy a number of different types of foot coverings (or bike booties as the Americans call them). A very small range of foot covers is available in Australia and most are designed for cleated shoes.

The Paddy Pallin Forza rain suit is lightweight, waterproof and is designed for road training and commuting usage.

Mountain bikers can find greater comfort and protection from wet weather in a pair of lightweight MTB boots. Axo and Scarpa make excellent footwear designed for cycling in the wilds and both are recommended for use with a pair of thermal socks to beat the cold as well as the wet.

The human body can withstand a greater heat loss through the limbs or

More gear we would like to see here – a Hind stretch Goretex waterproof training suit designed for ski tourers as well as winter cyclists.



the torso than through the head. In really cold temperatures it is important to keep your head warm so the large ventilation holes in helmets should be blocked up with tape or a lycra cover similar to that used on ultralightweight helmets (less the open mesh section). If your helmet has removable pads they can also be taken out and substituted with a wool cap or beanie. It often depends on how much hair you have to insulate your head.

European racers use natty little woollen caps with a fold down back section to keep the ears warm. This type of cap can be easily fitted under a hard shell helmet and worn to protect much more of the head than the helmet would normally cover.

Full fingered gloves are essential on really cold and icy mornings. The best type are full leather or woollen ones faced with vinyl or neoprene to break the chilly wind.

Cycling in winter means less daylight riding time along with an increased possibility of being caught out on busy roads by failing light. A lightweight set of battery lights is an important accessory for any winter rider.

Before setting out make sure that your batteries are working and have plenty of life in them. You may not pass any shops on your way home in the dark.

EQUIPMENT REVIEW

PADDY PALLIN INTEGRAL CLOTHING

Drytech shirts, pants and Fire Pluslite jacket

Bushwalkers have long understood the importance of using differing layers of clothing in order to regulate the heat generated by an active body. And often cyclists have turned to clothing made specifically for bushwalking activities when their own industries have not produced garments for their needs (cyclists had to make do with bushwalking parkas long before good rainwear was made for them).

There may be a plethora of cycling jerseys designed to look good and be seen in summer but do very little for the serious rider concerned about his or her comfort in winter. Cycling jerseys may be cut long and have useful pockets at the back but in winter riding conditions they are often not very practical to wear.

Woollen tops may keep in the warmth but they're also heavy and hold the sweat. Worn next to the skin they are often spiky and prickly. Lycra may be an excellent fabric for summer but in winter it too holds the moisture and clammily clings to the skin.

Cyclists have started to look elsewhere.

My first Goretex cycling rain jacket was a bushwalkers garment made by the Australian company Paddy Pallin. This firm started in the thirties by the well known Sydney bushwalker and retailer Paddy Pallin has always been involved in developing and manufacturing quality clothing and equipment for bushwalkers. Up until the eighties they have always been known for their use of traditional materials such as lightweight japara and canvas.

With the advent of workable synthetic fabrics (like the Goretex material used in rain jackets) the company has begun to embrace the new fabrics and experiment with their use. The most recent result of this experimentation is the release last year of its new clothing range called Integral Clothing.

The range promotes the concept of using layers of clothing as a means of regulating the heat and perspiration generated by vigorous outdoor activity and labels its three components: Body Wear; Warm Wear; and Shell Wear.

MOUNTAIN BIKE THINKING



inner city cycles

The Body Wear garments I tested were the Techtee – a lightweight short sleeved summer shirt – Techtop and Techpants. The three Body Wear garments are all made from a synthetic polyester fabric called Drytech.

The fabric has a smooth outer finish and a fibrous underside which by capillary action wicks away body moisture to the air or the next layer of clothing.

I have always found polypropylene thermal underwear slightly uncomfortable to wear (it feels slightly prickly on my skin) but the Drytech fabric was much more comfortable. All garments are designed to be worn much more loosely than conventional thermal underwear and the smart surface finish of the fabric allows them to be worn as an outer garment in the fashion of a track suit.

The Techtee had plenty of use throughout the summer and I can only conclude that it is an ideal cycling top. It always felt dry on my skin and the small vent holes in the fabric allowed just enough air in to cool my sweaty skin. A big plus for this fabric is that it is easily washed out overnight, dries rapidly and does not retain the sweaty smell of some types of thermal underwear.

The Techtop has extra long sleeves (a boon for cyclists) and press stud closures on the cuffs. The collar is cut high and is designed to be worn high to protect the neck. It too has plastic press studs to regulate the opening area.

The matching Techpants looked good and were quite presentable to wear around as a normal outer garment on cool evenings in the country.

My favourite garment, however, was the Fire Warmwear jacket which is made from a rich purple Pluslite fabric (see below for 1989 colour range). Pluslite is different from the normal fibrepile synthetic used in bushwalking jackets. Its outer surface is more like fleecy wool and will not pill (form little balls of loose fibres) like other fabrics. The jacket is extremely light and soft and warm to wear.

Worn over a Techtop the jacket allows just enough air through its pile surface to cool hot skin and out of the wind (or beneath a Goretex shell jacket) it retains body heat with out feeling at all clammy. I was very impressed with the ability of the Drytech fabric to pass on the moisture to the Fire jacket and keep me dry and comfortable at all times.

The collar on the Fire jacket is also cut high like the Techtop and Techtee but can be folded over and worn like a conventional collar if needed. The jacket is well finished and is an attractive jacket to wear both in town and on the road.

In windy or rainy conditions the system is sealed off with one of four Goretex Shell Wear jackets. The Goretex material prevents rain from

entering but allows water vapour (perspiration) to exit through microscopic pores in the fabric. Three of the jackets (Voyager, Vista and Vortex) have plastic full length double opening zips and (hooray) press studs fastening the weather flap covering the main zip. The other jacket (Vector) is designed for ski touring and is a pullover type. As it does not have a full length front opening zip it can not be adequately ventilated for cycling.

The best jackets for cycling are the shorter length Voyager and the Vortex. The Vortex also has a removable hood along with extra features such as triple storm flap on the main zip and two Goretex lined bellows type chest pock-

ets. The fixed hood on the Voyager is not an advantage for cyclists but in a downpour off the bike it may see some use.

When purchasing a rain jacket for touring you should always buy it big enough to comfortably wear over at least two other clothing layers.

Prices and colours of the Integral Clothing garments tested: Techtop – \$59.80 Cobalt/red trim, Amber/Cobalt, Red/Amber; Techpants – \$59.80 Amber, Cobalt, Red; Techtee – \$54.80 Red/Nutmeg, Grey/Peacock, Blue/Indigo; Fire jacket – \$129 Red, Dark Peacock, Indigo; Voyager shell – \$239 Red, Indigo; Vortex shell – \$315 Cobalt/Turquoise, Pewter/Red.



KING OF THE MOUNTAIN

SPECIALIZED STUMPJUMPER WORLD CHAMPION

SPECIALIZED Mountain Bikes lead the world in frame design and component specification.

SPECIALIZED use all Japanese Chrome-moly tubing manufactured to their specifications for ultimate performance.

See the **HARD ROCK, ROCKHOPPER, ROCKHOPPER COMP, STUMPJUMPER and STUMPJUMPER COMP** at your local *SPECIALIZED* dealer.

FOR YOUR LOCAL DEALER CONTACT ATOM 02 550 1655



SLAP ME

CYCLING WATCH (MA5000-08E)

- Shock sensor function starts timer, stops alarm, activates quick reset to 5 sec. countdown, displays split/lap times
- 9-entry stop time memory
- 30-second-start warning timer
- 2 alarms (daily and weekly setting)
- Month/day/date calendar
- Fully automatic calendar adjustment
- Water-resistant to 100m
- Lamp



Go ahead, slap me. I'm the new Citizen.
skiing watch with the unique shock sensor face.
Smack me for split and lap times.
Swat me to start the timer or stop the alarm.
Set me without looking.
I'll help you beat the clock as you hit the slope.
I come in cycling and marathon models, too.
So slap my face. I'll help you win the race.

OUTDOOR SPORTS WATCH (MA6004-01E)

- 5 split time and time memo (5 point time data booking)
- Daily alarm
- Twin timer
- 12/24H modes
- Month, Day, Date calendar
- 100M water-resistant



BEAT ME

For your best times ever



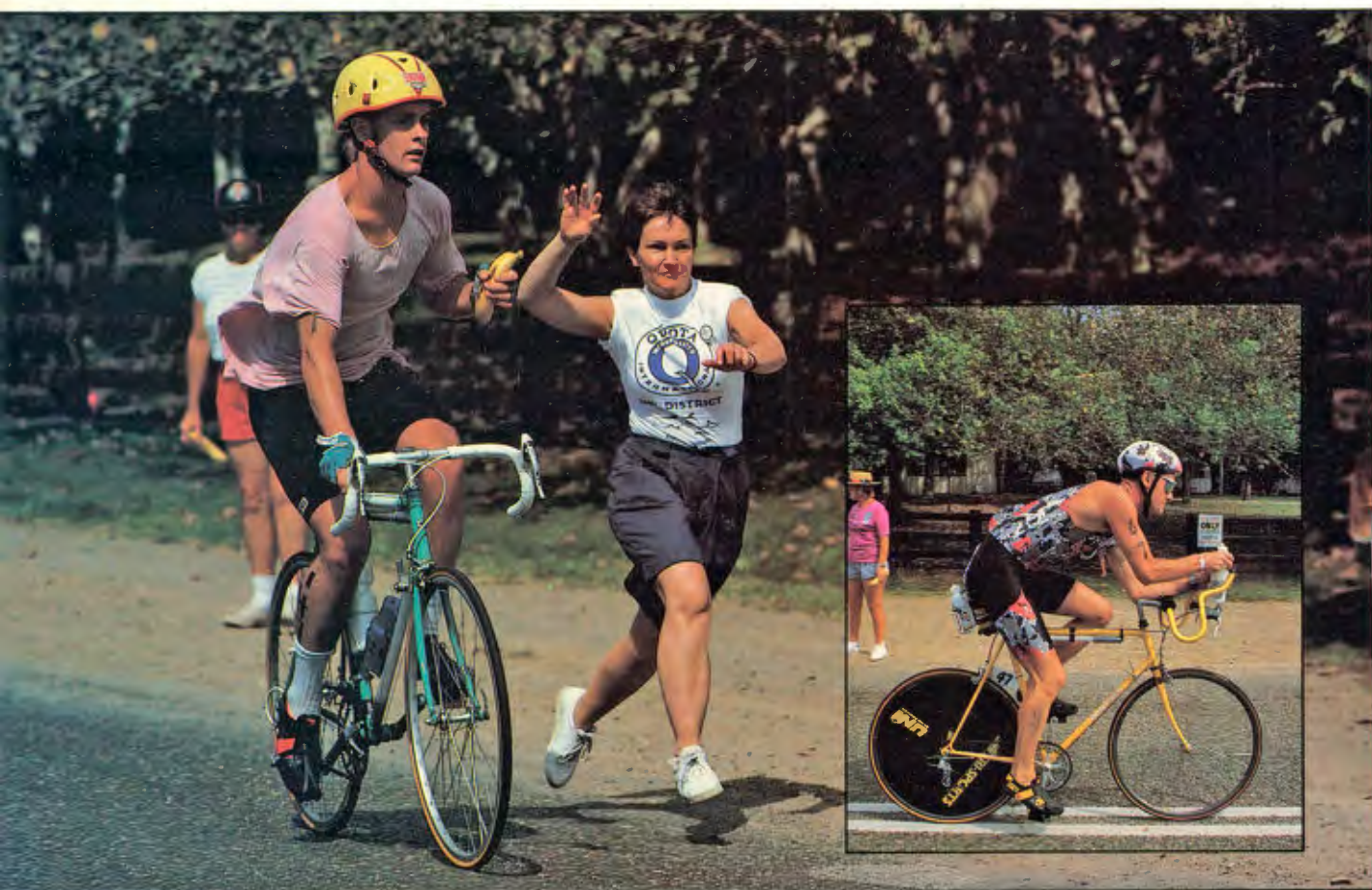
WIND SURFING WATCH (MA3000-09E)

- Fixed auto-repeat timer (with warning signal)
- Daily alarm
- 1/100 sec. chronograph
- Optional timer
- Chime
- Month, day, date calendar
- 100M water resistant



CITIZEN

CITIZEN IS A REGISTERED TRADEMARK OF CITIZEN WATCH CO. JAPAN.



TONY BEE

TAKING THE CHALLENGE

The Nutri-Metics Ironman

BY FIONA KENNEDY

A WELL-RUN IRONMAN triathlon is a wild, lavish, excessive party. A day long mobile celebration of human endurance, discipline, determination, courage, co-operation, and sacrifice.

If you join the revelries, then while the party progresses, nothing else matters. And even if you simply serve the drinks or hang outside watching and listening but pretending to be detached it is impossible to not become involved.

The next day you will be emotionally spent, perhaps even hung over but you will never doubt that it was worthwhile. Simply seeing Mr Joe and Ms Josephine Average cross the finishing line renews

faith in the human spirit, in the power of the psyche to triumph over physical limitations. Because ANYBODY who can finish a 3.8 km swim then follow immediately with a 180.3 km bike ride and a 42.2 km run, *IS* a champion. Whether they do it in nine hours or fifteen, they have beaten pain, boredom, despair and the doubters who said they never could.

So it was with the Nutri-Metics Ironman, a portable party on March 12 this year at Forster, on the NSW lower-north coast. 324 triathletes moved from the swim at Wallis Lake to the ride along a flat but bumpy stretch of sealed road (three times out-and-back on the 30 km stretch) to the run through Tuncurry and back over the hills of Forster.

The party was remarkable for its fuel consumption: 15,000 bananas, 3,000 sandwiches, 4,000 biscuits, 1,300 oranges, 2,800 litres of Pepsi, 8,000 litres of water, 2,000 litres of Maximum, and hundreds of tubs of ice. It was also notable for the performances of its top revellers (the first 24 finishers beat 10 hours): Tony Sattler (8:56:50) set an Australian record, course records for the run and cycle, and became only the second Australian (after Greg Stewart in Hawaii in 1987) to break nine hours; Louise Bonham (9:53:48) became the first Australian woman to beat ten hours and she had not even specifically trained for the Ironman as she was preparing for a hectic race schedule.

But the most remarkable thing was that 304 people – most of whom work 35-hour weeks and have kids and a mortgage – finished.

So what is it that makes ordinary people who have never been in contention for a spot in a sporting hall of fame, pay \$175 entry fee, plus travel and accommodation expenses, in order to gain a body-load of blisters and lactic acid, sunburn and dehydration?

It is not the lure of a sweat-shirt and towel, of all the bananas, water, Pepsi, Maximum, sandwiches and biscuits they can consume, or even of a kiss from a former Miss Australia. It is, pure and simple, The Challenge.

In a world of air-conditioning, computers and cars, this type of challenge is hard to come by. It drives even amateur ironmen and ironwomen to shelve their social lives for 30 hours of weekly training, to eschew junk food and alcohol, and blow their entertainment allowances on lightweight frames, disc wheels, aerodynamic handlebars and clipless pedals.

The Challenge is almost as psychological as it is physical. Out there, beneath the searing sun and atop the burning road, with drafting and pacing outlawed, they do it alone. The smiles of aid station volunteers and the hoots of spectators are the only external motivators.

Dave Scott, the American superman who has six Hawaiian Ironman victories to his credit, has a novel way of training for the psychological challenge of riding for hours through the lava fields of Kona (where the Hawaiian race is run): he pedals on his indoor trainer for five hours, staring at a plain black sheet of cardboard!

Barbara Robinson and Anne Telfer did not treat the Ironman quite so seriously as Dave Scott. Anne, 41, with two children, and Barbara, 47, with three, are long time friends who had watched their husbands, Bob and Neil, finish the Forster Ironman (Bob Telfer was second in 1987, at the age of 41). Together they

trained for the 1989 Nutri-Metics triathlon, aiming only to finish before the 15 hour cut-off time. In fact Anne clocked 12:49:11, Barbara 13:49:20, and they both qualified for Hawaii, the most coveted Challenge of all.

John Griffin, 42, a solicitor with two children, was also convinced to take The Challenge by the performance of his spouse Trish, a 40-year-old nurse, who had xcompeted at Forster in 1987. Undaunted by the fact that she had since become diabetic Trish also decided to compete this year. She and John trained together - mindful not to disrupt their family life - and Trish finished fourth and eight in two shorter triathlons, shortly before the Nutri-Metics. Trish was 15 km into the run at Forster and in sixth spot, when low blood sugar forced her to withdraw. (She says she miscalculated her sugar and insulin levels, and will probably try again next year). John, after waiting to check on his wife, broke 13 hours and he had only hoped to finish.

Undeterred by severe osteo-arthritis in the right hip, Bill Collis entered his third Ironman. At 54 he was the oldest starter. He swam and cycled well, but was forced to finish at the 15 km run mark. Bill says he might do it again next year - and walk the run!

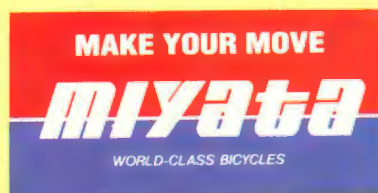
Stephen Cunningham was one of the race favourites even though at 21 he is

well under the prime age for a long-distance triathlete. Stephen arrived at Forster just a few hours before the 6.30 am race start after attending his nursing graduation ceremony in Sydney. He finished third in an impressive 9:14:01, and seems set for future brilliance.

Dick Quinn testifies to the lure of the Ironman. At 42 the swim coach has competed in every Forster event since the first in 1985. (Dick was one of the hardy few to survive the swim that year, when many of the top triathletes - including leading Americans Scott Tinley and Mark Allen - withdrew with hypothermia). Dick was so impressed with the race that he recently moved to Forster.

But if any represent the "have a go" spirit of the Ironman, it is Michael Roberts. The Ironman is such a demanding event that most of the top professionals will compete in no more than two each year. But Michael, a 32 year old actuary from Boston, USA, has no designs on being the best - he would rather be the most experienced. He probably has the distinction of finishing more Ironmans in one year than any other triathlete. In 1988 he completed seven Ironmans (including the Nutri-Metics) plus two DOUBLE Ironmans (7.6km swim, 360km cycle, 84km run)! This year he is aiming for eight singles and two doubles.

From Boston he travels all over the



Distributed exclusively by

Bicycles Incorporated Pty. Ltd.

Phone (02) 521-6144 for details of your nearest specialist dealer

312

An economical, born-to-race bicycle. Quick and responsive, with a frame engineered to withstand the rigors of competition-level training. Triple-buttressed chromoly tubing, top-tube routed cable, Biopace crank set, Shimano SIS 6 speed and Selle Royal saddle are performance extras that will help riders of all ability be the best they can be.

Colour: White.

Frame Sizes: 50, 54, 56, 58, 60, 63 cm.

Speeds: 12.



and time trialing the Citizen Watch Company of Japan has answered the call of many athletes for a timepiece designed around the needs of their sport with a unique 'no hands' action watch.

The D130 digital quartz watch incorporates for the first time a shock sensor device which allows cyclists to trigger the start/stop mechanism to record accurate times.

This high quality timepiece has four basic functions: two alarms (one can be set to a day as well as to a time of day - 3:20 pm Wednesday, 6:45 am Thursday etc); a countdown timer (60 min 59 sec maximum); and a stopwatch which can measure both lap and split (total elapsed) times. An additional feature of the D130 is that it will store the final split time into a nine position memory so that recent performances can be easily compared.

Anyone who has wrestled with a video cassette recorder timer and won will find the 52 page instruction manual easy to follow with plenty of explanatory diagrams and a mode-by-mode step-by-step instructions in real English.

The shock sensor built into the watch triggers a number of functions. The best position to wear the watch is on the inside of the wrist. In this position it can be easily slapped against the knee or thigh to activate the stopwatch or record final or lap times. Wearing the watch on

the top of the wrist is not recommended as it is possible to accidentally set off the shock sensor if your hand is jarred when hitting a sizeable pothole.

The alarm and timer modes are relatively easy to operate but the stopwatch mode is more sophisticated and the manual needs to be studied carefully in order to fully understand the timing operations.

There are four main buttons controlling the various operations of the D130 and an additional two which only function in stopwatch mode. The mode selector and night light buttons are located on the left side of the face while the settings selector and adjustment buttons are located on the right. At the top of the face there are two additional buttons which start/stop and record/recall lap and split times in the stopwatch mode.

The stopwatch is activated by the start/stop button which sets off a thirty second countdown to zero (stopwatch start). Slapping the timepiece at this point advances the countdown to five seconds. To enable an accurate start to be made the five second countdown can be restarted by slapping the watch before the countdown is completed.

Once the stopwatch is in running mode lap times can be read by slapping the watch (or pressing the other stopwatch selector button) at the completion

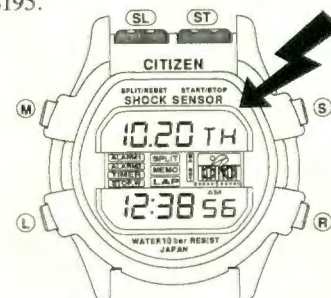
of each lap. (Lap times are displayed for twenty seconds before the display reverts to running mode). As the finish line is crossed the final split (total elapsed) time is recorded by again slapping the watch.

This time can then be stored in the watch's memory by pressing the record/recall button within twenty seconds.

Up to nine race times can be stored in the D130's memory and can be easily reviewed by pressing the record/recall button while the stopwatch is deactivated.

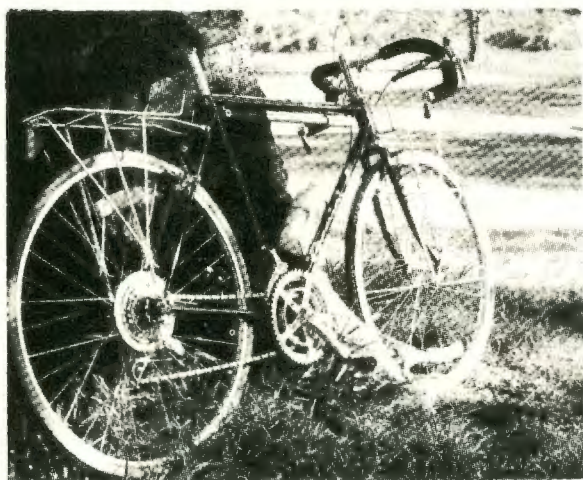
In normal time/calendar mode the watch displays time in 12 or 24 hour format along with the day of the week and the date (in numeric form). Both alarms of course have different tone indicators.

The Citizen D130 watch a high quality sports timepiece and is waterproof to 100 metres. It has a rated time-keeping accuracy of plus or minus 20 seconds per month. Its recommended retail price is \$195.



CALYPSO CYCLES

takes you and your dollar further



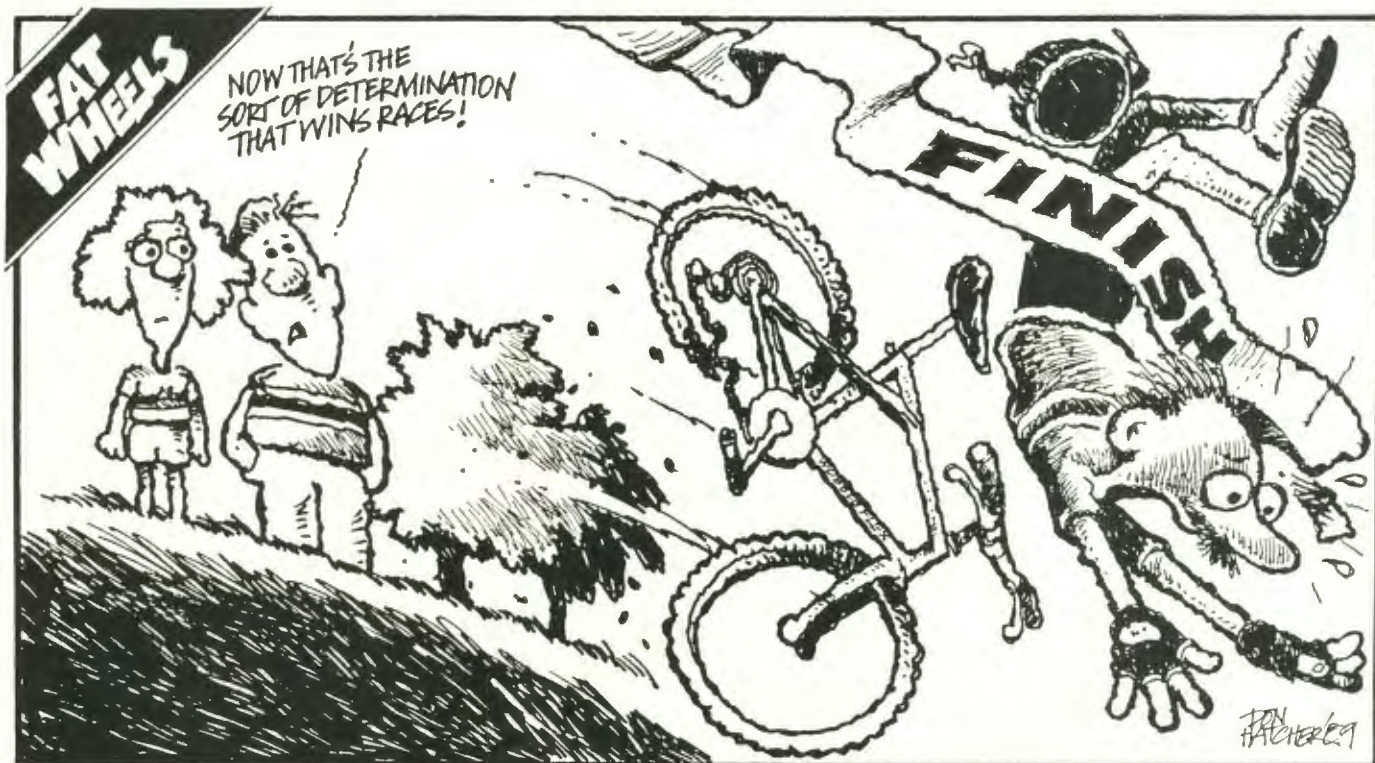
CALYPSO CYCLES
stocks the

GEMINI WORLD RANDONNEUR

The ultimate touring bike is now available with fat 700x35c tyres. This gives you all-terrain performance but with more efficient drop handlebars. SIS option available.

Come in and see why we're one of Sydney's leading bicycle shops.

404 King Street, NEWTOWN, NSW. Ph (02) 517 1655.



MOUNTAIN BIKE NEWS

Mountain Bike Nationals 89

Canberra is to host the Mountain Bike Nationals again this year. Promotion is to be handled by Active Australia and the event will take place on the weekend of the 18th and 19th of November. There are to be championship events for women, veterans, juniors and experts. Watch this space for more details.

World MTB titles

The World Mountain Bike championships will be held in Mammoth Mountain, California on 9 and 10 September. These will be promoted by a private promoter and governed by the United States Cycling Federation. Entries close for these titles on 15 July.

For more information contact AMBA officers, Martin Whitely (president) on (02) 27 2977 (w) or (02) 92 1922 (h) or Chuck Smeeton (secretary) on (02) 371 5278 (w) or (02) 300 0305 (h).

Dodge Desert to Sea

Another epic ride in America. The Dodge Desert to Sea 150 is a 150 mile mountain bike race from Palm Springs to Dana Point, California taking place

on 13 May. World class athletes are expected to compete for a \$10,000 prize. There is also to be a 50 mile corporate challenge open to teams of five riders, to be held on the final third of the course.

Interested? Contact Epic Sports Marketing, 112 W. Ortega, Suite 14, Santa Barbara, Ca 93101, USA.

Queensland MTB club

Yes it's happening in Queensland too. The Brisbane Mountain Bikers Club was formed on 1 February and aims to cater for competitive and social riders with a regular calendar of events. Once a calendar of events has been prepared it will be distributed to members and will also be available in Brisbane bike shops. Members are being asked to contribute to the calendar.

Queensland will also stage its first Open Mountain Bike Titles on June 10 and 11 with practice and trials on the Saturday and an enduro on the Sunday. The event is planned in conjunction with the Ipswich and West Moreton BMX Clubs who are holding their annual competition on the same weekend.

For more information contact Terry Telfer on (07) 374 1244 or P Hargreaves on (07) 344 1907.

Sunshine Coast races

Brisbane MTB racer Ian "Urban" Downing cleaned up the opposition in the Sunshine Coast Bush Bikers first event for the year on 22 January near Nambour.

Downing rode his Fisher strongly to

take the lead on the second lap of the 20 km race. The novice event was won by Malcolm Crombie. The Bush Bikers will soon be affiliated with AMBA and will be holding regular events.

Contact Pete Smith on (071) 428 572 for more details.

Radar guns for bike speeders

What will they get up to next in California? Marin County back roads, where mountain biking had its beginnings just over a decade ago, is about to see an influx of traffic controllers wielding radar guns in an attempt to crack down on bikers breaking the local speed limits.

Apparently the speed limits of 15 mph on straight trails and 5 mph on curves are being disregarded with many crashes resulting. Most of the accidents involve only one rider but there is concern that walkers or horse riders could be endangered. At present there is an average of one crash a month.

Offences will cause the offenders US\$75.

The area affected is Mount Tamalpais which is owned by the water board who have paid US\$1000 for the first radar set. The chief ranger claims that the money was donated by an equestrian group.

What should the bike riders donate in exchange?

It really doesn't seem to fit the tone of a quiet fire trail in the back woods to have a high technology speed trap designed to catch a group of harmless individuals out for a day's pleasure.

Return to the Simpson Desert

On 26 September about 100 brave cyclists are expected to take part in this year's Simpson Desert Cycle Classic, one of Australia's truly great cycling adventures. They will start out from Alka Seltzer Bore in the north west of South Australia and pedal 600 kilometres to that well known oasis, Birdsville, in southern Queensland. Finishers will arrive there around 3 pm on September 30.

This isn't a ride for the fainthearted as it requires large doses of stamina and bravery to go the length of the Rig Road along gravel with sandy patches, heat, flies and hills. All riders or teams of riders have to be accompanied by a support vehicle that is four wheel drive and there is also a "sweep vehicle" to mop up the riders who don't make it to the day's resting place or can't maintain the required average speed.

The classic is to be in aid of charity and the charity has yet to be announced. All finishers receive a certificate and medallion. On the last night there will be a banquet where trophies and awards will be handed out. The banquet will be provided by the staff of the Birdsville Hospital.

You won't be surprised to hear that the organisers recommend the ride is undertaken with an all terrain bike. Nighttime is spent under the stars and entrants are responsible for their own catering/accommodation arrangements. But some surprise happenings have been promised.

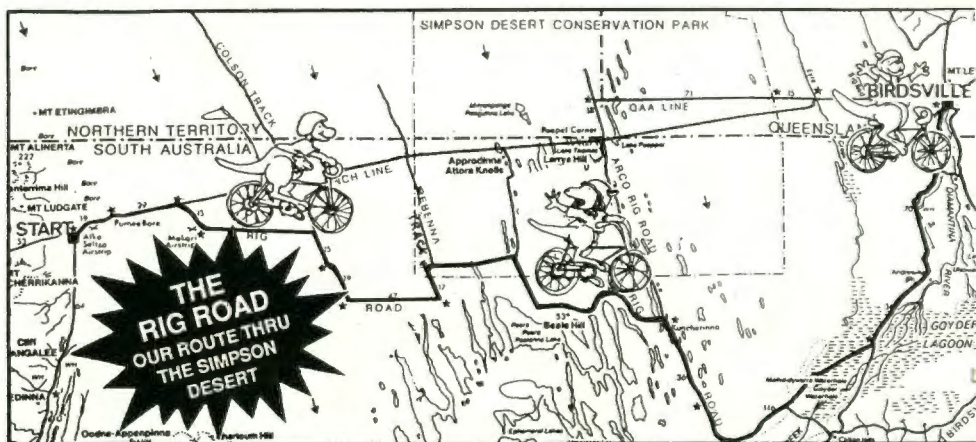
If you want to get further details of race regulations, entry forms or other information a brochure is available from Jack Mullins in Sydney, tel. (02) 588 5617 or Ian Hese in Adelaide, tel. (08) 281 0966, or you can write to 38 Ocean Street, Kogarah, NSW 2217.

Adelaide mountain bike club

Adelaide now has a separate mountain bike club (The Adelaide Mountain Bike Club Inc) to cater specially for fat tyre enthusiasts in South Australia. Until the club's recent formation the mountain bikers were just a group within the SA cycling organisation, but now they have their own committee and membership.

The club's first AGM was held on 1 February when the new constitution was adopted. Among the club's activities are weekend organised rides, development of MTB trails, regular newsletter, mountain bike education and discounts at some bike shops. Several keen MTBers have put a lot of work into bringing this club into existence so let's hope it flourishes.

On 16 April the club is organising a race/trials day to be held at Kersbrook. It is the first event of this nature to be held in South Australia and is primarily



aimed at novice MTBers. There are to be observed trials, enduro races and competitions for veterans and ladies, all taking place on forestry tracks. For more information about the club and this new event contact Peter Heal on (08) 263 3605 or John Hosking on (08) 46 8780.

BICYCLE REVIEW RICARDO KARROO BY WARREN SALOMON

MOUNTAIN BIKES and mountain bike equipment just keep on getting better. This new model from the Australian manufacturer Ricardo is a mid range fat tyred bike with the latest paintwork to set of an otherwise impressive finish.

The Karroo is designed around a laid back fully lugged frame (70 degrees seat tube/ 71 degrees head) made from Tange MTB plain gauge chrome moly tubing with white/grey smoked finish paint work. There are brazed-on lugs for a

rear rack and mudguards which all help make this bike an ideal all purpose off-road on- road touring trail riding machine.

The narrow 26x1.62 Cheng Shin tyres give a fast ride even on the tarmac and these are fitted to alloy Weinmann concave rims made in Belgium.

Best of all this bike is fitted with Shimano's new Hyperglide rear freewheel. The teeth on this cassette cluster have been accurately machined to allow precise shifting under load. With the seven speed block fitted I was able to work up quickly through a four gear sequence without risking the more precious parts of my anatomy on the top tube or handlebars. At last Shimano have found a way of converting the bike trade to its cassette hubs. Look out screw on hub manufacturers.

The Karroo is fitted with Shimano's Mountain LX gearing (SIS index shifting of course) and a set of Exage front cantilever brakes. The resin armed brake levers have return springs built into them which assist the normal return springs on the brake units themselves. The rear U type brake is fitted under the chain stays.



**ultra
Light**

CYCLE LIGHTS



**AND
INTRODUCING
THE NEW BRAKE LIGHT
FROM ULTRALIGHT**

**Available from
your specialist bicycle dealer.**

Trade distribution:
Hanley Trading Pty Ltd — All States



In all the Karroo is a very comfortable machine to ride with a laid back riding position due to its 'soft' frame angles. It's an ideal bike for the person who, like me, wants a bike to do everything and go every where. All it needs is a rack and it would make a very nice first bike.

Will I ever use my skinny tyred racing bike again?

Specifications

Price: \$730

Sizes: 480 530 580cm

Colour: White/smoke finish

Frame: Tange MTB chrome moly PG tubes. Two sets of bidon mounts on frame, double mounting eyelets on rear dropouts and single eyelets on front forks. Rear rack mounts on seat stays. All cable guides brazed on.

Rims: Weinmann 26" alloy concave section

Hubs: Shimano Deore with Q/R front and rear

Spokes: three cross pattern. Rustless

Tyres: Cheng Shin low profile angular nobby 26x1.62"

Brakes: Shimano Exage - cantilever (fr) U type (re)

Levers: Shimano Exage with resin levers

Pedals: Shimano Exage

Crankset: Shimano Mountain LX Biopace rings 48,38,28t

Chain: Shimano UG

Freewheel: Shimano Hyperglide 7-speed 12,14,16,18, 21, 24, 28t

Derailleurs: Shimano Mountain LX

Levers: Shimano Mountain LX with index shifting mechanism on rear gear lever only

Head set: Shimano

Handlebars: Straight type

Handlebar covering: High density black rubber

Stem: Alloy hi rise

Saddle: Velo VL 155

Seat pillar: Kalloy extra long (280 mm)

Seat pillar bolt: Kalloy Q/R type

BICYCLE REVIEW

PACIFIC 7000 MOUNTAIN BIKE

BY JULIA THORN

HERE AT LAST IS THE mountain bike you've been waiting for: aluminium frame, the latest Shimano transmission and tough rugged components. The Pacific 7000 is something new for the Aussie market, which has not been treated to the presence of aluminium framed bikes in any significant number.

I found the bike a joy to ride. Not only is it light and consequently easy to handle, but the front end is extremely responsive which makes the bike manoeuvrable in the trickiest situations.

Aluminium tubing has caught on in the US in a big way. It has the advantages of lightness and strength combined with a lesser degree of flex than steel tubing. The decreased level of flexing in the frame means that all your pedalling effort is converted into forward movement rather than being partially ab-

sorbed by the bike. And the bike doesn't wobble so much if you ride it hard.

The aluminium tubing on this bike is oversize and seamless, and the welding has a neat appearance. The front forks are chro-moly.

The Pacific 7000 comes with a new style Avocet racing saddle which I immediately found comfortable, both for its softness and its slim shape. It's always nice to feel at ease as soon as you get on a bike rather than noticing all sorts of parts of the body you didn't think you had.

Once I was comfortably seated I was able to appreciate the bike's other fine points. The flat handlebars are pleasant to use and their angle can be fine tuned depending on whether you like them pointing slightly up or down. They were perhaps a trifle wide, but this seems to be a general MTB problem and you can always saw them down.

One thing which is immediately noticeable about the bike is the length of the brake levers, which are short and intended for two finger operation. The Shimano SLR brake levers have an internal spring to assist braking, as well as the spring in the cantilever mechanism.

It's interesting to note that the brake design has reverted to the rear cantilever mounting on the seat stays, a move away from the fashionable rear U-brake that recent MTB's have featured.

ROSEBANK
STACKHAT® The 'smart'





Does this signal the demise of the U-brake?

Other noticeable features are the hard anodised seat post and Araya RX-7 rims which show that the bike is intended for rugged use. When it comes to getting moving on the bike the convenience and smoothness of the Shimano Deore II transmission are clear from the

start. The freewheel and chain are Hyperglide which make for easy gear changes and, combined with Biopace chainrings and SIS rear derailleur, changing gear has never been so accurate and quick. If you're not accustomed to SIS shifting the ease of changing gear will come as a bit of a surprise – just a click and you're there. You'll never want

to go back to friction shifting again. The Hyperglide is the icing on the cake. Changing down on a steep upward incline becomes for once achievable. The freewheel is 7-speed which sounds a bit over the top but when you ride a fair amount you do seem to appreciate the choice.

Front and rear tyres are Farmer John's Nephew (Farmer John sure has a big family!) 1.95 inch skinwalls.

Specifications

Price: \$1200

Sizes: 42, 46, 51, 57 cm

Colour: Black/yellow duotone

Frame: 7000 aluminium tubing, seamless, TTG welded & heat treated

Rims: Araya RX-7, 36 holes

Hubs: Shimano Mountain LX QR

Spokes: Stainless steel 14G

Tyres: Tioga Farmer John Nephew 26" X 1.95" SW

Brakes: Shimano Deore II SLR cantilevers

Levers: Shimano Deore II SLR 2 finger

Pedals: Victor VP331 alloy

Crankset: Shimano Deore II 46/36/26 HP Biopace 175/170mm

Chain: Shimano Deore II Hyper glide black

Freewheel: Shimano Deore II, Hyper glide 12/28T, 7 speed

Derailleurs: Shimano Deore II, front SIS

Levers: Shimano Deore II thumb levers

Head set: Tange Levin CD, black

Handlebars: HL MTB 110, alloy black

Handlebar covering: Kraton

Stem: HL MTS 128 SB1 internal roller

Saddle: Avocet gelflex

Seat pillar: Kalloy SP 246 hard anodized 300 mm

Seat pillar bolt: Kalloy QR

Accessories: Reflectors, nylon toe clips, nylon straps, chain stay guard

Distributed by KWThompson (Aust) Pty Ltd.

family head gear



Bike riding is great family fun ... and you will look smart and be smart if you wear a Rosebank Stackhat* Bicycle Safety Helmet. It's the best head protection you can buy and many Australians testify they owe their lives to their Stackhat.

It was the first and only helmet in the world with \$25,000 FREE INSURANCE for wearers,

and it's a proud winner of an Australian Design Award. But that's not all ... it is approved by the Standards Association of Australia to AS2063 & AS2063/2 Australia's guarantee of a quality bicycle safety helmet.

Rosebank Stackhat, the Aussie Life Preserver, available in a full range of sizes, Junior and Senior Models, for both Children and Adults. It is now available in a Snazzy Pink, a Reflective Black for your safety, in addition to the ever popular Brilliant White and Safety Yellow.

There are visors to suit all Stackhats. Rosebank Stackhat the "smart helmet" choice.



ROSEBANK STACKHAT

THE ALL AUSTRALIAN SAFETY HELMET

Proudly made in Australia by
Rosebank Products Pty. Ltd. 19-21 Hallam South Road,
Hallam, Victoria, Australia. Tel: (03) 703 1000

* Rosebank Stackhat Registered Trade Name



The 1989 Commonwealth Bank

BMX TITLES

The record field of 1814 entrants points to a resurgence of interest in the exciting sport of Bicycle Motocross.

BY WARREN SALOMON & DAVE HAWKINS

Not since the heyday of BMX in the seventies has such a gathering of riders and spectators been seen on any course in Australia. Well over six thousand people crowded into the Southlake BMX track at Shell Harbour south of Wollongong NSW for the four day program run over the waterlogged Easter holiday break.

The host club and its supporters coped magnificently with the crowds and the record number of entrants. In conjunction with NSWBMX officials an amazing program of 750 races covering 41 classes was run each day leading up to the finals held on Easter Monday in drizzly conditions.

In the elite Pro/Am category Paul Adams (QLD/Factory Robinson) won for

the second year after winning the top class at Alice Springs in 88. Paul picked up the \$2000 purse and a special Pro/Am class winner's jacket donated by the chief sponsor, the Commonwealth Bank.

In other categories there were a number of outstanding performances with no fewer than eleven riders winning all their races to become the number one plate holder in their class. Queensland once again demonstrated its dominance in the sport winning twenty of the 41 No 1 plates up for grabs. West Australia followed this with 8, NSW 6, Victoria 5, and South Australia 2.

Tai-Lee Muxlow (NSW/Factory GT) turned in a strong performance by winning her seventh straight Australian Championship this year in the 16 Girls. Tai-Lee is no doubt the fastest female on

Current 13 Boys world champion Daniel Sprague in action on the Southlake track. Photo: Kevin Hoare.

the track but still can not race open class.

Jackie Wilson (VIC) the current 12 Girls world champ won through in the 13 Girls class after falling in the first of her heats and in another fantastic performance Kim Grey from Queensland became the inaugural Over 25 Womens champ.

Tim Ward (NSW/Zero Nine) pulled off an amazing double by winning both the open cruiser (24" wheel) class and the open boys (20") class.

The event began on Good Friday with a march past and opening ceremony which saw the Southlake track absolutely packed with competitors for the first time ever. Julie Hayes (ABMXA) and the Mayor of Shell Harbour Bob Hollis welcomed riders to the meet and at 8:30 am the heavy schedule of events commenced and ran without a major hitch until the last of the finals had been decided on the Monday.

Each rider had to compete in six heats before reaching the finals. Depending on the number of riders in each class riders would then have to race in preliminary finals before the best eight riders (those with the lowest number of points) were chosen. The eight would then compete in a sudden death final with the winner sometimes seizing victory from other rid-

ers who had won straight races through to the final.

Riders who won straight races including their class finals were: Natalie Lucas QLD (6 Girls); Nathan Herron QLD (6 Boys); Danielle Thomas QLD (8 Girls); Jaime Thompson QLD (10 Girls); Clint Thomas QLD (10 Boys); Mandy Reynolds WA (14 Girls); John-Michael Schmidt QLD (14 Boys); Wayne McIntosh NSW (25 Cruiser); Jesse Carlsson SA (Sub Junior Cruiser); Butch Bromfield QLD (40 Cruiser).

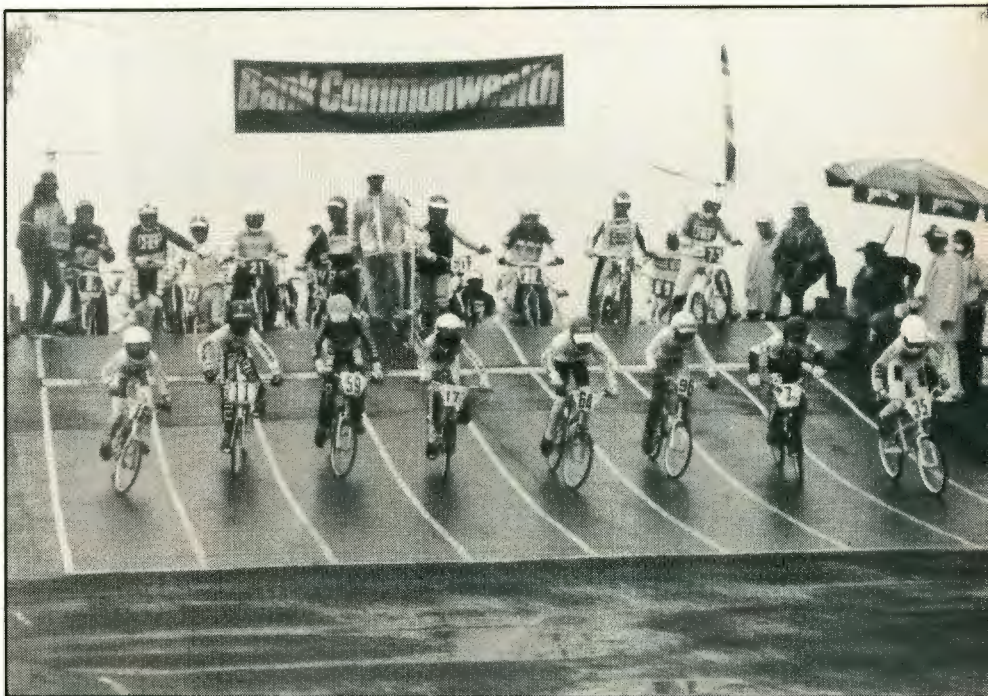
In the 9 year girls category there was a close tussle in the heats and finals with both Reanna Birch (ACT) and Alesha Pollard (VIC) entering the final with straight wins each. In the final race however, Rachael Marshall (VIC) was the faster rider and crossed the line ahead of Birch and Pollard.

In the Junior Cruiser class both Ryan Scott and Daniel Sprague each had straight wins into the finals but Scott was the faster of the two. Sprague the current 13 Boys double World Champion had a disappointing run coming only sixth in his class along with runner up in the cruiser class.

It was the 13 Boys class that provided the unexpected. The event was to be a closely fought contest between Sprague, Ryan Scott the former world champ (who lost only one race up to the final) and Cameron Mitchell a former triple world champion. With all eyes on these three last years runner up Thomas Foreman made the best start and held onto his lead to the finish line ahead of Scott (2nd), Sprague (6th) and Mitchell 8th.

Two riders defeated last year at Alice Springs returned to claim victory at Shell Harbour. Katrina Miller (NSW) in the 13 Girls had been disqualified in Alice but

Number one Pro/Am rider Paul Barnes crosses the line to make it two in a row. Photo: Kevin Hoare.



won through to claim her number one plate as did John-Michael Schmidt who had punctured into the final corner of the 1988 finals but had no such mishaps this time.

Successful defenders of their titles were: Bradley Coulson WA (5 Boys); Jamie Gray QLD (7 Boys); Danielle Thomas QLD (8 Girls); Jamie Thompson QLD (10 Girls); Tai-Lee Muxlow NSW (16 Girls); Shaun Collins SA (12 Boys); Mandy Reynolds WA (14 Girls); Keran Barnes VIC (15 Girls) and of course, Paul Addams QLD (Pro/Am).

Following the Australian titles sixteen of the best riders in each class will be eligible to compete in the up coming World championships to be held at Chandler in Brisbane in September.

The 11 year Boys start down the ramp and onto the wet track at Southlake. Photo: Kevin Hoare.
Winner of the 15 Girls Keran Barnes successfully defended her title. Photo: Kevin Hoare.





ROAD TRAINING CLIMBING TECHNIQUE

The right technique could help you become King of the Mountain

BY CYNDI HOLMES.

AS OUR SUNDAY training group pulled out of Dayboro after a quick stop to use the public facilities, someone asked where James was. From somewhere in the bunch the answer came that he had forged on alone to start the climb.

Why would James feel that he needs a head start, I wondered? He is, after all, our reigning Queensland road champion and had a good placing with the internationals in last years Grafton-Inverell.

We forgot about James as our group began the steady six kilometre ascent to Mt Mee. Gradually the bunch broke apart as everyone climbed at their own pace.

About halfway up, I see James ahead. As I pass him I say, "James, so this is why you left early!" He just grins and says, "I know my limits!" James' climb that day was a classic example of how a good power weight ratio can help you climb well.

You see, James had severely altered his ratio by gaining 11 kilos from a strenuous weight training program during the off season. His new muscles are certainly impressive, but they're really more than he needs. By the time the racing season is underway, I suspect through proper diet and training James will have lost the bulk he doesn't really need while still retaining some of the strength he worked so hard to gain. Then he'll be once again jumping to the tops of the climbs, without a head start!

Naturally some people are born with a good power to weight ratio. If you're not a natural climber, don't despair. Improvements in your technique and fitness can make you a better climber.

Technique

Should you stand or should you sit? The correct answer to this often asked ques-

tion is that you really should learn how to do both techniques.

During racing and training, you'll encounter different types of terrain. Part of the skill of climbing is being able to select the best way for you to tackle any particular climb.

Especially for beginning cyclists, the tendency is to climb anything remotely resembling a hill. That's not always the best strategy.

Climbing in the saddle is more efficient as it uses fewer major muscle groups, thus requiring less oxygen.

Climbing is an art and you can learn a lot by watching the pros do it. Pick up a cycling video; racing magazines advertise them and some shops hire them out.

You'll see that the basic technique is to sit upright in the saddle. For ease in breathing, your hands will be widely spaced on the top of the bars or on the brake hoods. Don't waste energy with a death grip on the bars, but rather hold them lightly.

You'll find you get a little more power if you move to the back of the saddle. Don't forget about your pedalling technique. Concentrate on bringing the pedals around the full circle.

Your selection of gears is important when climbing in the saddle. You must stay on top of the gear and that means not allowing your cadence to drop; aim for 70 to 90 rpm.

Anticipate when you will need to shift gears before your cadence drops. Your shifting will be smoother and you won't have to stand.

Climbing out of the saddle gives you more power. But because more muscle groups are used, more oxygen is needed. This increases your heart rate and breathing rate.

While climbing out of the saddle will bring you closer to your maximum effort, it does have some disadvantages.

The change in position from being seated can give some of your muscles a brief rest, thus facilitating the elimination of a little lactic acid.

The standing technique preferred by the top riders is to keep your upper body stable and move the bike from side to side beneath you. This method delivers more power to the pedal.

Hold the brake hoods lightly between your thumb and the first two fingers. With the hand opposite the downward pedal pushing on the brake hood, the other hand pulls on the hood.

Again, you still need to concentrate on proper pedalling technique, especially to pull back on the pedal at the bottom of the stroke.

On longer climbs, for many riders, alternating between sitting and standing can be the most efficient strategy. Try alternating every 200 or 300 metres. Because your cadence will drop when you stand, you should shift to a higher gear so that you don't lose speed. Usually a gear that is two teeth higher, like going from sitting in a 23 to standing in a 21.

Something else happens when you change from sitting to standing; and you can lose friends because of it! When you stand, the tendency is for the bike to get thrown backwards several centimetres. Your training companion, sitting close on your rear wheel, may not like this and could even crash.

You can control this by pulling the bike under you as you stand and by resisting the tendency to make your first standing pedal stroke a heavy one. With a little practice, this technique will become second nature.

Fitness.

While James' power to weight ratio was thrown off because he had too much muscle weight, most cyclists will find that too much fat could be the problem. In such cases, careful weight loss could help improve your climbing ability.

Most fitness centres offer percentage body fat testing. A general guide, by no means arbitrary, is that fit female cyclists have less than 15% body fat and male cyclists less than 10%. Be careful with any weight loss program to ensure you do not lose muscle tissue, unless that is your objective.

Of course, the only way to really improve your power on the climbs is by climbing, climbing, climbing.

First of all, take a look at your current level of fitness. For the past six to eight weeks, if you've been riding less than five days per week, set one day aside for climbing practice.

If you've been cycling five to seven days each week, include climbs in two of your rides. You'll be ready for more serious climbing practice if you've been riding consistently as recommended in our

Freewheeling race training program featured in the last two issues.

If you've only just begun your cycling fitness program, make sure your program includes one weekly endurance ride of 70 to 100 kilometres. Your heart rate should be within 10% of your anaerobic threshold; i.e. a pace where you feel you are working hard but it's not painful.

After you have a base of fitness, begin to change tempo during a climb. Begin with a steady cadence. As you approach the crest, accelerate, still seated, until you are well over the crest. In races, the ability to continue your effort until you are well over the crest of the hill will make the difference in your ability to stay with the bunch or drop competitors.

As you are building your power, you are also learning to recognise your limits. You want to go up the hills fast, but you don't want to blow up before you reach the top.

In races, it's wise to save a little energy so that you can counter any attacks by strong climbers near the top. But how much to save will depend upon how well you know your abilities.

One way to find your limits is to climb at a steady effort during the first half of the hill. Then increase your cadence for the next 20-30 strokes. Return to your steady pace cadence. If you are able to hold this cadence easily, try to increase your cadence once again.

Using a cadence meter, another way to find your limit is to climb a steady grade at a pace so that if you increase your cadence about five rpm, you'll be forced to slow down in less than a minute. For example, if you're riding at 75 rpm, increase this to 80. If you can hold this, try 82. Increase your cadence until you get into oxygen debt and slow down. Next, back off about five rpm and hold it to the top. This should give you a



RAY'S BICYCLE CENTRES

EIGHT HUGE STORES

• PRESTON

545 High Street
Ph: 478 2064 or 470 2090

• FOREST HILLS

291A Canterbury Road
Ph: 877 2311

• FOOTSCRAY

170 Barkley Street
Ph: 68 1385

• BALWYN

268 Whitehorse Road
Ph: 830 5902

• MOORABBIN

825 Nepean Highway
Ph: 557 7898

• MOONEE PONDS

650 Mt Alexander Road
Ph: 370 6155

• SPRINGVALE

Shop 3, 134 Springvale Rd.
Ph: 562 4322

• GEELONG

64-66 Ryrie St.



feel of what you are capable of during a climb.

Top riders know that you shouldn't shift down as you climb, but rather you should shift to a higher gear, depending on the climb.

You can practice this by alternating between sitting and standing. Accelerate as you approach the top of every climb. As you get stronger, you may be able to shift to a larger gear before the crest.

As mentioned before, cresting the hill properly is a valuable skill. Try to sprint the final 100 metres to the crest and the first few strokes of the downhill. On the downhill, shift to a large gear and increase your cadence before you allow yourself to ease up to recover.

As you get stronger, lengthen the distance of your sprint over the crest. Discipline yourself to wait for the downhill before you ease up.

Now that you're really a glutton for punishment, try some hill intervals. Find some hills between 200 and 1000 metres long on either rolling terrain or moderately steep hills. Because you'll be recovering between each interval, you should be able to use higher gears than you normally use on these hills.

Ride at 85 to 95 percent effort for each interval. Ride easy between intervals and allow your breathing to return to normal.

Training in the hills will not only make you a better climber, but the power you gain will make you a faster flat land rider too.

And should you ever find yourself in a race with a Fijian with short, short hair, big ears, a grin on his face and a Queensland Bananas jersey on his back, maybe you can teach him a thing or two about power to weight ratios!

BOOK REVIEW

BEGINNING BICYCLE RACING

By Fred Matheny. Published by Vitesse Press Brattleboro, VT 1987
Paperback \$19.95.

REVIEWED BY CYNDI HOLMES

WHEN YOU'VE BEEN racing for years, it's easy to forget that first season when someone had to tell you that cleated cycling shoes were better, that tyres could roll off if you didn't glue them properly and

that being a lounge lizard can actually be good for your cycling. Then there are all the silly questions you asked or worse still, the silly questions you were too embarrassed to ask!

Fred Matheny answers heaps of questions for the aspiring racer in *Beginning Bicycle Racing; Fast Riding for Fitness and Competition*. As the subtitle suggests, the sport rider, fitness rider and triathlete can learn much about cycling from this book even though the emphasis is on competition.

Can someone with the name "Fred" really know much about cycling? You bet. This Fred has practised what he preaches. He's won races and has raced the US National Championships. He regularly contributes to US cycling publications including *Bicycling*, *Bicycle Guide* and *Velo-News*.

Matheny is obviously addicted and admits it. Particularly helpful and inspiring for the athlete with family and job commitments is the chapter on time budgeting. Here he gives ideas for squeezing in your training and an example week of how he's handled it. Two chapters new racers can really relate to are "Making do" and "Helmets".

For some reason, beginning racers seem to be lacking in the financial department. Matheny gives good advice on equipment and clothing purchases; what's important to have now and what can wait. The chapter on helmets should be mandatory reading for Australian racers, most of whom still sport leather "hair nets". Matheny negates the often heard argument of experienced racers who think their superior bike handling skills will save them. He says this view is naive and that it is only prudent to protect oneself against dangers for which skill alone will not suffice - cars and other riders namely.

Other chapters address training and racing for road races, time trials and criteriums. A useful bibliography and glossary are included.

For southern hemisphere cyclists, some of the advice for off season training is not of much use. It would be good for someone to address this lack of advice for off season training in Australia. Our strength in the cycling world, track racing, is only briefly mentioned in *Beginning Bicycle Racing*.

An often confusing aspect of racing to new riders are echelons. Surprisingly, Matheny doesn't address this fundamental skill of pack riding. But that's a minor deficiency as the rest of the information in the book would be invaluable and a real time saver to the beginning racer. Definitely recommended that racing clubs and associations include a copy in their libraries.



Repco. Number One on two wheels.

Whether it's the gruelling Tour de France, or a gentle ride through the park, Repco Cycles has a bicycle for you - with all the technology and reliability that has carried the Repco Cycling Team to victory around the world.

Repco Cycles also has the colours and designs you're looking for, in a complete range of cycles. All with the Repco Cycles fifteen year warranty.

So to race on, or ride on, you can choose a

Repco cycle that's right for you. See your Authorised Repco Cycle Dealer. He'll help you select the cycle you need to give you maximum performance and comfort. As a professional, he will ensure you make the right choice.



NUMBER ONE ON TWO WHEELS.



RIDING RIVER TO RIVER

The Great Victorian Bike Ride 1988

BY ALEX HOPKINS

TOO MANY PEOPLE. TOO much queuing. These were the gripes of people on previous Great Victorian Bike Rides. But this year the pundits thought that with the Bicentennial Caltex Melbourne to Sydney ride on at the same time the GVBR would attract fewer entrants.

As it turned out the GVBR attracted its biggest field ever (over 4000), but with better facilities than in previous years the grouchers had less to grouch about. Well done, organizers.

Five trains and numerous buses transported entrants to the start at Swan Hill. Before bikes could be loaded, pedals had to be removed. This minimised dam-

age and tangling. At Swan Hill station, entrants loaded their luggage onto semi-trailers, replaced their pedals and rode the easy 16 km to Lake Boga. A news item in the daily newsletter *The Cyclist's Morning Herald* next morning noted that despite claims that you cannot screw left hand pedals to right hand cranks, two people at Swan Hill station nearly achieved it.

Several other entrants became very upset when they realised that the pedals they had forgotten to remove from their luggage were now irretrievably buried on the luggage trucks and they and their pedal-less bikes had 16 km to travel.

The tent village on the shores of Lake Boga grew quickly. It was then that

The first few days of the GVBR took riders along the flat roads of the Murray River valley. Photography by the author.

A new item in the *Cyclists' Morning Herald* announced:

Seat Available: Back seat of tandem free for young fit female. See Harry Z.

By the time we reached Castlemaine the rain had started again. All motels were quickly booked out. Dripping cyclists roamed the town. Two local halls were made available for entrants to sleep in. Shops stayed open late and trestle tables loaded with bargains were set up in the streets. The Highland Pipe Band played. There were free guided tours of the Art Gallery which has an excellent collection of Australian paintings.

On day seven we encountered hills; a pleasant change after so much flat country. Some young riders clocked well over 70 km/h on the downhill stretches.

At each town the longest queues were at the cake shop, the automatic teller machines and the pub. Organizers estimated that on their rest day last year, the GVBR entrants spent between \$180,000 and \$250,000.

Day eight saw more hills. There was a long steep downhill run to Blackwood where lunch was served to the music of a jazz band, and then steadily up, walking our bikes for many of us, to the Pentland Hills, with the peaks of the You Yangs in the distance. The day's ride ended with a long downhill run into Bacchus Marsh. Again the campsite was picturesque. The sun was shining at last and everywhere wet clothing was spread to dry.

some participants realised their poles/pegs/guy-ropes were still at home. The proprietor of a nearby garage had a busy evening making tent pegs.

The weather was hot and muggy and many people cooled off in the nearby lake.

The serving of meals was slow but orderly. There were five portable kitchens. Breakfast and dinner were served from 6 until 8. When the weather was fine it was pleasant to sit on the grass to eat. Live entertainers performed during meals. These were followed by entertainments until curfew, which was at 10:30.

The route for the first three days was on flat roads, following first the Murray, and then the Gunbower Creek. Day two finished at a delightful campsite in Cohuna. Nearly every shop in town stayed open for us. The biggest crowd was on the footpath outside the pub. So many tourists tended to swamp this small town and for one night the settlement's population was more than doubled.

The next day the rain which had been threatening from the start of the ride began to fall in earnest. A feature of the day was to have been a scenic crossing of the Murray by paddle steamer, but the rain turned the banks of the river to treacherous slippery slides, and that made the river road unrideable to all but mountain bikes who, for the only time on the ride, were the bikes passing rather than being passed.

The orderly chaos discouraged many riders who decided not to wait for the paddle steamer and continued on by road to Echuca. It was a bedraggled crowd that pedalled into town. Every motel room in Echuca was booked that night.

Next day, a rest day, was warm and sunny. Wet clothes, tents, sleeping bags were draped everywhere to dry. The launderette did maximum business through the day and on through the night. Food shops sold out. Cyclists with expensive bikes spent the morning cleaning and oiling after the rain and mud of the day before.

A new item from the morning's newsletter noted:

LOST: One tandem partner, last seen dashing from the highway, clutching a purse. Description: middle-aged lady, slightly over-weight. Reward for return of purse. See Harry Z.

There were people of all ages on the ride. The oldest was a great-grandfather of 77. Small children rode in pillion seats on the back of their parents' bikes. I know of one ten year-old who completed the ride on his own bike. There may have been others, and they may have been younger. There were many entrants in their 50's and 60's. One en-

trant had an artificial leg, and he was no slouch on a bike.

The most enthusiastic riders left camp very early each morning, passed the lunch spot before it was open, and reached the next campsite before the stragglers had left the previous one. This meant that the big field was spread out over the route, which helped to avoid congestion on the road. The organisers stressed the things to see and do along the way, encouraging entrants to enjoy the trip, have a swim, look at the little towns through which we passed.

Most people seemed to be on the road by 8, had lunch between 10 and 11, and reached the next campsite by mid-afternoon, leaving plenty of time to set up camp, have a shower, and take a walk into town before evening chow.

Morning and afternoon teas were available along the way at small towns, usually at the community hall. Tea, coffee, soft-drinks, fruit and home made cakes were available as a welcome break.

Everyone was up early and eager to get started for the last leg into Melbourne. The elevation/profile map showed a gentle down hill grade all the way, first through open country, then the industrial suburbs, and finally the magnificent West Gate Bridge and the Melbourne skyline.

On a sunny day the finish, on the banks of the Yarra, would have been marvellous sight. Sadly, that morning Melbourne was lashed by strong winds and driving rain.

But spirits were high and the riders gathered their luggage from the puddles where it had been unloaded, found their families and friends, and made their way home, with lots of good memories and lots of stories to tell.

Some incidents stick in my mind, such as cyclists at the roadside with broken down bikes calling to passing riders "Do you have a cone-spanner/valve remover/small valve pump connection" etc.

I liked the notice in the morning newsletter that said, *Personal: I hope the person who stole my nicks gets the same disease as I've got.*

And I was amused by the strange snippets of conversation, overheard for just a moment as groups passed me:

"We start crutching next week..."

"I don't know where he caught it..."

"I gave her a re-bore and new valves..."

I have good memories of a very enjoyable trip, a mixture of hard and easy stretches, quiet roads, good organisation, helpful officials and attractive campsites.

Next year's proposed route for the GVBR is Yarrowonga to Melbourne. ●



CYCLING HOLIDAYS

SOUTH AUSTRALIA

• Flinders Ranges • Kangaroo Island

BIKE MOVES

P.O. Box 642, Unley 5061 Tel. (08) 271 1854

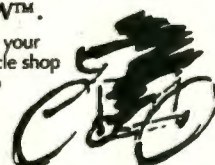


The Kit

Every cyclist needs one.

It features a 122 page book which is a comprehensive guide to maintaining and fine tuning your bicycle to its peak condition. Also included are chain care items, a rivet extractor with spare pin, 2-sided cleaning brush and arguably the best oil for bicycles, **TRIFLOW™**.

If it's not at your local bicycle shop ask them to contact:



CYCLING INNOVATIONS

Phone (062) 584 212 Fax (062) 515 251

A DIRT ROAD PRIMER

A FREEWHEELING guide to riding the magic 'half metre'

BY WARREN SALOMON

SOME OF THE BEST roads in Oz are dirt. Not those endlessly corrugated horrors – fine packed clay surfaces that wind through scented eucalypt forests on their way from nowhere to nowhere. Yes, you could say I like dirt roads but I am fussy. Not all dirt roads send romantic shivers up my spine.

Perhaps it's the constant uncertainty of dirt roads that I like best. They are always different depending when the grader was last along and how heavy it rained last week. Unlike a sealed road where you can sit back and look at the big picture – the landscape unfolding before your very eyes – a dirt road requires you to study the macro environment and constantly scan the road surface close up.

Of course this doesn't mean that you have to give up day dreaming and looking at the scenery – you can do that too on a dirt road – it's just that you need to 'read' the road more carefully and pay attention to its fickle surface more often than you would than if you were cruising down the tarmac.

So how do you read a road? First you have to know what to look for. And that means studying its erosion channels.

All dirt roads are subject to erosion caused by rain washing particles of the road surface further down the natural slope. Depending on the type and hardness of the gravel used in the construction of the road some surfaces erode faster than others. Where a road traverses terrain comprised of soft soils the road building authority will usually have to bring in harder gravels to cover the surface with a more durable coating.

In some areas like the granite country of the Australian Alps what you see is what you get and the roads are usually only levelled out of the highly durable natural surface material.

Imagine a hill side with a gentle slope falling to a dry creek bed. In a good storm this would become a raging creek and would carry all the surface run off water falling as rain onto each side wall of the valley. Now if we constructed a road from the creek bed diagonally up the side of the valley the road would then tend to capture all of the surface water flowing down the slope above it.

If you think back to the raging creek bed then it's quite possible that at some-time the road might even look like that as well. So, above all the secret of well constructed road is that it must be able to deal with large amounts of surface water flowing across it without being washed away in the process.

The rainwater actually hitting the surface of the roadway is only a small part

of the drainage problem. Most of the water comes from the slope above and must be allowed to continue down the natural valley wall surface and not follow the same direction as the road.

Roads are usually cut into a hill side with their surface sloping back away from the creek (back into the valley wall). A drainage ditch is then provided to carry the water short distances down the slope to outlet pipes running under the road to direct the water finally down the true slope and away from the road.

The more outlet pipes the more efficient the drainage and less damage is caused to the road by continual rain. With fewer outlet pipes the amount of water flowing down the inside ditch eventually becomes so large that it either scours out an excessively deep ditch or breaks out across the roadway and over the edge creating a washaway and destroying the road surface.

This is the big picture and in this sense all roads (dirt and bitumen) are alike.

Where gravel roads most differ from the sealed variety is in their road surface patterns. Bitumen roads are built smooth (well, theoretically) gravel roads start out that way when they are graded but soon wear away.

On any gravel surface it is easy to see the way water washes across the road and scours out small drainage channels of its own. Small channels start like small creeks and eventually join larger creeks to become small rivers before

This corner slopes to the right of the picture. The best riding surface is on the far left just inside of the loose gravel. The right hand edge is rutted with many drainage channels all leading to the roadside gutter.





The optimal downhill dirt road position. On steep off-road rides the rider would place his body even further back so that his centre of gravity is still placed above the bottom bracket.

they eventually reach the edge of the road.

Often a larger deepening channel will continue along the roadway for some distance before it finally cuts off to the edge.

The second factor influencing the surface conditions of gravel roads is, of course, the action of motor vehicle traffic. The most common action of large wheeled vehicles on a gravel road is to form two or more parallel tracks roughly corresponding to the position of the tyres along the road surface. Another

This rider is crossing over the drainage channel which has formed from the ruts caused by the wheels of vehicles. He has chosen that path because the left hand edge is corrugated and his magic half metre of riding surface has been interrupted by the channels. Note the loose gravel thrown off to the left hand edge by speeding vehicles negotiating the corner.

consequence of vehicular traffic is the dreaded corrugation patterns caused by the action of car suspension systems constantly pounding the roadway and reinforcing a continual repetitive pattern.

Corrugation patterns are often no more than loose gravel material heaped up in waves by constant and regular vehicular traffic. Though there may be a small underlying hard base to each wave a bicycle (which does not have bouncy suspension) with its thinner tyres will sometimes cut right through the wave like a boat through choppy water.

The boat analogy is very apt when considering the stability of a bicycle on gravel road. The calmest spots are often deep gravel "pools" that bury thin wheels and dramatically bring machine and rider to an abrupt halt. A warning: always be on the lookout for loose gravel usually found accumulated at the bottom of slopes where the rain has washed it.

The important thing to remember when travelling dirt roads is that there is usually (though not always) at least a half metre of continually rideable surface SOMEWHERE on the roadway. The aim of a good road reader is to constantly scan the road surface for this half metre; find it; ride it; and be always on the look out for a better path to take when the present one runs out.

Like I said, dirt roads constantly change. It's a good thing however, that most of them are only lightly trafficked because to comfortably ride them you have to use the full width of the road surface. Often the left hand side will not be where the magic half metre is to be found.

On steeply banked corners loose

gravel material is moved to the top of the curve by the action of the vehicles while normal erosion tends to move the finer material to the bottom of the slope where it lies waiting to bury your front wheel. The result is a road surface devoid of loose material and open to the action of erosion.

These banked corners also have many parallel drainage ruts running across the roadway down to the bottom of the curve so the only possible place to ride is on the top of the curve just inside of the loose gravel. On a left hand bend you are thus forced to ride on the opposite side of the road.

On gravel roads you depend on your ears to warn you of oncoming vehicles. If you are caught out on the wrong side of the roadway the best thing to do is to pull off to the edge of the road and wait until the vehicle passes. On long straight stretches vehicles will usually slow down when they see you negotiating a rough stretch. It's always a good idea to let them know you have seen them so that they may safely pass you on the 'wrong' side. Wearing a portable tape players with headphones in places where you depend on your hearing for warnings could result in you being carted off to hospital instead of enjoying a pleasant ride.

For down hill stretches along any type of dirt road the best riding position is standing in the pedals with the cranks at the three and nine o'clock positions, thighs resting on the cheeks of the saddle and body weight over the bottom bracket. This position puts your weight equally over both wheels and allows the bike to pivot on the bottom bracket according to the bumpiness of the terrain. From this position it is easy to drop back into the saddle maintaining some of your weight on the pedals. Your hands should be able to loosely HOLD the bars and assume a stabilising control without the need to support your body weight. A loose grip with thumbs locked into fingertips around the bars also greatly reduces the road shock and jarring.

Finally, you must be able to vary your speed according to the quality of road and the availability of that blessed half metre. In instances such as when you encounter the dreaded 'terminal corrugations' the only thing to do is slow right down and look for a way out of the mess. Trying to ride out terminal corrugations can often result in your machine vibrating apart underneath you. The same goes for soft sandy sections. Remember that if your machine suddenly comes to a halt you, the rider, may still retain the same momentum that you had a few minutes ago when you started down the slope. Be sure that you have nothing on the top of your handlebars to snag your self on as you take off down the road.



TRAINING FOR PEAK PERFORMANCE - INDOORS

Or how to get there faster by doing it less but better

BY CHARLES COIN



The Racer Mate Computrainer

IN AUSTRALIA WITH OUR mild winter climate most cyclists see indoor trainers as poor substitutes reserved for when the weather is bad or night training is an undesirable choice. This view is changing however as advances in training technique and general understanding of exercise physiology filter down to competitive cyclists. You can now do better training and more effective training using your own bike fitted to a new generation indoor trainer.

Those without experience of indoor trainers tend to be rather sceptical and many who do have them in their homes do not know to use them effectively to take them to peak performance. All but the Repco ergometer (see Freewheeling May/June 1988 for our market survey) require the use of your own bike.

Using your own bike has the advantage of training in a position with which you are familiar and using your gears to allow a wide range of pedalling rate-to-load combinations. It also allows you to observe and monitor performance and design specific programs of training to best improve fitness and correct weaknesses. Indoor trainers are now commonplace with many Olympic squads worldwide and in exercise physiology laboratories.

The traditional approach to cycle training has traditionally been: kilometres, kilometres and more kilometres. The new and more effective approach is: quality, quality and still greater quality.

Some on-road training is necessary to learn handling skills. But on-road training rarely has consistent quality. Concentration on effort is usually distracted by traffic and road hazards. Apart from that there are no ways to monitor fitness properly with on-road training. Even if using the same course regularly, weather, wind and traffic conditions make measurement of speed a very unreliable guide.

A five percent improvement in power may only represent a two percent improvement in time. When preparing for an event it is important to know exactly where you stand psychologically and physiologically. An indoor trainer helps both of these aspects.

There are many ways to use indoor trainers. These include interval, Fartlek and steady state training. Accessory equipment to help you train effectively is desirable. For example (in order of importance):

- A domestic electric fan to be placed in front to provide adequate forced ventilation to avoid dangerous heat build-up. Without it, body temperature can rise dangerously within ten minutes of training. There is absolutely no benefit in inducing thermal stress!

- A means of reading output power or speed. A power readout is preferable to

high levels. Small increases in power represent even smaller increases in speed as mentioned above. The only trainer to provide a power readout is the RacerMate. If you already own a trainer without a power readout then one option is a Cat-Eye Solar speedo with rear wheel pick-up. Without a readout of your power/speed you are training in ignorance unless you can calculate your power from your gearing and pedal revs.

- A stereo with headphones and a good supply of your favourite music. The music provides excellent motivation and stimulation for the unstructured training sessions.

- A pulse monitor to enable you to correlate pulse rate with power output (see example below) and to target the optimum pulse range for effective training. A stop watch and one finger on the carotid arterial pulse can work quite well.

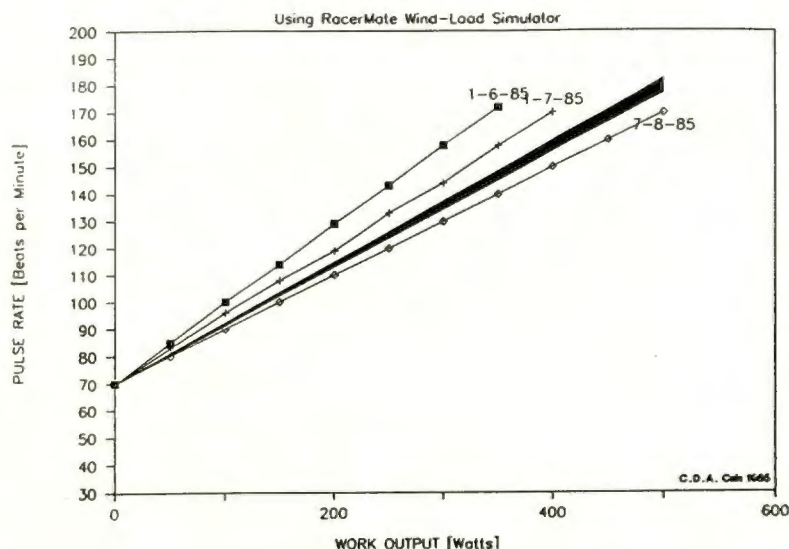
Effective aerobic training is best done in the 60% to 75% range of maximum aerobic output. Fifty percent maximum aerobic output is generally attained at a pulse close to 120 beats per minute. It is recommended that no more than three or four sessions be taken per week. Recovery from high quality sessions can take up to 48 hours and excessive use can lead to overtraining.

As an example of what can be achieved I will give a review of my 1985 season, in which I used a RacerMate (Pro) for 90% of my training. Training began in January for an attempt on the Newcastle to Maitland tandem record to be done on March 31. The record had stood for too long despite many attempts, some of which had come within seconds of breaking the record. I did no on-road training for the event.

What my training did consist of was three or four 45 minute sessions per week on the RacerMate. My first outing on the tandem was the weekend beforehand. My calculations from my power output indicated that we would break the record of 49 minutes by 5-8 minutes, which considering previous attempts, was a bold prediction.

On the morning of the event the warm-up was for 20 minutes on the

CHANGE IN PERFORMANCE



trainer at between 50% to 75% maximum aerobic output. I then jumped straight on the tandem and into a light headwind, forty-three minutes later we had broken the record by six minutes.

Because of other commitments, my training then subsided, resuming in June, working toward the circum Lake Macquarie record on September 15. My training continued as before with the inclusion of a slow three hour ride on Saturday mornings. During this period I recorded my pulse rate to power output and this is presented in the graph.

It can be seen that fitness was improving steadily and when it surpassed the figures for the 1980 British Olympic Road Squad I knew the record could be mine.

In short I did set the record with the fastest time of 2:09 for the 80 hilly kilometres and this was within one minute of my estimated time. This was followed two weeks later by my first road race for the season and my most successful Grafton to Inverell, gaining a placing, a road sprint and a time of approximately 7:00 hours. As a result of all this I am convinced that riding on-road is mostly for pleasure. Real training, the effective training, taking place at home.

How to structure your sessions

The performance measurement session. This will provide you with a marker to relate future improvement. Commence with a light warm up for 10 minutes at a speed of not greater than 26 km/h (100 watts). At the end of the warm up commence the following program measuring pulse rate either by hand or with a pulse meter for the last 30 sec of each 3 minute period. Note especially when the pulse reaches 120 bpm as this will give you a guide to your maximum aerobic work output.

Changes in aerobic work output/pulse rate from 1 June 1985 to 7 September 1985 using RacerMate (Pro) for both training and measurement. Hatched area represents range of results for the British Olympic Road Squad 1980 whose results were also obtained using a RacerMate (Pro).

It is not necessary to proceed to exhaustion – indicated when you can no longer complete the assigned 3 minute level. The recordings of pulse you have will enable you to plot your own pulse rate to power curve similar to the example given.

Your maximum aerobic output will occur at your theoretical maximum heart rate. Your effective training range will be generally in the pulse range 130 to 155.

Do this test every four weeks and note the improvements – which may surprise you.

The stereo music free-structured sessions. The secret of the music is its motivation. Most LP's, CD's and cassette tapes are 45 to 50 minutes which is ideal length for a session. A good choice of music will provide faster and slower pieces so that you end up changing rhythm and speed every few minutes.

Fartlek training sessions. Knowing your aerobic maximum etc., structure a session where speed is varied up and down for set periods of time. Some of the time at comfortable pace and other periods for more difficult pace. This simulates race conditions and turns of pace.

Interval training sessions. In these brackets of repeat efforts of sprint and recovery are attempted. For example you may like to use as your base your 50% maximum level and every five minutes attempt a 20 second sprint at 110% maximum level, then returning to the 50% level to recover. When say 10 repeats of this cycle are completed successfully then in the next session either

Blackburn Trak Stand Wind load



lift the recovery level or increase the sprint level of power output. This is extremely good for criterium racing simulation and for generally raising level of fitness. It also makes training sessions go extremely quickly.

Things you should not do

1 Do not overtrain (the biggest problem). Three or maybe four 45 to 60 minute serious, hard sessions a week is optimal. The sessions are high quality and your body needs time to recover. This is extremely relevant to those using a Computrainer type unit. If you, for some perverse psychological reason, want more time on the bike, go for a nice slow ride on the road.

2 Do not overheat. There is nothing to be gained from heat stress. Always use the electric fan in front and wear a T-shirt. This allows good cooling and stops the chest from chilling. If the sweat continues to drip off you, your cooling is inadequate. Sweat is for evaporative body cooling and not for proof of an acceptable training session.

3 Do not let young children near. You often become oblivious to the presence of children around you and a child's hand through the spokes is not recommended.

Things you should definitely do

1 Enjoy your training.

2 Record your results and note your improvement.

3 Enjoy the many hours of training time per week you have saved.

Chas Coin is an active competitive cyclist and is the Australian distributor of RacerMate and RacerMate Computrainer indoor trainers. He lives in Newcastle NSW.

TRACK 1989

Who were the challengers?

BY JOHN DRUMMOND

THE COMMONWEALTH Bank 1989 Track Cycling Championships took place on Canterbury Velodrome in some of Sydney's worst weather conditions and saw continued domination by the established stars but some interesting challenges were made.

The carnival started in Melbourne on 4 February when Robert Burns and Peter Attard, both of Victoria, and scholarship holders at the Australian Institute of Sport won the contest for the Australian Madison title from the Brett Dutton/Clayton Stevenson combination with Craig Chapman/Bruce Keech third.

The championships proper opened at Canterbury Velodrome on 11 March with the Wollongong's 15 year old Simon Kerston making a bid for a treble in juvenile events. Steve McGlede was the first of the established riders to win a championship when he annexed the Netti Senior 20 km title.

South Australia's Brett Aitken showed

his class when he won the Ipec Air Express Junior Point Score title by a huge margin.

Monday evening and James Rennie rode a well judged 1000 m time trial in adverse conditions in 1:9.78 to take the gold in the junior championship. By the time the senior riders were called to the mark it was blowing a gale and the championship was conducted in the worst conditions I can recollect in half a century.

Despite this, Victorian David Dew, riding fourth last, broke the 1:10 barrier when he conquered the gale force winds to record an amazing 1:09.39. He then watched in suspense while Scott McGrory, a Seoul medallist, could only manage 1:09.70. The opening carnival night's 20 km title winner Steve McGlede (NSW) fared even worse with 1:10.82.

Then Vinnicombe, the world kilometre champion, came on to the track but the wind nearly stopped him in the last lap and at this stage the championship was 0:2 down on Dew. Using all his power he fought successfully to win by a mere 1/100th of a second. But for all that the honours remained with the Victorian challenger.

Olympic road cyclist Clayton Stevenson would like to assume the mantle of Dean Woods (now a professional) despite the opinion of the cycling hierarchy that he is purely a road rider. He lost little time advancing his claim at the championships when he convincingly won gold in the individual pursuit in fast time from South Australia's Darren Winter.

Stevenson further proved to the selectors that he is the logical successor to Woods when he rode brilliantly to guide a young NSW team to victory over Victoria in the teams pursuit to win the coveted Southcott Cup.

Gary Neiwand remained king of sprint with some scintillating performances. I see no challenge to his authority in the near future.

The senior 50 km point score championship was the last event in a week that was dogged by rain to the bitter end. It was declared over when rain made the track unsafe with 21 laps remaining. Andrew McGee of NSW was declared the winner with an aggregate of forty points from Victorian Shaun O'Brien at 35 points.

Nathan Page (QLD) was the best endurance rider of the junior riders. In contest the Victorian Dean Mather was well to the fore with a gold medal victory in the junior sprint and a bronze medal won in the junior time trial. Mather rode a commendable 1:10.74 to winner James Rennie of South Australia's 1:9.78. Mather is the current Victorian junior champion and rides with outstanding confidence. South Australia's Brett Aitken also has a bright future and

ANTI-FREEZE

ZERO GRAVITY'S WARM WINTER RANGE

clothing
NOW

AT A LEADING BIKE SHOP NEAR YOU.

ZERO GRAVITY

CYCLEWEAR LIKE NOTHING ON EARTH

TRADE ENQUIRIES : (02) 949 6686

Tim Willing won West Australia's only gold when he landed the junior 10 kilometre scratch championship.

New South Wales held a stranglehold on the three juvenile titles until Simon Kersten fell when in a winning position in the finishing straight. Kersten had already won the juvenile time trial and sprint. However, Kersten's loss was Richard Clark's gain and he dashed through the melee to be first

Best of the women proved to be Queensland's Linda Orrow (who won the sprint), South Australia's Donna Gould and Victoria's Kathryn Watt; both these girls rode world class times in the final of the women's 3000 m pursuit.

The carnival was a racing success but an abject failure from a spectator point of view due to the inclement weather. Not one session was free of weather problems for the whole of the week.

Ray Godkin, president of the Australian Cycling Federation, introduced former Commonwealth Games cyclist Peter Bartels to the crowd. Mr Bartels is the managing director of Carlton United and has agreed to join the board of the ACF. Carlton through their brand Fosters have also agreed to provide corporate support for the next five years to the sport of cycling at a national level.

At the end of the 1989 titles an Australian Commonwealth Games Track Squad was announced. The squad will attend the August world titles in France later this year. The squad members are:

Brett Dutton (NSW), Mark Kingsland (NSW), Andrew McGee (NSW), Steve McGlede (NSW), Gary Neiwand (NT), David Spessot (NSW), Clayton Stevenson (NSW), Martin Vinnicombe (NSW), Linda Orrow (QLD), Julie Speight (NSW), and Kathryn Watt (VIC).

Vinnicombe sets new indoor record

Seoul Olympic silver medallist Martin Vinnicombe has set a new world indoor cycling record at Launceston Velodrome. Vinnicombe blazed around the wooden surface of Australia's only indoor track in 1 min 02.84 seconds, breaking the 1000 m record set nine years ago by East German Lothar Thoms.

BICYCLE TOURS

Spectacular cycling at a leisurely pace through some of the most magnificent countryside Victoria has to offer.

Fully inclusive tours beginning and ending in Melbourne with quality accommodation and fine dining. 2-4 days duration. Friendly company and experienced tour guides.

May Tours:

Pyrenees Wineries.

Grampians.

Echuca/Goulburn Valley Wineries.

June Tours:

Pyrenees Wineries.

Echuca/Goulburn Valley Wineries.

Top of the range 'Apollo' Mountain Bicycles and safety equipment.

Enjoy an exhilarating, refreshing and fitness orientated weekend away!

Enquiries: Australian Discovery Tours

P.O. Box 331

Black Rock 3193.

Phone: (03) 589 3609.

TRAVEL AGENT LIC. No. 310 17

KARRIMOR

EQUIPMENT FOR ADVENTURE

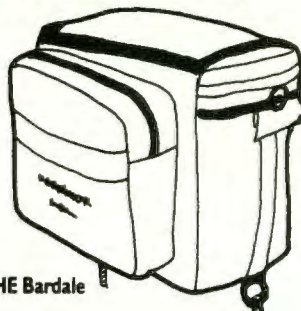
GRAND TOURING ON-ROAD OR OFF-ROAD, SHORT OR LONG DISTANCE

Karrimor KORNICHE

Travel bags for the serious long distance tourer. Korniche bags are manufactured from heavy duty red KS100e fabric and all fixing straps have quick release buckles.



KORNICHE Iberian



KORNICHE Bardale

A handlebar bag designed specially for the serious tourer. Clear map panel, double zipped main and front compartments. 10 litres.



KORNICHE

Universal 3

Can be mounted in rear, front high or front low positions. An ideal small rear bag. 30 litres.

Wholesale distribution:

KARRIMOR

DISTRIBUTORS

This bag with its giant 45 litre capacity has room for the largest loads. Quick release buckles and strong KS100e fabric make this the choice of long distance riders. 45 litres.

P.O. Box 141, Allawah,

N.S.W. 2218 Australia

Phone: (02) 547 2344

Fax: (02) 547 1663

SACHS-HURET-SACHS-HURET-SACHS



HURET-SACHS-HURET-SACHS-HURET

DISTRIBUTED BY:

BICYCLE BUYERS CO. LIMITED

SUPPLIERS OF BICYCLE ACCESSORIES & PARTS — "Cycling Sam The Bicycle Man"

REAR 20 JERSEY ROAD, BAYSWATER, VICTORIA, AUSTRALIA 3153.

P.O. BOX 221, BAYSWATER 3153. FAX 03 720 4776

Telephone: (03) 729 0344



THE RIGHT TOOL FOR THE JOB

Part 2 of our guide to practical bike care

BY WARREN SALOMON

BEFORE EMBARKING on any major overhaul of your bicycle you should take time to set up a suitable work area and assemble the right tools for the job. "The right tool for the job" is an old trades expression designed to

discourage young apprentices from using screwdrivers as chisels and pliers as hammers. In the bicycle repair field using a poorly adjusted shifting spanner could produce equally shoddy results.

A recommended bicycle maintenance kit is as follows:

Basic tools from the team mechanic's kit. The book *Bicycle Mechanics* has a good section on tools unlike the majority of repair books which assume that everyone is born with a spanner in each hand.

Basic tools

- Slotted head screw driver
- Phillips head screw driver
- 8/9 mm open ended spanner
- 10/11 mm open ended spanner
- 12/13 mm open ended spanner
- 14/15 mm open ended spanner
- 20 cm adjustable wrench (shifting spanner)
- 13/14 mm cone spanner
- 15/16 mm cone spanner
- Chain rivet remover
- Spoke key
- 15 cm pliers with good cutting blades
- 6 mm allen key
- 5 mm allen key
- 4 mm allen key
- Other smaller size allen keys as required
- Tyre levers
- Third arm (brake tool)
- Puncture repair kit
- Pump to fit your valve type
- Oil
- Grease

Specialist tools

- Freewheel remover
- Cotterless crank remover
- Bottom bracket spanners (2)

The nice thing about bicycles is that you really require so few tools. Even if you buy the best quality tools the above kit will cost you less than \$100. Good tools are expensive but will serve you longer and work best for your bike. If you spend good money on your bicycle don't skimp on cheap tools.

Screw drivers should be small enough to carry as part of a mobile tool kit. You will use this tool only for fine adjustments on a few components such as derailleur stop screws. Where a screw is used in conjunction with a nut the screwdriver should only be used as a holding tool while the tightening pressure is applied to the nut using an open ended spanner.

Open ended spanners and their relatives – ring spanners – are always preferred to that old standby: the adjustable wrench also known as a shifting spanner or just plain ol' shifter. The problem with the shifter is that it is a very imprecise tool and if the jaws are not tight on the nut it will tend to round off all the sharp edges of the nut making it impossible to move at some future time. Furthermore, a large shifter is a difficult tool to get into tight spaces.

Cone spanners are usually pressed from thin flat steel and come in two sizes

suitable for front and rear hubs. You only need one cone spanner used in conjunction with an open ended spanner to loosen off the cones on one side of the hub. Use these tools like scissors forcing their ends together to loosen or tighten the cones and locknut.

You will need a chain rivet remover tool to install or remove your drive chain (it has to be broken to fit it through the chain stays of the frame). If your chain is kept in good condition you will only need the breaker at installation time.

Round spoke keys have slots cut into them to fit different sizes of spoke nipples. With 14 gauge spokes being the most common gauge in use I recommend that you use instead a T type single size key. That way you won't have to look each time you pick up the tool to check for the right size slot.

A pair of small pliers with insulated handles and accurate cutting jaws are used to hold and cut cables. When buying pliers hold them up to the light. You should be able to see light between the gripping jaws but not through the cutting jaws. If the gripping jaws meet the pliers will not function well as a cutting tool.

Allen keys come in a number of metric sizes from 7 mm down to 2 mm. You will probably find that you will use them more often than other types of tools. A few years ago bike parts manufacturers decided that allen keys were the go and even tried to use them exclusively throughout the machine. Unfortunately the one-tool bike is still a long way off and you will need at least 6, 5 and 4 mm allen keys as well as all the other tools.

Tyre levers can be made of metal or high impact plastic. The latter is kinder on alloy rims. Use the type with hooked ends that fix to spokes and make the tyre removal process easier.

I use two types of oil. Thin penetrating oil for cables pivot points and guides and a heavy bodied oil for the chain. Some people prefer lighter oils on the chain but often these do not adhere well and remain inside the chain (see below for a review of a new oily product). Drawing ink containers with fine spouts and tight fitting lids make excellent oil bottles for use on tours.

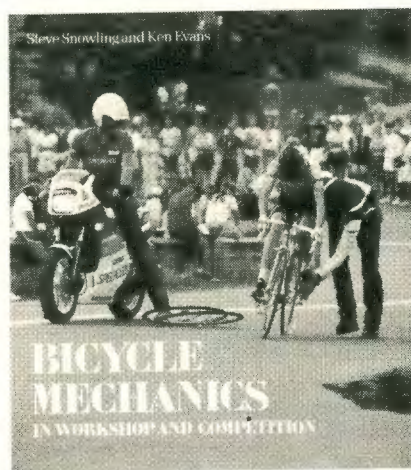
Grease is usually sold in small containers ideal for use in the home workshop. High quality bicycle grease can be bought at most bicycle shops.

Freewheel remover tools vary according to the brand and type of freewheel. If you are unsure take your bike down to your bicycle dealer so that the freewheel type can be positively identified. Is it splined or bossed? Two bosses or four? If you don't take your bike you will have to have answers to questions like these when you visit your dealer in search of a remover tool.

There is no end to the range of specialist tools available for use on your bicycle. Most are very expensive and are seldom retailed through dealers though they will gladly order one in for you if you ask. In future parts of our maintenance program I will deal with some of these tools as the need arises.

Setting up a good work area is very important. Firstly you should have a clean floor to work on. If you have only the living room floor you should spread out an old sheet to protect the carpet. This will also contain any loose ball bearings or screws that try to escape your enthusiastic endeavours. Good lighting and a handy work bench are also important.

I also suggest that you purchase some kind of simple bike stand to allow the back wheel to be raised off the floor and spun so that the rear derailleur can be adjusted. There are a number of good cheap stands that either fit under the bottom bracket or hold the bike by the chain and seat stays. Professional class workshop and bench stands are also available for the serious home mechanic.



BOOK REVIEW **BICYCLE MECHANICS**

Bicycle Mechanics in Workshop and Competition by Steve Snowling and Ken Evans. Hard cover 100 pp. Springfield Books \$29.95.

ANYONE WHO HAS followed the European racing scene must have had some desire to become part of one of its teams either as a rider or support crew. Bike shop owners often do take their holidays by following our biggest tours like the Commonwealth Bank Cycle Classic but in Europe being a team's mechanic is full time – not a holiday occupation.

This book then is about the world of the team mechanic. And through its

pages we learn much, much more than the often mundane tasks of bicycle repair. We learn how a real team mechanic deals with the problems created when a major stage race is in progress and a functioning bike is often the only thing between victory and oblivion.

Better than any of the many boring maintenance books on the market at present this book takes the reader through all the major maintenance tasks adding insights and tips that only a professional mechanic could know. Obviously race mechanics have to deal with a rather elite set of problems so don't go searching in this book for overhaul instructions for your cheap steel pedals.

Snowling and Evans' book is unpretentious and doesn't attempt to be the complete maintenance and repair guide. Instead it is one of the most interesting, original and informative bicycle books currently on offer to the jaded bike junkie. It should make a very welcome addition to any technical or general reference library.

ACCULUBE

PRODUCT REVIEW BY WARREN SALOMON

LUBRICATION IS a real problem area for bicycle mechanics. Petroleum based lubricants have a tendency to evaporate leaving their additives Teflon silicon and the like exposed to the other elements of dust, water and corrosion.

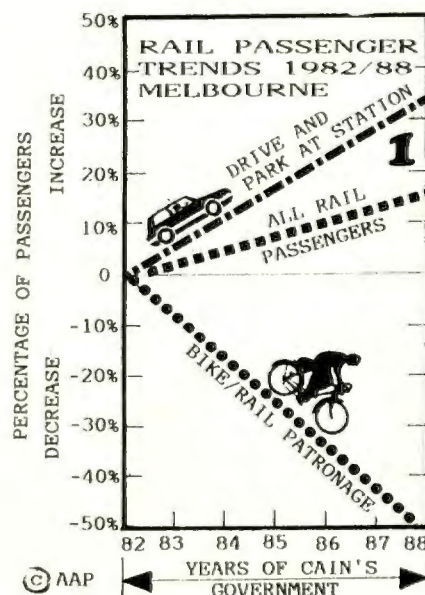
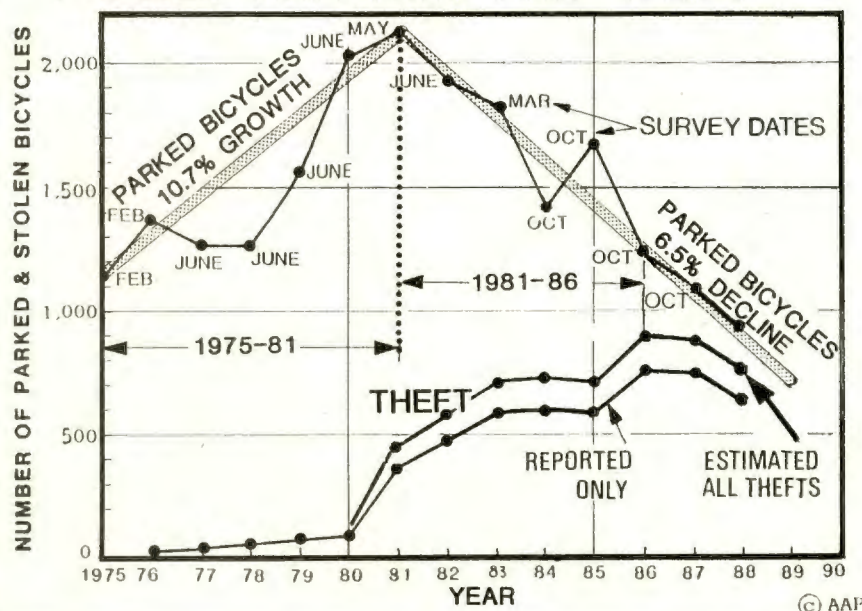
Acculube is a new vegetable based oil developed for use in the aerospace industries and with particular application to bicycles. The oil is a light penetrating substance that creates a film over the metal surface and is claimed to outlast other oil based lubricants. It doesn't become sticky with time and therefore will not attract surface dust, dirt and grit – a big plus for chain lubrication.

I tried a sample of the oil as a chain and gear cable lubricant and rode with it on my city bike through the almost liquid Sydney early Autumn weather. To my surprise the oil seemed to stay on the chain longer than the heavy grade motor oil I used in the past. Acculube on brake cables was immediately beneficial. A drop or two down cables frees up index gear shift cables and keeps them running smoothly.

Acculube is safe, non-toxic, non-allergic and bio-degradable. All I want to know now is can I use it also as a massage oil when I'm next out touring the countryside?

Acculube is distributed through bicycle dealers. The wholesale supplier is Acculube II (Aust) Pty Ltd (02) 724 7755.

MELBOURNE BIKE RAIL USERS PARKED BICYCLES AND THEFT

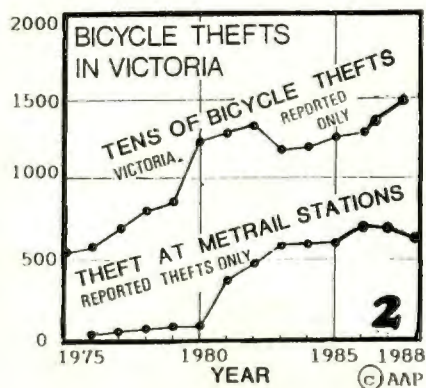


toria reached an alarming 14,800 last year.

The Met for several years has been wasting public funds on obsolete bicycle lockers built in quantities that are far too small to be economic. Furthermore the Met has never had proper construction plans of these lockers drawn up so that competitive quotations can be obtained. To make matters worse the old lockers have been so poorly built that after only a few years many have been badly eaten away with rust and must be replaced.

Transport Minister Kennan should be extremely concerned about the bicycle theft problems at railway stations because many of the victims are now dissatisfied former customers who will not return to the system unless conditions improve. The same applies to a similar number of people who have had their bikes vandalised.

The impact of theft on patronage has been devastating. In 1981 an annual Met survey revealed that 2,200 rail patrons used bicycles to get to the station but there were only 950 bike-rail patrons in October 1988. If the 1975 to 1981 trend had continued there would have been at least 4,000 bike-rail patrons today with the potential for even greater increases in the future.



BIKE RAIL THREATENED BY THEFT

Victorian government ignores the plight of its bike rail users

BY ALAN A PARKER

THEFT AT MELBOURNE rail stations continues to deter people from using their bicycles with public transport. Though the Victorian Minister for Transport Jim Kennan was recently quoted as saying that there has been a 15% increase in Met passengers in Melbourne since Labor came to office it is hard to believe this when the facts are that there been a 50% decline in the number of cyclists riding to Met stations in the same period.

With nearly all the available funds being spent on parking spaces for cars the security needs of cyclists are all but ignored. It is any wonder that the decline in bike rail patronage has been so

large. Last year 630 bicycles were reported as stolen bringing the total over the last six years to 3,960. This means that about 5,000 bicycles or about a million dollars worth of equipment have actually been stolen because many people do not report thefts to the police.

Since the Cain government came to power a paltry 30 bicycle lockers a year (which merely replace a similar number that have rusted and are unusable) have been installed. In addition to this official neglect perfectly good bicycle sheds and disused parcels offices (which could have been used as bicycle lockup rooms) have been demolished.

The problem is not confined to rail stations. Reported bicycle thefts in Vic-

Since 1981 there has been an annual increase in bicycle sales of 8.5% per year. There are 500,000 Melbournians over 14 years of age using bicycles for exercise, recreation and shopping but not to ride to the stations. This is most unfortunate because a 1986 transport authority (MTA) report shows conclusively that the one practical means of increasing rail patronage is to exploit the bicycle boom and encourage the 90% of Melbournians who live beyond convenient walking distance of a station to ride a bicycle to connect with a train.

This has been done successfully in Japan where rail systems have gained three million bike rail patrons in the last 15 years. This shows that the theft problem can be managed in a way that will not destroy patronage.

Japan National railways increases its bike rail patrons by a staggering 100,000 per year because they provide theft

proof bicycle storage facilities. The Japanese do not waste space and funds by providing free car parking. They have responded to the resurgence in bicycle use with creative planning solutions.

In Melbourne there are only about 150 bicycle lockers currently in working order. In addition to the lockers there are other types of lock-up facilities. Inspection of bicycles stored at Metrail rail stations revealed that over 80% of the racks provided could only be used for locking one wheel and the racks were not suitable for locking the bicycle frame. Fortunately Metrail have now stopped installing these racks.

The biggest problem with the racks was that they were located off the platforms in places where thieves could gain easy and interrupted access. Over a period of ten years more than 2,000 bike racks were installed by the Met in locations where thieves could conveniently park, cut through locks and chains with bolt cutters and load up in less time than it takes to empty a supermarket trolley.

In response to the alarming theft rate Metrail in 1987 installed 900 bolt cutter proof chains and lockshields on station platform fence posts but these units are not being used because cyclists find them complicated and difficult to use. The failure to trial prototypes with potential users and then rectify the detail design to make them easier to use has again deterred use of the rail system.

The problem of the difficult lockshields could have been overcome if station staff had been on hand at the outset to provide cyclists with information and instruction on how to use the facilities. During 1988 a new design of lockshield was tested with a panel of users. A promise was made to install the

new design in August 1988 but so far nothing has happened.

The only practical thing that has been done on any station has been the use of a video camera at Frankston Station with bike racks on the platforms. This seems to have had a considerable effect as a deterrent to both bicycle thieves and vandals.

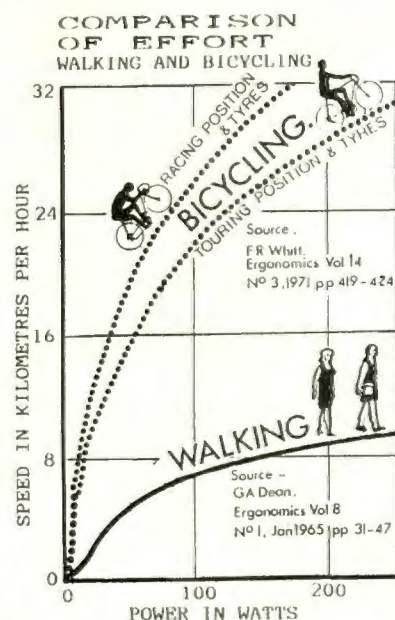
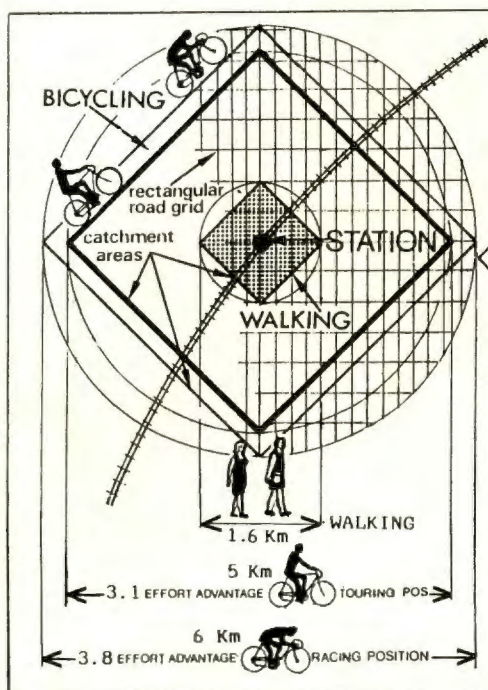
In accordance with the recommendations of the MTA Bicycle Facilities Report approved in December 1986 a large lockup cage type storage unit complete with bolt cutter proof internal locking devices was designed by this writer. However, bureaucratic bungling has meant that a prototype was only made and inspected by a panel of experienced cyclists in February this year.

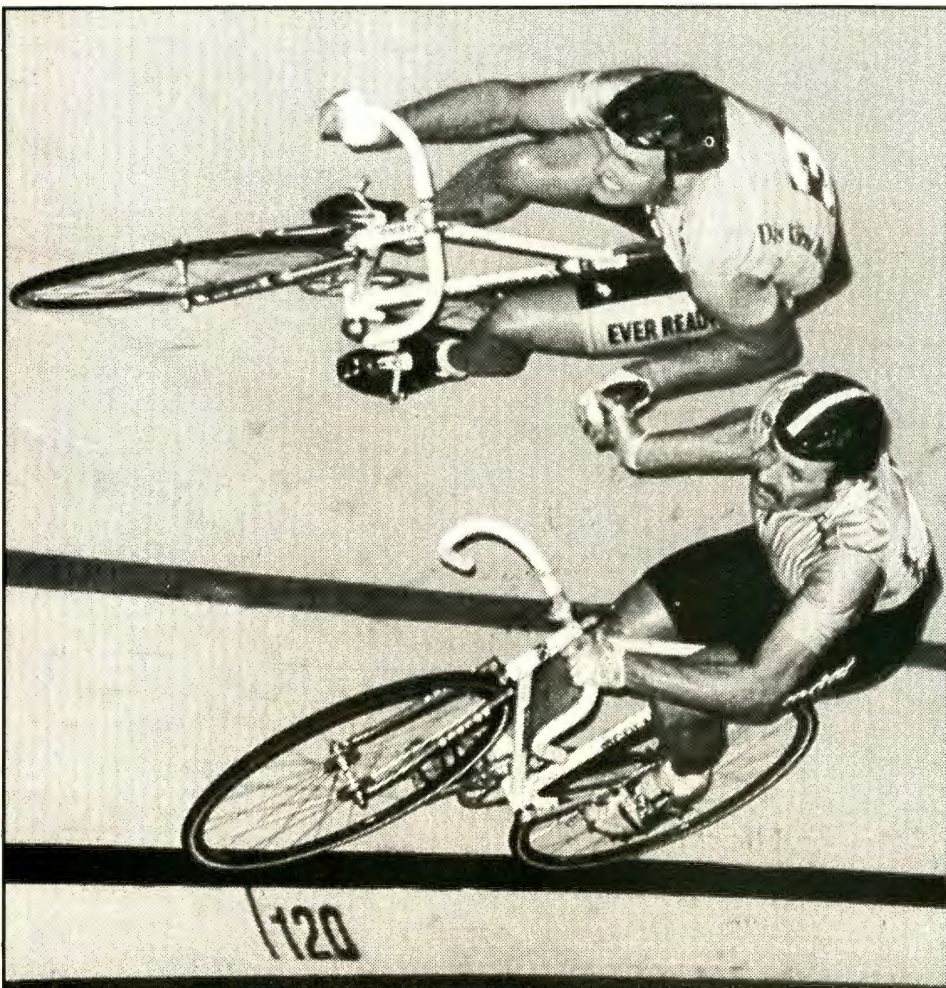
The prototype is still not available for testing by ordinary bicycle users at a network station. The hold up seems to be related to Metrail's placement of ordered for next years supply of obsolete bicycle lockers and it would seem that they have no intention producing the cage this year.

Sir Humphrey of Yes, Prime Minister fame would have been proud of these engineers as they have truly mastered the art of making nothing happen. The original reason for developing the cage was to provide secure low cost storage. The cage is meant to be batch produced for around \$2,000 and reduce the cost of storing a bicycle to one third of that of a bicycle locker. As there is an immediate need for 500 secure and vandal resistant bicycle locking devices each year for the foreseeable future the lockup cage would save a considerable amount of money.

The real problem is that bicycle parking programs have no real status ●

The significance of encouraging bicycle access to the public transport system can best be understood by appreciating the catchment area implications of travelling further. A cyclist can travel 3 to 4 times faster than a walker for the same physical effort, but gives a catchment area increase of between 10 to 14 times. For example in Melbourne several studies (MTA 1987) have shown that, while 15% of Melbourne's population is within easy walking distance of a station, 85% is within easy cycling distance. Despite these studies most transport planners seem unaware of the bicycle's potential as an access mode. In the 1970's one of the sacred cows of the transport planning fraternity was the notion that the rail system only acts as a feeder to the central business district. This need not be so, as using bicycles as an access mode at the city end of the trip enables Metrail to more adequately service all the inner suburbs and make cross city trips to other suburbs feasible.





Clark swings Doyle into action.

EMPERORS OF THE NIGHT

Six day racing explained

BY JOHN DRUMMOND

THE SIX DAY BICYCLE race originated in 1879 in America when two British roller skaters Haverley and Durey attracted crowds rolling around a very short indoor track in Boston, Massachusetts, for six days and nights, taking turns to establish a continuous distance record.

The effort led to the skaters' manager organising the world's first six day bike race in Springfield, Illinois, in 1886, on an indoor track which was somewhat longer than the one used by the roller skaters. That six day race was not for two man teams but for individual riders. Each rider was allowed on the track for only 12 hours per day and had to rest the remaining 12 hours. The German born American Albert Schock covered 2261 km which was considerably more than the two roller skaters had covered without a break in six days.

Promoters noted that the riders were reasonably refreshed after the 12 hour

rest periods so the riding time was increased to 18 hours. Patronage also increased. Next step was unlimited riding time which meant a racer was allowed to ride for as long and rest for as long as he wished within the designated six days and nights. Initially all this was performed on penny farthing machines.

With the arrival of the safety bicycle came change and a realisation that the six day structure was vulnerable, and would not meet the expectations of the crowds now more speed was possible. Race rules were altered to make the races genuine team events by requiring that one of a two man team be on the track at all times. But this change failed to give the patrons any race entertainment as the riders became too tired and were fighting a constant battle with sleep.

The main interest in the race centred on the final sprint and the team credited with covering the greatest distance. This record lies with Alfred Goulet from Victoria, who teamed with Tasmanian Alfred Grenda to cover an incredible 4438 km in the 144 hours at New York's Madison Square Gardens.

Gradually changes occurred. The one change that gave the race some spice and established its long term popularity was the sprint session – not only at the end of each day, but often several times each day.

That is still the structure of present day events although their continued popularity is attributed to their restriction to smaller sized tracks. Some of the portable variety are 10 and 12 laps to the mile (6.25 and 7.4 laps to the kilometre) and are erected in sports stadiums throughout Europe capable of holding up to 15,000 fans.

Aussie Danny Clarke, and Tony Doyle of Great Britain are particular crowd pullers.

In the early years six day stars were mostly recruited in Australia. The greatest were Victorian Alfred Goulet and New South Welshman 'Iron Man' Reg McNamara. Goulet is on record as being the greatest six day rider to race in the United States. He won a total of eight six day races at New York's Madison Square Gardens and seven more in Newark, Chicago and Boston in a brilliant career between 1910 and 1926. In between he spent two years in Europe and won six day races throughout the continent, including the first ever Paris six.

He could be seen out on the track doing battle single handed against combinations of riders, offsetting their moves with speed and stamina. He was very intelligent and this accounted for his every move on the bicycle. And his concentration never wavered.

When Goullet was at his peak he was the dominating force in scratch races, handicaps, pursuits, and long distance track events. But he stood alone in six day races.

Alf Goullet is now 96 and lives in America.

If Alf Goullet was the best six day exponent of the great American era then Reg McNamara was not far behind him, and certainly the most courageous. He died in October 1971 aged 84.

He came from Grenfell in New South Wales and built a legend all over the United States around his fond nickname 'the Iron Man'. He endeared himself to the crowds at Madison Square Gardens New York in the 1920's as a star of the six day race.

For more than 20 years a six day race in America without Reg McNamara was like Christmas without Santa Claus. In New York alone he finished the Madison Square Gardens event 32 times between 1913 and 1934 (two events a year were held for most of the period) winning seven of the races, including a hat trick in 1926 and 1927; he was five times second and five times third.

He had his first bike race in Sydney in 1906, a mile and a half handicap which he won easily. He also won his first six day race in Sydney.

In 1913 Bob Spears and Frank Corry made a tour of America and Reg McNamara went along as a sort of helper to the well established Australian cyclists. He quickly developed as a top rider himself and got into the big time at Newark Velodrome in New Jersey. In his first serious fall on the board tracks he broke a leg.

In the next 25 years, Reg McNamara alternated between putting his name in newspaper headlines or his tough wiry body in hospital. He broke his collarbone 14 times, his jaw three times, and suffered several skull fractures, but he always came back.

During his best year in America he earned his nickname when midway through a six day marathon he hit the boards at 64 km/h. When the doctors got to him they conducted an on the spot examination and advised his withdrawal telling him he had cracked at least three ribs.

"Don't worry," said the Iron Man, "if my legs are alright I am going back in." And he did exactly that.

Later that year, McNamara was involved in a spectacular spill in New York while changing at top speed with his partner, Pietro Linari. Both were knocked unconscious, but Reg regained his senses enough to climb back on his saddle, hold the lead he and his partner had built up, and win the race.

He was once interviewed in hospital by a journalist following serious injury who asked if he intended to quit the circuit. McNamara exploded, "If you



Roger Arnold (right) is seen here with his regular six-day partner, Alf Strom.



The Iron Man (right) lines up at the mark in Newark USA for a sprint match.

can't take it, you should try your hand at something else. This is a man's affair."

In 1935 he won an International six day race in Berlin. The same year he won Cleveland's first six day race.

He retired at 50 years of age, but loved the sport so much he became a cycling referee for the next 20 years.

Reg Arnold and Alf Strom are two Australian cyclists who brought fame on themselves and captured the imagination of European cycling fans in the late 1940's and early 1950's. The Australians learned all about six day racing in the tough European scene and then beat the continental stars at their own game.

In the forties the Paris six day race rivalled the famous Tour De France as the greatest of all cycling contests. The 1948 Paris six – the 25th – drew about \$60,000 at the gates, while about \$9,000 was distributed in special prizes. Australia was splendidly represented by Arnold and Strom.

This pair constantly brought the packed velodrome to its feet, especially during the second and third days, when they launched their attack, and led the field. The Paris six went on every evening and into the early morning hours with the final session for the day taking place after 1 am.

The Australians performed magnificently. It had been a long hard struggle to perfect their technique, but after the tremendous effort to master the Belgium sixes, they were finding the Paris race easier to handle.

The Australians were active in all the jams, and participated with credit in most of the sprints. Australian fans present viewed with pride the high placings in the last sprints of the race, when the six leading teams were jamming frantically.

The Australians finished fifth, with 541 points, two laps behind the leaders. They had the third biggest tally of sprint points.

Arnold was only 21 when he arrived in England in 1945. With Strom he had been chosen by the Australian Cycling Association, a breakaway organisation, to compete in the 500 mile Brighton to Glasgow race. Arnold withdrew and Strom finished tenth. Amazed at the different standard of racing by the English and continentals, the two Australians resolved to stay on and improve their skills.

To dodge the multitude of star road and track riders they decided to attempt to make it on the less competitive but harder and more lucrative front of six day racing. Eventually they worked

their way to the top of the pile.

Both had plenty of crashes in their first season, and many were caused by enraged spectators. In Paris one man kept hurling knives and forks at Arnold, others bombarded riders with bottles and fruit. It was a strange initiation into the continent's most popular sport.

In one of their early races, a 100 kilometre event, they finished 13th in a field of 18 teams, three laps behind. The riders were emotionally distraught at the result.

Arnold returned to Australia in 1953 a reasonably wealthy man and under no illusion about the future for a successful six day star in Australia. He switched to orthodox Australian cycling and later became a great tour and handicap rider. Strom remained on the continent and died in 1973.

Arnold had notched up 16 six day victories in eight years and Strom nine before deciding to call it a day.

Back to the present.

It is hard, tough living, but after more than a decade of six day racing at the top Danny Clark has concluded one of his most successful years of racing in the European citadel of the sport, and sees no reason why he should not continue the grind for a few more seasons, despite his 37 years.

Clark is close to achieving some unique six day statistics. Patrick Sercu of Belgium is the undisputed leader in the aggregate of six day races with 88 wins but like everyone else in the top ten, except Danny Clark, he has retired from racing.

Danny finished the current season with eight out of 12 possible wins, clearly Emperor of the Night. The Tasmanian hero is now holding fourth place on the all-time tally. Clark says he will continue while he has the form and



energy and while it is difficult to imagine him heading Sercu he will surely overhaul Dutchman Rene Pijnen, with 72 wins and Peter Post on 65, before he finally retires. Clark is currently on 62.

Clark and Englishman Tony Doyle as a six day team have won 18 six day events, just one off the all time record of 19 wins. The pair won five this season and are looking forward to teaming again next season. They are both Blue Train riders and considered the top team at present racing.

The Blue Train is an expression from the past referring to the vehicle that bossed all the other wagons about and made sure they didn't overtake the express engines.

Today it refers to an elite of riders who because of experience of the tracks have got more respect from their fellow riders, and if the race director wants to discuss any aspect of the race he will do this with the Blue Train.

Danny Clark would now be considered a guard on the Blue Train that he broke into about 12 years ago in defiance of the elite to score his first six day win against his team manager's orders. Danny took a calculated risk which paid off.

Despite the current downturn in track cycling throughout the western world,

Covered tracks like the Vigorelli in Milan, Italy make the six-day event work. In Australia we have no such tracks though a similar one used to exist in Surry Hills, Sydney.

the future of six day racing is looking bright on the continent. Next year there will be 15 sixes. Three sixes were cancelled this year for various reasons. The Paris event was moved from the end of the season to the beginning, and the date changed to mid October this year to make it one of the first.

At Rotterdam the stadium was sold by the government and is now privately owned, but its six day event will return next year. Maastricht was also cancelled because of complications at the hall.

There is a new six at Bordeaux. In the second half of this season there was a general upsurge of interest resulting in record crowds at Bremen, Stuttgart, Copenhagen and Munich.

Many new riders are coming into professional racing in Europe, particularly in West Germany. Every one is talking about the impact the Russians will have regarding professionalism and the drive toward open sport.

Danny Clark and Tony Doyle are putting credibility back into six day racing. They are winning because they are the best.



SURFSIDE CYCLES

2 WILMETTE PL, MONA VALE

▲ JUST ARRIVED DIRECT FROM THE USA

cannondale

Heat treated, oversized all aluminium racing and mountain bike frames.

▲ Full SHOGUN range in stock

▲ Huge range of spares and accessories

MAIL
ORDERS
WELCOME

PHONE (02) 997 3410

Calendar

COMPETITIVE EVENTS

JUNE

Saturday & Sunday 10 & 11 Queensland's first Open Mountain Bike Titles. Practice and trials on the Saturday and an enduro on the Sunday. The event is planned in conjunction with the Ipswich and West Moreton BMX Clubs who are holding their annual competition on the same weekend. Contact: Terry Telfer on (07) 374 1244 or P Hargreaves on (07) 344 1907.

JULY

Sunday 16 1989 Nobbies Enduro A great day of racing events out at the Lower Hawkesbury organised by the North Shore Nobbies. Contact Steve Nesbitt (02) 411 5466.

AUGUST

Sunday 13 Lynton Park Trials If you haven't tried observed trials riding for mountain bikes this event is the one for you. Come and join in or watch the experts strut their stuff. Organised by the North Shore Nobbies. Contact Steve Kidd (02) 981 5859 (H).

SEPTEMBER

Sunday 17 Watagan Cross Country Race A 40 km blast through the Watagan Ranges just north of the Hawkesbury. Organised by the North Shore Nobbies. Contact Steve Nesbitt (02) 411 5466 day.

NOVEMBER

Saturday and Sunday 18 & 19 AMBA National Mountain Bike Titles A weekend of cycling events to decide the top riders in uphill, downhill, trials and cross country enduro events. All classes. Camping available and good spectator facilities. Contact AMBA or your local mountain bike club for entry forms (02) 27 2977 or the promoter Active Australia (062) 95 9498 for details closer to the event.

NON COMPETITIVE EVENTS

MAY

Sunday 21 Adelaide Hills 100 Challenge Organised by the SA Touring Cyclists Association. Start 8 am at Aldgate. Contact Mick (08) 258 7376 or Geoff (08) 340 0229.

Sunday 28 Watagan State Forest Organised by the North Shore Nobbies. Contact Steve Kidd (02) 981 5859 (H).

JUNE

Friday 23 Michelin Century Ride Stay fit riding 100 km of hills north of Hornsby in Sydney's north. Contact (02) 212 5628.

JULY

Sunday 16 Barossa 100 Challenge Organised by the SA Touring Cyclists' Association. Starts 8 am at Tanunda. Contact Mick (08) 258 7376 or Geoff (08) 340 0229.

AUGUST

Sunday 13 Strathalbyn 150 Challenge. Organised by the SA Touring Cyclists' Association. Starts at 8 am in Strathalbyn. Contact Mick (08) 258 7376 or Geoff (08) 340 0229.

SEPTEMBER

Sunday 17 Green Valley Twin Century Join the fun in Australia's longest running endurance event, riding 50 to 200 km in the scenic Nepean valley south west of Sydney. Contact Russell Moore (02) 608 1125.

Saturday 30 to Sunday October 8 Bicycle SA 1989 Hawker to Adelaide Revisited. This week long ride roughly follows the same route as the first Bicycle SA ride held in 1986. Free bus from Adelaide to the start. Contact Brenda (08) 339 3613 or Evelyn (08) 213 0637 for details and entry forms.

OCTOBER

Sunday 15 Sydney Spring Cycle Celebrate spring with thousands of fellow cyclists in a 35 km ride from Sydney to Parramatta. Contact (02) 212 5628.

Sunday 15 Meadows 200 Challenge Organised by the SA Touring Cyclists' Association. Starts 8 am at Meadows. Contact Mick (08) 258 7376 or Geoff (08) 340 0229.

NOVEMBER

Sunday 26 Eighth annual Sydney to the Gong Bicycle Ride in aid of the Multiple Sclerosis Society. This year bigger and better than ever. A one day fun and fitness ride through Royal National Park. Some say its the London to Brighton Ride with scenery. This year a time trail option will be available for sports riders. It's a ride not a race. Don't miss it. Details throughout the year in Freewheeling magazine.

DECEMBER

Saturday 2 to Sunday 10 Great Victorian Bike Ride A two week ride from Rutherglen to Melbourne. Organisers take good care of you, from entertainment to a sag wagon for your luggage. Camping, meals and full medical and mechanical support provided. Organiser is Bicycle Victoria. Contact (03) 670 9911 for entry forms and prices.

MOUNTAIN BIKE CLUB CONTACTS

The Australian Mountain Bike Association is the sanctioning body for all mountain bike races on a state and national level. Local clubs can affiliate and offer their members the benefits of insurance coverage for their inter club events. Enthusiasts interested in contacting a local MTB club in an area not listed below should contact AMBA on (02) 27 2977 AH (02) 92 1922 as the list is growing all the time. All of these clubs offer both competitive and non competitive events and are a good source of information on what equipment to buy and the best places to ride.

QUEENSLAND - Brisbane Mountain Bikers Paul Hargraves (07) 344 1907, Velo Club Brisbane Mike Roberts (07) 359 1244, Sunshine Bushbushers (Sunshine Coast) Pete Smith (071) 428 572; **NEW SOUTH WALES** - North Shore Nobbies (Sydney) Paul Barnes (02) 449 1978, East Side Ground Hogs (Sydney) Chuck Smeeton (02) 371 5278, Brookvale Fatheads (Sydney) Laurent Vignes (02) 982 2574, Western Suburbs MTB Club (Sydney) Jeff Blackman (02) 622 8196, Southern Cross Cycle Club (Sydney sth) Tony Marsh (02) 520 4600, Hunter Valley Mountain Bike Club Bruce Richards (049) 32 7820, Blue Mountains MTB Club Kerry Barlow (02) 264 2994 (W); **AUSTRALIAN CAPITAL TERRITORY** Canberra Mountain Bike Club Mark Vardy (062) 491 806 (w) or (062) 489 301 (h); **VICTORIA** - Fat Tyre Flyers (Melbourne) Mick Jamison (03) 817 2917; **TASMANIA** Northern Tassie MTB Club (Latrobe) Stephen Foster (004) 262 107 (H) (004) 265 263 (W); **SOUTH AUSTRALIA** Adelaide Mountain Bike Club Peter Heal (08) 263 3605; **WEST AUSTRALIA** Perth Mountain Bikers Jack Thornley (09) 453 1434, Cycle Touring Assn of WA (09) 330 3659.

RACING CLUB CONTACTS

The Australian Cycling Federation and the state cycling federations will direct you to a club in your area if you want to get involved in bicycle road or track racing. Phone numbers and contacts for each state are: **NSW** Margaret Balmer (02) 241 1870; **VIC** Ruth Birznieski (03) 328 4391; **QLD** Mike Victor (07) 390 1489; **WA** Mike Poyner (09) 384 4130; **SA** Bruce Quinn (08) 381 2398; **TAS** Joy Bestwick (003) 31 2712; **NT** Shirley Davis (089) 208 798.

Riders wishing to take out a professional licence should contact the National Secretary of the Australian Professional Cycling Council, Reg Marriner, PO Box 329 Torquay VIC 3228 Phone (052) 61 4067.

Club secretaries, race directors and event organisers help us to publicise your event by sending details to us early. If you are planning a ride in the coming twelve month period you should send your notice to the Freewheeling Calendar now.

Classifieds

TOUR MATES

TOUR MATES is a FREE service for readers wishing to find companions for bicycle trips and holidays. Entries are limited to thirty words (excluding your name and contact details). There is a charge of thirty cents per word for any long entries exceeding the limit. Payment (if applicable) must accompany your listing. Name, address and phone number should be attached for verification purposes.

Nullarbor Crossing Leave Kalgoorlie WA on Sunday 24 September via Ceduna to Port Lincoln by October 20. Fully self supported. Contact David Hulett (08) 339 1056

England Young 61 year old seeks companion for leisurely train and cycle tour in June and July. Contact Wal Liddle, 5 Wilima Place, French's Forest, NSW 2086. Phone (02) 452 1172.

Townsville to Broome this winter. Companions wanted for a low budget crossing of the northern half of the country. Itinerary not yet fixed. Phone Julia on (02) 399 5581.

Across the USA Companion wanted for tour from Boston to the Pacific Ocean. Leaving early September and mostly camping. Contact Ken Moylan on (062) 431 014 (W) or (062) 477 617 (H).

HIRE

RENT-A-CYCLE TASMANIA 10-speed low gearing, all frame sizes, ladies and gents. Completely equipped for touring. Postal bookings accepted. Seven years hiring experience. Brochure, rates, your questions. 36 Thistle St Launceston, Tasmania Phone (003) 44 9779

BICYCLE HIRE SYDNEY. Inner City Cycles hires ten-speed touring bikes, mountain bikes, racks pannier bags, high security locks and lights. Contact ICC 31 Glebe Pt Rd Glebe NSW 2037 (02) 660 6605.

TRAVEL & TOURS

BIKE QUEST - CYCLE THE WORLD! Tours in Europe, Britain, Asia, Mexico, NZ and Australia. Specialists in the USA and Canada. For more information contact: Bike Quest, (051) 74 8850 Anytime. PO Box 1102, Traralgon VIC 3844.

CAMPANOEING ON THE MURRAY RIVER. bargain holiday. We can deliver you and canoes upriver to Picnic Point, Barmah Lakes, Tocumwal or Albury. You meander downstream to Echuca camping along the way. A weekend, a week or a month. Example: 4 persons in 2 canoes for 4 days costs only \$50 each. Secure parking. Echuca Boat Hire, Box 62, Echuca 3564 or phone (054) 824063 for brochure.

BOGONG JACK ADVENTURES.

Cycling holidays in North-East Victoria visiting National Trust gold towns, Rutherglen and Milawa wineries, Ned Kelly Country, historic hotels and fine restaurant dining. PO Box 221 Oxley VIC 3678 Telephone (057) 27 3382

CYCLE NEW ZEALAND

Enjoy the beauty and hospitality of NZ on our escorted Bicycle Tours. From 6 to 18 days starting at \$NZ2654.* All trips include support vehicle, escort, twin share hotel and guest house accommodation, all meals. Diversions such as rafting or jet boating included.

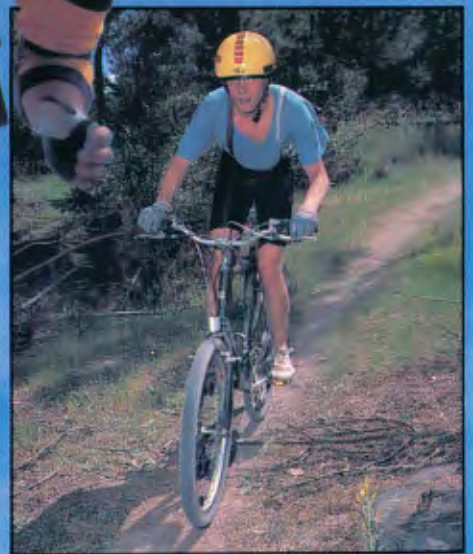
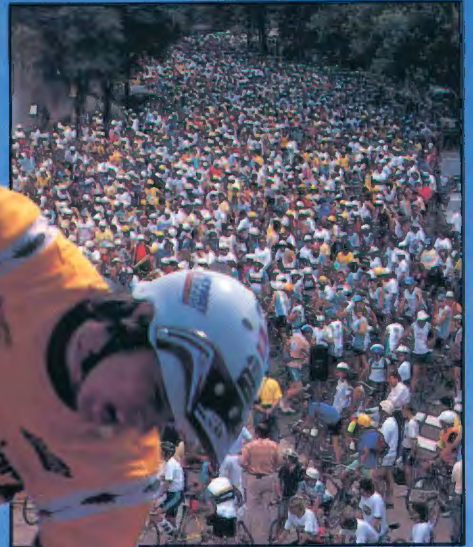
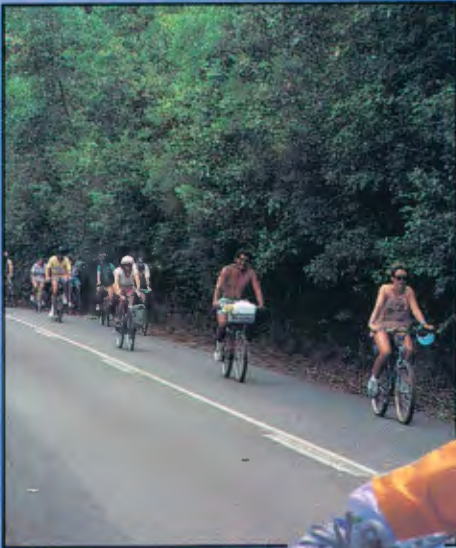
*airfares from Australia not included

Contact: Taihinda Bicycle Touring, 15 Sargood St, O'Connor, ACT 2601. PH (062) 496834. FAX (062) 496788.

FREEWHEELING CLASSIFIEDS are seen by over 15,000 readers across the country. Rates for 1988 are: \$15.00 per 30 words or one column centimetre. Additional wording costs 50 cents per word. Multiple insertion discounts: Six insertions - fifteen percent; three insertions - ten percent. Display classifieds rates: \$15.00 per column centimetre. Payment must accompany order. Send typed advertisement text (phone orders can not be accepted) to **FREEWHEELING CLASSIFIEDS, PO Box K26, Haymarket NSW 2000.**

Freewheeling

*the bicycling magazine that
has something for everyone*



From fat tyres to skinny tyres you'll find the latest news in FREEWHEELING. Whether you bicycle for pleasure, sport or health and fitness FREEWHEELING has everything you need to know. Travel and touring, events and competitions, technical features, and safety, it's all in Australia's leading bicycling magazine.

Don't miss an issue. Subscribe now and pay only \$19.00 for seven issues. That's a discount of over 20%. Plus you have the benefit of free home delivery, in a protective plastic envelope.



YES! Please start my subscription to FREEWHEELING. I enclose cheque/money order for \$19.00 OR charge my credit card: —

Bankcard ☐ Visa ☐ Amex ☐ Mastercard ☐

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

CARDHOLDER NAME _____

SIGNATURE _____

EXPIRY DATE _____

SEND FREEWHEELING TO:

NAME _____

ADDRESS _____

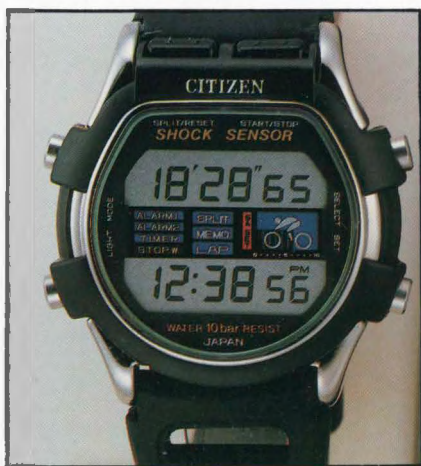
P/CODE _____

send coupon to: FREEPOST 33*

Freewheeling Magazine
PO Box 746
Darlinghurst
NSW 2010.

* No Postage Stamp Required

New Products and Ideas



Shock watch!

The Citizen Watch Company of Japan has released a new timepiece designed for cycling use. The D130 Shock Sensor watch is fitted with a device in its body which allows the watch to be controlled with a slap on the leg or arm. This means that accurate timing can be obtained by the rider during competition as well when training. The D130 has two alarms (one can also be set to a day of the week), a countdown timer and a stop-watch capable of measuring lap times and storing a succession of split or total elapsed times. Up to nine times can be recorded in the watches memory. The D130 sports watch is distributed by Citizen Australia.



Inflatable flats

High quality puncture repair kits from German manufacturer Rima Tip Top are now available in Australia through specialist bicycle dealers. Rima is one of the largest makers of patch kits in the world and pioneered the tapered edge patch which has since been copied by other manufacturers. Rima's latest addition to its range are two repair kits especially designed for mountain bikers. The Compact Air and Repair set comes in a compact plastic case which contains heavy duty patches, glue, valve adapters, plastic levers and three metal com-

pressed air cartridges to enable your tyre to be reinflated without the need for a pump. The lightweight MTB repair kit contains patches, glue, and tyre levers all inside a small carry case. Distributed by Rima Tip Top Australia (02) 772 4899.



Wheel safety

Sidelights are a new way of increasing bicycle visibility at night without adding weight or rattles to your bike. The Sidelights kit consists of a strip of highly reflectorised material backed by a durable self adhesive coating along with detailed hints and instructions for use. The best place to fix the strips is in small patches around the inside circumference

of the rim. This way when the wheel is spinning the whole of the spinning rim seems to reflect light. The Sidelights can also be used on any surface of the bicycle liable to be seen by approaching vehicle headlights. The tape lasts up to 10 years and is distributed by Payer Australia Pty Ltd (03) 429 2555.

1989 Shoguns

Splotches splodges and Hyperglide are all the go on this year's range of Shogun mountain bikes. The new season top of the range Prairie Breakers all feature paint styles with tastefully placed contrasting blots and splodges of paint (not all over the place like some competitors but carefully placed by the designer's loving hand. The top models also come fitted with Shimano's new Hyperglide rear freewheel

Carbon fibre cross frame

By removing – not adding – parts to his carbon fibre mountain bike frame designer, Brent Trimble, has built a radical new machine which has the road handling feel of a bicycle with suspension. Trimble is the designer of the original Kestrel carbon fibre racing frame and now works on his own inventing innovative new products to give cyclists more enjoyment from their sport. Trimble's moulded fibreglass carbon fibre reinforced cross frame has a chrome moly fork and offers exceptional road handling capabilities. Trimble has also developed a one piece carbon fibre handlebar and stem that combines well with the cross frame or can be fitted to a conventional MTB. The Trimble frame and handlebar stem are both distributed in Oz by Vance Trimble the Arkansas based designer's brother. Vance can be contacted on (02) 923 2152.



Now there's a Shogun for everyone



Ground Breaker EXPERT

The all new 1989 Shogun Ground Breaker Expert is a welcome addition to our quality A.T.B. range. It features lightweight chromoly tubing, Shimano's incomparable 18 speed Mountain LX Groupo with SIS capability, Hyper-Glide Cassette and Biopace HP chainrings. All this for only \$835.00 recommended retail.

SHOGUN BICYCLES
THE TRADITION CONTINUES

THE REFINED OFF-ROAD COMPONENT SYSTEM FOR UNREFINED ENVIRONMENTS.



Cycling in the rough demands rugged components that operate with precision. That's the Deore XT component system from Shimano.

Precise thumb-shifting SIS, powerful U-brake, and triple Biopace chainwheels provide a level of performance with control that makes off-road cycling as safe as it is fun.

Deore XT from Shimano. Simply the finest off-road components available today.



SHIMANO
DEORE XT