

## Wally's Waterford Round-up

By Wally Kiehler, MHPVA president

This year was our 22nd annual Michigan Human Powered Vehicle Association rally.

We had 37 HPVs competing Saturday and 26 on Sunday. I think those were about our average numbers since I joined the MHPVA in 1992.

The big difference this year was the weather. On Saturday -- after both one-hour time trials were completed, it rained and then poured. We were not able to run the hill climb/coast down event as scheduled. After waiting around all afternoon, we decided to stay on schedule for our dinner plans at Big Boy.

Two hours later, we returned to the track and the rain had stopped, so we ran the hill climb/coast down event. Some of the competitors did not return after dinner and missed out on the break in the weather. We felt, however, that we had to try to get back on schedule.

On Sunday the rain held off enough for us to run the 1-kilometer time trial, followed immediately by the 200-foot sprints. We were rushing that day to get back on schedule so that we could hold every advertised event.

Following the sprints we decided to proceed with the road race. Because the pavement was still wet, only 11 competitors entered this final event and we were able to run them all at once. Our awards ceremony was held on schedule at 2 p.m.

The results to all of these events are found elsewhere in this newsletter. They represent the hard work of our club officers, club members, and their families. Thank you!

I have been involved with this organization as an officer now for several years and I really feel our HPV group is working together very well. For example, Bill Frey has been compiling the race results on his laptop computer for several years now. This method was originally started by member Jon Stinson. Bill receives the race data from Warren Beauchamp's timing equipment, which Warren takes with him to all the Human Powered Race America events.

This year we were fortunate enough to have two long-time friends assist us, Len Brunkalla from Illinois and Charles Brown from Florida. "Flag man" Len came with his son, Greg, who took some video for an upcoming proposed TV slot in the near future and photographs for a magazine article. Charles assisted Mike Eliasohn with the "best home-made bike" judging. There are many others who helped out greatly those two days. Thanks to you all!

I encourage you to share your Waterford photos or experiences with our group. You should forward them to Mike Eliasohn for the newsletter. You are also encouraged to submit photos and bike information which can be listed in the "[who we are](#)" section of our Web site.

I hope to see you all again next year.

([next page](#))

## HUMAN-INTEREST STORIES

By Mike Mowett

Len Brunkalla's 27-year old son, Greg has become a photographer and videographer. He's really interested in shooting a documentary on HPVs.

He had some great studio quality cameras that look like the stuff TV guys use. He took, presumably, some great action shots as we went through the chicane on the course. I think several of us were leaning over him as he sat like those courtside photographers right on the edge of the chicane.

Greg flew in from Chicago and made it to Waterford later on Saturday, after missing a flight. He mentioned it would be great if he could find a production company willing to sponsor the documentary. (I mentioned maybe CycleVision to him.) He would like to travel to the big events like Battle Mountain to really get great footage.

Greg did some on-camera interviews with people during the weekend, and after we had all packed up, he took a video of Sean circling the track in the Coslinger. Dad Len was driving and Greg was shooting out the back open hatchback of their van.

Jeff Hunn brought along a younger guy (Luke Gilbert), who really helped out with the timing and tabulating results from Warren's system. Brenda Gritters helped man this system during the races, freeing up Warren.

Ann, the lady from the Waterford Hills raceway, spent the whole weekend with us, and I think was interested in buying a trike by the end of the weekend.

Upright bike junior racer, and state junior champion Cory Dubrish made a return appearance to Waterford. He was there in 2002 as a 14 year old. Now 17 and about 200 pounds of muscle on a 6-foot 2-inch frame, he looked impressive on his Felt time trial bike. Cory's dad, George Dubrish, is a good friend of Bill Frey and I've also talked to him at our local bike store. George said Cory rode 550 miles in nine days at a cycling camp in Alabama over spring break. He's a fast spinner, and practices a high-cadence.

Cory was perhaps a bit overworked and his dad said being bothered by the heat near the end of the one-hour time trial, as 15-year old Charlie Ollinger (on an M5 low racer) took the win, with a new junior hour record! (*Editor's note: Cory, who only raced on Saturday, and Charlie actually were in different classes. At 17, Cory raced in the stock class with the adults. Charlie was the only competitor in the junior class.*)

## What I've been up to lately

By Charles Brown

*Editor's note: Charles Brown wrote this prior to the Michigan HPV Rally, which he attended. For those of you who don't know Charles, he and his wife, Blue, moved from Ann Arbor to Clearwater, Fla., in 1994. He's built more recumbents out of wood than anybody and is a frequent contributor to human power publications.*

There's a lot of projects going on around here. I built a front-suspension bicycle to see if one can be built that is not actuated by pedaling forces. I concluded that the natural frequency of the suspension should be outside the normal range of pedal pushes per minute (2 x the crank's rpm) and the suspension should be well damped.

Another experiment was to build a bike with a steering system utilizing a universal joint, like Mochet's Velocar from the 1930s or the Ground Hugger recumbent (the subject of a how-to-build article in Popular Mechanics in April 1969).

Using automotive driveshaft bearings, I got a lot of lost motion or slop in the steering system. I've since learned from the Internet and Gunnar Fehlau's book, "The Recumbent Bicycle," that other people who tried U-joint steering had the same problem. I'll go back to using a push-pull rod next time, where I had the same difficulty in the past, only this time I'll use aircraft rod end bearing, such as Wicks Aircraft Supply sells, which I understand are a lot better. *(Editor's note: But at the Michigan HPV Rally, Charles saw one or two -- I forget -- homebuilts that used a U-joint in the steering and had little or no play in the steering. Apparently it's a matter of buying the right U-joint.)*

In every way but the steering, my Velocar clone is an exceptional bike. Mochet was really ahead of his time.

Got a letter from Vernon Forbes, the new editor of Human Power (published by the Human Powered Vehicle Association). He was spending the spring in St. Petersburg, just south of me, and invited me down to say "hi."

I met an extraordinary human being, driven more by principles than money. He is incredibly well educated, but fixes bicycles in a shop.

He became editor partially to get his own material published. His own interests lie in the esoteric, pure science end of the bike world. He said he has enough articles to fill four more issues. I'm building my first bikes with really laid-back seats. These really do reduce the air drag. I bicycle to work 8-10 percent faster than I use to.

I tried painting one of my bikes with glow-in-the-dark paint, but it has to be really dark to see it. With street lights, automobile headlights and bike lights, you don't even notice the ghostly glow. I've seen reflective tape for sale that might be something better to cover a bike frame with.

Currently I'm trying to design a safer cycle. Any protection from cars is better than what I've got now. My current thinking is a sort of a full body helmet with three or four wheels. Does anybody have any ideas?

Handlebars are again being tinkered with. I'm again amazed how rather small changes to the bars can greatly affect steering and how pleasant the bike is to ride.

In my opinion, for a supine recumbent, measuring to the center of the handgrips, the distance of the handgrips back from the steering axis should be 25-40 percent of the distance between the hands. I'm also working on a short wheelbase bike with a rider position like a (dual big wheel) Bachetta, but with the rider lowered 4 inches due to use of a 20-inch front wheel. I think this design shows some real promise.



CHARLES BROWN on what he calls his "famous long-wheelbase mid racer." He described his thoughts behind the design in an article in the May/June issue of Recumbent Cyclist News.

## 22nd annual Michigan HPV Rally – June 11-12, 2005

By *Mike Mowett (mostly) and Mike Eliasohn*

The rally attracted 37 entries on Saturday and 26 on Sunday. We had 44 last year and the record of 50 was set in 2001. Competitors came from Michigan, Ohio, Ontario, Illinois, Indiana, Iowa, Pennsylvania — and coming the farthest, Patrick Grant, who drove 690 miles from Laceys Spring, Alabama (near Huntsville) with two tricycles.

The two one-hour time trials were held Saturday morning. Then after the lunch break, it started raining and kept raining. Finally about 4:30, President Wally declared an early start to the traditional dinner at Big Boy.

After a two-hour dinner, we came back to the track and successfully ran the hill climb/coast down. After six or so riders ran the 1 kilometer, it started raining again, which caused some problems with the pressure sensitive switches that Warren Beauchamp made, so we called it a night.

### Story of the day:

Sean Costin recovered from a dropped chain/gearing problem in his Coslinger streamliner on the hill during the one-hour time trial in the morning, then came back to win the evening hill climb in a record 18.6 seconds on his stock class Monkeyhand, the first ever sub-20 second run on the track.

Rick Gritters had the previous record at 20.06 seconds. These earlier runs were done with hand timing. Warren's new pressure sensitive switch tapes was used for this event, with one tape at the bottom of the hill and one at the top.

From a historical perspective, the two one-hour time trials were the fastest ever, based on the average of the top 10 speeds -- 27.0 mph. In 2002, we averaged 26.4 mph. What hurt in the hour races was the temperature was a blazing 89 to 91 degrees, with high humidity.

John Simon, in his 15+ year old Terry Hreno-built Moby streamliner has been a fixture (or top speed person) at Waterford every year. He's won the sprints and hour time trial numerous times. He told me it was the first time he's ever been lapped in the hour on the track, as both Rick and Warren passed him. He asked if everyone is getting faster or is he getting slower. The answer is: Rick and Warren have gotten faster, as John is running about the same 30 to 31 mph hour times as in years past, from a check of the records.

Rick, from Pella, Iowa, won in the streamliner class, 32.5 miles, followed by Warren, from Big Rock, Ill., 31.7 miles. Both were racing streamliners they built themselves. John, from Portland, was third, 30.1 miles.

Other time trial winners, all riding low racers, were: Super stock, Doug Pertner, St. Clair Shores, Optima with homemade fairing, 25.6 miles; superstock, Chris Evans, Flint, Velokraft, 25.4 miles; stock, Frank Geyer, Brighton, Challenge Jester, 25.8 miles; junior, Charlie Ollinger, West Milton, Ohio, M5, 21.5 miles; women, Kathy Eagen, Marietta, Ill., low racer built by Rick Gritters, 17.9 miles.

Hill climb winners, in addition to Sean Costin in the stock class, were: Streamliner, Rick Gritters, 21.03 seconds; super street, Mike Mowett, upright Cervelo with body sock, 20.06 seconds; super stock, Chris Cortez, Chicago, Earth Cycles Sunset lowracer, 27.9 seconds; junior, Charlie Ollinger, 20.31 seconds; and women, Amy Miller, Dayton, Ohio, Schwinn "10-speed," 26.72 seconds.

Coast down winners were: Streamliner, John Simon; super street, Rich Sadler, Quakertown, Pa., homebuilt bike and fairing; super stock, Chris Cortez; stock, Sean Costin; junior, Charlie Ollinger; women, Kathy Eagen.

### Sunday Events

Standing start 1-kilometer time trial winners. (The six or so who ran Saturday night had their choice of accepting that time or running again Sunday morning, but couldn't run Sunday and then take their best time.): Streamliners, Rick Gritters, 31.9 mph; super street, Mike Mowett, 28.0 mph; super stock, Chris Cortez, 21.4 mph; stock, Sean Costin, 29.8 mph; junior, Charlie Ollinger, 25.2 mph; women, Amy Miller, 20.2 mph.

Timing for the sprints on Sunday morning started having problems half-way through when the rain started coming down again! So we took a quick poll of riders waiting to go and decided to hand-time. Thanks to Terry Gerweck for this. The timing trap is 200 feet long. In track and field, it is commonly accepted in 100 meter sprint events that automatic timing is 0.14 seconds faster than hand-timing. In stock class, on the Monkeyhand, Sean went agonizingly close to 40 mph (39.99 mph – electronic timed). OK, Sean we'll round up for you. Not bad for unfaired.

Rick Gritters threw down a 41.57 mph (electronic-timed) for the fastest speed of the day.

Other winners: Super street, Rich Saddle, 35.51 mph, followed by Mike Mowett, St. Clair Shores, 35.24 mph; superstock, Chris Cortez, 30.1 mph; junior, Charlie Ollinger, 33.8 mph; and women, Kathy Eagen, 27.8 mph.

In past years, the rally concluded with two road races, one for the "fast group, those over 35 mph in the sprints," and the other for the "slow" group.

This year, with participation being a bit down on Sunday, we only had one road race and no streamliners were entered. Fast guys Rick Gritters and John Simon had already gone home, and Warren didn't race. Sean "King of the Hill / sprints" had a mechanical problem again, but since he dropped behind, I (Mike M.) was able to make it up to second place. I averaged 25.5 mph in 30 minutes for 12.75 miles, but had it been official, it might have been faster. (It seems my speedometer is reading low at every event). Frank claims he saw me behind him near the end because I'm up high with a bag over my head – literally!, but I never could see him, he was so far ahead! Dennis on his Jester was moving along well. The top five finishers were all within a lap or two, including Wally Keihler and Charlie Ollinger. Charlie's looking strong!

Frank Geyer finished first, with Mike M. second and Wally Kiehl on his Lightning F40 third.

There was a turtle crossing the road during the road race. He made his way slowly across towards the infield and was there lap after lap till Warren thankfully came across the track and rescued it. We also spotted deer and a baby fawn during the weekend.

Road race results did not count as part of the standings. The top two in each class were: Streamliner, 1) Rick Gritters, 2) Warren Beauchamp; superstreet, 1) Mike Mowett, 2) Rich Sadler; superstock, Chris Cortez; 2) Chris Evans, Flint, Velokraft low racer; stock, 1) Sean Costin, 2) Rick Gritters; junior, Charlie Ollinger (the only competitor); and women, 1) Kathy Eagen, 2) Amy Miller.

## HPVs at the Michigan State Time Trial



ABOVE FROM LEFT, PAUL BRUNEAU, CHRIS EVANS, FRANK GEYERS, AND MIKE MOWETT of the MHPVA line up for the start of the 2005 Michigan State Time Trial. Race Director Fred Nemenski stands at left with clipboard. BELOW, FRANK GEYER (LEFT) AND CHRIS EVANS negotiate turn number two while a race official looks on.

By Paul Bruneau

On Sunday, June 26, 2005, four members of the MHPVA lined up at Dearborn Heights' Hines Park to race against the clock (and against 170 other racers) in the Michigan State Time Trial, an annual USCF event hosted by the [Wolverine Sports Club](#), a fellow member organization of the [LMB](#).

About 10 days before the event, MHPVA Webmaster Paul Bruneau realized this might be a nice event for HPVs to try. Race Director Fred Nemenski was open to the idea, so Bruneau posted a message on the [BentRiderOnline HPV Racing forum](#). "I was already licensed in the USCF due to my membership in my local bike club's racing team," Bruneau said, "so I figured what the heck, I'll give it a shot, and see who else might want to race."

MHPVA members and racers Chris Evans on his VK2 (with tail fairing), Frank Geyer on his Challenge Jester (stock), and long-time MHPVA "hybrid" racer Mike Mowett on his upright-with-body-sock vehicle each signed up for the event and with Bruneau on his VK2 (stock) raced in their own "open" group on the 40K circuit.

Race organizers might have been even more surprised by Mowett's appearance than by the low racers', as one was overheard stating, "Is that covered by our insurance?" upon seeing Mowett roll up to the starting lineup.

The course, with its "double out-and-back" routing provided some challenge for the HPVers since there is a tight turn that must be negotiated, but overall, the course was a good one for HPVs with rolling hills, good pavement, and no auto traffic.

Geyer finished 15th overall (57:33) with Evans coming in 23rd place 39 seconds later (58:12). Mowett placed 46th (61:45) and Bruneau brought up the rear of the HPV group finishing 74th (62:38).

Race Director Nemenski expressed interest in setting up an actual HPV class in next year's event, which would be able to participate in prize money and awards for the winners provided the HPV community shows enough interest.



### Newsletter Submissions

Submissions for the MHPVA newsletter can be e-mailed to editor Mike Eliasohn at [editor@mhpva.org](mailto:editor@mhpva.org). If what you have is on paper, mail it to him at 1016 Morrison Ave., Apt. 2; St. Joseph MI 49085-1429.

If you have regular photos, mail those to Mike. If you have digital photos, e-mail those to our Webmaster, Paul Bruneau, at [webmaster@mhpva.org](mailto:webmaster@mhpva.org), but let Mike know what you sent to Paul.

Mike will mail a paper copy of the electronic newsletter to members who don't have e-mail. So if you are in that category, and somehow read this anyway, write him or call him at (269) 982-4058.

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## Best Homebuilt Prize

By Mike Eliasohn

For the second year, we had a prize for the best homebuilt competing, a copy of [Atomic Zombie's Bicycle Builders Bonanza](#), by Brad Graham and Kathy McGowan, published by McGraw-Hill. There's no set criteria and I and Charles Brown couldn't decide on one "best" homebuilt, so we conducted a drawing among the six builder/riders lined up for the start of the 1-kilometer time trial Saturday evening: Kevin Berls, Rick Gritters, Dave Balfour, Jim Iwaskow and Rich Saddler.

The winner was Dave Balfour of Marietta, Ill., on his carbon fiber front-wheel-drive low racer. It's the first carbon fiber bike he has built. I'm not sure why, but he raced it in the streamliner class, even though it's an "open" bike.

Amazon.com had a great price on buying two copies of the Bicycle Builders Bonanza, so I bought two. If you're too cheap to buy your own copy (cover price is \$24.95), start building and maybe you can win the book next year.



DAVID BALFOUR of Marietta, Ill., raced his award-winning homebuilt carbon fiber low racer to third place in the streamliner class. The worst he finished in any single event was fifth in the coast-down.

## MHPVA Rally Photos

Photos by Mike Eliasohn unless mentioned.



RICK GRITTERS of Pella, Iowa, won the streamliner class, winning every event except the coastdown in his homebuilt machine. In the one hour, he pedaled 32.5 miles; in the sprint, 41.6 mph.



IN THE STOCK CLASS, Rick Gritters finished second. He not only builds his own bikes, he also makes his own oversized chainrings.



CHRIS CORTEZ of Chicago won the superstock class, which allows a front or rear fairing. He's riding a no-longer-made Earth Cycles Sunset.



WARREN BEAUCHAMP of Big Rock, Ill., finished second in the streamliner class in his homebuilt machine. In addition to having a job, being recumbents.com Webmaster and building the HPRA timing system, he's been building a new streamliner.



*MHPVA PRESIDENT WALLY KIEHLER of Grosse Pointe Woods raced his Lightning F40, acquired since the end of the 2004 racing season. He finished third in the super street class, which allows a full fairing as long as the rider can enter/exit without moving part of the fairing or a maximum 40 percent hard surface, with the rest fabric.*



*AFTER AN ABSENCE of a few years, Doug Pertner of St. Clair Shores was back, racing an Optima low racer with a homemade fairing. He didn't compete Sunday and finished fifth in the super street class.*



*IN THE ONE-HOUR TIME TRIAL, Jeff Hunn of North Manchester, Ind., on a ??? leads Thom Ollinger of West Milton, Ohio, on his homebuilt lowracer.*



*RALLY ORGANIZER Bill Frey raced his Easy Racer Gold Rush in the super street class. He made the tail fairing from corrugated plastic the day before the rally.*



*FRANK GEYER of Brighton is the North American distributor for Challenge (made in the Netherlands), so naturally he raced one (a Jester), but only on Saturday. He won the one-hour time trial in the stock class, with a distance of 25.8 miles. Only three streamliners were faster.*



*RICH SADDLER of Quakertown, Pa., finished second in the super street class in his homebuilt streamliner with foam fairing.*



**WHAT DO HPVers DO WHEN IT RAINS?** Park their vehicles and themselves under a roof and discuss HPVs (of course) and U.S.-Canadian relations. Visible in the photo, taken Saturday afternoon, are Reg Rodaro (standing), Jim Iwaskow (yellow jacket) and Jacek "Jack" Sochacki, all from Ontario. In the rear is David "Doc" Pearson of Mooresville, Ind.



**JIM IWASKOW** of Richmond Hill, Ontario, raced his homebuilt carbon fiber bike. He's ridden it about 10,000 km since building it in 2002. He made the frame by laying carbon fiber over a foam mold. The handlebars and seat also are carbon fiber. He's now building another carbon fiber bike, with front and rear suspension.



**SINCE RACING** his front-wheel-drive Varna clone at the 2004 rally, Kevin Berls of Sunbury, Ohio, made changes including lowering the seat so his head wouldn't bump on the canopy and replacing the original tiller steering with a remote system. Garrie Hill made the monocoque lower part of the fairing and the two top pieces; Kevin did the rest. Despite the improvements since last year, he said, "You got to work to ride it." (Charles Brown photo)



**RICHARD MYERS** of Xenia, Ohio, raced in the streamliner class with a Challenge Jester fitted with his homemade fairing.



**MIKE MOWETT** towers above the other entries at the start of the one-hour time trial. He won the super street class, with two thirds, one second and first places in the hill climb (second best overall, behind Sean Costin) and the standing-start 1 kilometer. His bike is a Cervelo. (Charles Brown photo)