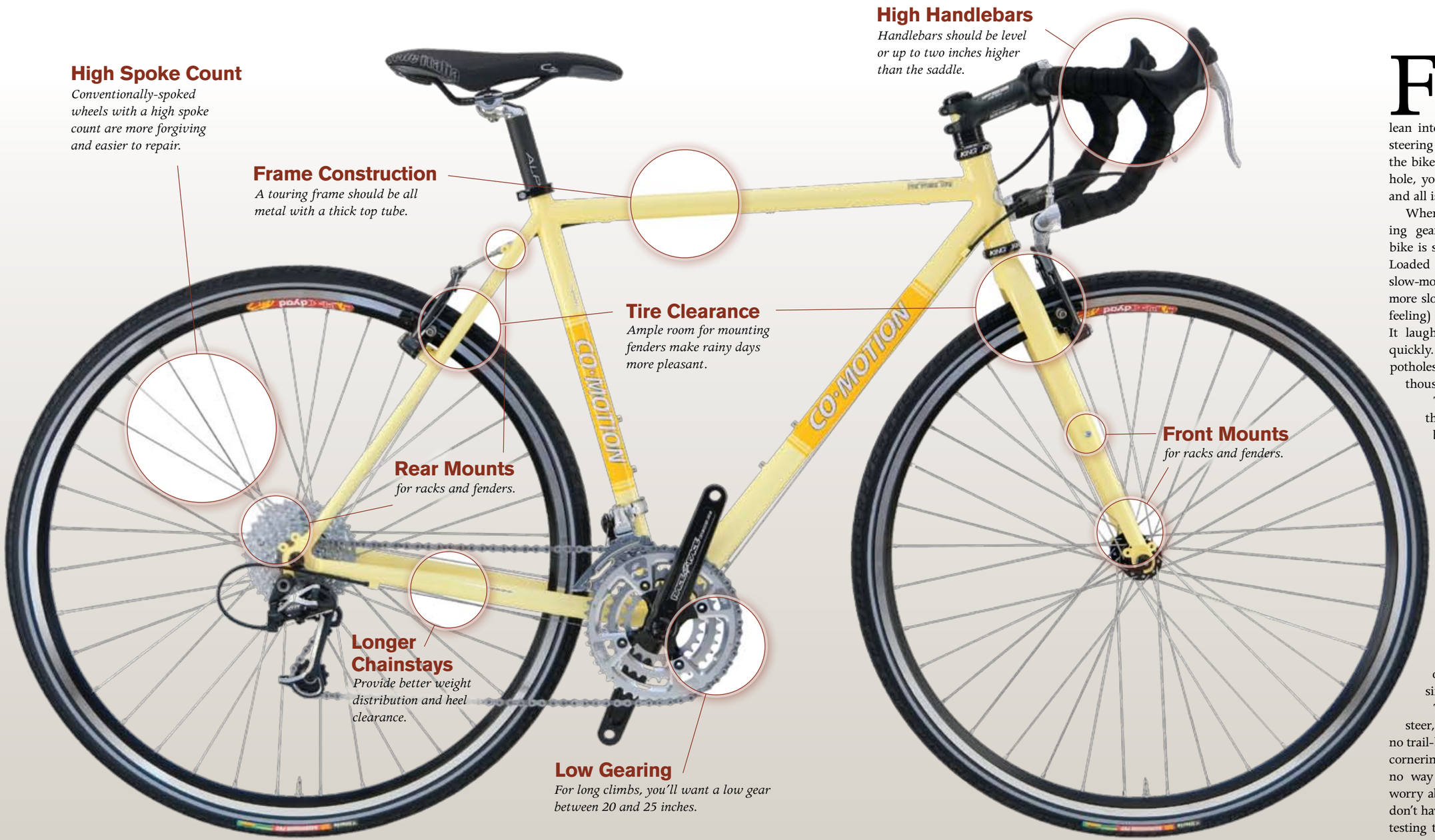
Touring Bike Buyers' Guide

by John Schubert

What to Look for in a Touring Bike



For most of us on our daily rides, the bike is a flamboyant companion. You stand on the pedals and feel it sprint underneath you. You lean into a corner and feel its reassuring steering geometry. You surge up a hill, and the bike is an eager partner. You see a pothole, you jump the bike over the pothole, and all is well.

When you add a sizable amount of touring gear, the relationship changes. The bike is still there, but it's less flamboyant. Loaded with panniers, it's more like a slow-moving workhorse. It corners a bit more slowly (but still with that reassuring feeling) because you're riding more slowly. It laughs if you try to sprint or climb quickly. And you can forget about jumping potholes. But the bike stays with you for thousands of miles.

The same bike can have both those personalities. A good touring bike will be your spry fun-riding around-home bike and your uncomplaining pack mule on an extended adventure.

If you decide you want to purchase a touring bike, you'll probably have to order it because most shops keep zero to one touring bikes in stock, and Murphy's Law dictates that they will not stock one in your size.

Now here's the big secret, and the reason why I'm comfortable telling you to not sweat the lack of a test ride: they all ride very similarly to one another.

That's right! No caster-angle understeer, no divergent negative instability, no trail-braking induced instability in hard cornering, no self-energizing wheel flop, no way for jargon writers to make you worry about your purchase. Touring bikes don't have quirky handling. I've been road-testing touring bikes for 31 years and I'm

telling you, they don't have that. They all have neutral handling.

So how do you pick a touring bike that will do that job optimally? And why will that bike feel spry the other 340 or so days of the year when you don't have it packed up for that long trip?

If you want to purchase a touring bike, you'll probably have to order it because most shops keep zero to one touring bikes in stock.

For people impatient with technical detail, here's the short answer: Go into a shop where the sales folks like meeting customer needs and buy a *real* touring bike. All of them will do the job, and all of them feel quite spry when the gear is off. Put on skinny tires if you're inclined, and the bike will handle and ride quite similarly to a racing bike. (People in bike shops generally don't believe that, but they haven't done as much measuring, weighing, and side-by-side road testing as I have.)

Mass produced (i.e., less-expensive) bikes include offerings from many of the major brands: Surly, Salsa, Cannondale, Fuji, Kona, Rocky Mountain, Novara, Raleigh, and Jamis, among others. More expensive brands with fancier features include Co-Motion, Independent Fabrications, Bruce Gordon, Waterford, and many more (see table on page 14).

But people who want technical detail should keep reading. We're going to walk around the bike, look at the various features, and tell you what to look for in each feature.

What a touring bike should have

We'll start with all-metal construction. Your friends who don't actually go anywhere on their bikes will buy carbon fiber, but not you.

Your bike might get scratched by a baggage handler or have a minor fall in the outback. If the bike is steel, aluminum, or titanium, you don't care about the scratch. If the bike is carbon, you do care, so you'll be worrying about phrases like failure mode, crack propagation, and stress analysis.

Someday, someone will design a carbon-fiber bike optimized for touring. But I haven't seen it yet.

If it makes you feel better, the weight savings of carbon are often overstated. A good steel touring frame, depending on size and other factors, will weigh about 4 to 4 and 1/2 pounds. An aluminum touring frame will be maybe a half pound lighter. A carbon frame, if you could find one made to resist the stresses of touring, would be about another half pound lighter. The difference — that of emptying out a water bottle or boycotting French Fries for a couple weeks merits a yawn.

Every touring bike in our Buyers' Guide has a metal frame, so I won't bother with specific examples. But if a salesman tries to sell you a hybrid or mountain bike with carbon components or frame tubes, just say no.

Next we want great torsional rigidity. Again, this is a factor that is built into name-brand touring bikes, but if you've read this far, you clearly want to know the details.

Torsional rigidity means the frame doesn't much like to twist in response to the loads placed upon it. And some of the loads that you put on your touring frame are much greater than the loads top athletes put on their racing frames. Specifically, the weight in your panniers tries to twist the frame. Racing frames shouldn't have panniers attached, so they need less torsional rigidity. But if you *do* put panniers on a light racing frame, you may find that it likes to shimmy, as the more flexible frame's dynamic oscillation frequency gets excited.

RUSS ROCA

The long haul. *A good touring bike can last for a lifetime of riding.*

The most important thing that chases away shimmy is a big, stiff top tube. The oversized aluminum top tubes on Cannondale frames are as stiff as it gets, and are excellent for this. The Co-Motion Americano has a steel frame with a 1-and-1/4-inch top tube, and that will clearly do the job. Most other steel frames now sold have top tubes of 1 and 1/8 inch, which is almost always fine. If you ride a pre-1990 steel frame, its top tube may only be 1 inch. At that point, shimmy may be a problem, depending on numerous other factors.

But again, new bikes have this question figured out.

Spokes. Lots of spokes

Fancy racing wheels with goofball spoking are a fashion necessity on some club rides. They are also a perilous maintenance headache on tour. If you break a spoke, the bike becomes unrideable. Replacement spokes are proprietary to that brand of wheel, expensive, sometimes hard to find, and require far more expertise to install.

By contrast, conventionally-spoked wheels are more forgiving. Lose one of your spokes and the wheel goes slightly out of true. If you didn't bring a replacement, the next bike shop will have one for cheap.

Today's touring wheels usually have 32 or 36 spokes arranged in a conventional tangential laced pattern. Accept no less. Avoid the "paired spoke" and other cute variations.

I've never seen a bike sold for touring that has goofball spoking, but plenty of people have taken quasi-racing bikes on

DAN BURDEN

Bikecentennial 76. *On the historic ride, people rode whatever bikes were in their garage, and they all worked pretty well as "touring bikes."*

tour and discovered the hard way that goofball spokes can ruin a bike trip.

The frame should fit you

There is more to frame fit than I can cover in this space, but there are a few things to emphasize for the touring cyclist.

You already know that the seat needs to be the correct distance from the pedals, and the top tube needs to be low enough for you to straddle with both feet on the ground. The handlebars need to be an appropriate distance away, so you're neither too far nor too close.

Most men (but not all) have body proportions similar enough to each other that this is not an issue. For example, I'm 5'8" and bikes that can be adjusted to fit my leg length (32-inch inseam) have effective top-tube lengths ranging from about 21 to 22 and 1/2 inches. It so happens that I can ride any of these top tube lengths, but if my arms were unusually short or unusually long, I'd be more picky.

Women have it tougher. On average, women have shorter arms for a given overall height than men, and sometimes their arms are quite a bit shorter. I was reminded of this recently, when I attempted to help a woman find an inexpensive used bike. She was two inches taller than I, and her legs were 1 and 1/2 inches longer than mine, but her arms were about four inches shorter. She needed a short top tube, short stem, and higher handlebars, and we never did find that bike on the used market. For her, or any other short-armed woman, the touring options include the Terry Valkyrie Tour, the British Thorn Audax or Club (discussed in these pages last month), or the luxury of an all-custom frame.

Even after you've gotten a good fit, I have an additional strong suggestion: higher handlebars. Bars that are comfy in your day-to-day routine will be too low for an extended tour and will invite a sore neck.

We tourists want our handlebars 1 to 3 inches higher than you'll see on a racing bike. On a racing bike, the handlebars are typically an inch or more below the saddle. Most touring cyclists want the bars somewhere between level with the saddle and 2 inches higher than the saddle.

Which company pays most attention to handlebar height? No contest: it's Rivendell, the mostly-mail-order purveyor of classic old-school bikes and accoutrements. Rivendell founder Grant Petersen has written many articles about the benefits of sensible handlebar height — and he walks the walk. If you buy a Rivendell, the bars will be plenty high enough.

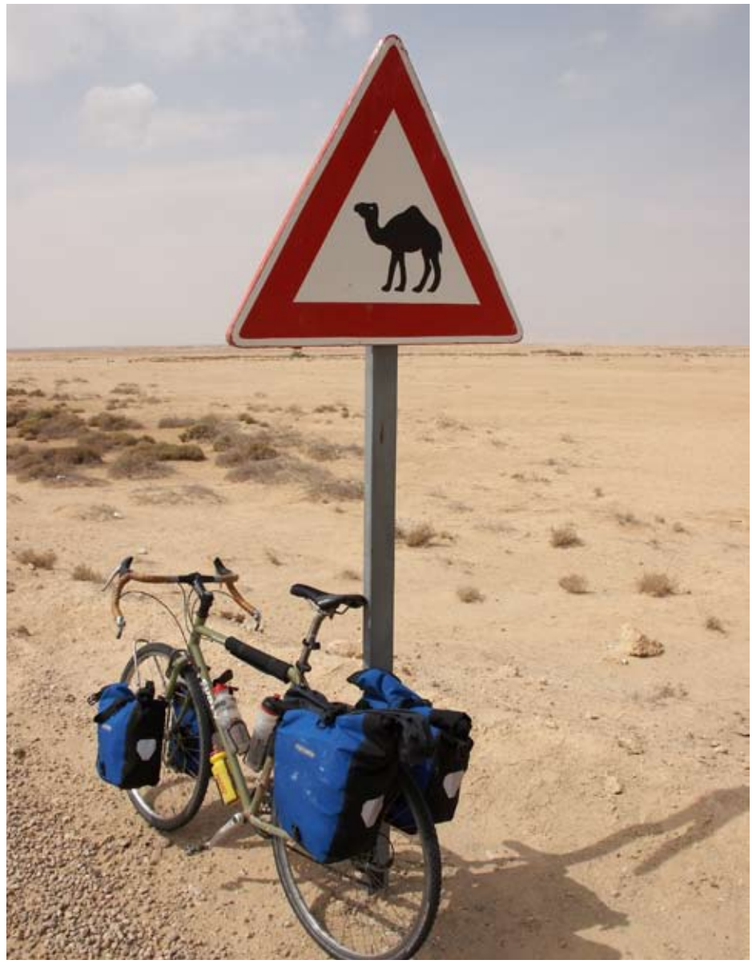
So how do you shop for fit? You find a dealer who will take the appropriate time to make sure the bike will fit well. Many retailers do this (of course, a fit session can be a very time consuming service, so don't balk at the cost). Co-Motion is one of several companies that do a stunning job of fit by long distance. They take your home-measured numbers and make fit prescriptions from those numbers.

The right handlebars for you

The bike industry, and therefore this Buyer's Guide, focuses on the traditional touring bike with dropped handlebars, largely out of institutional inertia. But what's right for tradition may or may not be right for you.

This question ignites a holy war among many Adventure Cycling members. I have received many an impassioned email, eloquently argued, about how the other guy's way of doing it is wrong. Both upright and dropped handlebars have strong adherents. Dropped bars are more aerodynamic and have more hand positions; upright bars are more comfortable for many people and place the hands farther apart for easier control. Neither is inevitably better than the other. I personally prefer dropped bars. It doesn't matter which style you choose — as long as you make an informed decision.

The bike industry has seldom offered an upright-handlebar bike designed for touring, so upright bar riders are forced to pick among mountain bikes and hybrids, some of which don't have all the touring attributes you want. In particular, look suspiciously for traditionally-laced steel spokes, all-metal construction, and rack/fender mounts.



CASS GILBERT

The places you'll go. *You're more likely to see a camel than another cyclist in Tunisia.*

TOURING BIKES FOR YOUR CONSIDERATION

All prices and specifications may vary to some degree. Please check with the manufacturers before making any decisions.

Bilenky Cycle Works offers the light-touring Tourlite ($2,895 and up); the traditional, steel Midlands ($2,520 and up); and the coupling-equipped Travel Tour Special ($2,650): www.bilenky.com, 215-329-4744.

Bruce Gordon offers the hand-built Deore XT Rock 'n Road ($2,999; $3,349 with racks) and the factory-made Deore LX BLT ($2,349; $2,699 with racks): www.bgcycles.com, 707-762-5601.

Cannondale offers the rack-equipped, aluminum Touring 1 ($2,029) and the Touring 2 ($1,449): www.cannondale.com, 800-245-3872.

Co-Motion Cycles offers the light-touring Nor'Wester (frame: $1,695; complete bike: $3,376), the around-the-world Americano (frame: $1,850; complete bike: $3,565), and the Pangea (frame: $1,850; complete bike: $3,631): www.co-motion.com, 866-282-6336.

Dawes Cycles offers a line of nine Touring Bikes (£499/$740 to £2,699/$4,000): www.dawescycles.com/c-81-touring-bikes.aspx, +44 (0) 121-748-8050.

Fuji Bicycles offers the traditional steel Touring model ($1,089): www.fujibikes.com.

Gilles Berthoud offers highly-customizable steel touring bikes from France (€2,550/$3,400 and up): www.gillesberthoud.fr, +33 03-85-51-46-51.

Gunnar Bikes offers the Rock Tour, a mountain bike designed for loaded touring ($975 stock design frame, $1,250 custom/made to measure frame): www.gunnarbikes.com, 262-534-4190.

Handsome Cycle Company offers the Devil ($379 frame): www.handsomecycles.com.

idworx Bikes offers trekking bikes with Rohloff hubs (prices unavailable at press time): www.idworx-bikes.de/de/bikes/trekkingbikes.php, +49 228-184700. SITE IN GERMAN.

Independent Fabrication offers the Independence frame set ($2,310 steel; $3,820 titanium) for long-distance touring, and the light-touring Club Racer frame set ($2,200 steel; $3,820 titanium): www.ifbikes.com, 617-666-3609.

Jamis Bicycles offers the classic Aurora ($1,025), and the chromoly-equipped Aurora Elite ($1,650): www.jamisbikes.com.

Koga Miyata offers the Worldtraveller ($2,700), and the Traveller ($2,300), all with front and rear racks and many accessories: www.kogausa.com, 805-569-5381.

Kona offers the Sutra ($1,199), a steel tourer with mechanical disc brakes: www.konaworld.com, 360-366-0951.

Masi Bikes offers the Speciale Randonneur ($1,145): www.masibikes.com/steel/speciale-randonneur.

Nashbar offers bikes and frames up to 70 percent off: www.nashbar.com, 877-688-8600.

Raleigh Bicycles offers the Sojourn ($1,200): www.raleighusa.com, 253-395-1100.

REI offers the Novara Safari ($849) and the Novara Randonee 2010 ($999): www.rei.com, 800-426-4840.

Ridgeback Bikes offers the Panorama (£1,199/$1785): www.ridgeback.co.uk.

Rivendell Bicycle Works offers custom touring frames ($3,000 to $3,300). They also offer the Atlantis (frame, fork, and headset: $2,000): www.rivbike.com, 800-345-3918.

Rodriguez Bicycles offers the Adventure ($1,799 and up); S&S-equipped ($2,599 and up), co-designed by Willie Weir: www.rodcycle.com, 206-527-4822.

Rocky Mountain Bicycles offers two steel tourers, the Sherpa 10 ($1,199) and the Sherpa 30 ($1,599): www.bikes.com, 604-527-9993.

Salsa offers the new Vaya road adventure bike (frame: $540; complete bike: $1,549) and the adventure touring 29er Fargo (frame: $500; complete bike SLX: $1,399; XT: $1,675): www.salsacycles.com, 877-668-6223.

Santana offers a wide array of tandems suitable for touring (starting at $3,295): www.santanatandem.com, 800-334-6136.

Seven Cycles offers the steel Halcyon (frame: $1,995; complete bike: $3,395 and up); the Halcyon S (frame: $2,695; complete bike: $4,095 and up); and the expedition Expat S (frame: $2,695; complete bike: $4,195 complete bike): www.sevencycles.com, 617-923-7774.

Soma Fabrications offers the light-touring frames the DoubleCross ($399), the Smoothie ES ($399), and the Saga Touring ($499): www.somafab.com.

Surly offers the steel Long-Haul Trucker (frame: $430; complete bike: $1,095), the Karate Monkey (frame: $465; complete bike: $1,175), and the Cross-Check (frame: $420; complete bike: $1,050): www.surlybikes.com, 877-743-3191.

Terry Bicycles offers the Valkyrie Tour ($3,025) and the Isis Sport ($3,214) for light touring: www.terrybicycles.com, 800-289-8379.

Thorn Cycles Ltd. Offers the Club and Audax (check for pricing and availability) www.thorncycles.co.uk.

Tout Terrain offers the Panamericana (frame with shock: $2,695): www.tout-terrain.de/2, +49 (761)-58997-44.

Trek offers the venerable steel 520 ($1,319): www.trekbikes.com.

Waterford Cycles offers custom-built touring bikes, the new T-22 and 1900 Adventure Cycle (frame: $1,800) and the TIG T-14 (frame: $1,400): www.waterfordbikes.com, 262-534-4190.

Windsor Bicycles offers the steel touring bike, the Tourist ($1,495): www.windsorbicycles.com.

CUSTOM TOURING-FRAME BUILDERS:

Curt Goodrich Bicycles www.curtgoodrich.com, 612-788-6812.

Ira Ryan Cycles www.iraryancycles.com/bikes-tour.html, 503-810-2504.

J. Peter Weigle www.classicrendezvous.com/USA/weigle_jp.htm, 860-434-0700.

Mariposa www.mariposabicycles.com, 416-423-0456.

Peacock Groove www.peacockgroove.com, 651-269-5295.

Pereira Cycles www.pereiracycles.com, 503-333-5043.

Peter Mooney Cycles www.peter-mooney.com, 617-489-3577.

Rex Cycles www.rexcycles.com, 916-446-5706.

Spectrum www.spectrum-cycles.com, 610-398-1986.

Steelman Cycles www.steelmancycles.com, 650-364-3939.

True North Cycles www.truenorthcycles.com, 519-585-0600.

Vanilla Bicycles www.vanillabicycles.com, 503-233-2453.

Velosmith www.velosmith.com.au, +61 (0)3 6266-4582.

Willits Brand Bicycles www.willitsbikes.com, 877-558-4446.

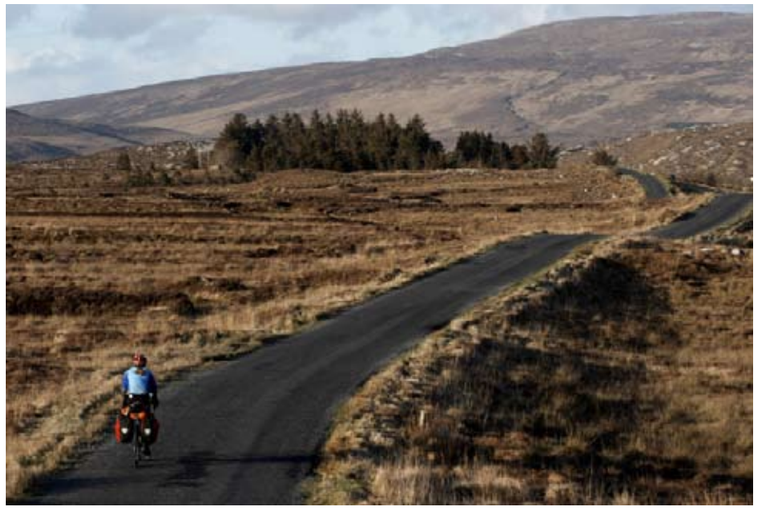
Note: *The June issue of* Adventure Cyclist *will cover non-standard bicycles and will contain a table of tandems, recumbents, folding bikes, and more.*

Rack and fender mounts

These useful features cost pennies to add at the time of manufacture and are visually unobtrusive, and yet millions of otherwise-attractive bikes don't have them. There's not much to them: tiny threaded eyelets near each wheel axle, on the seat stays, and on the fork blades. Many otherwise-good bikes lack front eyelets in particular, and some brands of racks have clamps that go on the fork blades to atone for this lack. A minor industry has grown up around fitting racks to bikes without eyelets, but getting eyelets in the first place is my preferred choice, although Old Man Mountain and Tubus provide good options.

Tire and fender clearance

These days it seems you must have to have an eagle's eyesight plus an obsession with racing chic to be a bicycle product manager because almost all bikes not marketed specifically for touring have an odd fashion attribute: minimal tire clearance. Bikes that the companies know will go to 60-year-olds doing charity rides have just enough clearance for skinny racing tires. No one can see this from more than a few feet away, and no one but the product managers cares. But again, this is how millions of bikes are built.



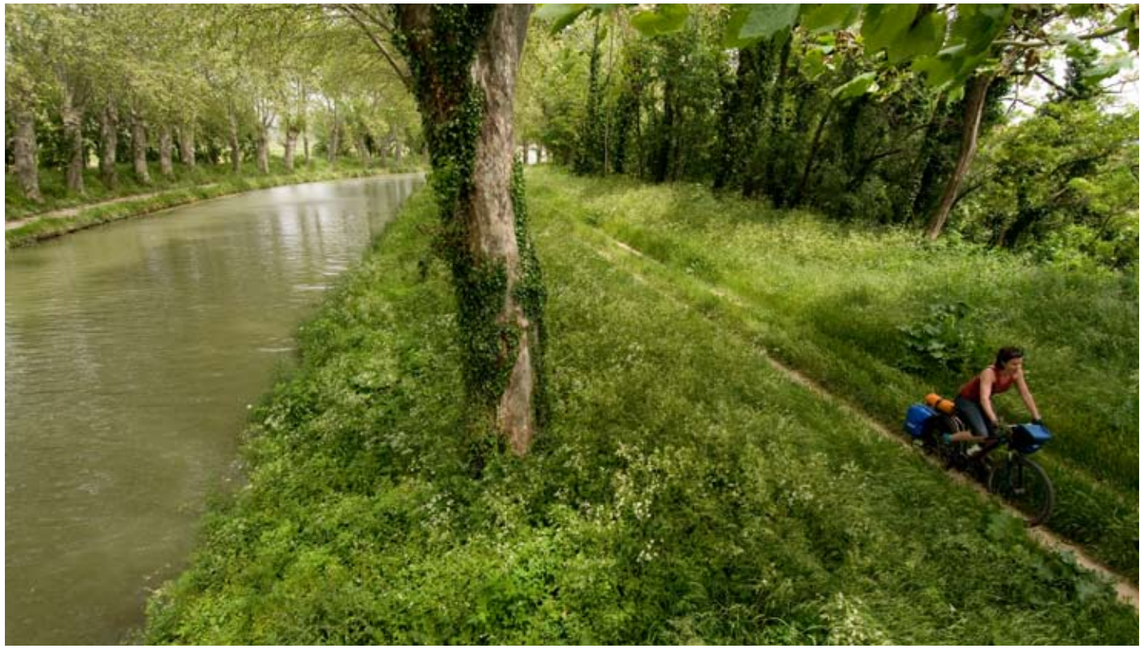
CASS GILBERT

Out there. *Exploring the low-traffic byways of Dongeal County, Ireland.*

Want lots of tire clearance? Touring bikes have it, none more than the Bruce Gordon BLT, which has space for 700 x 45C tires (almost two inches wide). Get fenders before, not after, you experience the misery of a long trip without them. Rainy days can be reasonably pleasant with them.

Longer chainstays

Often you'll read that long chainstays are desirable for weight distribution. That assertion begets footnotes. What you'll read



CASS GILBERT

Canal cruising. *Pedaling the bucolic track alongside the Canal du Midi in southern France.*

is that longer chainstays allow the rear panniers to be placed more in front of the rear wheel axle, for improved weight distribution. But there's more to it than that.

Yes, weight belongs between the axles whenever possible, and the results are very good when it is. Example: the excellent handling I have experienced riding a tandem with a 200-pound stoker. The stoker's weight is between the axles. But look at a side-view picture of a touring bike: the rear panniers are almost entirely behind the rear axle. The inch or so by which you can increase the chainstay length doesn't change that position very much.

For this reason, we repeatedly tell people that touring bikes need front and rear panniers to distribute the load. If your rear panniers are lightly loaded, it matters less that they're mostly behind the rear axle.

Long chainstays remain desirable, though, for two other reasons: 1) The effect they have on weight distribution, and 2) heel clearance. Riders with large feet have written me many times over the decades clamoring for more heel clearance, and the only way I know to get it is with a combination of longer chainstays and smaller rear panniers.

Since day one, Cannondale has made its touring bikes with 18-inch chainstays, the longest dimension commonly available. So if you have size 13 clodhoppers, Cannondale rises to your short list. By contrast, Fuji's touring bike has 17.3-inch chainstays. They're fine for me and my size 9s, but on that bike, the bigger your feet, the smaller your rear panniers should be.

Low gears

At some point on a long tour, you'll encounter the perfectly bad confluence of events: a steep hill, a sore butt, and low blood sugar.

That moment, and not the test ride at the bike shop, is when you discover the utility of low gears.

Gearing can be a lengthy discussion by itself, and if you're unfamiliar with the terminology and want a full primer, I urge you to go to my website, Limeport.org, and read the gearing article in the right column blog. You can also check out Sheldon Brown's site (sheldonbrown.com/gearing).

Here's the short version: Gearing is expressed as a single number called "gear inches." A 100-inch gear is a high gear for riding downhills. A 70-inch gear is for cruising on the flats. A 40-inch gear is for medium hills, and it feels ridiculously easy during that test ride at the local shop. You need a gear between 20 and 25 inches for that moment on tour when the hill is two miles long and you're already tired.

For example, Cannondale puts a 25-inch low gear on its less expensive touring bike, and a 21-inch low gear on its more expensive touring bike. Bruce Gordon's BLT has a 19-inch low gear.

Only 9 rear cogs

In my youth, derailer-geared bikes had 4 rear cogs. When I got my first derailer bike, it had 5. One by one, the cogs have piled on, and now you can get 11 (in a Campagnolo racing component group). Far more common are 10-cog systems from Shimano and SRAM, found on most of today's good weekend-fun bikes. So what's not to love about more cogs?

There are several factors, but the one I'll focus on here is the chain that works with these cogs. The cogs get narrower and narrower, and so does the chain. As the chain gets narrower, it gets more and more fragile.

In the days of fewer cogs, chains almost never broke. Now chain breakage is commonplace. I would have liked to have seen touring bikes settle on seven or eight cogs for this reason. But my fellow retrogrouches and I have lost that war. We have regrouped behind our makeshift bunker, shouting, "We accept nine, but please, no more!"

There is something of a step function in chain width, and durability, between 9 and 10 cogs. But you'll still want to buy a chain tool and learn how to use it before, not after, you go on the road.

Every stock bike whose specifications I reviewed while researching this article had 9 cogs. If you get an inexpensive hybrid or mountain bike for touring, you may find fewer — in which case, I say bravo.

Reasonable steering geometry

This is an area where myth abounds. It's also undoubtedly not a real-world concern. You'll hear buzzwords like "relaxed angles," "slower, more stable steering," and so on. These words are exaggerated to the point of almost total inaccuracy.

The bike's head-tube angle is picked to serve a number of functions. Among them are steering stability, front/rear weight distribution, and to keep the front wheel out of the way of your feet. There isn't a lot of wiggle room in the design.

Because of the need for weight distribution, the head-tube angle gets steeper with larger frames. I compared the head-tube angles of Fuji, Cannondale, Trek, and Jamis touring bikes. At their smallest frame sizes, the head-tube angles vary from 69 to 70.5 degrees. At their largest frame sizes, the range is from 71.8 to 72.5 degrees.

By contrast, I would expect road racing bikes in these sizes to have head angles 1 to 2 degrees steeper. And I wouldn't care if I had a touring bike with that slightly steeper head angle.

If these one-degree differences sound tiny, it's because they are. There was a time when overly-steep head angles were a fashion among racers who wanted something silly to brag about. But that won't affect you here.

Note that we haven't talked about wheelbase, but we have talked about the pieces that add up to wheelbase: chainstay length, top-tube length, and steering geometry. Wheelbase is an outcome, not a starting point. If these other dimensions are correct for your needs, the wheelbase will be fine. For the record, touring bikes typically have a wheelbase between 40 and 42 inches.

Lastly, don't neglect the recumbent option. Touring on a recumbent is low-stress, fun, and quite comfortable. We've written extensively about recumbents before and we'll cover them more fully in the June issue. AC

John Schubert awaits your pleas for further clarification at his website, limeport.org or by email at schubley@aol.com.