

# Schlitter

Brian's Full Review

## **Recumbents are for old people...They're not real bikes...**

These are the types of depressing messages that bounced around my head in the fall of 2013 as I sat across from my third physical therapist discussing how there was nothing else he could do for me and I should consider riding a different kind of bike.

A lot has happened since that idea was placed in my head and I believe it may be valuable information for a few of you dedicated road cyclists out there who are struggling with your own bodies in rebellion. Happily, I'm still putting at least 3,000 miles a year on the road and I'm still leaving all my work stress on the pavement – a critically necessary process for me and my family.

Amazingly, I'm doing much better than just getting in miles. I'm still watching my data on Strava, still pushing myself for new PR's, and occasionally I'm getting into some top 10's on certain segments. In short, I'm still having every bit as much fun exploring the mountains and farm roads of Maryland perched upon a miracle of physics and machinery.

My intent for this site is to share some facts, based in cold, hard data, for those of you that may have to be considering an alternative to the standard upright road bike. Take comfort, my friends. Your life on the open road is not over, you just need a slight change of perspective and geometry. Believe me, it'll be worth it.

The head picture of this blog is my bike – the Schlitter Encore. Let's state the obvious – it's a recumbent bike. But the world of recumbent bikes is a far broader and wilder jungle than upright bikes. The differences between upright road bikes is a very thin margin. Sure, you can tell the difference between the ride on a steel, or an aluminum, or a carbon bike. Sure, a nice set of wheels makes a big difference. Components? Yep, you can tell a difference in that shift. But lumping all recumbents together in a single category would be the same as lumping a high end carbon road bike with a low end fat tire beach cruiser. All that will result in this is a complete misunderstanding of the world of recumbents and their possibility.

I'll admit right up front, I am not a recumbent expert by any means. I've only had about one and a half years of experience with them and that time has been spent only on a single style of recumbent called the High Racer. I've never ridden a different type so I am fairly ignorant to what the other experiences might be. But I do have a very good feel for the difference between an upright road bike and a high racer and that's what this blog is about.

So, let's start to get into it. Is your body telling you in subtle or obvious ways that it's mad at you? Is it telling you to stop what you're doing on that bike? It could come in so many different forms – sore back, stiff shoulders and neck, sore hips, tender hamstring/pelvis connectors, hurting knees, sore feet, just about anything. Well, in the fall of 2013 my body was not just telling me something, it started screaming it and there was no way I couldn't listen. When you get to the point that you can't sit at work, have to stand up during conference calls, can't sit on your own couch at home and have to lay down on the floor, then believe me, you begin to really listen. This is where I found myself. It was the beginning of a lot of research, try, fail, try again, change, change again, rinse and repeat. I'd like to share the story with you in hopes that it might help just a few or bring a small amount of comfort to anyone else swimming hard upstream to stay on two wheels. I hope you enjoy...

# Schlitter

Brian's Full Review

## The Problem

For me, it started in late July of 2013. That year, I was approaching my 49th birthday and was in my tenth summer of road cycling. Prior to getting on the bike I had never been involved in any endurance-related or otherwise cardiovascular-centric sport. I wasn't a couch potato, but I just had not discovered the zen of the pain yet. I sport a pretty average build being about 5' 10" and bouncing between 165 and 170 pounds. Getting to the point that I could ride with the A riders was a long, hard journey for me. I can easily remember calling a pimple on the road "a hill" and I now think that same "hill" as a just a little roller. I can recall turning around on the actual hill climbs before even halfway up, unable to breath and certainly unable to go forward another foot. I can recall feeling like my head was going to pop off and not being able to get enough air no matter how much I breathed. But I fell in love with the road, so I kept pushing through.

By 2013, I could go up at a rate that I was comfortable, hanging with the A group on the local rides. I wasn't the first up the hills but was not the last. I took pride in getting to this point. Starting your cardio sports life at 40 doesn't lend itself to an easy road, so getting to the point that I could pace line with those A guys and not fall off the back was a point of pride for me. One of the pinnacles of my upright riding, in my humble opinion, was being able to complete the metric century at the Garrett County Gran Fondo in West Virginia in June of 2013. This 62 miles race included 8,000 feet of vertical ascension on some pretty killer grades. Now, there were hundreds of riders there completing the full century or even the double diabolical metric century including over 16,000 feet of climb. I wasn't there yet. I was happy with the metric and the 8K of going up.

So later in that summer, in July, I began to feel a soreness beginning to appear directly on my right sit bone after about an hour on the bike. It started slowly as a mild irritation and only after some length of time on the bike. It didn't take too long, though, and it started hurting earlier in the ride and lasting longer off the bike after the ride. By September, the irritation was a full grown pain that was evident the moment my butt hit the seat and was carrying on at all times off of the bike. Sitting at work and at home became an unpleasant affair. I knew I had a real issue that I'd have to address. No amount of "just ride through it" was going to solve this problem. Something wasn't right.

It was about October that I started what turned out to be about six months of every kind of therapy I could think of. Ultimately, I tried staying off the bike all together, chiropractic care, therapeutic massage, physical therapists (three different ones), and finally an orthopedic doctor. Through the summer of 2013, I was averaging about 26 hours a month on the bike. As I look at my Strava data, I see one hour in October, eight in November and December as I worked with my therapists. My riding had gone away from "training" and was solely focused on recovering from whatever issue I had.

From an anatomy perspective, I'll share my limited knowledge of what was occurring. Basically, your hamstring muscles, which includes several odd names such as Bicep Femoris, Semitendinosus, and Semimembranosus, all attach to your pelvis at the point that we refer to as the sit bone, or Ischium. The sit bones are the two little points that take most of the weight of your body on your little upright cycling seat. As all muscles do, they end in tendons that attach to this bone. There could be a whole host of variables that result in these hamstring tendons becoming irritated or inflamed. What I believe is that through years

# Schlitter

## Brian's Full Review

of improper pelvic positioning in my life in general, coupled with the stress that results from the position on an upright bike and the usage of the hamstring muscles, I ended up irritating these tendons to the point that it was uncomfortable to sit on any kind of seat, whether saddle or chair.

Then physical therapists called my issue Postural Asymmetry, which basically means that my pelvis was not aligned as it should be. My pelvis was both rotated or tilted too much to the back (like arching your back) and one side of my pelvis was rotated more than the other so there was asymmetry between two pelvic blades. There are all kinds of writings on this type of postural issue and its relationship to cycling injuries, so feel free to Google to your heart's content.

As with most physical therapy treatments, I learned many different exercises and stretches to take with me for home work. I swear to you, I followed each and every one pretty darn close to the letter of the prescribed law. I really wanted to be on the bike and that desire drove me to do whatever I needed to do to fix the problem. I won't go into the details on all these exercises, because any person's specific issues will call for specific treatments and it's not what this blog is about, but I'll share that it basically involved strengthening exercises to counterbalance my asymmetry with some additional stretches to get things aligned and a smattering of postural adjustments when standing, walking, and sitting.

When months of treatment with one physical therapist were deemed "a success" and concluded by the therapist, I found that I could still not ride my bike without the pain and irritation. So, I would just find a different therapist and start again. I did this three times and each one found some different nuance to my situation and would prescribe new or slightly altered exercises. The last therapist I spent time with was renown both in my local Frederick, Maryland area, as well as nationally for his unique and effective approach to healing called Strain-Counterstrain therapy. I had heard many testimonials from both patients and people that knew patients that experienced amazing cures to chronic ailments. I was impressed with the approach and do believe that it has indeed helped so many people. Unfortunately, it did not change my experience on the bike.

It's important to note that I also tried bike fittings...three of them to be exact. All from trusted and trained fit specialists and the last one being the more computerized form called The Guru Fit. I do think they improved my positioning on the upright, but none of that seemed to make any material difference to my hamstring connectors.

Alas, I found myself six months through rigorous treatments, all the while staying off the upright, and although my off-the-bike activities of sitting and standing had much improved, my short 10-15 minute test rides quickly proved to me that there was no difference on the bike. I had reached the end of the road as far as I knew. An impasse I had hoped I'd never have to face.

With spring teasing all the local riders with the promise of those glorious and joyous first warm and sunny rides of the year, I was concerned I'd be stuck on the couch and would lose my mental, physical, and spiritual friend – that open road on two wheels. It was with this concern that I received the advice of one of my last therapists..."the physical alignment on a recumbent would be perfect for your body. Why don't you just switch to riding recumbent cycles?"

# Schlitter

## Brian's Full Review

### The Bikes

Up to that point in my life, my only experience and knowledge of recumbent bikes were seeing a few long wheel base models around the neighborhood piloted by a sweet retired couple resplendent in their bright orange safety vests and proudly flapping visibility flags. I had also seen a few low rider trikes in one of the many Gran Fondo rides that take advantage of the most excellent mid-Maryland country roads that I accept as my own backyard. The thought of actually riding one never, and I mean never, entered my mind.

When finally faced with the choice of to never ride a bike again or consider other two-wheeled geometries, you bet my mind made the shift at least just enough to be willing to begin some Internet research to discover what was what in this odd and seemingly counter-cultural world. The first thing that was apparent was to simply search on "recumbent bike" returned an expansive list of bikes of all shapes and geometries. Unlike the upright world where every bike basically looks exactly like any other bike (with of course subtle yet important differences), the world of recumbents includes all of the following (and maybe more):

Long Wheel Base (LWB)

Compact Long Wheel Base (CLWB)

Mid Wheel Base (MWB)

Short Wheel Base (SWB)

High Racer

Low Racer

Many of these geometries can also be significantly modified by having either Over Seat Steering (OSS), which is basically having handle bars in front of the rider such as a motor cycle, or Under Seat Steering (USS) which fashions the steering mechanism under your seat so that your hands are dropped straight down by your side.

That's a bunch of combinations and variations. I realized that I'd have to dedicate a fair amount of time to determine what the differences were and why I'd want to choose one over the other. I quickly realized I'd have to be clear and state my objective in order to find the right fit for me. That was easy...I wanted to ride just like I rode on an upright, but with comfort and no pain of course. I wanted to be able to hang with the group rides I was doing. I wanted to be able to pace line. I wanted to be able to attack the local mountain climbs with as much ferocity as I felt like I had developed.

Which bike geometry would be right? Going through my objectives took several of the choices off the table quickly. Namely – being able to ride with other upright riders. In my mind, this meant I needed to be as high as I could be so that I was both seen and could potentially still provide some draft. This took all the low riders off the table as well as the trikes. So I quickly learned that the High Racer bikes placed the rider higher than any other geometry.

With a little more research into High Racers, I was pleased to learn that the Short Wheel Base also resulted in the lightest recumbent bikes made. This of course was an advantage for one of my other objectives – going up mountains. Lastly, I discovered that Under Seat Steering was primarily a comfort issue that may be advantageous for extremely long endurance rides, but did not support being more agile and nimble when riding in traffic. I would definitely need an Over Seat Steering model, which again lined up nicely with the Short Wheel Base High Racer.

# Schlitter

## Brian's Full Review

With a bit more research I was surprised to discover that recumbent bikes held all kinds of records against standard upright geometries. The famed One-Hour UCI record has been bested by a recumbent rider. Most ultra-distance records, such as 24-hour races or even Race Across America (RAM) all have records held by recumbents. What I discovered was that these "bents" can be and are real racing machines. It's not about retirement.

Wikipedia has a great comparison of bents to uprights and I've included just some of the main advantages and disadvantages below...

### Advantages:

- Increased comfort (duh...that's what got me here)
- Better braking
- Increased long distance or endurance power
- Increased speed on flats, declines, and slight inclines due to aerodynamics

### Disadvantages:

- Difficulty balancing (one can't shift their weight as much)
- Difficulty starting (because of the balance thing)
- Less maneuverability (due to turning radius and balance issue)
- Climbing speed

I'll spend much more time in upcoming sections providing you my own detailed Strava data related to the final points regarding speed on flats and hills as that was where the rubber hits the road for me.

So when all things were considered, I decided upon the High Racer. The trick was then how and where to find one. Luckily, about 3 hours from my house was a fine recumbent shop called RBR in State College, PA run by a very nice and helpful enthusiast named Rob Frank. Rob had several High Racer models in stock for me to test ride. Given that I had a healthy amount of concern and skepticism on hand, I chose a relatively inexpensive brand called Volae.

My first recumbent High Racer was a custom build Volae that Rob had put together himself. It was an aluminum frame (some commonly refer to this geometry as a "stick frame"), 650cc wheels, SRAM X-9 derailleurs, mountain bike X-9 grip shifters, and SRAM clincher brakes. It did have an all carbon fiber seat, which was nice to try to keep the weight down. But even with that benefit, this thing still weighed in at 31 pounds with pedals. That seems like a lot coming off my 17 pound Cervelo R3 upright. But the price was right and it seemed to be faster than the other models he had in stock, so I loaded up the truck and headed home.

In late April of 2014 I began riding this Volae High Racer. The first test was to see if I could ride for one hour, two hours, even three hours at a time without irritating my physical issue. I was pleasantly pleased to discover that lo and behold, I could ride for all this time without any irritation occurring to my hamstring connector tendons. Basically, my butt felt fine! This was hurdle number one and was of course absolutely critical to all the other training to come.

The other aspect of moving to a bent that I had read about during my online research was called getting one's "bent" legs. Due to the physical position on a bent, there is much

# Schlitter

## Brian's Full Review

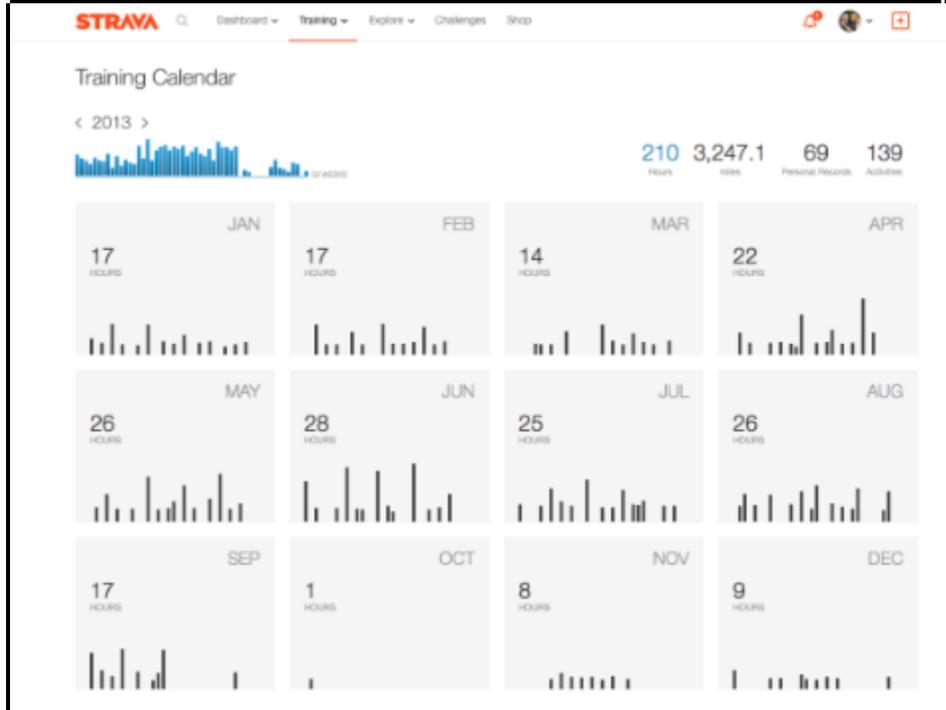
more reliance upon the hamstring and gluteal muscles than on an upright. I had read that it could take a minimum of four months to build up one's bent legs to be back at a comparable "full strength". That's a good segue to the training I began and comparisons to upright data that is the topic of the next section.

### Training - The Hills

We'll start at a high level with a comparison of how much riding I was doing. It's common sense that the more hours on the bike result in better results, so I can't really compare my bent riding to upright riding without knowing this overarching data point first. In 2013, the last summer on an upright, this is what my data looked like.

*"...I'm still having every bit as much fun exploring the mountains and farm roads of Maryland perched upon a miracle of physics and machinery."*

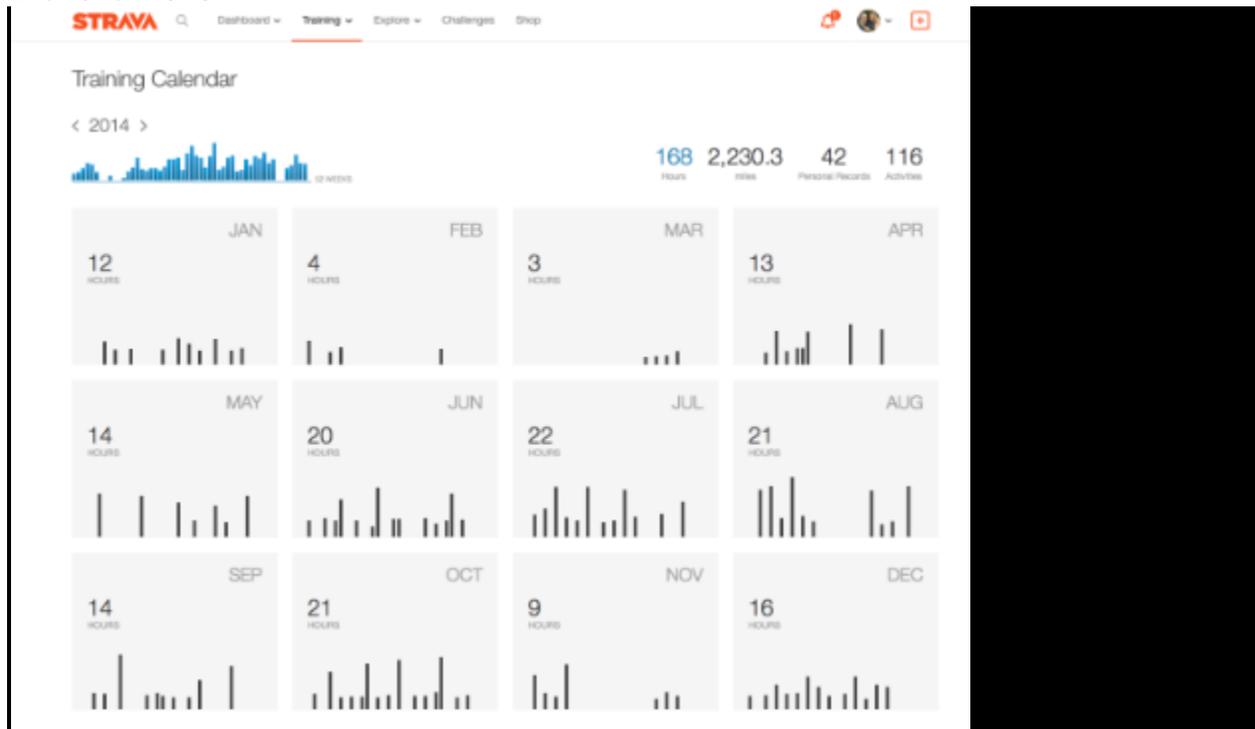
Home    Encore    Why    Specification    Show    Contact  
e    Riders    Schlitter    s    p    us



You can clearly see the precipitous drop off of riding in mid September. The winter months were filled only with short indoor training rides. April saw a jump up to 22 hours that maxed out in June at 28 hours. July and August looked steady around 25 and then...boom. Since I started feeling the problem in July, you can tell that I stopped doing longer rides and stuck with mainly shorter ones through August. Even with the drop off in September and October, I still rode over 3,200 miles in that calendar year.

# Schlitter

## Brian's Full Review



The January through March efforts are really exercises on the Elliptical in my basement, although I was very spotty about logging it. I wanted to continue to track exercise, even though it wasn't cycling, in an attempt to not lose all my fitness. In early April, I purchased my Volae and started having outdoor weekend rides. I stopped tracking morning Elliptical sessions then. The shorter mid week rides didn't start until it warmed up in the morning around mid May.

You can see I never got up to the 25-28 hours a month, only peaking at 22 in July. The gaps throughout the year were caused by either vacations or work travel, not injury. In the end, I only rode 2,200 miles which is quite a bit less than 2013. It will be impossible to quantify exactly how much this reduced time on the road effected my results, particularly when the entire summer of 2014 was the "build my bent legs" timeframe.

There's one other aspect that skews the data that I'll mention. Early bent rides were more timid rides in general. Having been off the bike for half a year, I wanted to try to ease myself back into riding. I didn't go out and attack my favorite climbs immediately. Even the first several times up the climbs may have been at less than full steam. Even so, the data is the data so let's take a look at some particular Strava segments.

One of my favorite local climbs, if not my absolute favorite, is a road called Catoctin Hollow Road. The bottom of this climb starts at Maryland State Road 15 and travels through some beautiful woods of the Catoctin State Forest. It's tough enough to challenge yourself to TT up it, but doesn't have so many sections over 10% that it's ridiculously painful.

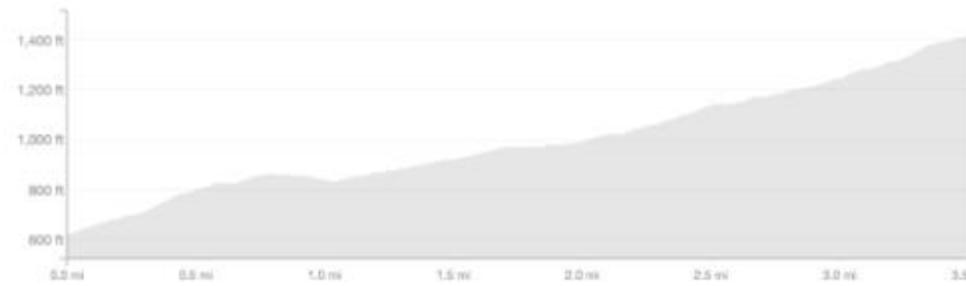
# Schlitter

## Brian's Full Review

### \* Catoctin Hollow from 15 to Mink Farm Rd

Ride Segment Thurmont, MD

3.5mi 4% 624ft 1,418ft 794ft Climb Category 3  
Distance Avg Grade Lowest Elev Highest Elev Elev Difference 1,726 Attempts By 411 People

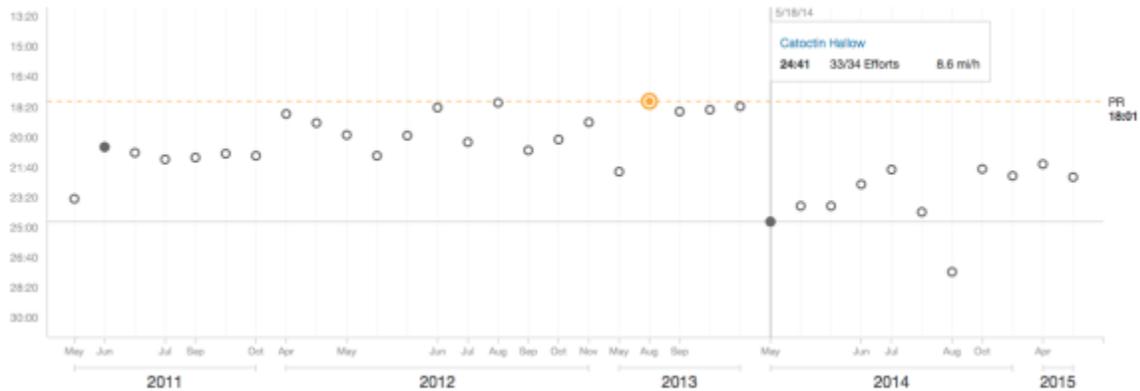


As you can see from this very cool personal history plot from Strava, my upright PR in August 2013 is the little gold dot which represented a time of 18.01 with an average speed of 11.7mph. On May 18, my first bent ride up the Hollow had me finishing in 24:41min with an average speed of 8.6mph. You can clearly see the precipitous drop off in overall average times starting in 2014. This is definitely the reality of moving from upright to bent for hill climbing. That said, let's see how I've been able to improve so far with a full year under my belt of "bent leg" building.

# Schlitter

## Brian's Full Review

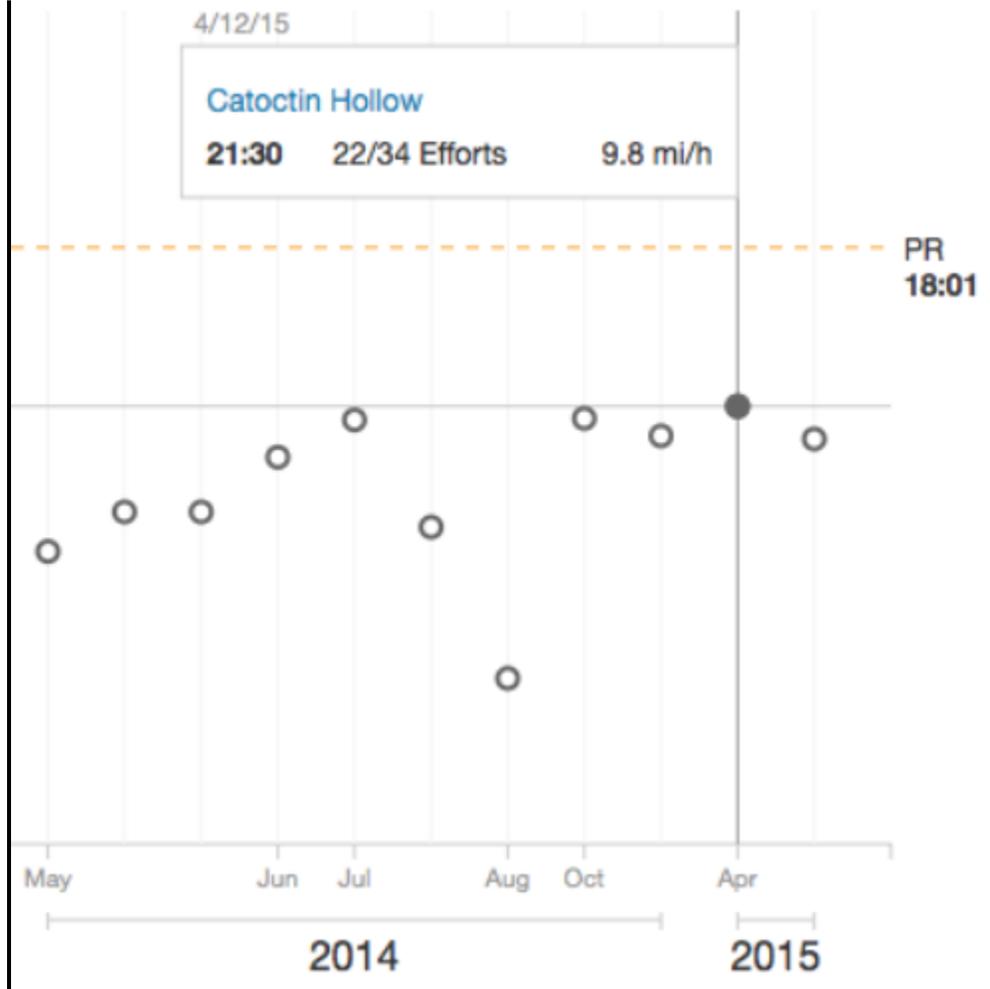
### Your Recent Efforts



Zooming into only 2014 and 2015 (the current date of this writing) times, we can see a pretty consistent improvement from May thru July of 2014. I clearly took a few easy rides after that and then closed the year out in October trying to hit it hard again. Interestingly, I only managed to barely beat my July time in October with a 21:46 and 9.7mph average. I'll talk about the 2015 data once I tell you more about my new bike. But you can see I've slightly bested 2014 with a 21:30 and 9.8mph in April of 2015.

# Schlitter

Brian's Full Review



Let's look at another hill I've been working on to get another data point. This hill is even easier than Catoclin Hollow and is called 550 (State Road) that starts out of the town of Thurmont, MD. It's about the same distance of 3.4 miles long, but only ascends about half as much climb. Obviously, speeds should be up on this one.

# Schlitter

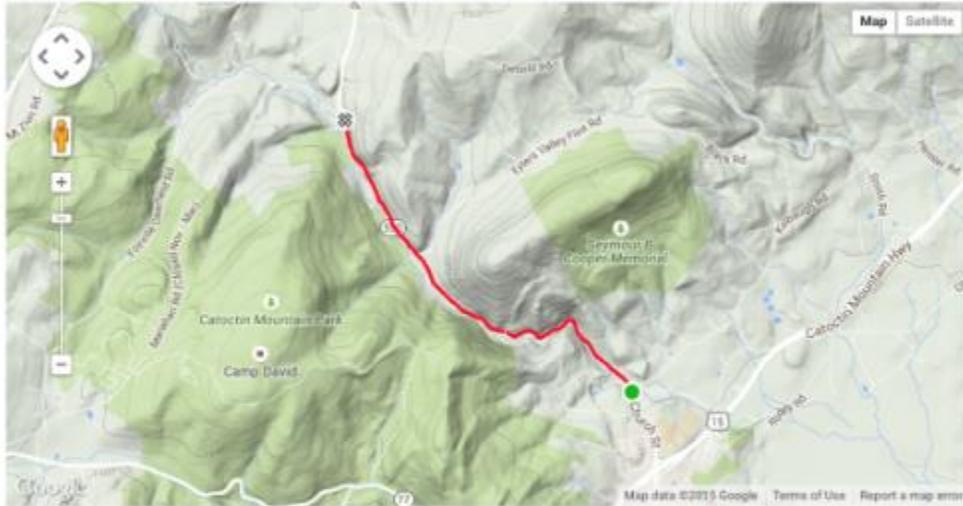
## Brian's Full Review

### ★ 550 to Foxville Climb Only

Ride Segment Thurmont, MD

3.4mi 2% 585ft 1,009ft 424ft

Distance Avg Grade Lowest Elev Highest Elev Elev Difference 445 Attempts By 190 People



As can be seen from the effort plot below, my upright PR occurred in August 2012 with an exact tie in September 2013 with a time of 12:02 and average speed of 17.3mph.

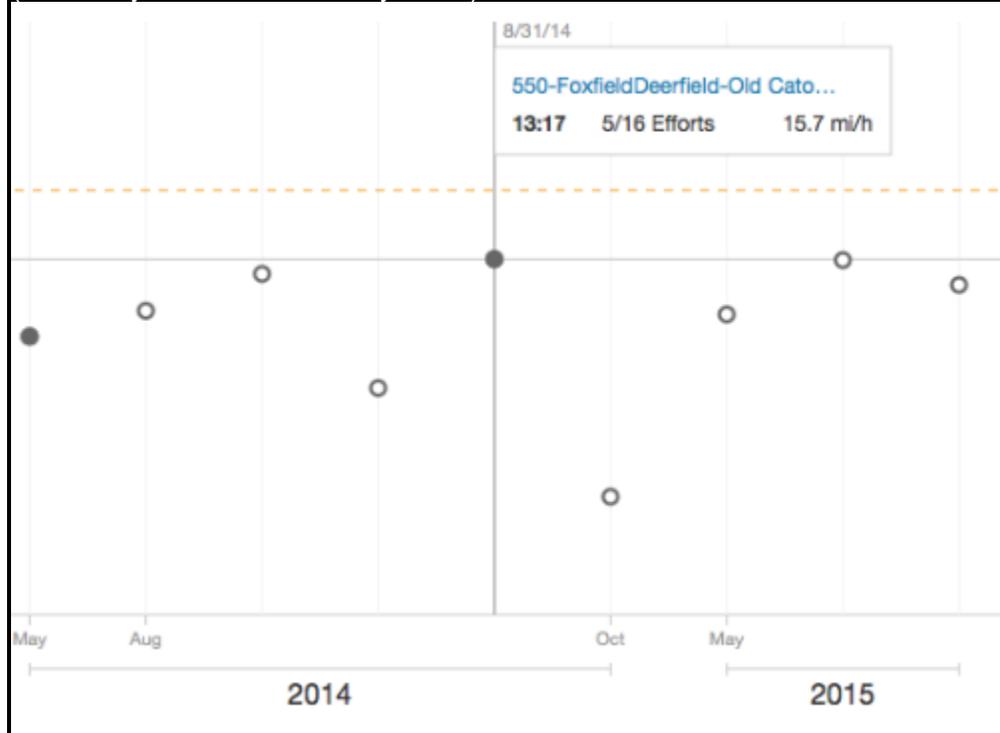
Once again, the notable reduction in speed beginning in 2014, but not as sharp of a change as Catocin Hollow. This would have been predicted because of the lower grades.



# Schlitter

## Brian's Full Review

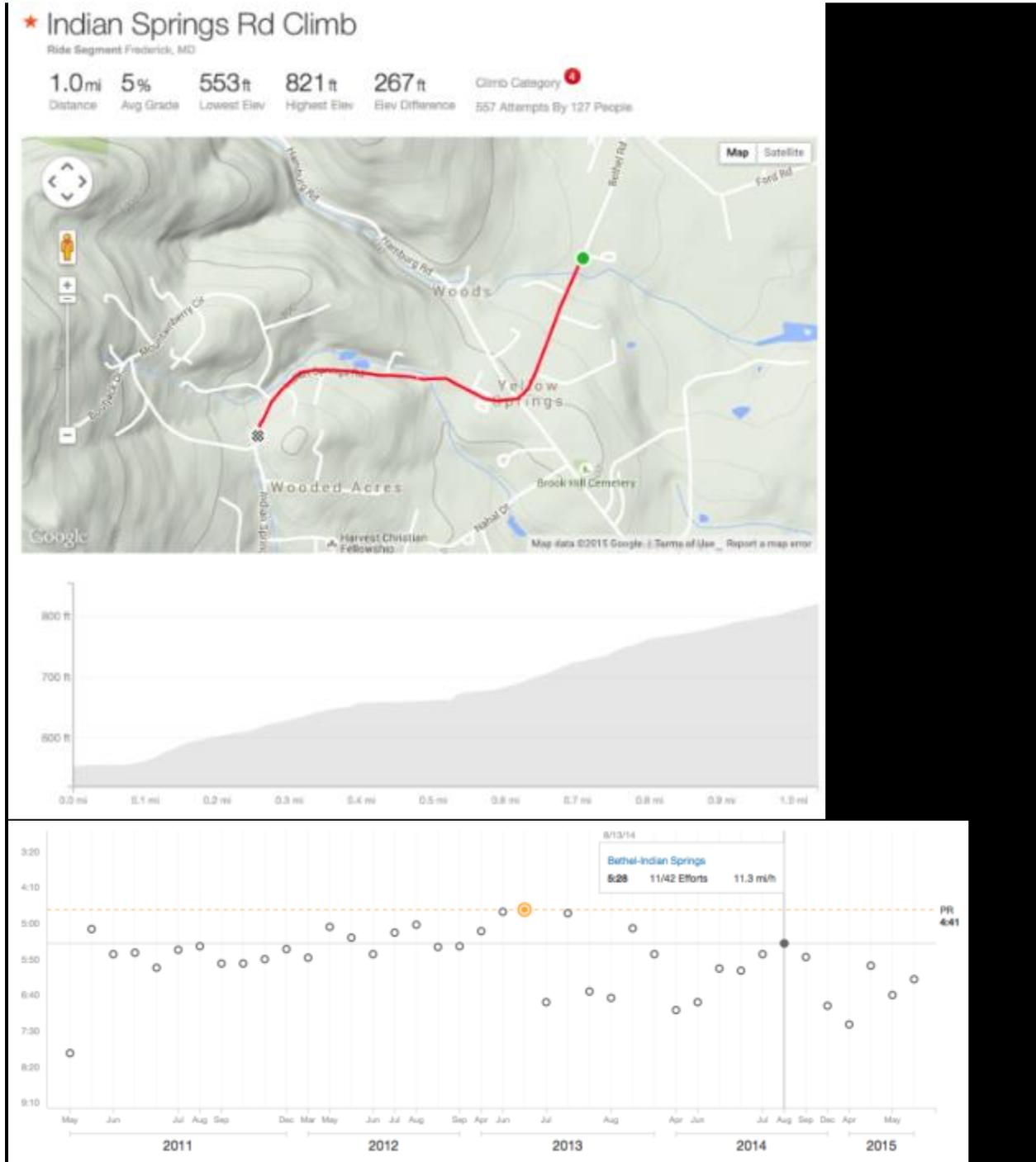
Zooming in a bit to '14 and '15 rides, it is evident that even though I've attacked that hill three times in '15, my PR still remains in August '14 with a 13:17 time and 15.7mph average. (I was only 1 second off in May of '15).



The next hill is even smaller and much shorter, but it's another good data point because I ride it a lot and I try to really attack the entire hill as hard as I can. This climb starts on a Bethel Road and changes names to Indian Springs Road after going through an intersection at Yellow Springs. It's only 1.0 mile in total with only 267ft of climb...a nice sprint climb. Obviously I ride this way quite a bit more, but of course I don't always try to PR. My upright PR in June 2014 is a time 4:41 with an average speed of 13.2 mph. This time is also a 6th overall of the 127 Strava riders that have hit it. It's one of the very few hills that I ever popped the top 10 and I'm sure has more to do with others not riding it hard as opposed to my ability. So far, my bent PR was on August 2014 with 5:28 and 11.3mph.

# Schlitter

## Brian's Full Review



So, let's pull these data points together to see how I really compared to upright riding. In all three cases, it was clear there was a positive slope of improvement since starting the bent journey thru to the fall of 2014. That would be expected for several reasons. First, I was off the bike for 6 months, so even though I was trying to stay fit on an elliptical, it's only reasonable to expect significant fitness degradation. Secondly, if the stories are correct, it takes 3-4

# Schlitter

## Brian's Full Review

months to get your bent legs. These improvements seem to support all of this.

Let's see how my PR's match my upright PR's by grade/distance.

Ride	Distance	Avg Grade	Upright PR Time	Upright PR Avg Speed	Bent PR Time	Bent PR Avg Speed	Bent %
Catoctin Hollow	3.5 miles	4%	18:01	11.7	21:30	9.8	83.76%
550	3.4 miles	2%	12:02	17.3	13:17	15.7	90.75%
Indian Springs	1.0 miles	5%	4:41	13.2	5:28	11.3	85.61%

This data would suggest that after one year of the transition from upright to bent that riding up hill on most of the types of climbs found around Maryland, one could expect to average somewhere around 87% of the speed of your best upright efforts. I did check my data against one other local hill called Hamburg, which is 3.1 miles with average 6% grade, so it's one of the harder hills around. Unfortunately, I've only ridden this a single time on my bent so we don't have enough data to make sound judgements. Even so, I performed at an 82% level against my upright PR so it supports the other data.

As I'll discuss in the last section, I've since upgraded my bent bike to a high end high racer from Schlitter. It's an all carbon fiber bike and really nice, so I'm hoping 2015 will prove to deliver all new PR's on these hills. I'll update the data at the end of the '15 season. I will say, though, that I do not believe it possible to be better than 90% of upright given the same amount of time on the bike. It might be possible to approach my upright times with significantly more time on the bike, but that is not an apples to apples comparison or something that I have the luxury of doing.

Up next, though, is the fun stuff. If going a bit slower up hill makes you sad, then you're enjoy the flats and sprints that much more.

### Training- The Flats

OK. So even though I'm not going to be winning any A group rides on my bent, I believe an 85-90% performance can still keep me in a respectable bunch. One thing for sure. I still go up. I haven't stopped riding any of the rides I love and that's the most important thing to me.

As you've heard...close one door and another will open. Very little of my time on the upright was spent focused on Strava sprint segments. I was aware of their existence, I just didn't have my head around pushing myself for them. To me at that time, expending energy on sprint points was just going to deplete my reserves for the climbs. I've since adjusted that perspective, given that due to the natural aerodynamics of the High Racer, these bikes can just fly on the flats. And I say that in direct comparison to uprights. Let's check out some data to prove it!

Sprint point #1 is Bethel Road to Fish Hatchery Road. It's 1.1 miles long, does have a very slight down grade of -1.5%, but only changes 87 feet, so it's no downhill. Just enough to get your speeds up there so it's really fun.

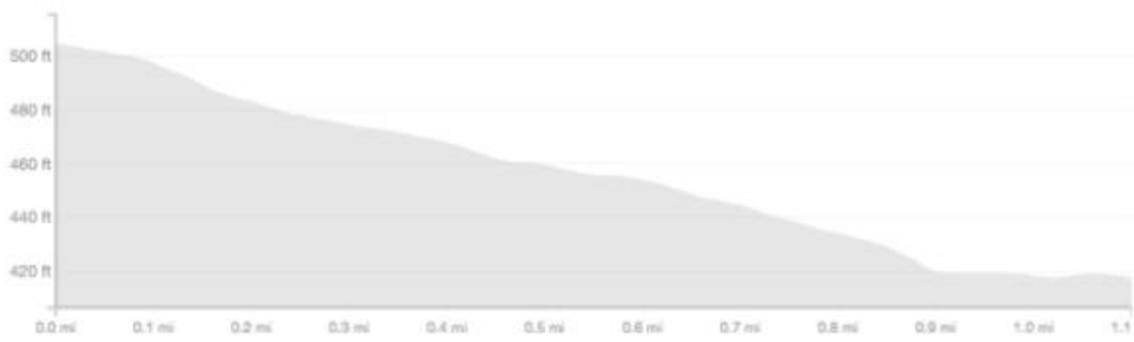
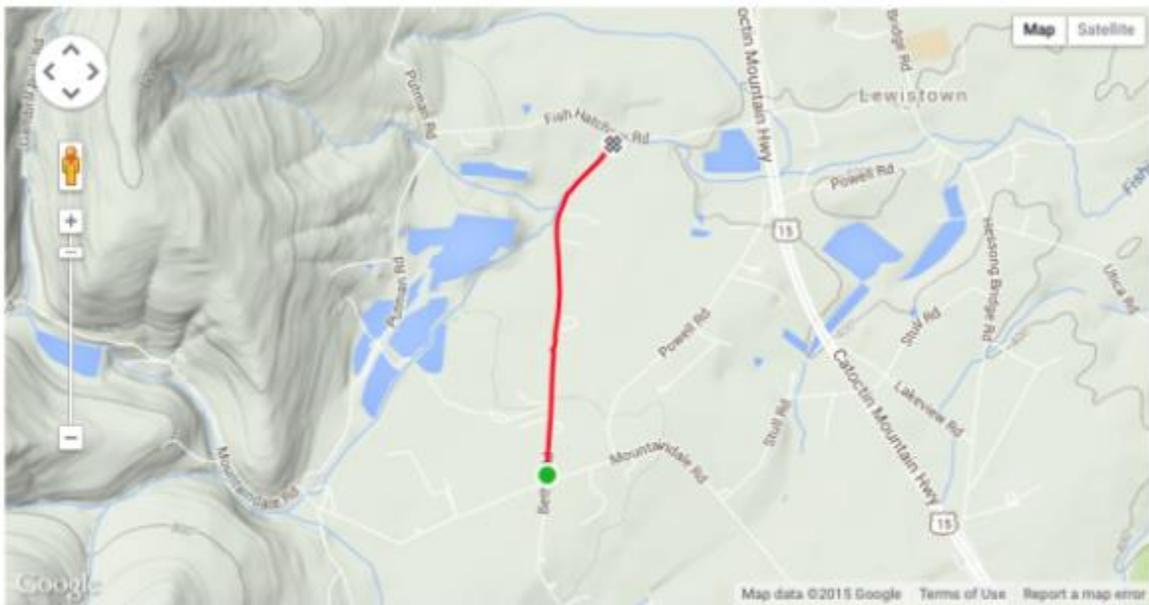
# Schlitter

Brian's Full Review

## ★ Bethel to Fish Hatchery TT

Ride Segment Thurmont, MD

1.1 mi -2% 417 ft 505 ft 87 ft  
Distance Avg Grade Lowest Elev Highest Elev Elev Difference 1,301 Attempts By 470 People



I've ridden this one quite a bit as well. My upright PR was set in August 2012 and was 2:45 minutes with an average speed of 24.0 mph. Looking at my data plot, you can immediately see the major jump in average performance in 2014. Like I said, High Racers just fly on flats and down grades. My bent PR was set in December 2014 and was at 2:15 minutes and speed of 29.3 mph. Interestingly, every single one of my rides on a bent (with the exception of the last one in 2015 in which I believe I was trying to eat something) were all higher than my upright PR. That's crazy. I'm currently sitting at an 11th place out of 470 riders on this run.

# Schlitter

## Brian's Full Review



Let's look at another. Putman Blast is very similar to Bethel. It's 0.9 miles long and drops 107 feet. My upright PR was in August 2013 at 2:13 minutes and 24.8 mph. My bent PR first occurred on July of '14, but repeated in September and then again in May of 2015 at 1:48 minutes and 30.5 mph. I currently hold a 12th position out of 534 on this segment.

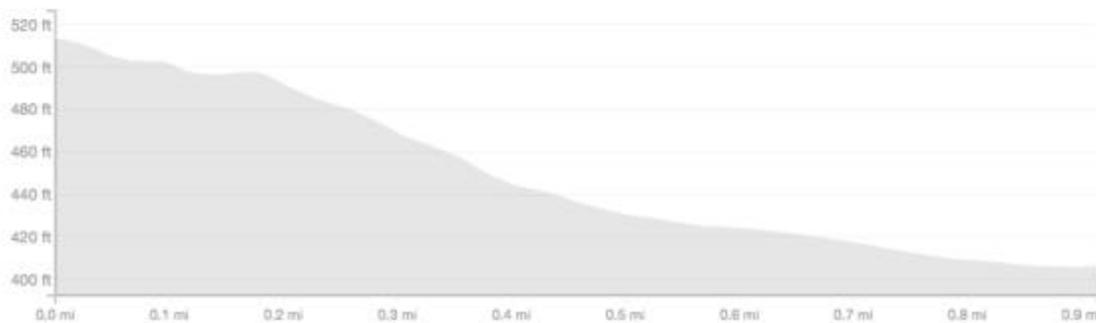
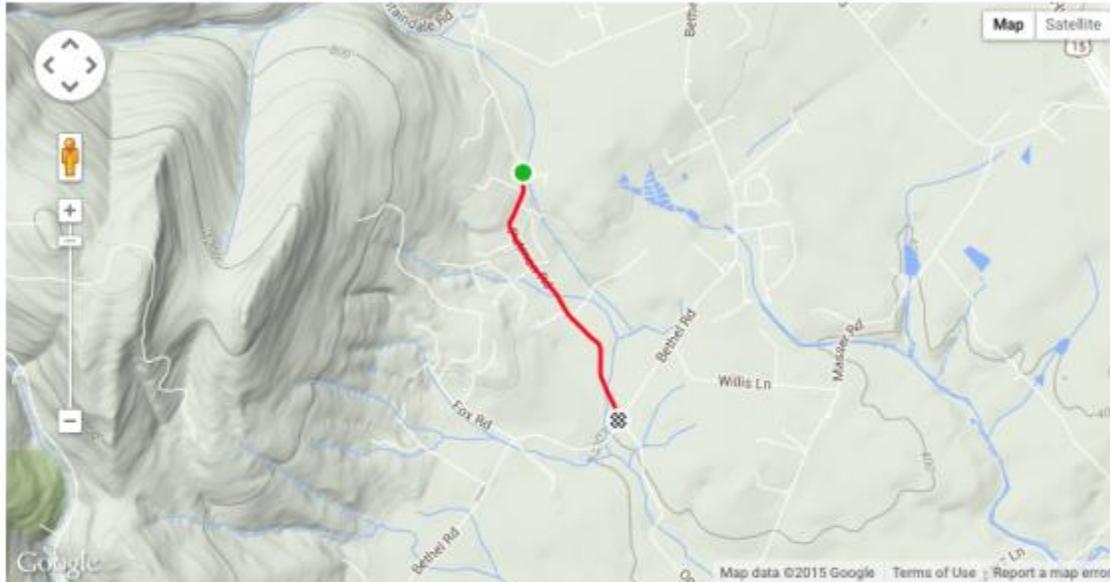
# Schliter

Brian's Full Review

## ★ Putman Blast

Ride Segment Frederick, MD

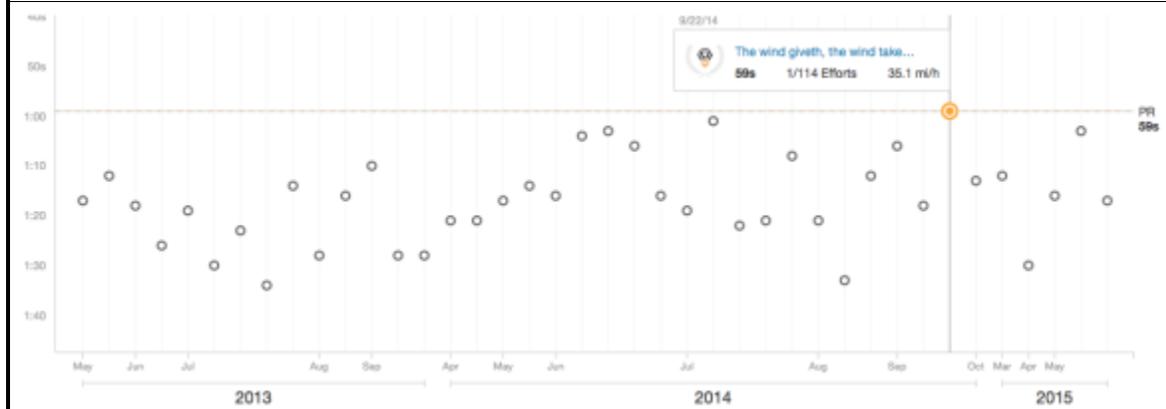
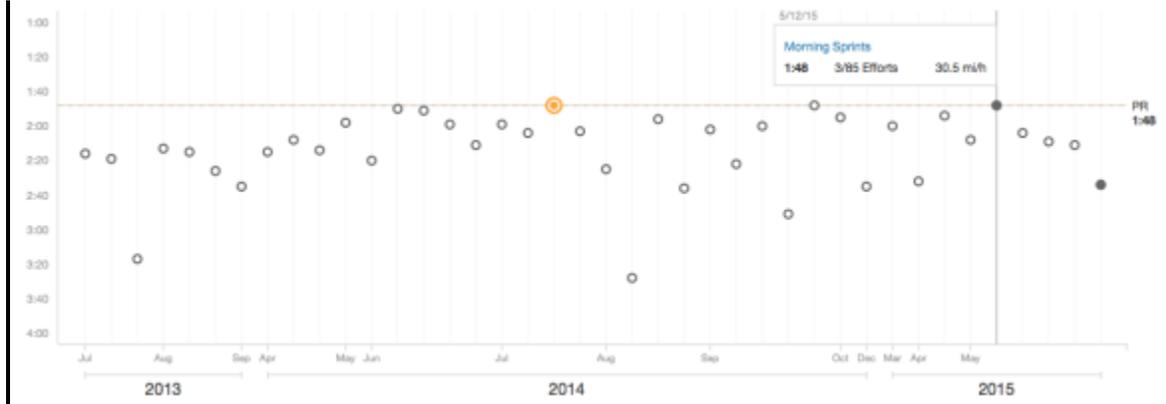
0.9mi -2% 406ft 513ft 107ft  
Distance Avg Grade Lowest Elev Highest Elev Elev Difference 1,907 Attempts By 534 People



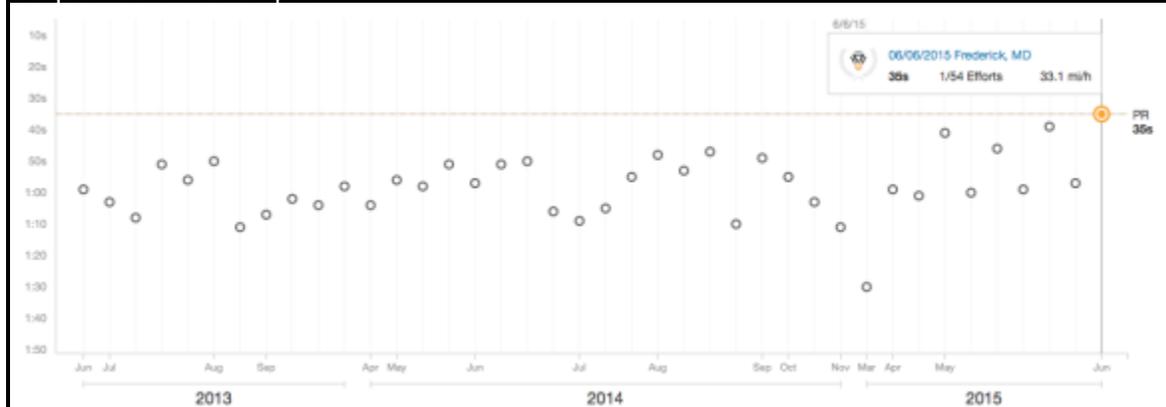
The third sprint point is Opossumtown Sprint, a shorter little segment of only 0.5 miles and slight drop of only 58 feet. My upright PR was set in September 2013 at 1:10 minutes and average speed of 29.6 mph. As with all these sprint segments, you can see then general improvement starting in 2014. This sprint near my house, so if I'm not attacking it I'm usually riding it very easily because I'm tired. The bent PR comes in at 59 seconds and speed of 35.1 mph in September 2014. I named that ride "The wind giveth, and the wind taketh away" because there was a stiff breeze helping me on this run. But there are plenty of other 2014-15 rides that are pretty close, so it wasn't a complete cheat! I do hold a 7th overall out of 411 riders on this segment.

# Schlitter

## Brian's Full Review



The last little segment is the shortest at only 0.3 miles and dropping 47 feet. My current bent PR was set just this weekend as I write this in June '15 at 35 seconds and average speed of 33.1 mph. This has me tied at 3rd position out of 273 riders. My upright PR was at 50 seconds and 23.2 mph, but I believe that I did not know this was a sprint point in 2013 so that most likely disqualifies this example.



<b>Bethel to Fish</b>	1.1 miles	2:45	24.0	2:15	29.3	122.08%
<b>Putnam Blast</b>	0.9 miles	2:13	24.8	1:48	30.5	122.98%
<b>Opossumtown</b>	0.5 miles	1:10	29.6	0:59	35.1	118.58%
<b>Tuscaroara Creek</b>	0.3	0:50	23.2	0:35	33.1	142.67%

OK. That's a pretty good smattering of sprint points, let's see how this data compares to upright.

# Schlitter

## Brian's Full Review

As expected, the last data point looks to be an anomaly because it's out of range of the others. I believe I was right in not being aware of the sprint point in 2013. The others look fantastically similar with around a 120-121% increase in speed over my upright PR's. All of these sprint segments had very slight declines included. Living in mid-Maryland, it's impossible to find any actually flat land for more than 0.1 mile. The only reason I chose to share these was because there were the only Strava sprint segments that I did attack as an upright rider. It's the only true comparison data that I have to share.

In the next section, I'll share with you what I looked for in my second and upgraded High Racer bike and my overall impressions between the two.

### The Schlitter

After working through a full summer season of getting my bent lets underneath me, as they say, I had an interesting experience. I had now been off my upright for about 9 to 10 months and I was seriously considering putting it up for sale. Now, understand, I loved this Cervelo R3. I absolutely loved it! It was not an easy decision for me to make. Not only would it be selling a bike I had a relationship with, but it would signify to me that I would be turning away from upright riding for what could be the rest of my life.

Before I could make such a decision, I had to go out on one more ride to check for sure whether I believed it was the right thing to do. So I saddled up and got on the Cervelo. There was a part of me that truly believed that I would feel an immense sigh of relief, like pulling on your favorite jeans, feeling like I was back at "home" with the right fit. I had planned to do just a short ride of about 45 minutes. I didn't make it.

Immediately, upon rolling out of my driveway, I was shocked to find myself aghast at how uncomfortable I was. My hands felt all that pressure on the handlebars. My shoulders felt all the pressure up from my hands. My butt felt uncomfortable as usual on that little stump of a saddle. I felt like I was leaning forward in an awkward way. I felt every little vibration and bump from the road. Plain and simple...I didn't like it.

Again, this was not because the Cervelo is a bad bike. It's not because my fit wasn't right on the bike (I had received 3 different fittings during my struggle to figure out my hamstring issue). It wasn't because of anything other than the fact that I had now spent 4 or so months on my High Racer and now I was "trying out" the upright.

About 10 to 15 minutes into the ride, I could feel that ever so slight but so recognized pain in my right sits bone start to wake its angry head and whine. I turned around, stood up on the pedals, and spun home. That was it. I was done. The ride made up my mind alright. I was putting my R3 up for sale and I was claiming that like it or not, whether I came to the party willingly or not, I was now a true recumbent rider. Bent only.

This was in some ways a weight off my mind. I was caught in the middle of wishing I was on my upright and having to ride a bent for so long I was tired of it. I could just let it go and move on with a new vision. I decided immediately, that day in fact, that if I was going to be a bent rider, then by God I was going to seek out and buy a damn nice High Racer. So the search began.

What I discovered ended up being voted the Best Bent of the Year by BentRiderOnline.com – the Schlitter Encore High Racer. It's the beautiful bike you see me with on the main banner

# Schlitter

## Brian's Full Review

image. I invite you to find out everything you may want to know about this bike from the website, <http://schlitterbike.com> but I will tell you the reasons I bought it and how it compares to my Volae.

First, I wanted to find one of the lightest High Racers possible. Of course, I wanted to do this without breaking the bank as well, because there are several models available out there in the \$6K and \$8K level. To help achieve this, I knew I wanted an all carbon fiber frame and fork. I also wanted to use the same high quality components that uprights have. The Encore is built on 700cc wheels so that my options for wheelsets are far greater than the 650cc of the Volae.

Instead of the somewhat clunky mountain bike grip shifters of the Volae, the Encore uses SRAM TT bar-end shifters with the X-9 derailleur. A much nicer shift feel. It also has upgraded brakes by moving to mechanical disc brakes for better control over the caliper brakes on the Volae.

There are lots of other cool things about this bike that you can look up for yourself, but suffice it to say that it rides like a dream and is fast as  $\$h^{\wedge}t$ . I have fallen in love with this bike just as I had with my Cervelo. It comes in at a sultry 21 pounds with pedals, so it's not too far off from the Cervelo in terms of weight.

The season is early this year in 2015. I've already made some new PR's and have a long way to go to set more. I don't expect that my legs or this bike will make such a drastic difference that I better my percentage comparisons to upright in any significant way. I expect I'll probably stay between 85%-90% for going up hills and likewise will sit around 120% for flats and down hills.

I rode 3 1/2 hours two days ago and feel absolutely fantastic. I have no butt pain, no sits bone pain. No hand or shoulder pain. My legs feel far more balanced with the newly aroused hamstring muscles that were rather dormant during my upright days. The only thing that I'll note physically is that some days I do experience "cold toe" or "numb toe" only in my left foot. This is because the feet are so much higher than on an upright and some times the blood can begin to leave one or more of your toes. All I have to do when I feel that coming on is unclip and let my leg hang down for just a few minutes while coasting downhill or something, and boom, I'm back in business.

So there you go. I hope this review has provided some valuable information for those of you out there who may be in a similar position (no pun intended). If anything changes drastically over this 2015 season, I'll be sure to let you know.

Please follow me on Strava if you're interested in watching my progress. You can find me under my name Brian Scott. I'm also a member of the Strava clubs SRR (Strava Recumbent Riders) as well as Frederick County Roadies club.

I wish everyone on two wheels safe rides and the same experience that I have in the sun, or rain, or wind. Let your work stresses fall by the wayside like the passing trees, make a goal, hammer till you drop, and have a blast!

-Brian