

# HUFF



Head Up Feet First is the Newsletter of OzHPV Incorporated.

OzHPV can be found at [www.ozhvp.org.au](http://www.ozhvp.org.au), or contacted by mail at OzHPV Inc, c/o 17 Marama Street, Box Hill North VIC 3129

## March – June 2008 Volume 11 Issue 2 Contents

Finger of God <i>Simon Watt</i> .....	2
Membership <i>Pete Heal</i> .....	3
2008 OzHPV Challenge <i>Peter Heal</i> .....	4
Risk Management.....	6
Seeking Speed <i>Paul Worden</i> .....	7
New Public Officer.....	10
IHPVA World Championships.....	11
Coming Events.....	12

### In this Issue – Pete Heal

Welcome to the May edition of HUFF. It was supposed to be the March issue but we got tied up with organising the Challenge and felt that there would be plenty to report in the way of results, stories and photos.

I'm in the editing chair for the newsletter, so please try not to compare my efforts to Michael P's.

Once again the Challenge draws HPV riders out of the woodwork and a good time was seemingly had by all. The organisers questioned the viability of actually running the Challenge in the weeks before due to a poor response in the way of postal entries.

In this edition there are a variety of articles both humorous and of a technical nature which should be of interest to members.

Please send your articles for future editions of HUFF to [huff@ozhvp.org.au](mailto:huff@ozhvp.org.au)

Next Edition of HUFF – June 2008



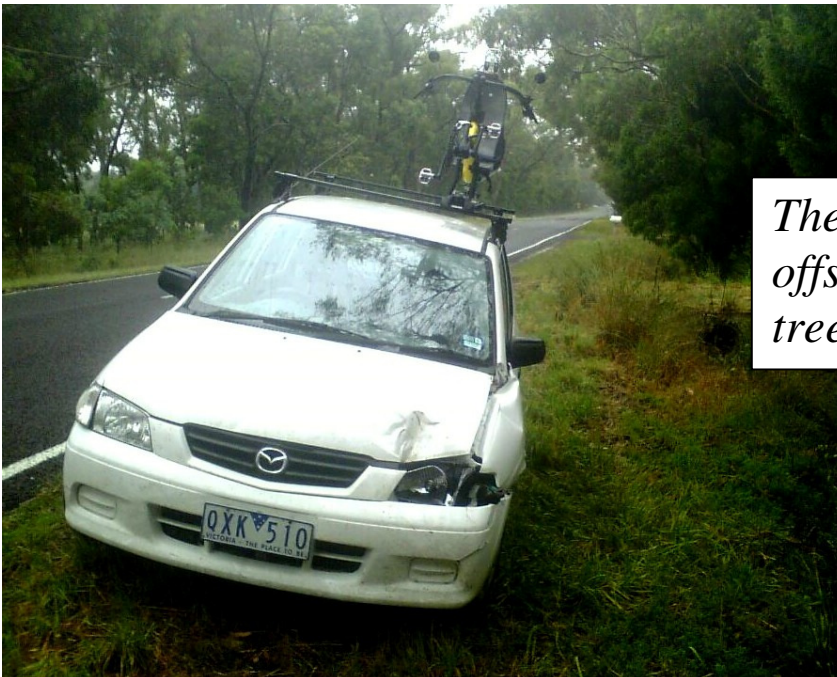
**2008 OzHPV Challenge – 18 Years and Going Strong!**

## THE FINGER OF GOD – Simon Watt

Prior to the Audax Alpine Classic, I'd been training on various lumps, mostly Mt Benwerrin between Lorne and Dean's Marsh. A mate who was off to have his first go at the Alpine threatened me with Mt Macedon, just out of Gisborne and I foolishly agreed to give it a go. I loaded the Baron on the roof rack and drove up to Gisborne via Bacchus Marsh - very pleasant drive, particularly the ridge road between Bacchus Marsh and Gisborne. All very pretty in the morning mist and fog, blustery wind and insistent rain. I tried to convince my mate that sitting in the nearest cafe practising carbohydrate absorption techniques would be a good substitute, but no, he insisted that climbing the hill would be better. We compromised and drove to the base of Mt Macedon and set off in the rain. My amazing climbing skills meant I had to stop several times and regroup. However, once past the lower half the top settled into a steady solid climb with a welcome cafe at the top. After taking in the views we set off down. Very frustrating. Too many driveways, turns, and trees to let rip, just an opportunity to wear out brake pads on the very treacherous wet road.

After a bit of carbo loading practice, I packed up, told him if this was his training hill, the Alpine wouldn't be a problem, and after coffees and dry clothes I loaded the Baron back on the roof and set off home via the same ridge road to Bacchus Marsh. Of course much of the rain and wind had gone now, and the morning mist and fog replaced with more distant early afternoon views. Anyway, cruising along at 95 - 100 kph, at a few paddocks called Bullengarook, my pleasant interlude was rudely interrupted by the car suddenly taking a life of its own. After some considerable lurching and to-ing and fro-ing followed by a very unpleasant dragging sound I decided I should probably stop and investigate what had happened. Had the bike leapt off the roof and plunged under the rear wheels of the car to avoid ever doing that climb again? Was there really a god who was not only listening but vengeful?

As I pulled to the roadside to stop, I looked in the mirror. The fact that both lanes of the road were blocked by a sizable piece of gum tree gave me a bit of a hint as to what had happened. Expecting my bike to be a miserable shadow of its former self, I got out to inspect. While cars began to queue from both directions, I struggled to make sense of the lack of any apparent damage to anything. Then I walked around to the offside to find a piece of gum tree embedded in my car!



*Then I walked around to the offside to find a piece of gum tree embedded in my car!*

By the time I'd walked the 100 metres or so back to the attack site, various heroes of the road had begun to clear the debris. From the bits I could see, and observation of the adjacent trees, I could deduce that a three limbed branch had detached from about 10 metres up. The branch that went through the car had provided a pivot for the rest. The base and bulk twisting off and passing to the left of the car, the other half broke off and passed to the right of the car. By the time these bits of tree had finished their no doubt elegant pirouettes, they appeared as a connected whole, blocking both sides of the road, save for the very outer verge in the oncoming direction. The multi-limbed remnant stood as tall as my car! Some light trucks and 4WDs were driving around the end. It took three blokes and quite a few supervisors to drag the stuff off the road.



## THE FINGER OF GOD – continued

The multi-limbed remnant stood as tall as my car! Some light trucks and 4WDs were driving around the end. It took three blokes and quite a few supervisors to drag the stuff off the road. They were all congratulating themselves on the fact that nobody had been hit or had run into this bit of nature fighting back. I walked them up to my car to view the truth of the tree attack.



After close inspection, I found a tiny sliver (less than 5mm) of broken gum tree caught in cables at the front of the bike - a bit of flying debris. The Baron was completely unharmed, not so the car. I couldn't open the bonnet, but was able to see that nothing critical had been injured: battery was intact, radiator and air conditioner condenser all intact. I drove the little Mazda 50 metres back to a farmer's driveway with a culvert. By parking on the culvert, I was able to get into the drain and pull the one and half metre length of tree through from the bottom. Aside from looking ugly and presenting some jagged bits to the world, everything necessary for driving was intact. I drove the 80km back to Geelong.

My insurance people were already in pre-xmas mode, so a kind operator offered to report it as a tow-in so that I could get quotes done and begin recovery. I started to ponder the damage at this point (bent bulkhead, bent skirt panel, bent A-pillar aside from the visible stuff), and the age of the car, and the modest nature of my six year old Mazda Metro and so was not too surprised when they told me it was an insurance write-off, and where should they send a cheque.

In hindsight, another microsecond, or a metre to the right and I'd have been compost. Apparently a Baron on the roof deflects all evil!

## MEMBERSHIP – Pete Heal

At present member numbers of OzHPV are hovering just below the 50 mark. As mentioned earlier, there has been a rash of non renewals this year and we are endeavouring to contact those who have not renewed.

If you have received this newsletter it means you are actually a financial member so you get a big "good on ya". Now we need your help to turn this decline around and grow OzHPV membership again.

It is interesting that the various OzHPV Yahoo Groups that OzHPV sponsors have very large "memberships" suggesting that people are quite happy to sponge off OzHPV's information network without becoming members or offering anything towards the running of the association.

OzHPV main list – 143 members

Canberra Mob list – 62 members

VICHPV list – 126 members

Interestingly, roughly half of the 26 competitors at the OzHPV Challenge were lapsed or non OzHPV members. We are not in the business of being 'bent rider benevolent society and our resources will dwindle unless we can maintain our membership base.

What should we do about this?

Suggestions are:

Run more events – there is only so much the enthusiastic few can do

Provide more member only services – suggestion?

Appoint a membership secretary to follow up non renewals of membership.

Limit access to OzHPV information and web content to members by password.

Two tier entry fees for events or member only events.

Write to one of the committee if you have some ideas or suggestions and are prepared to back them up with your elbow grease and enthusiasm.



## 2008 OzHPV CHALLENGE – Pete Heal

The annual OzHPV Challenge has taken place in various formats and at various locations over the 18 years it has been conducted since 1990.

In 2008, a different venue was chosen in the form of a go-kart track at Wodonga, Victoria with the aim to provide something different in a central location to the main OzHPV membership.

Participants came from Canberra, Sydney, Adelaide and Melbourne.

Keeping in mind the travel involved the event started midday Saturday and ended early Sunday afternoon.

Despite having confirmed various aspects with the Kart Club management the day before, we were disappointed to find that first off we were locked out and then the caretaker had gone away for the weekend so there was no shed or BBQ to use as promised. HPVers are fairly ingenious and revel in a “challenge” so in quick order we had access to the site and the shed and a BBQ was located and trailered in.



What was shaping up as a small attendance earlier in the week turned out to be a reasonable turn out with 26 competitors and around 45 people and kids for the evening BBQ which certainly stretched the catering arrangements.

We only had use of the track between noon and sun down so we made full use during that time.

The usual events such as the Go to Whoa, Slalom, Cross Country and Shopping race.

The various kids belonging to riders and sponsors had a great time joining in and taking part in their own special class and the competition was fairly serious at times.

The road race was exciting on such a short twisty track and the tight corners certainly brought out the more committed speedsters. There are only two short straights on the track and pedalling through the corners is necessary to maintain speed. 25 or so riders on a short course added to the excitement as the faster riders came through and tried to overtake. A certain HPV club president found and exceeded the cornering capabilities of his carbon fibre steed and had to remount and fight his way back into position.





Sunday's events were quite different as we were using a long straight open road about 2km from the kart track on the other side of the freeway. This involved a short ride through already sussed out underpass under the freeway. Racing was again spirited over the measured 200 metre flying sprint with a 1km run up. Some complained the run up was too long even though there was a slight downhill into the traps.

Unfortunately after much initial preparation, John Klugis's "Ikara Blue" camera streamliner had a rubbing rear tyre on launch which combined with a moderately rough road surface cause the tyre to blow and the bike to slide off the road on it's side before even reaching the start gate. Rider was OK but nice blue paint job was scratched up badly.

Survivors then completed a standing start 1,000km straight time trial up that slight hill.

Results were tallied back at the race track where now go karts were madly buzzing around. Awards and trophies were handed and participants dispersed to various points to make their way home either by car or by bike for some of the South Aussies.

Full results are included with this issue of HUFF.

Once again Jamie Friday and his fully faired SWB bike took out the Challenge in the Men's. Helen Curtis beat all challengers in the Women's class and Dorian Friday won the Junior's.

Once again OzHPV would like to especially thank our enduring and generous sponsors:

- Greenspeed Recumbent Tricycles
- Tri-Sled
- Reflex Fairings
- Typing 2000
- Fuse Recumbents
- Schwalbe Tyres &
- Pedros Lubricants





## **RISK MANAGEMENT – Pete Heal**

An assessment of the risks facing OzHPV was carried out by the committee in 2005.

It's worth mentioning the main risks and what mitigating actions have been put in place to reduce the exposure to the association.

OzHPV is an incorporated association and has been so since 1997.

From a risk perspective Incorporation means that the liability of the association in the event of it being sued following some form of negligence or accident is limited to the assets of the association and the members personal assets are protected.

If OzHPV operated as a non-incorporated association every member could be personally exposed should a lawyer come looking for money following an accident etc. The Lawyer would probably start by looking for the member with the biggest bank account. Being an incorporated association also means OzHPV as an entity can enter into contracts such as a rental on a cycling track for an event etc.

The committee identified one of the biggest exposures as the risk of being sued for negligence following an accident on an OzHPV event whether it is a social ride or a race. This exposure could also fall back on organisers and ride leaders for OzHPV events. The OzHPV committee maintains a public liability insurance coverage which would respond to such claims up to the limit of the policy and it protects not only the association but the financial members of OzHPV. Venue owners insist that hirer associations like OzHPV maintain an adequate level of public liability insurance before they are given permission to conduct an event. This insurance does not provide any protection for persons who are not financial members.

It is important that events organised under the OzHPV name such as the Challenge, other races, regular social rides in Melbourne and Canberra are specifically promoted as OzHPV events and that the Committee is advised that such events are taking place.

Organisers are required to comply with the following basic procedures for their rides and events:

- The Committee is advised that such events are taking place.
- The organiser/ride leader is a financial member of OzHPV Incorporated.
- At least one other OzHPV member assists with the running of the event
- Suitable first aid equipment for the ride/event is available.
- A mobile phone is available for emergencies.
- Non-members of OzHPV Inc are required to complete liability waiver form
- Details of the event are recorded such as participant numbers, names of non members, details of ride/event and any incidents which may have occurred.

Ride or events organised by non-members of OzHPV as well meaning or otherwise as their actions may be would not be covered by OzHPV's insurance arrangements.



## SEEKING SPEED – Paul Worden

### One Benter's quest for recumbent performance

Unless we were born riding a low racer (Ouch!) we were all newbies once. Each of us has a story about when and why we chose to buy a recumbent. My choice was made after a serious bout of pneumonia (then at age 58) when my doctor told me "Get fit or next time you get sick, you'll die."

I used the threat as a bit of domestic leverage. I'd always fancied a recumbent but we have to persuade our life partners that it's worth paying five times the cost of a 'proper' bicycle for a funny looking bike. I don't really know why recumbents appealed to me, but part of it was the logic of exercising while seated. I hate gymnasiums or non productive exercise so cycling and better still cycling while lying down, seemed perfect. Also, I'd go really fast because 'everyone knew' that recumbents were fast<sup>1</sup> and held all the speed records!

Even those few years ago, in Australia 'recumbent' meant trike and there was a choice of three locally made trikes; Greenspeed, Trisled and MR Components. I ordered a Swift trike from MR Components, more or less from my hospital bed and by the time I was well enough to ride it, it was waiting for me.

I'd accidentally chosen the perfect vehicle to help me recover. The vibration from the seat and rear wheel gave me a bonus massage every time I rode. If you know anyone with Cystic Fibrosis advise them to buy and ride a trike over some nice rough chipseal; beneficial results guaranteed.

The Swift trike was totally reliable and trouble free –pump the tyres and grease the kingpins every six months and that was all it needed.

I didn't expect to be 'fast' until I got fit. My first ride averaged a blazing 14 kph<sup>2</sup> and I remember having to stop half way to rest. I didn't mind that 'cos I had my own seat. It was an expensive seat, but lawn chairs don't have wheels and pedals. Over the next twelve months my fitness and speed improved, but impressive Tour de France speeds weren't coming quickly enough, so I started experimenting.

Front wheel covers helped a little bit. Then I made a few very crude tailboxes, but they didn't seem to do much except embarrass my wife when I rode around with them fitted. I rode a Great Vic and was passed by everyone wearing lycra and a couple of ten year olds on BMX's. Climbing the Tawonga Gap people walked by pushing their bikes as I climbed at a steady 4 kph! It was a trike, there's never a need to dismount! Hitting 85 kph on the way down tested the brakes too.

I made a rigid airfoil sail. This did create serious speed in the right conditions. With a quartering rear/side wind I could pedal at a relaxed 50 kph plus, but gusts tended to send me into the shrubbery. Dragging bits of a sailing boat up hills didn't improve my average speed. It was fun but not practical.



The MR Swiftlet Trike

<sup>1</sup> You and I know that it's the faired recumbents that hold the records.

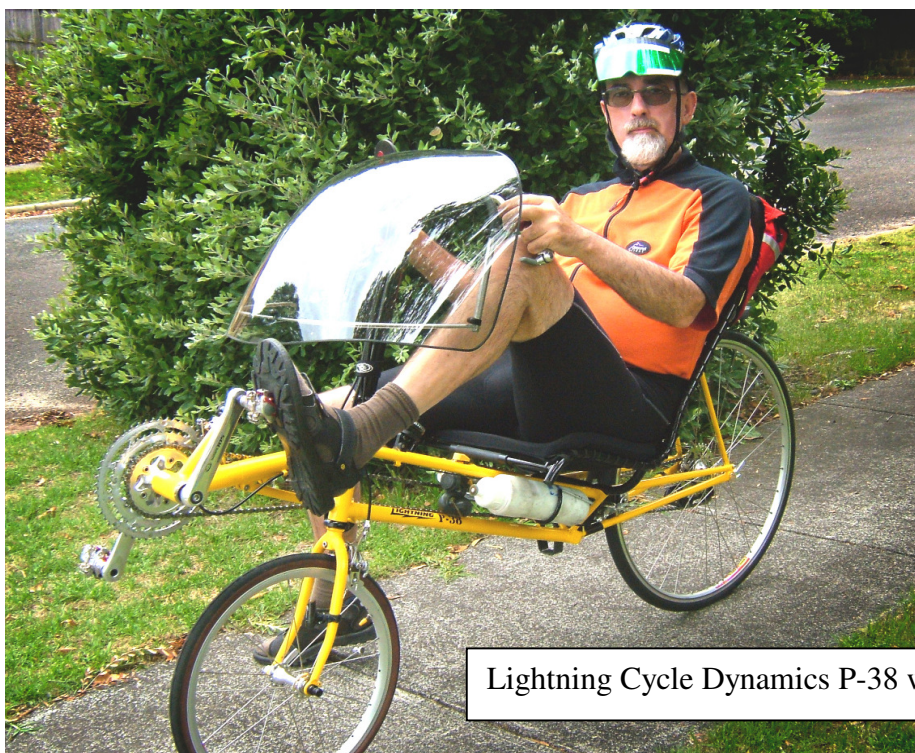
<sup>2</sup> I'm not shy. My current PB (Raptor) over 20 kms is 34.5 kph. For medical reasons, I probably won't do any better.

The crunch came when a local roadie looked at my trike and sniffed, "I've never been passed by a recumbent." The next day I ordered the lightest, fastest trike that was available<sup>3</sup>; an MR Swiftlet. This was the Ferrari of trikes weighing 12.4 kgs, adjustable hard-shell seat, linked hydraulic disc brakes, Schlumpf high speed front drive and reduced spokage wheels.

It was fast, but it wasn't fast enough. I just couldn't conquer hills on it. Downhill and on the flat I could fly but on long up hills I bogged down. I knew I wasn't going to be wiping the smile of any roadies faces on this trike My wife didn't really like it, because I was so low that talking while riding was difficult.

I'd learned the hard way that average speeds are mostly determined by how fast you can ride up hills. Diamond frames have innate advantages when it comes to hill climbing. They're generally lighter; they're a lot stiffer and the rider can stand and use body weight to stamp the pedals down. The rider can also pull up on the bars to get more leverage.

Coincidentally at this time I was given a nice wad of money by a relative so I started doing some research. Where could I buy a recumbent that would actually climb? It seemed that one design kept popping up as the 'best' climber. That bike was the Lightning P-38. I thought it was an ugly looking bike and I couldn't understand why it had such a good reputation. The seat angle was too high. It wasn't particularly light at 12.5 kg and it was expensive. Nevertheless, I could only find one bad review and that was by a chiropractor that said it gave him a bad back... he didn't say it couldn't climb! Comments were "It's twitchy," "It's too expensive," "It's an old design" and so on. But they climb!



Lightning Cycle Dynamics P-38 with small Zzipper front fairing.

The bike arrived some three months later. Let us pass over the pants wetting excitement of the assembly and get to my first ride on a recumbent bike<sup>4</sup>. Oops, what the fur, %@\$%\$\$# .....

I had to learn to ride a bike all over again. Twitchy? TWITCHY?! I rode around our 20 km loop and I swear the computer read 40 kms. I was all over the road and came home shaking like a wet dog. My wife asked how it went... "Really well," I said.....

I had good 'roll down'<sup>5</sup> figures for the trike<sup>6</sup>, so I was able to compare 'aero' speeds. Once I got the thing going in a straight line I easily equalled my personal bests on the trikes and I knew my muscles would adapt to the different BB<sup>7</sup> relationship. It took twelve months of regular riding to acclimatise to the P-38.

<sup>3</sup> MR made the lightest trikes in the World at the time – Australian innovation.

<sup>4</sup> Bike being two wheels as opposed to my trikes with three.

<sup>5</sup> A method for testing the basic aerodynamics and tyre efficiency of bikes. Using an accurate computer, the bike is allowed to roll from a standing start at a marked point down the longest hill available in as near no wind as possible. Several runs are needed and the maximum speed is recorded for each run, then averaged.

<sup>6</sup> Swift 58 kph, Swiftlet 61 kph, P-38 63 kph, Raptor Quasi low, 66 kph (none adjusted for bike weight)

<sup>7</sup> BB – Bottom Bracket – the bearing for the cranks.



Time passed and I started to ride with a local DF group. They were ten years younger and recreational riders like me, but a few were seriously and fit and riding bikes that cost more than my P-38 and weighed about half as much.

They got passed by a recumbent. Sometimes they got passed going UP hills too. The Sunday ride became a bit like the fastest gun in the West. Each week a stranger would turn up and I would politely ride away from him either down hill or into a head wind. The challengers were always younger than I and regular riders, so I have to assume that my advantage was the 'recumbent advantage.'

I fitted a HED Jet front wheel and a Mavic Carbone 50mm aero on the rear. Tyres were a Conti Sports slick on the front and a Michelin Pro Race 2 on the rear. I changed all the bearings for ceramics and swapped to an FSA carbon compact front chainset, using 34/56. To improve braking I swapped the cables for 'Metawire' noodle compressionless versions. These changes added maybe 2 kph to my personal best averages.

We're seeing more roadies on our rides now and one in particular has been keeping up with me on too many occasions. I needed more speed!

So I bought a rather tasty Challenge Seiran SL high racer.



Challenge Seiran SL High Racer

Challenge excel at making light recumbents. The Seiran SL weighed 8.6 kilos and felt like a feather compared to the P-38.

It didn't suit me at all. I hadn't prepared myself for the high BB and I got very nervous starting off on hills. It was faster than the P-38<sup>8</sup> but not significantly so with me riding it. I think each of us has a preferred seat to BB angle (or we develop muscles for a specific angle.) It's difficult to swap between the varying BB heights of high, medium and low designs. The high racer just didn't suit me.

Up until a few months ago I'd avoided 'going low.' The seat angles on low racers are a bit too radical for my neck. My wife has discouraged me because "drivers won't see you..." Many have pointed out that drivers see potholes<sup>9</sup> and dead dogs on the road, so they should be able to see a fruit cake dressed in fluorescent Lycra sitting 10 cms off the tarmac while riding what appears to be two wheels and a cog.

<sup>8</sup> On a heart rate controlled same day ride by ride test over a specific route, in windy weather the Seiran SL was 1 kph faster than the P-38. My P-38 is not 'stock' – it's faster, so I believe that a high racer is about 3 to 5 kph faster. Those figures are confirmed by roll down tests with the weight of each bike ballasted to be constant. The high racer is 3 kph faster 'aero.'

<sup>9</sup> Some drivers don't see semi trailers parked in front of them so we've got no hope really.

Never mind the perceived safety; I want more SPEED! I've bought a 'quasi low,' an Optima Raptor.



Optima Raptor Limited Edition Quasi Lowracer

The Raptor is a Baron with half the frame missing. The missing bits, all straight, are replaced with carbon fibre tubes. These have been carefully<sup>10</sup> bonded to the alloy other bits. The result is a Mad Max Baron weighing about 9.7 kg. I can get the weight down at the usual rate of \$1000 per kilo(!) but at the moment it's making the DFs sweat nicely so there's no need for expensive purchases of black Weetbix.<sup>11</sup> Is it faster? Yes it is; about 5 kph! Is it fast enough? No! But I can drop the chain, add a tail box, change the steering, go for ceramics and Q-Rings....

The NoCom looks nice....? I wonder how that would go for more speed?

<sup>10</sup> Carefully? I hope so.

<sup>11</sup> Carbon Fibre

## NEW PUBLIC OFFICER

One of the requirements for an incorporated association like OzHPV is to nominate a Public Officer. The Public Officer whilst not a committee member has an important role and is basically the point of contact with the Registrar General in the ACT (where OzHPV is incorporated). The public officer also is to ensure the Registrar General is advised of any changes to the aspects of the Association such as its Objectives, Committee of name. The Public Officer is required to be a permanent resident of the state or Territory where the organisation is incorporated.

Chris Curtis has filled this role for the past 13 or so years and due to a move across the border to his new country estate, isn't able to continue.

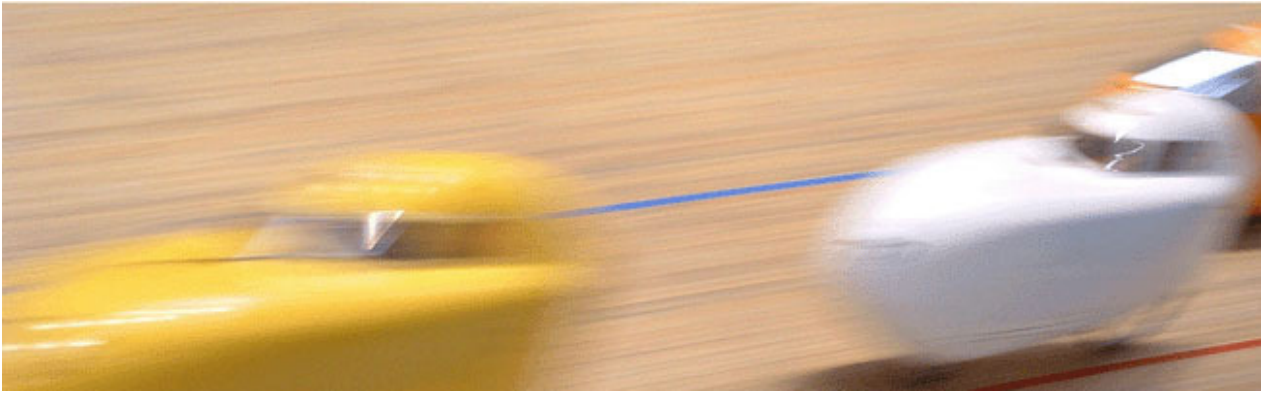
**Atholl Reid** has volunteered to take over the role of OzHPV's Public Officer.

Thanks for your support Chris and Atholl.



Off Road Atholl





### **IHPVA World Championships 2008 Bentwaters Parks, Suffolk, England – 16-17 August 2008**

The British Human Power are hosting the 2008 International Human Powered Vehicle World Championships to be held 16 -17 August 2008.

The Championships will attract the very best and fastest riders from around the world for two days of serious competition in events such including 200m sprints, criterium and distance races, and drag sprints.

The venue, Bentwaters Parks, is an ex-airfield in Suffolk near to the village of Woodbridge and approximately 60km of easy riding from the Port of Harwich.

Full information and entry details can be found at the official website <http://www.wc2008.org.uk>



#### **For Sales**

I've been surprised at how many really nice bikes are sold via the OzHPV website.

Posting these adverts in the past 6 months has resulted in quick sales of:

an M5 dual 559 Ti Shockproof,

a fairly new and high end equipped Challenge Serian SL

a Bacheta Giro 20

a nicely equipped Baron lowracer

a Greenspeed race trike

a Kotzur swb recumbent

Members are welcome to list their bikes or items for sale on the list. It obviously gets a lot of interest from prospective bent buyers.

Check it out some time <http://www.ozhvp.org.au/forsale/forsale.html>

Members can send their For Sales to <mailto:webmaster@ozhvp.org.au>

Pete Heal

## OzHPV Coming Events

**Canberra Races** – Second Saturday of month in May, June July August and September 2008

To be held at Stromlo Forest Park Criterium Circuit from 1:00pm till 3:00pm

Variety of races over 2-3 hours of booking. Classes for Bikes, Multi-track and Streamliners. OzHPV Members only. Non-members can participate in one event only before membership is required.

[www.ozhvp.org.au/events/ACT\\_Winter\\_Races/OzHPVSSOTMRaces.pdf](http://www.ozhvp.org.au/events/ACT_Winter_Races/OzHPVSSOTMRaces.pdf)

Contact Chris Curtis [actracing@ozhvp.org.au](mailto:actracing@ozhvp.org.au)

**Sydney Social Ride** – 25th May 2008. Social bent ride starting 10:00am from Homebush Railway Station and including varied bike paths and quiet roads.

About 40km with a lunch stop en route.

Contact: Pete Heal 0422103139

**AGM Weekend** – October or November 2008. Venue and actual date to be advised.

## Other HPV Events Around Australia

Australian HPV Super Series – Round 1

17th – 18th May

[www.pedalprix.com.au](http://www.pedalprix.com.au)

Australian HPV Super Series – Round 2

26th – 27th July

[www.pedalprix.com.au](http://www.pedalprix.com.au)

EIEP Maroondah Grand Prix

16th – 17th Aug [www.zoom-maroondah.com.au](http://www.zoom-maroondah.com.au)

Australian International Pedal Prix

18th – 21st September

[www.pedalprix.com.au](http://www.pedalprix.com.au)

State Cycling Finals Victoria – HPV Demonstration Venue TBC

18th - 19th October

RACV Energy Breakthrough

20th – 23rd November [www.racvenergybreakthrough.net](http://www.racvenergybreakthrough.net)



Racers at first of Canberra Race Series – 10/5/08