

May/June 2006 Volume 9 Issue 2 Contents

The Greenspeed OzHPV Challenge 2006 <i>Damian Harkin</i>	2
Dinner Party Debates and How to Win Them! <i>Jon Finch</i>	5
Battle Mountain records <i>Ian Humphries</i>	8

Broadford, body bits and Battle Mountain.

by Michael Priest

A SLIM ISSUE, THIS ONE, but the articles there are very good indeed! Damian Harkin has sent in a cracker of a writup on the Greenspeed OzHPV Challenge at Broadford, and I've used a few of the hundred-plus photos Struan Little took on the day. And on page 5 Jon Finch has sent in an alarmingly well researched and frankly disturbing catalogue of medical unpleasantness that our upright compatriots could avoid if they'd just go 'bent! Finally, Ian Humphries has sent in the IHPVA Battle Mountain records from 2005 - crikey, these people ride *fast!*

There's been a bit of disussion on the lists about the future of OzHPV, of the future executive and what members can choose to do. OzHPV is in a very literal sense it's members - it's simply not large enough to really have a presence of its own, it runs few events and owns no property - our common HPV interest is the tie that binds us.

OzHPV floats or fails on the involvement of its members.

There's also been a bit of discussion also about the content of HUFF - should it be more technical, or more lifestyle inclined? At this point I'd have to say both can be easily catered for - the sticking point isn't the content, it's who will write it! I'll be putting finger to keyboard more frequently, but the material of interest is what you (yes, I'm looking at *you*) are building, what event you're entering or a review of hardware you've just bought. If it's in the HPV sphere, it's of interest. Send it in.

Cheers,



from the OzHPV Picture CD 2005

Got a tale to tell or photo worth sharing?

Don't hide it - send it in! Triumphs, tragedies, weird and wonderful homebrews or a how-to of some aspect of building a HPV. A travelogue or an event review. Submit them all and share the joy around - after all, whatever doesn't kill us can only make us stronger... right?

Send your submissions to huff@ozhvp.org.au and get your name in lights today!



“The Greenspeed OzHPV Challenge 2006 ”

words by Damian Harkin

photos by Struan Little

WE HELD THE ANNUAL OZHPV CHALLENGE at Broadford again on April 1st and 2nd coinciding with the Melbourne Grand Prix. We actually got a mention in the Age's Good Weekend guide of 10 things to do (other than the Grand Prix) on the weekend! I don't know if anybody actually came along because of that but it was good to see us in print!

This year we had a good looking entry form designed by Tim Marquardt, and we tried to get the word out to lots of people to come. We offered \$1000 prize money. We contacted all the racing clubs and BUGS from Bicycle Victoria's listings. We wrote to previous Challenge attendees. We got our entry form into the packets given out to the 55 teams at the Wonthaggi Human Powered Grand prix, and we attended the associated eco innovation festival to hand out forms and to run a "Come & Try".

After we set up camp on Friday afternoon it got very cold and rainy. It was still cold, rainy and very windy on Saturday morning, though it dried up as the day went on. Still, the wind up on the back straight must have been fierce. We ended up with 28 entries which was pretty disappointing. There were quite few interstate entries including Ian Humphries and David Cox from ACT, Rob Wartenhorst and Danielle Cantono from SA, "new participants" Olly Powell and Wu Yi-Ting also from SA. Quite a few familiar faces came a long way to attend, but weren't racing including Peter Moller, Rob Braunsthall, Lloyd Charter and others.

This year we asked for chaining guards to bring us into line with other IHPVA events. This didn't seem to cause too many problems, so I hope we can continue with these rules in future. Racing started more or less on time at 10am.



Jamie Friday won the TriSled hill climb followed by Rob Wartenhorst and Ian Humphries. Jamie's "Preston" commuter bike didn't have a nose cone this year, just the tailbox, and Jamie's obviously been commuting a bit.

The following event was the Cycle Cafe downhill drags. It was won by Ian Humphries on his M5 carbon lowracer, followed by Jamie and Rob. For heavy people like me this is sad – light fit people can even roll downhill better than the rest of us! Josh Mayo-Murphy did this on a proper wooden billy-cart and actually spun it in the rain at the bottom of the hill.

Ian won the Flying Furniture time trial, and Rob came second but third place was taken out by young Daniel Noy on a very neat little trike. Daniel is from the Berwick Secondary college HPV team and it was great to see some of these "pedal prix" guys competing at Broadford.

Next race was the MR Recumbents enduro. Michael Rogan and I laid out a course between the trees of the camping area, trying to build in a few off-camber corners and muddy bits. We probably should have made the race longer because it was over in a flash. David Mahler won this on a proper full suspension mountain bike. Jeff Nielsen made second on a trike with Ian Humphries 3rd. A huge pile-up occurred at the jump between two trees with bikes toppling onto each other – very unfortunate but spectacular!

Lunch was put on by the Broadford scouts who excelled their previous efforts and created "Cafe Scout" - a restaurant with tables and chairs! Great stuff and good burgers too!

Next up was the Reflex Fairings road race. Some of the other races at The Challenge are pretty casual and a bit of a laugh, but 10 laps of Broadford is bloody hard work so full congratulations to Ian Humphries for winning and to everyone else who attempted it. Ian has turned 40 now and some of the younger guys looked dangerous as they really went out hard in the early laps. But Ian knows how hard he can go for 10 laps and he prevailed. Rob Wartenhorst stayed on the same lap as did Jamie Friday. Olly Powell, Daniel Noy and Jeff Nielsen were one lap down at the end.

The crowd's favourite event is the Typing 2000 Twin Slalom. Last year the cones were really widely spaced and it was just too cruel. We had people carrying their bikes down the course because they couldn't make the turns. So this year we moved them back in and it flowed a lot better. Not so good for Ewan Nurse on his roller blades however! Ewan, who won it last year, didn't even make the top eight. The final elimination runs were as exciting as ever and the final was between Jamie Friday and Jeff Nielsen. Jeff was exploiting the sheer cornering power of his trike, while Jamie used the narrow footprint and precision of his "high racer" style bike. At the last cone Jeff popped his inside wheel into the air and had to back off – Jamie took it out. If we didn't have the elimination runs, Jeff would have won as his time was faster by .75 seconds. Great racing!

The last event was the Greenspeed shopping race. We have tried to crack down on the enormous trailers this year. People were allowed bags and pannier bags, but if they had a trailer, they had to use in all events – nobody tried that. This event went to Jamie Friday using his tailcone storage. Ian Humphries came second using pannier bags, and Jeff Nielsen was third. I reckon this is a great endorsement of Jamie's bike design and his shopping prowess!

During the day we saw some great machinery in the pits. Many thanks to Tim Marquardt and Ben Goodall for bringing the Aussie Kyle streamliner for everyone to see. Also to Greenspeed for bringing along their pedal-prix quad. Some exciting machinery is happening! I also just loved Warren Rogan's tiny but perfect trike. How lucky can a kid be having Michael Rogan for their dad?

A special mention must go to the Friday's for entering three generations in the races. Robin made the eliminations in the slalom and came 8th overall. This proves that age is no excuse for not racing!





After dinner we had a trivia night in the classroom. Steve Nurse had made little kits of paper and drinking straws from which each team was supposed to make a model modular bike – a blatant plug for his real modular bikes. The teams rejected this notion and instead created hang gliders, ordinary bikes and other silly creations. The kit even included a fully articulated human rider but he's really floppy when made.

On Sunday morning we met outside Stuty's Bakehouse for the concourse event, plus coffees and croissants. The best presented homebuilt was Aaron Dobroszak's Silver and orange CLWB cruiser. The design objective included that it had to be cool and it was! The design and innovation award went to Jamie's "Preston" commuter bike. Best presented professional bike went to Bob Braunsthal's Greenspeed trike. The design and innovation gong was awarded to Ian Humphries' Catrike Speed. This new machine was a real hit – lots of good ideas and very beautifully laid out. The trike uses normal racing bike headstem bearings and has razor-sharp direct steering, cable discs, a cute suspended neck rest, and amazing hollow axles.

After the concourse I left with my daughter Sarah to pack up our tents. Roy Munro had taken me around some local back roads a few weeks before the Challenge as a route for a social ride. Roy took the group out at about 11am but alas, the Broadford hills proved too steep for some of the people who attempted it. Rob Waryszak tells me his group fell behind, got lost and took most of the afternoon to do the loop – I sincerely apologize. I don't want to scare people off coming to the Challenge.

Many thanks to the organisers and helpers Tim Marquardt, Steve and Christine Nurse, Alan and Dianne Ball, George Durbridge, my day-glo wife Joan and daughters Frances and Sarah for driving the PC all weekend.

I think the people who came enjoyed the weekend – how can we get more people to come????

- See the rest of Struan's photos online at <http://imagery.fotopic.net/c909036.html>
- See the complete results online at ozhvp.org.au (link on front page to Excel document)



Dinner Party Debates and How to Win Them! or Numb Nuts, Limp Wrists, Going Weak At The Knees And Other Problems Solved, Simply By Choosing To Ride Recumbent.

by Jon Finch

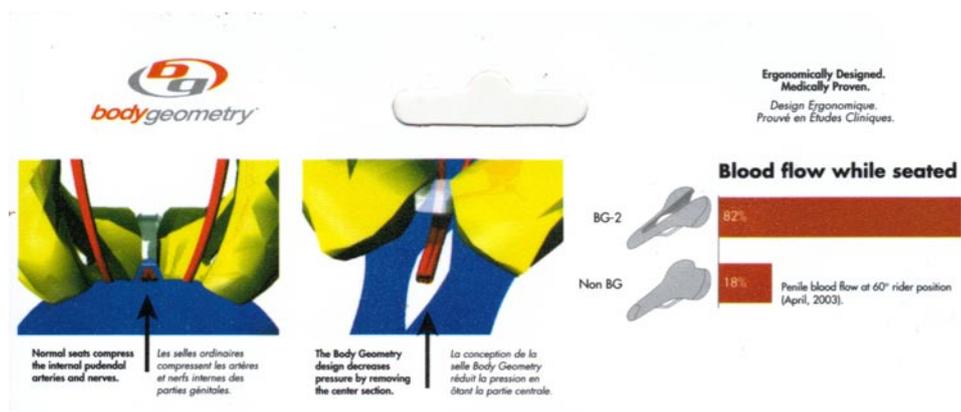
Next time you are out riding and someone asks why do you ride one of those weird looking things? Here are some possible responses.

NUMB NUTS

Perhaps there are not many recumbent riding people out there who know of the first problem I will discuss, but it is obviously a topic of much debate judging by the 160,000+ entries Google (17) shows for the topic of genital numbness and cycling.

Genital numbness colloquially known as “numb nuts” is numbness in the genital area believed to be associated with pressure on perineal region due to the design of bicycle seats. There are many new designs that attempt to manage this problem. However interestingly, this doesn't seem to be something that the recumbent riding community report.

This issue was only recently brought to my attention when a mountain biking friend showed me the new saddle he bought that increased penile blood flow by 60%!



Of course my interest was sparked and surprisingly I found research on this topic in relation to recumbents. The Department of Urology, University Medical Centre of Cologne in Germany found that there is a difference in penile blood flow during cycling in an upright versus a reclining position. They concluded;

“The results of the present study demonstrated that there is a deficiency in penile perfusion caused by perineal arterial compression. Cycling in a reclining position - in which no perineal compression was seen - caused no alteration in penile blood flow during exercising. Therefore, we suggest cycling in a reclining position to avoid health hazards - such as penile numbness and hypoxxygenation of the corpora cavernosa, which can result in impotency.” (2)

Another study of 1,100 male cyclists in Germany found a rate of between 58.3 % to 70.3 % occurrence of genital numbness (12). Similarly, in a survey of 333 female members of a cycling club, 44 percent reported perineal swelling or bruising, 34 percent experienced perineal numbness, 19 percent reported painful and/or bloody urination (12).

There is a wealth of research around the bottom of upright cyclists and some researchers (5) have described problems such as nerve entrapment syndromes presenting as genitalia numbness, being reported in 50-91% of cyclists, followed by erectile dysfunction reported in 13-24%. Others (6) have reported the aptly named Alcock syndrome, a

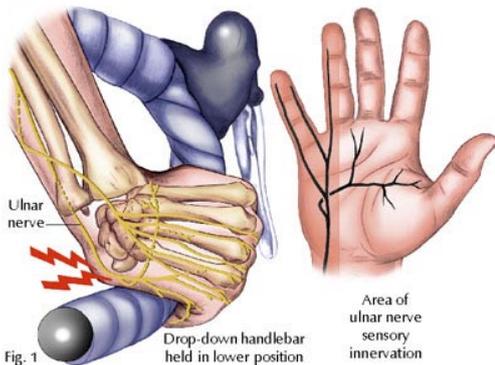
temporary penile insensitivity, due to compression of nerves within lower region of cyclists.

And just to keep your medical dictionary off the shelf, other less common symptoms reported include priapism, penile thrombosis, infertility, hematuria, torsion of spermatic cord, prostatitis, perineal nodular induration and elevated serum PSA (5), perineal folliculitis and furuncles, subcutaneous perineal nodules, pudendal neuropathy, male impotence, traumatic urethritis and a variety of vulva trauma (4). You may notice that I haven't even mentioned things like skin problems, such as chafing, ischial tuberosity pain, folliculitis, and ulceration which are reported as particularly common (3) and in common with all the above disorders are attributed to seat position, seat construction, and riding position.

LIMP WRISTS

Ulnar neuropathy (inflammation of the ulnar nerve), or handlebar palsy occurs due to shock and vibration that is transmitted directly from the handlebars to the arms and can also occur when the hand and arm are in a fixed position for a long time (10). Its symptoms include tingling, numbness, or pain on the outside or middle of the forearm; this sensation of discomfort may run all the way to the little finger. If ignored, the tingling can rapidly progress to numbness and intense pain sufficient to prevent cycling with hands on the handlebars (10).

Carpal tunnel syndrome (compression of the median nerve at the wrist) is another overuse injury that cyclists often experience. This often occurs when a cyclist holds the handlebars on top and applies pressure directly on the median nerve. Symptoms include numbness and tingling in the thumb, index, middle, and ring fingers and weakness of the hand (11).



from
http://www.hughston.com/hha/a_15_3_2.htm

WEAK AT THE KNEES

Knee Pain was highlighted recently in an article by Catherine McLean, in *Ride On Magazine* October-November 2005 (16) She wrote,

“Gear choice: one of the most frequent causes of overuse knee injuries, including ITB friction syndrome, is riding in too high a gear. The optimal cadence (pedalling rate) for cycling is about 85 revolutions per minute. Adjust your gears accordingly to maintain this cadence throughout your ride. On hills, choose a gear that will get you to the top with the least effort to minimise stress on the knees.” (page 32).

Once again, by virtue of the recumbent position, one has to practice riding with the correct cadence to get up hills. While it is possible to use the wrong gear on a recumbent, the amount of work done and the difficulty in maintaining balance while trying to get up a hill by sheer “grunt” discourages the rider from choosing gears that don't maintain a high cadence up a hill. Similarly, other research published in *Biomedical Sciences Instrumentation* (1) has shown that the recumbent position, all be it on an exercise bike, places less stress on the anterior cruciate ligament of the knee joint.

A PAIN IN THE BACK

Mellion (4) reported that neck and back pain are extremely common in cyclists, occurring in up to 60% of riders.

The prestigious *British Journal of Sports Medicine* quoted in a 1999 article that “According to the literature, 30-70% of cyclists suffer from cervical, dorsal, or lumbar back pain.” (14)

The University of Maryland Spine Program recommends using a recumbent bicycle for at least 20-30 minutes per session (7) for rehabilitation of back problems. Similarly, George J. Kolettis, M.D. stated that “Cycling on a recumbent stationary bike can relieve stress on the back” (8). Furthermore, the website “lowback-pain.com” states “cardiovascular exercise is safest on a recumbent bike 2-3 times per week” (9).

In an article regarding triathletes, (very fit and strong people one would imagine) published in the *British Journal of Sports Medicine* the authors reported that over one third of study participants reported back pain and they further suggested that cycling was a major risk factor for low back pain in triathletes (15). So it seems that even for the elite some times the upright bike might be a cause of pain.

A PAIN IN THE NECK

Researchers from The Department of Kinesiology, California State University reported that of the 85% of their sample that had overuse injuries or complaints the most common anatomical site for overuse injury/complaints reported by male and female cyclists was the neck with almost half (48.8%) reporting a problem (13). Interestingly, their research also found that women had 1.5 times chance of developing neck overuse injury or complaint than males in their sample.

A quick check of some of the sites on recumbent cycling come up with much the same conclusion (18, 19, 20, 21, 22, 23, 24, 25) Summed up in this statement:

“To recumbent riders, neck, back, wrist and seat pain are virtually unknown” (18).

So there you have it, some answers to the question, why do you ride one of those weird looking things, because it avoids some of the pain of cycling and some of the research says it's good for your body!

REFERENCES

- 1 Reiser RF 2nd, Broker JP, Peterson ML. Knee loads in the standard and recumbent cycling positions. *Biomed Sci Instrum.* 2004;40:36-42.
- 2 Sommer F, Schwarzer U, Klotz T, Caspers HP, Haupt G, Engelmann U. Erectile dysfunction in cyclists. Is there any difference in penile blood flow during cycling in an upright versus a reclining position? *European Urology.* 2001 Jun;39(6):720-3.
- 3 Weiss BD. Clinical syndromes associated with bicycle seats. *Clin Sports Med.* Jan 1994;13(1):175-86.
- 4 Mellion MB. Common cycling injuries. Management and prevention. *Sports Med.* Jan 1991;11(1):52-70. [Medline].
- 5 I. Leibovitch, Y. Mor. The Vicious Cycling: Bicycling Related Urogenital Disorders. *European Urology*, Volume 47, Issue 3, Pages 277-287
- 6 Oberpenning F, Roth S, Leusmann DB, van Ahlen H, Hertle L. The Alcock syndrome: temporary penile insensitivity due to compression of the pudendal nerve within the Alcock canal. *J Urol.* Feb 1994;151(2):423-5. [Medline].
- 7 <http://www.umm.edu/spinecenter/treatment/index.html> world wide web accessed 29/03/2003
- 8 <http://www.spineuniverse.com/displayarticle.php/article605.html> world wide web accessed 29/03/2003
- 9 <http://www.lowback-pain.com/exercise.strength.htm> world wide web accessed 29/03/2003
- 10 <http://www.sportsinjurybulletin.com/archive/cycling-injuries.html> world wide web accessed 02/04/2003
- 11 http://www.hughston.com/hha/a_15_3_2.htm world wide web accessed 02/04/2003
- 12 http://ocawlonline.pearsoned.com/bookbind/pubbooks/bc_johnson_humanbio_2/medialib/news/article11.html world wide web accessed 02/04/2003
- 13 Wilber CA, Holland GJ, Madison RE, Loy SF. An epidemiological analysis of overuse injuries among recreational cyclists. *International Journal of Sports Medicine.* 1995 Apr;16(3):201-6.
- 14 Salai M, Brosh T, Blankstein A, Oran A, Chechik A. Effect of changing the saddle angle on the incidence of low back pain in recreational bicyclists. *British Journal of Sports Medicine.* 1999 Dec;33(6):398-400.
- 15 Manninen JS, Kallinen M. Low back pain and other overuse injuries in a group of Japanese triathletes. *British Journal of Sports Medicine.* 1996 Jun;30(2):134-9.
- 16 Catherine McLean. *Ride On Magazine* the bicycle Victoria magazine. Vol 23 No 5 October-November 2005 Bicycle Victoria.
- 17 Results 1 - 10 of about 166,000 for genital numbness cycling. (0.39 seconds). <http://www.google.com.au/search?hl=en&q=genital+numbness+cycling&btnG=Search&meta=> world wide web accessed 02/04/2003
- 18 <http://www.lmb.org/wolverbents/> world wide web accessed 02/04/2003
- 19 http://www.angletechcycles.com/why_a_recumbent.htm world wide web accessed 02/04/2003
- 20 <http://www.ihpva.org/FAQ/> world wide web accessed 02/04/2003
- 21 <http://www.ihpva.org/people/beckstev/howWC.html> world wide web accessed 02/04/2003
- 22 <http://www.oraclecycleworks.com/tv1.htm> world wide web accessed 02/04/2003
- 23 <http://www.asisna.com/hppbikes/> world wide web accessed 02/04/2003
- 24 <http://wazabike.itgo.com/> world wide web accessed 02/04/2003
- 25 <http://www.bikeroute.com/WhyBent.html> world wide web accessed 02/04/2003





IHPVA Battle Mountain record submissions for 2005

by Ian Humphries, OzHPV's IHPVA Representative

photo: Dave Balfour (at the rear of the bike) tapes the Varna II prior to Lisa Vetterlein's record-breaking run.
<http://www.recumbents.com/WISIL/whpsc2005/resultsfriday.htm>

HERE ARE THE IHPVA BATTLE MOUNTAIN record submissions for 2005. These are not yet IHPVA approved but should be and have been just submitted:

A Junior rider, Charlie Charlie Ollinger did well (riding an M5 fully faired bike):

200m 7.754 sec 92.854 KPH (57.697 mph)

1Km 39.115 sec 92.036 KPH (57.189 mph)

His exact age for the submission is yet to be advised.

Also Damjan Zabovnik did very well at (riding a bike using mirrors to see ahead)

200m 6.137 sec 117.321 KPH (72.9 mph)

1Km 30.628 sec 117.54 KPH (73.036 mph)

Not the top record, but the fastest European entrant

Record Report for Land Speed Record Women's 200m & 1000m Flying Start Speed Trial, Single Rider Battle Mountain, Nevada, 7 October 2005

Record Attempted: Land, Women's 200m Flying Start Speed Trial, Single:
 Previous Record: 65.899 mph, (106.054kph) (Ellen Van Vugt)
 Time: 5:56PM
 Vehicle: Varna II
 Rider: Lisa Vetterlein
 Designer: Georgi Georgiev
 Builders: Giorgi Georgiev/ Dave Balfour
 Official Observers: Paul Gracey, Tom Nowak
 Timing Equipment: IHPVA Alge Timer and HPVA Anemometer
 Official time for Distance: 6.719 seconds
 Computed Speed: 66.585 mph, (107.159 kph)
 Official Wind Speed: 272 ft/min. (1.38 m/sec)
 Backup run: 10/6/2005 6.852 sec 105.079 kph (65.293 mph)

Record Attempted: Land, Women's 1000m Flying Start Speed Trial, Single:
 Previous Record: 47.036 mph (75.697 kph) At Blaineville, Quebec
 Date of Attempt: 7 October 2005
 Time: 5:56PM
 Vehicle: Varna II
 Rider: Lisa Vetterlein
 Designer: Georgi Georgiev
 Builders: Giorgi Georgiev/ Dave Balfour
 Official Observers: Paul Gracey, Tom Nowak
 Timing Equipment: IHPVA Alge Timer and HPVA Anemometer
 Official time for Distance: 33.904 seconds
 Computed Speed: 106.182 kph, (65.978 mph)
 Official Wind Speed: 1.38 m/sec (272 ft/min)
 Backup run: 10/6/2005 34.53sec 104.257 kph (64.782 mph) wind 0.47m/s

