



## BOO BICYCLES CX



### Growing a Pro Ride

*photos and review by Andrew Yee*

While I've been fortunate to have ridden a slew of bikes in the last few years, typically we test ride stock bikes, while pros change out components to high-zoot options for a lighter, and usually higher-performing, ride. We ride what you'd buy, and we hope that's the most helpful assessment of whether it's the bike for you, and a good value. So it's not often we ride a pro's bike, and that's by choice. But if the frame is made in small batches and doesn't come in a stock build? A pro's bike is just fine by me. Now when that pro is Tyler Wren [*See sidebar*] and the bike is made from bamboo? I knew this wouldn't be just another bike review.

I remember being awed when Craig Calfee unveiled his innovative bamboo bikes. Boo's founder, Nick Frey, was still in college when he saw those creations, and he took that inspiration, contacted Calfee to learn more and built his own as an engineering project that was actually rideable.

### The Frame

The Boo frame's appearance can be deceiving. A quick glance and you'd be forgiven if you thought it was a carbon bike with a stunning paint job. Once you realize the tubes are actually bamboo, the visible sections look like they're just short tubes connected to long, carbon lugs not unlike the way Trek used to construct its OCLV frames. But rest assured,

the frame is built from full-length, two to three year-old Bamboo tubes from Vietnam that are hand-picked and aged, then cut and mitered for each specific frame—exactly as you would select specific tubes for a brazed or welded steel or aluminum frame. The tubes are even butted and shaped like metal tubes, with internal drilling to thin them and save weight, and a slight flattening of the underside of the top tube for shouldering.

The bamboo tubes are joined, then wrapped and epoxied in place with carbon fiber, a material Frey chose because of its weight, strength and aesthetics. Frey experimented with Calfee's technique of using the bulky but more sustainable hemp fiber lugs, but without success, snapping a prototype frame after just a few feet of riding. Frey goes out of his way to make it clear his goal was not to build a "green" frame, but rather the highest performing frame possible, and he believes that bamboo is the ultimate frame material—any environmental benefits were bonuses. He did point out to me that the tubes, although shipped to the States from Vietnam, are cut from stalks that grow back after cutting, a truly renewable resource. It's one of the reasons bamboo has a ton of potential to increase the usage of bikes in third world countries, as you can build bikes right from this readily-available material.

Our 56cm review bike was a stock cyclocross frame as ridden by Tyler Wren, and had a 56.4cm top tube, 43cm chainstays,

and head and seat angles of 72.1 and 71.9, respectively. Advertised frame weight is around four pounds—comparable to a standard lightweight steel frame. With all the hype, anticipation and cost, I certainly hoped it'd feel different than just another steel frame.

### The Build

Tyler Wren's bicycle was dressed with a full wardrobe of Edge Composites (now called ENVE) components, complete with an Edge fork, bar, stem, seatpost and 65mm deep section carbon tubular rims on DT 240s hubs. The drive train was a mix of SRAM Red and Force, with TRP Magnesium Euro-X brakes completing the bike. All in all, it's a parts selection worthy of any pro.

Because the frames are built in such low quantity—Boo produced about 50 frames last year, and each takes about 50 hours of work—there's no real stock bike. Select from different component options, and they'll price it up. This bike, as built, costs a whopping \$7,995. If you want the frame alone? That'd set you back \$3,000, and with the ENVE fork, you'll pay another \$450. That puts the Boo at the most expensive frame we've ever ridden, eclipsing the discontinued Time Cross and BMC CX Machine. Needless to say, this isn't a starter cyclocross bike. Heck, most top racers who require a matching pit bike would have a hard time swallowing the bill for a matching pair. I knew I was riding a bike most of us can't afford, but hope that just as some folks enjoy reading

reviews of Bentleys and Lamborghinis that they may never be able to afford, a test of the occasional \$8k bike can be interesting, if not drool-inducing.

## The Ride

Bamboo is highly touted for its smooth ride. The bike arrived with Challenge Fango tubulars, and an initial ride did produce a buttery-smooth feeling on my training course, but I was convinced it was mostly due to the tubulars—which I hardly ever train on. But after swapping out the wheels for the Shimano tubeless wheels with relatively stiff Hutchinson Bulldog tires I was already riding on my personal bike, it became clear that there really is something to the material's reputation.

The Boo's ride is best described as quiet. It's quiet because it's smooth—your teeth aren't rattling, and I felt that I floated over rough surfaces. But the material also has actual benefits in terms of noise. The fittings, cables and chain aren't banging metal, and because the material isn't as paper-thin as carbon or light steel, there's less of a chamber to resonate sounds—compare a set of steel wind chimes

with bamboo.

The Boo is smooth, but I didn't notice the tubes flexing to create that smooth ride. It's almost as if the small bumps just disappeared upon impact. Of course, there must be some tube flex to absorb bigger bumps, but the type of material can make a big difference in the higher frequency stuff, and the ride of Wren's bike was smoother than any carbon frame I've ridden.

The smoothness doesn't mean the frame rides like a wet noodle, but it's not the stiffest frame I've ridden. For me and my mortal power, that's a good thing, but also a good characteristic for someone like Tyler Wren—a fast but svelte pro weighing no more than 140 pounds. This ride quality is likely in part due to the material, but also due to the "classic" build that lacks an oversized lower headset race or the wider bottom bracket shell of a BB30, BB86 or BB90 found on most modern bikes.

Smooth ride or not, it's still a cyclocross bike, and without the right geometry or features, there's little to celebrate. Thankfully, the geometry of Wren's bike happened to fit me well, and with the saddle just a bit higher and further back, I was comfortable on the machine, especially in tight corners and on sketchy descents. In two races—a rocky, tight course followed by a wide-open, muddy-but-hilly affair, the bike shined, even though in the first race my legs did not. The sections I looked forward to the most? The bumpy, rutted flat sections where I could mash the pedals and float over the terrain. On my shoulder, the large-diameter tube and slightly-flattened

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**Top left: Hand-wrapped carbon fiber joins the bamboo stalks. Bottom left: Every tube is hand-picked bamboo. Below: Yes, they can (slightly) flatten the top tube for your sensitive shoulder. Bottom: Clearance was average around a 32c Fango.**

## Tyler Wren's BamBoo and Green Mission

by Josh Liberles



Tyler Wren has been combining his pro roadie fitness with his collegiate-title-winning MTB past in the form of cyclocross racing for the past several years, but for 2010 he's branched out. Rather than just wearing his Jamis-Sutter Home road team's kit for another few months, he's cobbled together his own one-man show, with Boo Bikes as the primary sponsor.

Beyond just trying to rack up results, Wren's cyclocross season has a mission. "Cycling is the most efficient form of transportation, yet we're flying to races and [during the road season] we have a caravan of cars behind us," says Wren. "As cyclists, folks are pretty green-minded. It's important for racers to be in that mindset as well."

His Boo frame fits right into that theme. "Bamboo is one of the most sustainable building materials in the world; it grows back fully in six years," says Wren. The bike's tubing is shipped from Vietnam—so there are environmental ramifications—but relative to most bike-building processes, the frames have much less environmental impact.

Lessening his footprint was not the only reason Wren chose a Boo. "We're out to show that it's a legit race bike and not just a novelty, and that bamboo is a race-worthy material," says Wren. "It's slightly heavier, but ideal for cyclocross—it's super stiff, but takes vibrations. My back doesn't hurt after the fact, it takes the sting out."

Other sponsors attracted to the green angle include Clif Bar and TerraCycle, a company that works to re-purpose waste and to recycle energy bar wrappers at races. The wrappers are made into messenger bags, seat bags, tote bags, toys—even kites. The Boo rider is also offsetting any carbon emissions racked up getting to races this season.

Wren's cyclocross campaign sponsors show the power of an alumni network. Wren won four Collegiate National Championships for his Princeton alma mater; Terra Cycle was started by Tom Szaky, a more recent grad; and Wren's Jamis-Sutter Home road teammate Nick Frey, the man behind Boo Bikes, also graduated from the New Jersey Ivy.

Although racing on the road remains his day job—and it put a dent in the middle of his 2010 'cross campaign with a nine-day stage race in Brazil in October followed by a race in Okinawa, Japan—cyclocross has taken hold of Wren, and he hopes to continue to expand his "off-season" calendar in years to come.



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underside made run-ups with the Boo more comfortable. In the mud, the bike rolled fine, but when paired with 34c Hutchinson Bulldogs, clearance was a little tight down by the chainstays. Neither the bamboo nor the carbon were painted, and thus the frame seems to be low maintenance and doesn't look the worse for wear after a few spills or muddy races.

This isn't a review focused on the components, but if you chose the pro-level build kit similar to Wren's bike, skip the ENVE seatpost. It's a beautiful creation and very light, but the one-bolt design is not designed for the abuse of cyclocross and the inevitable botched landing. I learned this the hard way in my first race and soon had a seat pointed toward the sky.

## The Verdict

Because this bike had an owner, it had to go back after only 10 days—shorter than the four-week minimum we like to have test bikes. But in that short time frame, I became a fan of both the material and the Boo Bicycle frame. It looked good, was extremely smooth, wasn't too heavy and, if I'm really going to be honest, was just pretty darn cool and different than your average race bike. Can I justify the price? Personally, I can't. But at a different income level, I might buy two, and perhaps even throw in a Gates carbon drive singlespeed option.

## The Specs

**Frame:** 2-3 year-old bamboo stalks, hand wrapped with carbon fiber

**Fork:** ENVE Composites

**Component highlights:** SRAM Force shifters and front derailleur with SRAM Red rear derailleur and crankset, TRP Magnesium Euro-X brakes, ENVE Composites handle bar, stem, seatpost and 2-66 tubular rims, Challenge Fango tubulars, Chris King headset.

**Weight (without pedals):** 18.0 pounds

**Weight (without wheels):** 12.3 pounds

**MSRP:** \$3,000 frame and fork, \$7,999 as ridden with SRAM Red and ENVE components.

**Country of origin:** Vietnam

**More Info:** boobicycles.com

## Psyched

- Stalk-huggers
- Compliance officers
- Pandas

## Bummed

- Most income levels
- Metal heads
- Wren's competitors



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