



# Super-tough tourers

Adventurer seeks lifelong companion to travel the world, maybe more. Must be dependable and low maintenance...

**Cass Gilbert** tests three trusty tourers







## On test



**Thorn** £950.99



**Cannondale** £1,200



**Mather** £2,515



### Thorn Sherpa

**£950.99** (builds available from £799)

Thorn Cycles ☎ 01278 441500

[www.sjscycles.com](http://www.sjscycles.com)



**W**hat exactly is adventure touring? Think of it as your usual rack-and-pannier travels, with an adventurous twist. Perhaps there's an extra sense of wilderness to the route, or it's a far-flung destination a long way from a decent bike shop. Maybe you're hauling everything you need for several days at a time, or there's little information on where you're heading.

It doesn't have to be an 'expedition' with a sense of pioneering purpose, nor does it have to be a 'sell up and travel the world' journey. Adventure touring is, by definition, a tour that's off the beaten track. So your bike should be able to cope with wherever you go; whatever the road conditions; and whether it's over a couple of weeks, a month or even longer.

But what about when you're not pedalling across the Tibetan Plains, trundling down Laotian backroads or island hopping through the Outer Hebrides? The good news is that these toughened tourers make excellent workhorses back in the real-world

Somerset-based Thorn have built up an enviable name

commute to work too. With their big tyre clearances, they're versatile too, so can handle their fair share of forest trails; they're just as surefooted on that camping trip round Europe too.

Somerset-based Thorn have built themselves an enviable name when it comes to touring bikes, and their designer, Andy Blance, sets off on his own trips in South America and Australasia each year to hone designs. As the brand is increasingly associated with Rohloff's internal Speedhubs, you might have overlooked their entry-level Sherpa – our test model will get you on the road for less than a grand.

While Cannondale may be known for their mountain bike aluminium

expertise, their heritage is also in travelling the open road – their very first bike was a tourer back in 1983. Weighing in at £1,200, the Touring Ultra ruffles tradition with the likes of hydraulic brakes and a Headshok front suspension fork. Too much technology? With the ever-expanding internet and the likes of DHL to whisk parts out to the further reaches of the planet, this is now less of an issue than in the past – as long as you have time (and cash) to spare.

Lastly, flying the custom flag is Bath-based Robin Mather, a young framebuilder and keen tourer with a growing reputation for building unique bikes. Our test model is no exception, showcasing a personalised frame with

The Thorn's Dura-Ace bar end levers offer both indexed and friction shifting

The Sherpa builds on Thorn's reputation for dependability





**Cannondale Touring Ultra****£1,200**

Cannondale ☎ 00 41 61 487 9380

[www.cannondale.com](http://www.cannondale.com)

hand-picked components, at a cost of £2,515. As a footnote, we'd also add that the humble mountain bike makes a very capable adventure tourer with just a few upgrades – we'll be doing a feature on converting one on the cheap soon.

**Frame****Thorn 8 Cannondale 8 Mather 10**

Like the Raven Tour, the Sherpa uses Thorn's proprietary 969 frameset – seamless 4130 chromoly, double-buttet tubes – teamed with a Reynolds 531 fork. Our test bike was size 560S, which equates to a Large frame with a short top-

tube, making it best suited to drop handlebars. Of the six sizes available, three are long top-tube variants that can be run with flat bars. This said, as the effective top-tube difference isn't that big, it's really a frameset that lends itself best to drops – though women may well find it works well for straights too.

Typical of many Taiwanese frames, the finish is excellent, with some welcome touches, such as the socket dropouts found on Thorn's top-end eXp range. There's clearance for 2in tyres and mudguards too. The powder coat finish is simple but remarkably tough and



**A switch on the top of the steerer locks out the Cannondale's Headshok suspension fork for more efficient pedalling on long tarmac slogs**

there's every braze-on you could need, including three bottle mounts, pump peg, dynamo mounts and those all-important rack and mudguard eyelets. We can't fault FSA's Orbit XL2 headset either – it's always performed really well for us before.

The Ultra Tour is based around Cannondale's US-manufactured Furio MTB frame, and inherits its massive clearances. In fact, angles, bottom bracket height and chainstay lengths are the same, albeit with added mudguard and rack eyelets. The fact that it's an aluminium frame will concern some, simply because that material is much harder to repair in more remote parts of the world. While rare, we have seen instances of aluminium frames cracking or denting.

However, Cannondale's excellent reputation precedes it and they're confident enough to guarantee their frame for life. Up front, there's a Headshok suspension fork, with 80mm of travel and a lockout – note that production versions have low rider bosses too. All the parts are also replaceable, so

Cannondale are confident enough to guarantee their frame for life...

**Cannondale's Touring Ultra comes with 80mm of front end suspension**





### Mather

**£2,515**

Robin Mather Cycles

[www.robinmathercycles.co.uk](http://www.robinmathercycles.co.uk)



an old fork can be serviced to its original working condition, but it does take more day-to-day maintenance, such as lifting the boot and applying grease on the bearing races after particularly wet conditions. Cannondale recommend regular servicing and because it's an air system, you'll need to carry a shock pump, too. If your destination demands simplicity, a rigid fork is also available.

Being fully custom, each Mather frame will fit its rider to a tee, with a choice of tube sets to suit. Our test bike was built for Mather himself, and features Reynolds 725 tubing, Columbus Zona stays and Reynolds blades, linked by a fit-and-forget Chris King headset. The tubes are oversized in a bid to provide a precise ride when fully laden, with comfort gained by bigger-volume tyres – there's clearance for the tourer's favourite, Marathon XR 2.0s.

We've rarely seen a frame with such an exquisite finish, with simple, elegant Pacenti lugs adding a sense of understated decoration. Indeed, each

We've rarely seen a frame with such an exquisite finish...

Mather frame is carefully considered, both practically and aesthetically. Smaller frames can create space issues with cantilever bosses and carrier mounts, so the solution here is to neatly

integrate them. A frame and fork-only option is available for a remarkably reasonable £750, giving the workmanship and individuality that's gone into this bike, right down to its custom decals. Sliding

All Mather frames are fully custom made for the individual rider

Attention to detail on the Mather is impressive, including these braze-ons for a custom light mount







dropouts, eccentric bottom brackets and internal brake cables are also available. All good things come to those who wait – and in the case of the Mather, that will be a build time of four to five months.

### Wheels

#### Thorn 7 Cannondale 7 Mather 8

All the bikes here sport 26in wheels, which have the big advantage that they can be replaced the world over. In fact, your tyre and wheel combo should ultimately reflect what your bike will be used for. Consider the loads you're likely to carry as well as your own weight, along with the kind of surfaces you expect to encounter. While it's tempting to go for the strongest, most overbuilt option for peace of mind, a more all-round wheelset will often be more suitable for all but the most demanding touring. If you can, invest in a second set of wheels

because this can transform a heavy tourer into a more spritely ride when you're back home.

The Sherpa is kitted out with Sun CR18s, with simple, well-sealed Shimano Deore hubs. They're machine built with plain-gauge spokes and finished by hand. Thorn don't recommend these wheels for extended, remote tours, pointing you towards the heavyweights of the touring world instead – Sun Rhynos with XT hubs; a £90 upgrade.

As they are, CR18s strike a reasonable balance between weight and strength, and certainly make the bike more enjoyable to ride unladen. Ours came fitted with Schwalbe's relatively light Hurricanes suited to dirt tracks, though a range of tyre options are available. We've found Hurricanes somewhat lacking in sidewall strength and picked up a couple of punctures from winter glass.

While it's always good to see a 36-hole wheelset, Mavic's XM117s are out of place on the Ultra Tour. Designed for cross-country

mountain bike use, we'd have preferred thicker braking surfaces, especially as they're paired with the powerful hydraulic Maguras. Hubs are benchmark Shimano XT, ideal for long-term touring. Schwalbe's Marathons are a solid tyre choice too, and while they're not grippy enough for roughstuff rides, they're puncture resistant and roll well even if, at 800g, they're a little portly.

The Mather wears Mavic D521s (now rebranded as EX721s) with a ceramic finish, offering powerful and long-lasting braking performance. However, we have heard several reports of splitting around the eyelets on the standard versions of this model, so we wouldn't recommend them for the long haul. The front wheel gets a Schmidt dynamo hub, which boasts excellent rolling efficiency, while the back is built up with a super-smooth Royce hub.

Mather has opted for a two-cross lacing pattern at the front, which should be amply strong given the larger Schmidt flange.

Tyres are the seasoned tourer's classic: Marathon XRs. The 1.6 version's are fitted here over the more popular 2.0s, offering lighter weight at the cost of a little comfort.

### Handling

#### Thorn 8 Cannondale 8 Mather 9

One of our test loops in the Brecons involved a blend of forest tracks, an old Roman road, potholed backroads, smooth tarmac and some stone-strewn trails. Throw in wintry hail, snow, wind and rain, and we had perfect adventure touring conditions!

The Sherpa's built as a jack-of-all-trades. Unladen, it's livelier to handle than you might expect. To account for the short top-tube, the head-tube has been slackened off and the fork has a generous 52mm rake, which helps solve any toe overlap issues and still keeps steering on the spritely side. With its load spread under a full complement of panniers, it felt reassuringly planted on long tarmac descents with no shimmy in the frame, and surefooted enough on brideways – a good all

## JARGON BUSTERS

**Chromoly** A steel alloy of iron, carbon, chromium and molybdenum. It's not as light as aluminium but has a high tensile strength and is more easily repaired. Aka 'chromo'

**Reynolds 725** A high-end chromoly that's heat treated to increase its strength

**Lugs** Close-fitting sockets that surround the tube intersections, to create the joint and offer aesthetic appeal

**TIG welding** Tungsten Inert Gas welding enables strong, high-quality welds, using an arc welding (see below) process with a tungsten electrode

**Arc welding** Available the world over to fix damaged chromo frames

**Fillet brazing** A brass fillet is built up around the joint then filed back for a smooth finish.

**Lockout** Converts a suspension fork into a rigid one, for more efficient tarmac riding

**Rohloff Speedhub** A 14-speed, fully sealed internal geared hub that does away with vulnerable derailleurs

**Eccentric bottom bracket** Allows the BB to be moved fore and aft to adjust chain tension, often used with Rohloff hubs







rounder. Its drop-bars mean you can tuck out of the wind and offer a variety of hand positions, staving off numbness in the fingers. Overall though, we do find flats offer a more confidence-inspiring ride position and better braking when the going gets rough, which those new to cycling may prefer.

With its oversized aluminium tubing, the Cannondale is a harsher ride in comparison – larger-volume tyres are certainly a good idea for taming road blemishes. Under the weight of a couple of panniers, it's not quite as stable and predictable at the front end as a purpose-built tourer.

However, hit the trails and the bike comes into its own. Converted mountain bikes are great for roughstuff riding, thanks to their stiff framesets, higher bottom brackets and responsive off-road handling and the Ultra Tour is no exception. With an easy flick of the lever, the Headshok provides superb comfort over any terrain, precise steering and very little fore and aft flex even when braking under a heavy load. Its narrow, straight bars do tend to roll the shoulders forward over long rides. We'd recommend a gentle rise, helping to open out the chest and take pressure off the wrists, though the Ergon grips are excellent.

Many small frames suffer from unduly slack head angles and steeper seat-tubes in an effort to solve toe overlap issues. But rather than compromise handling, Mather has worked in a small amount of overlap – only with

mudguards – to maintain a lively feel, even with its relatively heavy wheels. This is particularly noticeable when riding the bike unladen – it's far more engaging than some rock-steady but rather staid traditional tourers. Add a full complement of panniers, and steering takes on a more predictable role, though it still retains enough of a sporty edge for the more experienced rider.

Nitto's super-stylish Moustache handlebars are worth commenting on with regard to their effect on handling. Essentially a flattened drop bar, the day to day riding position is particularly open and comfortable, with excellent leverage for out-of-the-saddle climbing and quick access to the bar levers. However, the bars mean that there's more of a reach to the brakes and we found the narrow grip slightly too close when riding laden through traffic or on roughstuff descents.

## Equipment Thorn 9 Cannondale 7 Mather 9

Thorn has always offered a dizzying array of options and extras – there's even a flat-barred Sherpa available. In terms of the complete build, our bike came in fairly close to the £799 entry price.

The biggest upgrade is to the basic rear carrier, replaced by Thorn's Taiwanese chromo version (£50), with a matching low-rider front rack (£70). While the racks are relatively pricey and heavy compared to Tubus' benchmark products, we can't fault their quality or rigidity. Together with well-placed mudguard mounts, they offer a superb, fully integrated system of the kind you won't usually see at this price.

The rest of the bike is specced with solid, dependable kit. A choice of stems helps achieve your preferred riding position and there's 40-44cm ITM drop-bars to suit your shoulder width. Dura-

Ace bar-end gear levers keep maintenance to a minimum and enable the front mech to be easily trimmed. Deore Octalink cranks make up the drivetrain; we'd have preferred square taper cranks, simply because we seem to get more life out of the bottom brackets. As it is, make sure you change the bolts out – you won't find a 10mm key on your multi-tool. Suntour's cantilevers may be old but offer progressive, powerful braking with drop-bars, though you'll need to carry a 19mm cone spanner to tension them. Brooks' venerable B17 also pushed up the price by £17.

For £1,200, Cannondale's Touring Ultra packs plenty of quality kit for the money. A LX/XT mix delivers gear shifting – no complaints there. Popular with Continental touring bikes and trials riders alike, Magura HS33 Hydraulic rim brakes provide absolutely superb braking power and are self adjusting – but you're going to need a bleed kit if something goes wrong.

On an adventure touring bike, cranks with outboard bearings aren't an obvious choice – although a stiffer system, they're more exposed to invasive grime. Truvativ bearings don't have the best reputation and replacing them in the field isn't recommended, unless you have plenty of mechanical sympathy. Again, we'd prefer the reliability of square tapers. Worth mentioning is that while the stem is particular to the Headshok system, 80-130mm models can be fitted when you buy it, with 5- and 20-degree rises for the perfect ride position.

Tubus' rugged Cargo handles carrying duties without complaint, while quality, well-fitted SKS mudguards keep the muck off. There are even a couple of cages and bottles thrown in, too. It's another appearance for the Brooks B17, this time atop a basic suspension seatpost. Ergon's comfortable grips with bar ends are a nice touch.

There's a word to describe the Mather: un-upgradeable. Indeed, £2,515 buys you a list of top-notch,



The Mather's Marathon XR tyres will be a favourite with many

hand-picked kit. This includes TA Specialities's Carmina cranks, an elegant, dependable square-taper crankset with a vast range of spiders and hardwearing chainring options. Dura-Ace bar-end levers are easily set up and low in maintenance.

Gleaming front and rear mechs are also courtesy of DA, offering crisp gear changes. While no less hardwearing than Shimano XT – the benchmark for expedition kit – it's an unusual choice due to the smaller gear range, though this is balanced by tighter jumps between gears. A matter of personal preference, I'd have to opt for the extra gears in reserve if I were tackling hilly, unsurfaced terrain.

We've discussed Nitto's Moustache bars previously; teamed with the 3w Schmidt light, they lend the Mather something of the low-slung stance of a 1950s motorbike. The light bracket is custom made, as is the matching fillet-brazed stem to which it's fixed, complete with its own braze-ons – another lovely feature. Shimano levers work efficiently with Paul Component's beautifully machined Neo Retro cantilever brakes, though at the back, the Touring Cantis are a bit spongy. Again, there's a Brooks saddle – this time a Team Pro – atop a satin-finished seatpost.

A change from the usual SKS fare, Giles Berthoud's stainless steel guards, complete with a leather front flap, are expertly fitted, so no rattle whatsoever. Even more eye catching are the fully custom racks, which make up £250 of the price tag. The same seamless stainless steel tubes are used in the hydraulic systems on offshore oil platforms, so no corrosion worries there. Like the mudguards, they are rock solid to ride with. While you're never going to get the same value for money offered by brands that buy in bulk, what you're getting is built to last.

## Rivals

**Fahrrad Manufaktur T400 £695**

**Thorn Raven Tour from £1,199**

**Longstaff Touring £2,000**

Bikefix (☎020 7405 1218, [www.bikefix.co.uk](http://www.bikefix.co.uk)).

With its reliable chromo tubing, Shimano dynamo hub, Deore groupset and Tubus rack, the T400 is at home in the city – but could easily be adapted for the Serengeti... all for just £695.

Thorn Raven Tour (☎01278 441502, [www.sjscycles.com](http://www.sjscycles.com)). Our Touring Bike of the Year 2006, complete with Rohloff Speedhub, hand-built wheels and a geometry that has been corrected for a suspension fork.

Longstaff (☎01782 561 966, [www.longstaffcycles.com](http://www.longstaffcycles.com)). A classic Reynolds 531 frame, DT1K7.1 rims/XT hubs and 105/Ultegra mix. Bagged a 9/10 in C+184. Classy and highly desirable.



## Thorn Sherpa

**£950.99 (builds from £799)**

Thorn Cycles ☎01278 441500

[www.sjscycles.com](http://www.sjscycles.com)

### Frame and forks

Size tested: 560S

Sizes available: 460S, 510S, 560S, 485L, 535L, 585L

Weight as tested: 14.360kg/31.6lb no pedals

Frame: 969 chromo

Frame weight: 2,495g/5.5lb

Fork: Reynolds 531

Fork weight: 1,168g/2.6lb

### Bike dimensions

Top tube: 56cm/22in

Seat tube (c-c): 50cm/19.7in

Chainstays: 44.5cm/17.5in

Wheelbase: 107cm/42.1in

Head tube angle: 70.5°

Seat tube angle: 72.5°

Fork offset: 5.2cm/2in

Trail: 6.3cm, Wheel Radius 33.3cm

B/b height: 29.5cm/11.6in

Standover height: 79.4cm/31.3in

Braze-ons: f&r mudguards and racks, pump peg, 3x water bottle

### Frame alignment

Head tube: Perfect

Rear triangle: Within 2mm

Fork: Perfect

### Transmission

Chainset: Shimano Deore, Octalink, 175mm

Bottom bracket: Shimano ES51 Octalink

Freewheel: Shimano M580

Chain brand: Shimano HG73

Derailleurs: Shimano LX

Gear levers: Shimano Bar End Shifters

Pedals: None

### Gear ratio (in)

Chainring	Sprocket									
	11	12	14	16	18	21	24	28	32	
	26	64	59	50	44	39	33	29	25	22
	36	88	81	69	61	54	46	41	35	30
	48	118	108	93	81	72	62	54	46	41

### Wheels

Front & Rear: 36H Sun CR18 rims on Shimano

Deore hubs with DT Champion spokes

Tyres: Schwalbe Hurricane, 26x2.0in

Wheel weight: f: 1,746g; r: 2,300g

### Other components

Handlebar stem: Thorn, 110mm

Handlebars: ITM Racing Line, 45.5cm

Headset: FSA Orbit XLII

Saddle: Brook B17

Seatpost: Thorn

Brakeset: Suntour XC

Accessories: f&r Thorn rack, f&r SKS mudguards



## Cannondale Touring Ultra

**£1,200**

Cannondale ☎00 41 61 487 9380

[www.cannondale.com](http://www.cannondale.com)

### Frame and forks

Size tested: L

Sizes available: P, S, M, L, X

Weight as tested: 13.620kg/30lb no pedals

Frame: Aluminium

Frame weight: 1,848g/4.1lb

Fork: Headshok 80mm

Fork weight: 1,301g/2.9lb

### Bike dimensions

Top tube: 62cm/24.4in

Seat tube (c-c): 44cm/17.3in

Chainstays: 42cm/16.5in

Wheelbase: 110cm/43.3in

Head tube angle: 70°

Seat tube angle: 72°

Fork offset: NA

Trail: NA, Wheel Radius 33.3cm

B/b height: 29.6cm/11.7in

Standover height: 80cm/31.5in

Braze-ons: f&r mudguards and racks, 3x water bottle, f&r disc

### Frame alignment

Head tube: Perfect

Rear triangle: Within 4mm

Fork: Perfect

### Transmission

Chainset: Truvativ FireX 3.1 GXP, 175.0mm

Bottom bracket: Truvativ GXP

Freewheel: Sram PG-950

Chain brand: Shimano HG-73

Derailleurs: Shimano LX/XT (f/r)

Gear levers: Shimano LX

Pedals: Wellgo M-17C Dual Function

### Gear ratio (in)

Chainring	Sprocket									
	11	13	15	17	20	23	26	30	34	
	22	52	44	38	34	29	25	22	19	17
	32	76	64	55	49	42	36	32	28	24
	44	104	88	76	67	57	50	44	38	34

### Wheels

Front & Rear: 36H Mavic XM117 on Shimano LX

hubs with DT Champion spokes

Tyres: Schwalbe Marathon 26x2.0in

Wheel weight: f: 1,924g; r: 2,560g

### Other components

Handlebar stem: Cannondale

Headshok, 120mm

Handlebars: Cannondale C2, 590mm

Headset: Cannondale Headshok SI

Saddle: Brooks B17

Seatpost: Suspension 45mm

Brakeset: Magura HS-33

Accessories: Ergon R1M grips with Bar-end,

Tubus Cargo 26in rack, fenders, bottles, cages



## Mather Tourer

**£2,515**

Robin Mather Cycles

[rob@robinmathercycles.co.uk](mailto:rob@robinmathercycles.co.uk)

[www.robinmathercycles.co.uk](http://www.robinmathercycles.co.uk)

### Frame and forks

Size tested: Custom

Sizes available: Custom

Weight as tested: 13.960kg/30.8lb no pedals

Frame: Reynolds 725

Frame weight: 2,060g/4.5lb

Fork: Reynolds

Fork weight: 924g/2.0lb

### Bike dimensions

Top tube: 52cm/20.5in

Seat tube (c-c): 42cm/16.5in

Chainstays: 42.8cm/16.9in

Wheelbase: 100cm/39.4in

Head tube angle: 71°

Seat tube angle: 73°

Fork offset: 4.2cm/1.7in

Trail: 6.7cm, Wheel Radius 32.3cm

B/b height: 28.2cm/11.1in

Standover height: 72.5cm/28.5 in

Braze-ons: 3x water bottle, f&r rack

### Frame alignment

Head tube: Perfect

Rear triangle: Perfect

Fork: Perfect

### Transmission

Chainset: TA Carmina, 165.0mm

Bottom bracket: Shimano Cartridge square taper

Freewheel: Shimano Ultegra

Chain brand: Shimano CN6600

Derailleurs: Shimano Dura-Ace

Gear levers: Shimano Dura-Ace Bar-End Shifters

Pedals: None

### Gear ratio (in)

Chainring	Sprocket														
	12	13	14	15	16	17	19	21	24	27					
	26	56	52	48	45	42	40	36	32	28	25				
	36	78	72	67	62	59	55	49	45	39	35				
	46	100	92	85	80	75	70	63	57	50	44				

### Wheels

Front & Rear: 36H Mavic D521 rims on Schmidts

dynamo hub/Royce freehub with Sapim spokes

Tyres: Schwalbe Evolution Marathon XR,

26x1.60in

Wheel weight: f: 2,160g; r: 2,150g

### Other components

Handlebar stem: Robin Mather, 80mm

Handlebars: Nitto Moustache Handlebar

Headset: Chris King

Saddle: Brooks B17

Seatpost: Kallay

Brakeset: Paul's Neo Retro/Touring Canti (f/r)

Accessories: Robin Mather hand-made f&r rack,

f&r mudguard, front hub dynamo

## Verdict

It may lack glamour, but the hard working Sherpa reflects Thorn's tradition of building no-nonsense quality tourers with great attention to detail. At its best with drop handlebars, it's good value, robust and well-rounded – we recommend it highly.

We wouldn't suggest the Ultra Tour for truly remote destinations. But as an option for adventurous mix and match touring in western locales – say crossing the US's Continental Divide – it offers more appeal. Drop your panniers,

thrown on a set of knobbly tyres and enjoy all the singletrack you can find. £1,200 is also good value, though the wheels let it down.

It's rare to find such an individual, exquisite and lovingly-crafted bicycle as the Mather. It's a truly personalised service – each build and every component choice is approached with incredible consideration, and finish is second to none. Lest its rather deluxe, albeit durable kit overshadows the frame's excellent value for money, a full

XT and Tubus build would set you back a more reasonable £1,800.

**Thorn 8/10**

Whether on tour or at home, the Sherpa will serve you very well

**Cannondale 7/10**

The MTB'ers touring choice - but could do with some component changes

**Mather 9/10**

Exquisite and unique – a really rather special bike