
Recumbents as Audax vehicles

by Peter Weiss and Peter Mathews

With the recent increase, we hesitate to say upsurge, of interest in recumbents among Audax club members we are urging readers to consider the suitability of recumbents as Audax bikes.

Your scribes have done PBP on recumbents, Mathews on a bike and Weiss on a trike. They were not alone.

So the answer is clear, right? Wrong. Who will forget the rider who did PBP on a scooter in 2003? The question is not the possibility but the suitability of a recumbent for Audax riding. That means doing long rides within the time limit in a fair degree of comfort.

As this article is about recumbents as Audax vehicles, we will consider two questions: Why recumbent, and two wheels or three? We will not write about their use for commuting, for touring or as general-purpose sports bikes.

Why recumbent?

Comfort

Weiss: Imagine a club meeting with a few dozen members present. (Your scribe Mathews not present) The speaker asks all riders in PBP 2003 to stand. A significant number do so. The speaker then asks anyone to sit down if during PBP they suffered from sore wrist or arms, neck pain, back pain, or sore bottom, or who took pain killers or applied creams or ointment to various parts of their body to cope with soreness or chafing. Every PBP rider sits down. That's right folks, not one rider who did PBP on a conventional road bike escaped pain-free. Your scribe Weiss who did PBP on a recumbent trike remained standing.

There you have it, in one paragraph. Recumbents are comfortable. Your scribe Weiss still remembers the first time he came across PBP. It was in Checkpoint, just after the 1999 edition of PBP. Weiss had just done his first 200 (Around the Bay



Peter Weiss glides along on his Ultra Swift recumbent

in a Day) and he wandered into the Audax tent. He remembers reading an article about PBP in Checkpoint, and thinking that the participants must be mad. They battled pain, tiredness, pain, fatigue, and did he mention pain. They were nothing less than heroic. Weiss didn't want to be heroic. So recumbent for him.

Mathews: I rode PBP in 1999 on a custom built road bike. A lovely machine, still much treasured but ridden only about half the distance I have so far accumulated on my recumbent. The engine suffered serious pain and lasting physical discomfort in the neck, toes and fingers as a result. I didn't ride a bike again for several months. In 2003 I finished PBP in a slightly better time, with

much more sleep and longer stops, grinning from ear to ear! Rode the recumbent two days after arriving back in Australia.

The view

Have you ever tired of looking at the road just in front of your front tyre, especially when slogging up a long steep hill?

Weiss & Mathews: On a recumbent, lie back and enjoy the view. Going recumbent has for both of us rekindled the joys of riding in the country, bird, bee, and bus-watching all take on new meaning!

Weiss: Sure we can't stand on our pedals, but we don't need to. The gearing on most recumbents is so low that on steep hill the

rider just twiddles away in low gear until the crest is reached.

Mathews: And with a final gear ratio of about 120 gear inches developed by a 67 front ring and an 11 small sprocket at the back, my bike has serious down hill gears. At the other extreme my great-granny 30 (front) to 32 is so low that it requires fast spinning to stay above “minimum velocity” to avoid falling over – a problem not encountered by tricyclists.

Medical conditions

Some riders choose recumbents because of physical problems such as spinal degeneration or stiff neck. Others may be worried about loss of sexual function, which is said to afflict some men who ride huge distances on conventional bikes. Still others suffer from numb fingers and toes, mostly temporary, but for some riders permanent. We contend, from our very personal experiences, that all of the above conditions are mollified during recumbenteering.

Mathews: I think it important to note that I still get occasional fits of tingling in both fingers and toes.

The nose

Weiss & Mathews: Discussing the content of this article we came to the amazing realisation that when riding their conventional bikes their noses drip. Recumbent, they don't.

Two wheels or three?

Like so much in life, the choice of recumbents is a compromise. What to choose depends on one's priorities. Weiss rides a trike, Mathews a bike. Here are our experiences.

Weiss: Trikes are reluctant to fall over. It can happen, but it's less likely than on a two-wheeler. The story of Raoul Mill's fall is well known. Wouldn't have happened on a trike.

Mathews: Trikes don't lean either. This imposes some skills at least at high speed and cornering. I have certainly come off my two-wheeler several times. Most dramatically during the 2004 Alpine Classic a rear tyre blew out while descending Tawonga Gap towards Mt Beauty at speed. After one and a half rotations along the road my knicks had no bum left and I had some holes in my treasured PBP jersey. The bum recovered and I rode again in a week. Had I come off my road bike maybe would I have come off so lightly?



Peter Mathews hugs the corners during Paris-Brest-Paris.

Weiss: One evening well into Paris-Brest-Paris Weiss fell asleep while riding. The first he knew of it was when the rumbling of the wheel on the grass verge woke him. Had he been on a two-wheeler he would have tumbled. Yes, we know that when we are too tired to ride on safely we should pull over and sleep. But on long Audax rides (400 and above) that's not always possible. With the time limits we subject ourselves to, we sometimes just have to keep going. Eventually our bodies

can have enough, and then we have no choice but to sleep.

One hundred km into a ride, time for a lunch break at the cafe in the town we're riding through. Pull up outside the cafe, where to park the bike? Cafe owner doesn't want it leaning against the plate-glass window. Prop it against a tree? Lie it on the road? Lean it against a brick wall out of sight? With a trike it's simple. Park outside the cafe next to the window, sit down inside

with the trike in full view and enjoy lunch. After lunch, go outside, sit down on the trike and pedal off. A little point? Maybe, but ask Bob Bednarz what can happen to a road bike left out of sight even locked up.

Mathews: I like to get off the bike to walk around, talk to people, and find it very easy to lock the bike to purpose-made or other street furniture.

Convenience

Weiss: One can sleep on a (stationary) trike. Sometimes on a long ride you just have to stop and sleep. It's not always possible to find somewhere convenient to sleep. There may be no shelters nearby, the ground may be hard or wet or stony or dirty. On a trike, just stop, apply the parking brake, pull on a space blanket if it's cold, and take a nap.

Mathews: On Audax rides I have slept on some of the loveliest concrete you'll find! Mr Weiss is correct, and during bad weather I have rested on the recumbent seat by leaning the shoulder gently against a wall. I prefers beds!

Hills

Weiss: If the going gets too tough (e.g. climbing Mt Buffalo after 130 km of the Audax Alpine Classic) the trike rider just stops. No need to unclip, no need to balance, just stop and apply the brakes. To go, release the brakes and pedal. No clipping the shoes in, no wobbling until speed is reached.

Mathews: The two wheel contributor to this article acknowledges this advantage. Starting and stopping on any two wheeled machine on a steep hill is tricky. On my two wheeled recumbent I seem to wobble less on starting than my conventional bikes. Why? Perhaps because of less strain on the handle bars. You need to be in the right gear. Getting uphill speed on my recumbent has been a real challenge.

The recumbent bike

There is little doubt that recumbent bikes can be faster than recumbent trikes, and faster than most road bikes. Recumbent bikes can be lighter than trikes (only two wheels, no heavy cross-member to hold the two front wheels) and much more aerodynamic. In fact a recumbent bike can combine the speed of a road bike with the comfort of a recumbent trike. Of course it lacks the stability offered by the third wheel, but in this, as in so much in life, it's a compromise. You have to decide what's more important to you - speed or stability.

Weiss: Recumbent bikes are easier than trikes to carry inside or on top of a car. They are usually lighter and easier to lift and carry.

Mathews: Not much! And I suspect Mr Weiss' trike probably weighs less than my bike (stark naked). I think we both suspect that once you add lights, water bottles and recumbenteering paraphernalia the differences are not great. Rider power to weight ratio has been one of the most influential factors contributing to improvement of my cycling performance. And is independent of the type of machine I ride.

Disadvantages of recumbents

Weiss: Because 'bents are low-volume articles, they are generally dearer than road bikes¹. Because they lack the strength of the diamond frame they are generally heavier than road bikes².

Mathews: Not sure about either of these assertions Peter. \$4000 gets you into a good Audax recumbent two wheeler (2 wheeled Flying Furniture of very recent manufacture) and plenty of road bikes cost more. Not sure about strength - my engineering ain't quite good enough to make that assertion.

Trikes are slower than bikes. How much slower? That varies from trike to trike. Weiss has tallied up his brevets, and finds that on average on his trike he takes around 30 minutes more for 200 km than on his road bike. That's slow enough to be last, and to lose the sociable aspect of Audax rides. Does that matter? On shorter rides, maybe yes. On longer rides, safety and comfort are paramount. At least to Weiss.

Mathews: finds that overall his times are at least as good as on his road bike. Never world beating, but its not a race, eh? Terrain always plays an important part. On a hilly course I am always slower. Always have been. On flattish courses - like the Irene Plowman very credible times are common. Comfort, more specifically lack of pain in hands and wrists makes riding the recumbent a joy which was disappearing from long rides on conventional bikes.

Conclusion

Peter Marshall (an Englishman who did PBP in 1999 and again in 2003 on different trikes) has written that for rides below 600 km he chooses the road bike for its speed; for longer rides he chooses the trike for its comfort. Weiss thinks that he might prefer a recumbent bike for rides below 600 and

a trike for longer rides, but money is a consideration. Mathews is happy with his 'bent bike for all distances.

Footnote on prices

Recumbent trikes in Australia start below \$3,000 while 'bent bikes start just below \$2,000. As with good road bikes, lighter is dearer, and you can easily pay \$5,000 for a lightweight trike or a fast recumbent bike.

Footnote on weight

Some Dutch makers like Optima and M5 make (expensive) bikes weighing under 10 kg. But most bikes weigh more. Mathews' bike, for example, weighs 13kg. Trikes are even often heavier. Weiss' trike, a lightweight in the trike world, weighs about 12 kg stripped down, but ready to ride Audax, considerably more.

PBP

Re-run of the 2003 Paris-Brest-Paris Australian Team Jersey

If you participated in PBP in 2003 and are interested in obtaining another Australian team jersey, please contact Greg Cunningham as soon as possible.

Greg will forward you the details and prices and how you can order. He will be finalising the orders by the end of October, if it is to proceed. So be quick.

Greg's contact details are as follows:

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