

My bike



Kate's bike is home grown. The bamboo is from the Eden Project



Photos courtesy of Lizzie Gilson

KATE RAWLES' BAMBOO BIKE

For her 6,000-mile journey through South America exploring biodiversity, author **Kate Rawles** built her own bike – from bamboo

The journey is called The Life Cycle and it's a follow up to The Carbon Cycle, which I did ten years ago. I plan to ride from Colombia to Cape Horn, following the spine of the Andes and exploring biodiversity; what it is, what's happening to it, why that matters and, above all, what can and is being done to protect it.

That's one reason why I'm using a bamboo bike – I love the idea of doing a biodiversity bike ride on a bike that used to be a plant!

The terrain will be very diverse, from rainforests to deserts; from tropical coastlines to rugged mountainous regions. I'm keen to get as high into the Andes as I can, and I'll be camping some of the time and so carrying a fair amount of weight.

I didn't have a bike that could tour fully loaded on gravel and dirt roads as well as tarmac. Bamboo is actually ideal for this. It's strong and light and, when turned into a frame, results in a bike that gives a smooth and shock-absorbing ride. The bamboo frame has a lower carbon footprint than a steel equivalent (though bikes have a pretty low carbon footprint already). The bamboo came from the Eden Project in Cornwall, so it's probably the UK's first home-grown bicycle!

Most of the other components are fairly standard and include a certain amount of

imported steel and aluminium. But the joints are made from Yorkshire hemp soaked in a plant-based eco-resin from Europe. And the bamboo will be recyclable or even compostable when the bike comes to the end of its life.

I built it with help from The Bamboo Bicycle Club in London. It's built to a computer-generated design based on what I want the bike to do – long-distance touring, carrying a full load, off and on road – and my body measurements. I chose it for all sorts of reasons. For a start, I was really attracted to the idea of learning how to build my own bike from scratch, from, literally, a pile of canes. And I think that knowing the bike inside out will help me look after it on the road.

The bike is on the heavy side. With pannier racks, it weighs in at 16.5kg. The bamboo is pretty light but there's a small bucket-worth of resin involved in making the joints, and some of the components are pretty hefty too – the steel drop-outs for example, and the wheels. In all cases, the decision was to go for strength rather than weight-saving. And by the time you load camping gear, cold weather gear etc, and plan to be away for a year, you are not exactly going to end up travelling featherweight anyway so it probably won't make all that much difference. And I'm not in a rush on this journey – I have time to do shorter days, mileage-wise, and spend more time exploring where I am when I get there.

We'll have more from Kate in a future issue of Cycle. For updates on her trip, visit her blog: outdoorphilosophy.co.uk

Kate Rawles' custom bamboo bike

FRAME & FORK: Custom made from bamboo, hemp and resin, with aluminium insets. Reynolds steel fork

WHEELS: Rigid Andra CSS 26in 32H, Shimano Deore Rear hub

DRIVETRAIN: Chris King bottom bracket, Shimano Deore groupset and cranks, Shimano M324 SPD pedals

BRAKES: TRP Spyre disc brakes

STEERING & SEATING: Cane Creek headset, straight bar, Ergon cork grips with ends. Old Bontrager saddle from Trek carbon road bike.

ACCESSORIES: Ortlieb panniers front and rear, plus bar bag. Tubus racks, front and rear. SON dynamo hub connected to The Plug USB charger. Rechargeable lights – Lezyne & CatEye

Share your story

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