



DAN JOYCE
Cycle editor

Bike test

BRITISH STEEL

Handbuilt bikes are enjoying something of a renaissance. **Dan Joyce** tests a Stanforth Skylander, Sven Pathfinder, and Shand Bahookie

THE MARKET FOR enthusiasts' bicycles is dominated by aluminium and carbon machines made in the Far East – bikes that are modish, competitively priced, and relatively lightweight. Against this backdrop, a (probably) heavier and more expensive steel bike that's handbuilt in the UK is a hard sell.

Yet if you're not racing, a one kilo difference in the frame weight is something you'll be aware of primarily when you pick the bike up, not so much when you're actually riding it. It's 1-2% of your bike-plus-rider weight. That comparatively small weight saving often means sacrificing other things, such as comfort, durability, or practicality. It's not all about the weight.

A steel frame, and more especially a steel fork, can have different ride quality from oversized aluminium and super-stiff carbon. Steel is a resilient material that can be designed to flex a little. It's durable. When it does fail, it lets you down gently. Since steel is inherently strong and stiff, its frame tubes are skinnier, which makes for good looking bikes. And it can be built with a brazing torch by a guy in a shed rather than in an autoclave by a corporation.

That's a benefit not so much because the bike can be tailored to your size – the majority of us will comfortably fit mass-produced, off-the-peg bikes, given careful contact-point placement – but because it can be tailored to your *preferences*. You can have a bike that isn't mainstream. Choose different geometry. Choose versatility. Choose more frame fittings and clearances large enough for bigger tyres and/or mudguards...

The ultimate non-mainstream bike inhabits a niche of one: it's bespoke to you. The

three on test here aren't custom bikes in that sense. They're handbuilt but they're off-the-peg designs. All three builders offer à la carte options when it comes to the specification, however, and you can have customised sizing/geometry/fittings if you wish. So I guess we should call them, as Sven Cycles does, semi-custom bikes.

The builders of all three test bikes, and many more, will be at Bespoked, the UK Handmade Bicycle Show. That takes place at Brunel's Old Station, next to Bristol Temple Meads, from 20-22 April. The normal ticket prices are £20 for one day and £30 for all three days. Cycling UK members can get two-

for-one tickets, either online at bit.ly/cycle-bespoked241 (enter the code CUK24118), or on the door with a valid membership card. For more details about Bespoked, visit bespoked.cc. I'll maybe see you there, as I'm one of the judges. 



MORE REVIEWS ON THE WEBSITE

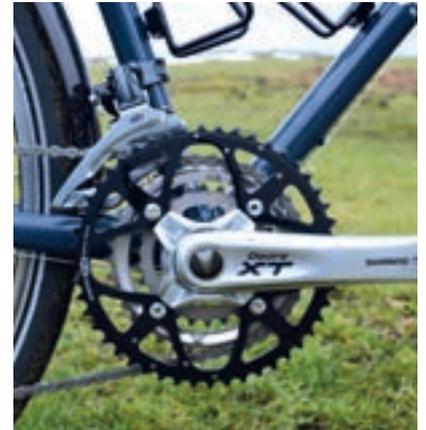
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Bespoked is an ideal opportunity to liaise with framebuilders



Below: The 48-36-26 chainset provides better touring gears than a road triple



Touring bike

STANFORTH SKYELANDER

STANFORTH BIKES' FIRST model was the Kibo, an expedition bike named after Kilimanjaro's peak and reminiscent of the Saracen mountain bikes that Richard and Nick Crane took up there in 1984. Saracen Cycles was owned by Simon Stanforth's father and uncle, and Simon heard the Cranes' exploits firsthand as a boy. The Kibo has been joined by a classic tourer, the Skyelander, and a sports tourer, the Stanforth Conway. There are two versions of Skyelander: 700C, which I picked, and 650B.

FRAME & FORK

The Skyelander frame comes in five nominal sizes: 20-24 inches in 1in increments. Either the 21in or 22in would have fitted me fine, given an appropriate length stem. But since all frames are made to order, Simon asked me to specify a reach (the horizontal distance from the bottom bracket to the top of the head tube) and stack (the vertical distance from the bottom bracket to the top of the head tube) that I would find comfortable. Had I made a trip to Brighton, I could have been measured for the bike for free.

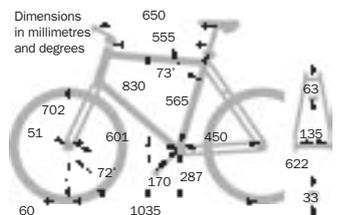
Simon also wanted to know my weight (64kg) and the kind of riding I'd be doing on the bike (mostly on road with a couple of small panniers), because he selects the tube gauges to suit. Normally that selection is from

Reynolds 631 for the main tubes and 525 for the stays. The test bike uses 853 and 725 instead, an optional upgrade that costs £180.

With stack, reach, and tubesets decided, Simon sent me a geometry diagram. 'My' Skyelander frame ended up 13mm taller (stack) and 3mm shorter (reach) than a typical 22in frame. While I might have adjusted the handlebar position more than that by moving, flipping, or switching the stem, these small frame geometry tweaks incurred no extra charges. Simon and I agreed that he would leave the fork steerer long. I then cut it to size and fitted a new star nut when it arrived, a better solution than a too-short steerer.

The frameset has the fittings – and, in this case, the equipment – you want for touring, although I removed the front rack for the test as I didn't need it. There's room in both frame and fork for 35mm tyres and mudguards or perhaps 45mm without. However, there wasn't a lot of room between the front mudguard and my size eight feet, which rubbed against each other on the tightest turns. It didn't cause any trouble, and it's true that the test bike is 3mm shorter than normal, but if I were buying rather than reviewing I'd have specified either: a 71° head angle and a 55mm fork offset; or a 10mm shorter stem and a 10mm longer top tube. Either of these changes would have increased the front-centres distance. To be

Tech Spec



STANFORTH SKYELANDER

PRICE: £2,550 as supplied (frame & fork from £950)

SIZES: 20, 21, 22, 23, 24in or custom

WEIGHT: 13.33kg (inc pedals, without front rack)

FRAME & FORK: Reynolds 853 steel frame, lugged and brazed, with 725 stays and fittings for rack, mudguard, three bottles. Reynolds 631 fork, lugged and brazed, with fittings for low-rider rack and mudguard

WHEELS: 35-622 Schwalbe Marathon Racer tyres, 622-19 Rigida Sputnik rims, 36 x3 spokes, Shimano Deore XT hubs

TRANSMISSION: VP Touring pedals (swapped for Shimano M520 SPD), 170mm Shimano Deore XT M771 triple 9-speed chainset, 48-36-26 chainrings, Shimano SM-BB70 Hollowtech bottom bracket, Shimano HG53 9-speed chain, Shimano HG500 10-speed 11-32 cassette (later exchanged). Dura Ace 9-speed bar-end shifters, Shimano Deore front derailleur, Deore XT M771 9-speed rear. 30 ratios, 22-121in

BRAKING: Dia Compe 287V aero brake levers, Shimano Deore XT V-brakes

STEERING & SEATING: Profile Design Drive cushioned tape, 420x26.0mm Nitto Dirt Drop RM-013 touring handlebar, 80mmx7° threadless stem, Tange Seiki J27 1.1/8in threadless headset. Brooks Cambium B17 saddle, 27.2x300mm Zoom seatpost

EQUIPMENT: Tubus Cargo rear rack, Tubus Tara lowrider front rack (removed for test), SKS Chromoplastic mudguards, two bottle cages

stanforthbikes.co.uk



Clockwise from far left: 853 is an optional upgrade; powerful V-brakes; the correct 9-speed cassette; Troutsdale climb



FULL MARKS FOR THE STURDY TOURING WHEELSET. RIGIDA SPUTNIKS ARE STRONG

fair, I could have done this for the review bike.

The frame and fork are powder-coated twice for durability. I think this is behind the only actual problem I had with the frameset: I couldn't initially get the front wheel out. In freeing it, I bent the quick release. My vernier calliper confirmed that the jaws of the fork dropouts are narrower than usual – I suppose due to the paint thickness. The wheel went in and out easier thereafter, but stiffly enough that I'd file the dropouts a little. Rear wheel removal was also fiddlier: I had to deflate the tyre due to the forward-facing dropouts.

COMPONENTS

Full marks for the sturdy touring wheelset. Rigida Sputniks are strong rims, and they're laced to reliable XT hubs with 36 spokes apiece. You can choose your tyres from among Schwalbe's Marathon range: Plus, Mondial, or Racer. I picked the lighter, faster Marathon Racers. As Cycle went to press, lighter wheel options were being added to

the Stanforth Bikes website. I'd have chosen from among those. Excellent though they are, the robust Sputnik wheels are tougher and heavier than I really need.

There's a choice of brakes too: Avid cantilevers or XT V-brakes. While cantilevers look right on a tourer, I prefer the power of V-brakes. Since the bike comes with bar-end controls in any case, it's not like I was missing out on the convenience of STI shifters by choosing V-brakes. Dia Compe's 287V levers work well, although they're not quite as comfortable as Cane Creek Drop V-brake levers, which have broader hoods.

The drivetrain is the classic touring mix of a sensibly-sized triple chainset (48-36-26) and an 11-34 9-speed cassette. Or at least, that's what it should have been. Inexplicably, the test bike turned up with an 11-32 10-speed cassette! No surprise that the gears wouldn't index. Fortunately, 9-speed Dura Ace shifters have a friction setting so it didn't stop me testing the bike. I raised the cassette issue

with Simon Stanforth, who was distraught ('this shouldn't have happened, no excuses') and sent a replacement by Special Delivery.

THE RIDE

Despite grim winter weather, I had some nice rides on the Skylander. Like most tourers, it gets better the further you go. At 10 miles, it felt somewhat pedestrian; at 50 miles, I appreciated its stability and comfort. The slightly flared handlebar is a good match for the bike, providing surer steering than a narrow road drop handlebar on country lanes awash with mud.

SUMMARY

There's no escaping the fact that the test bike wasn't properly checked over before it went out of the door. On the 'burnt hand teaches best' principle, those gearing and fork dropout issues shouldn't reoccur. So if you're after a traditional British tourer, the Skylander should be worth your consideration. To an extent, you can expect to get out what you put in, due to the customisation opportunities in terms of the design, tubing, and specification. If you're visiting Bespoked, have a chat at the Stanforth stand and see what you think.

OTHER OPTIONS



1 Hallett 650 Adventure
£1,150+ (frame & fork)
650B tourer built from Columbus Zona and SL tubing by Cycle's Technical Editor. Also available with stainless steel highlights and fancy lugs. Reviewed April-May 2017.
halletthandbuiltcycles.com



2 Pilgrim Cycles Northdown
£1,950+ (bike)
Reynolds 631 tourer with 700C wheels that, like the Skylander, is available with a threaded or threadless steerer. See bit.ly/cycle-pilgrimnorth for a Cycling UK review.
pilgrim-cycles.co.uk



Below: Bare stainless steel tubing looks good and is durable too



Adventure bike

SVEN CYCLES PATHFINDER 2x11

SVEN CYCLES IS based in Weymouth, where founder Darron Coppin has been building bikes for customers since 2012. Sven bikes have won a clutch of awards at Bespoked, some of them from me. One was for the Pathfinder. While it's styled more like a gravel bike than a tourer, and will perform that role well, it will also take pannier racks and front and rear, not just frame bags.

FRAME & FORK

The frame and fork are TIG-welded from Reynolds 921 stainless steel, which looks lovely. It's practical too, because you can buff away scratches or surface rust with emery cloth. Yes, rust: Reynolds 921 is much more corrosion resistant than other steels but it isn't as weatherproof as, say, titanium. As the British Stainless Steel Association notes: 'it's stain-less not stain-impossible'. While I cared for the bike like I'd care for any other, there were some small orange marks in places.

The Pathfinder is available in four standard sizes, of which the medium was a perfect fit for me. (If you want bespoke sizing, that's £100 extra.) The sloping top tube gives good standover clearance, which is handy off-road. The head tube extends above the top tube, which puts the handlebar a little higher and, incidentally, makes top tube bags fit better.

Screw-through axles are used front and rear: 100x12mm up front, 142x12mm at

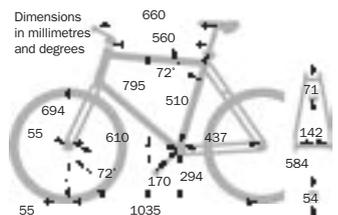
the rear. I like these on a disc-braked bike. There's less flex than with a quick release, so the rotors are less likely to rub the brake pads when you ride out of the saddle. The wheels can't accidentally eject either. The front dropouts are neatly cowled, while the rear ones are supremely versatile. They're Paragon Machine Works PolyDrop dropouts, which can be exchanged for different ones to suit different hubs – such as a Rohloff Speedhub or a 135x10mm quick release. Moreover, the drive-side can be split, so the frame is belt-drive compatible too.

Frame and fork are well supplied with fittings, the only obvious things missing being a hole in the fork crown and an extra pair of eyelets at the dropouts to make a front mudguard fit more easily. (As it is, you'd need a fork bung.) You can have any extra fittings you want, however. These can be added to the finished frame without spoiling its appearance if you change your mind later, as there's no paint or lacquer to replace.

Compared to most gravel bikes, the Pathfinder's clearances are huge. It's designed to run 650B tyres up to 2.2in front and rear, and evidently newer builds will take tyres up to 2.4in. You might run something even bigger in the unicrown fork – 2.6 or maybe 2.8 – but Darron doesn't recommend it as he considers it a different bike then.

I'm in two minds about the internal cable

Tech Spec



SVEN CYCLES PATHFINDER 2x11

PRICE: £4,200 (frame & fork from £1,700)

SIZES: S, M, L, XL (M tested)

WEIGHT: 11.2kg (inc pedals)

FRAME & FORK: Reynolds 921 stainless steel frame with 142x12mm Paragon PolyDrop dropouts and fittings for rack, mudguard, two bottles.

Reynolds 921 unicrown fork with 100x12mm axle and fittings for front rack

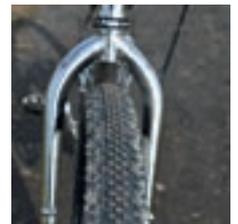
WHEELS: 54-584 Schwalbe G-One Bite tyres, DT rims, 32 x3 spokes, Hope Pro4 hubs

TRANSMISSION: no pedals (Shimano M520 used), 170mm White Industries R30 chainset, 46-30 White Industries chainrings, White Industries external bottom bracket, Sram PC1170 chain, Sram 11-32 11-speed cassette. Sram Force 22 mechanical shifters and derailleurs. 22 ratios, 26-114in.

BRAKING: Sram Force 22 levers, TRP Spyre cable discs with 160mm rotors

STEERING & SEATING: Cork tape, 460x31.8mm Salsa Cowchipper handlebar, 90mmx10° Thomson Elite stem, Hope headset. Selle Italia Flite Titanium saddle, 27.2x330mm Thomson Elite layback seatpost

EQUIPMENT: two bottle cages svencycles.com



Clockwise from far left: Good on gravel – and other surfaces; wide, tubeless-ready tyres; roomy fork; variable BCD chainset



THE PATHFINDER RIDES BETTER OFF-ROAD THAN ANY GRAVEL BIKE I'VE TRIED

routing. It's neat, especially with such shiny tubing, but inevitably complicates cable outer replacement.

COMPONENTS

650B wheels allow the use of wide tyres without eating into toe room or adding much weight. While I wouldn't mind trying a similar style bike with 29er tyres, the arguments for smaller wheels are equally valid here. They outshine 700C wheels with narrower tyres, and the overall wheel diameter is comparable.

The Schwalbe G-One Bite tyres and DT rims are tubeless compatible, an upgrade well worth making. Running the tyres at around 30psi was great for grip and comfort off-road – right up until the inevitable pinch-flat, suffered while winding up the pace over the rocky bridleway of Worm Sike Rigg.

Gearing is largely from Sram's Force 22 groupset, with mechanical double-tap shifters. The chainset is a versatile White Industries R30 with 46-30 chainrings. You can fit rings from 24-38 teeth in the inner position and

from 38-52 in the outer because it has a variable bolt circle diameter. Clever! I'd have been happier, however, with a single ring sized somewhere between the two, which is just what the cheaper Pathfinder 1x11 has.

The brakes are TRP Spyres. They offer smoother modulation than the single-piston Avid BB7s I'd normally choose, with no discernible difference in stopping power. Whether they'll be as robust and easy to live with as BB7s remains to be seen. Since the rear brake is mounted on the chainstay and points upwards, water might get into the cable housing. I had a rear brake like that freeze solid this winter, though this one was okay.

THE RIDE

The Pathfinder rides better off-road than any gravel bike I've tried so far: it's more comfortable and more controlled. That's largely down to the tyres, 54mm tyres at 30psi being simply better than higher pressure 35-40mm tyres – not just on rocky bridleways but on forest fireroads and gravel

tracks too. The G-One tyres also roll better than you'd expect on tarmac, although if you were doing a lot of road riding on this bike, a different (or second) set of tyres would be worthwhile. Have a look at the Compass Switchback Hill, which Sven Cycles stocks.

Similar to the Sonder Camino (tested Dec 17-Jan 18), the Pathfinder's riding position is relatively relaxed, thanks to a reach that's not too stretched and a wide, flared handlebar with a shallow forward sweep. You don't have too much weight on your hands, and you can get down on the drops without worrying you'll ride nose heavy into bumps, ruts and drops. (It was the rear tyre I pinched.)

SUMMARY

This is one of the few drop-bar bikes I've really enjoyed riding off-road; most have felt like some kind of punishment. I'd load the Pathfinder fairly lightly if I were bikepacking to avoid losing its sense of elan. Yet it could easily do double-duty as a loaded tourer on either tarmac or dirt roads. With the right tyres, it could be a fine road-plus bike too. This versatility, which all gravel bikes claim but don't all deliver, goes some way to justifying the suck-your-teeth price. The 1x11 version is £1,000 cheaper, mind you... >

OTHER OPTIONS



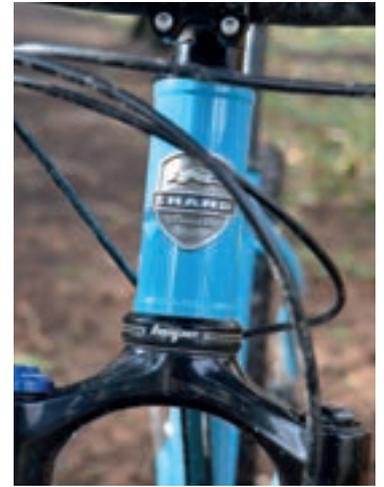
1 Enigma Escape
£3,999 (bike) Made-in-the-UK titanium adventure bike with a carbon fork, hydraulic discs, and through-axles. Clearance for tyres up to 700x42C or 650x50B. enigmabikes.com



2 Ironbridge 1851
£1,850 (frame & fork) Reynolds 853 gravel bike that won a Bespoked 2017 award. Choice of 853 or carbon fork. The seatstay bridge is a work of art. ironbridge-bicycles.co.uk



Below: With the right headset, almost any threadless steerer will fit



Mountain bike

SHAND BAHOOKIE

STEVEN SHAND HAS been building steel bikes in Scotland since 2003, with a focus more recently on 'all-road' bikes and adventure mountain bikes. The Bahookie is Shand's do-it-all 29er hardtail. It's a bike I considered for the '1 bike only' feature (Oct-Nov 17), and which the Adventure Syndicate's Lee Craigie uses for just that (Dec 17-Jan 18). It'll take luggage, different forks, different wheels, different gearing... There's even a drop-bar version, although that uses a different frame. I chose a flat-bar Bahookie with 650B+ wheels and a suspension fork.

FRAME & FORK

The Bahookie is TIG-welded from custom-drawn Columbus Niobium tubing from Italy (so this article's 'British steel' headline doesn't entirely work). There are fittings for three bottle cages, a rear rack, and a 'stealth' dropper seatpost. The latter's cable would run up inside the seat tube, while the gear cable and brake hoses are all external and thus easily accessible. The seat tube is 30.9mm, a common size for droppers. It's fitted with a shim for the 27.2mm rigid seatpost supplied, a narrower post being a bit more forgiving.

The bottom bracket is a 73mm press-fit shell. Not being a fan of press-fits, I requested the optional (£105) eccentric bottom bracket. This has an additional benefit: it provides a way to tension the chain if you want to switch between geared and singlespeed usage. The dropouts are PolyDrop ones like the Sven Pathfinder's

and the advantages are the same: you're not locked into one axle standard; and the frame will split, so you can use a belt drive. (Belt-drive singlespeed and belt-drive Rohloff are off-the-peg Bahookie options.)

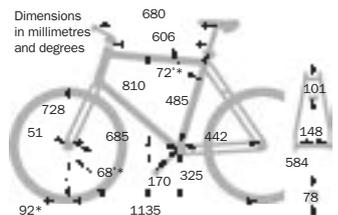
Up front, a straight 44mm head tube looks better on a steel frame than a tapered one yet still accommodates modern suspension forks. Here the fork is a Rockshox Reba RL with Boost (110mm) axle spacing and 120mm of air-sprung travel. It's not as plush or as tuneable as the out-of-production Manitou Magnum Pro on my own plus-size hardtail, but you can upgrade its fork crown compression lockout to handlebar control, which is much more convenient if you regularly find yourself standing up to pedal on climbs.

The Bahookie is available in four standard sizes, small to extra-large. If you need something different, custom sizing is £200 extra. The medium was a good fit for me. The 120mm Reba felt fairly tall, since I normally ride a shorter suspension fork or a rigid one, so I flipped the stem over to reduce the handlebar height. As with any telescopic suspension fork, the height, head angle, and trail will vary through its travel.

COMPONENTS

It costs £75 extra to have tubeless 650B+ wheels instead of 29er wheels with tubes. It's worth it for the comfort improvement alone. Softer, three-inch tyres take the edge off bumps and vibration, making a hardtail a viable alternative to a full-suspension bike

Tech Spec



SHAND BAHOOKIE

PRICE: £3,250 as tested (frame only £1,295)

SIZES: S, M, L, XL, custom (M tested)

WEIGHT: 13kg (inc pedals)

FRAME & FORK: TIG-welded Columbus Niobium steel frame with 148x12mm Paragon PolyDrop dropouts and fittings for three bottles, stealth dropper seatpost, rear rack. Rockshox Reba RL Boost (15x110mm) 120mm travel suspension fork

WHEELS: 75-584 Schwalbe Nobby Nic (front) and Rocket Ron (rear) tyres, set up tubeless, on Halo Vapour 50 wheels with 32 x3 spokes

TRANSMISSION: no pedals (Shimano M520 used), 170mm Shimano XT M8000 chainset with 30T narrow-wide ring, Shand eccentric bottom bracket, Shimano HG701 chain, Shimano XT M8000 11-speed 11-42 cassette. Shimano XT M8000 shifter and rear derailleur. 11 ratios, 20-78in

BRAKING: Shimano XT M8000 hydraulic disc with 160mm Ice Tech rotors

STEERING & SEATING: ESI grips, 720mmx8° USE Ultimate Rip handlebar, 70mmx7° Shand stem, Hope headset. Shand saddle, 27.2x350mm Shand seatpost with 30.9mm shim

EQUIPMENT: none

shandcycles.com

*Unsprung – steeper in use.



Clockwise from far left: PolyDrop dropouts; Hollowtech cranks in an eccentric BB; Reba RL fork; easy North (York)Shore



YOU'RE NOT LOCKED INTO ONE REAR AXLE STANDARD WITH THE POLYDROP DROPOUTS. THEY'RE ALSO BELT-DRIVE COMPATIBLE

even for those of us with older bones riding on choppy trails.

The tyres' bigger footprint makes them sit on top of the trail surface more rather than sinking in. It's often an advantage but not on slippery mud that can shear away from firmer ground underneath. Normally, a Nobby Nic front tyre and a Rocket Ron rear would be a reasonable combination for year-round riding. In plus-size, a more aggressively treaded front tyre like a Surly Dirt Wizard would work better for UK winter conditions.

Gearing is 1x11, using a big cassette and a 30T narrow-wide chainring. The resulting range of 20-78in was perfect for me for mountain biking. Note that while you can run this bike with a Rohloff or a singlespeed hub, it's not designed for a front derailleur. So you need to select your chainring size with care.

The Shimano XT hydraulic brakes are excellent, allowing easy one-finger braking.

Faster descenders and bigger riders generally might want a larger front rotor; it was fine for me. The chainstay-mounted rear calliper won't interfere with a rear rack, and since it's hydraulic it won't seize in winter due to water ingress.

THE RIDE

Aside from its smaller diameter wheels, the 650B+ Bahookie is similar to my own 29+ hardtail, so it felt familiar. Its first outing was with about 100 others on a remembrance ride for a local rider and trail builder (RIP Lewis). I don't normally ride with guys in downhill pyjamas on long-travel bikes, but found myself hustled along in a group of them on the first technical descent after overtaking everyone on the way *up* the hill. The Bahookie was surefooted enough that I didn't crash, despite

2,745 miles on a Bahookie
To read about Lee Craigie and the Bahookie she used for the Tour Divide, see bit.ly/cycle-ultradistance

being at the edge of my comfort level. It's a capable trail hardtail, and with dropper post and a grippier front tyre it would be more capable still.

As with any plus-bike, there's a narrow sweet-spot for tyre pressure. Too hard and you'll bounce off rocks like a

Spacehopper; too soft and the tyres will squirm when you bank the bike over. Invest in a digital pressure gauge so you can see what works for you. The Bahookie has 50mm wide rims, which provide the lateral support you want for lower pressures.

SUMMARY

The Bahookie lives up to its do-it-all hardtail billing: it would work well for 100% of my off-road riding. As with the Sven Pathfinder, this versatility takes some of the sting from the price; over three grand *is* a lot of money for a steel hardtail. Of course, you could get just the frame, then re-use parts from an existing bike. Given the Bahookie's dropouts, head tube, bottom bracket, and tyre clearances, there's a good chance they'll fit. **C**

OTHER OPTIONS



1 Curtis AM+ £1,150+ (frame) Fillet-brazed from a mix a tubesets, this hardtail has a longish top tube, a 66.5° head angle, and clearance for 27.5+ tyres. Takes a 120mm fork – or longer. curtisbikes.co.uk



2 BTR Chaser £1,050 (frame) Better known for their long, low and slack trail bikes, BTR also do cross-country frames like this 29er singlespeed. The geared Chaser XC frame is £50 dearer. btr-fabrications.com