

How to Buy a Recumbent Bike for Touring

You want choices? Boy, do we have choices!

Imagine sitting back in your most comfortable chair as the mountains and rivers glide by. While your legs move at the effort level of a brisk walk, every muscle above your hips is relaxed, your fingertips occasionally flexing to make a steering correction. At the end of the day, you experience almost none of the stiffness and soreness that “regular” cycle-tourists suffer.

This is why recumbent cycle tourists are fiercely loyal to their bikes.

“I enjoy being comfortable. I enjoy being able to see and experience things,” said Hans van Naerssen, a Philadelphia-area management consultant. “Touring means just enjoying getting there, in addition to being there. For me, the real defining quality of a recumbent bike can be the comfort. On a normal bicycle, you’re trying to convince yourself that all those hurts don’t exist.”

Van Naerssen is an Adventure Cycling Association member, a veteran of numerous long tours over many decades, and owner of single and tandem recumbents since 1996.

“I can ride and see a hawk, because I naturally look up and out. I see the clouds,” van Naerssen said. “I see around the corner. I can feel the wind, because I’m sort of upright. That’s part of this experience of getting places and enjoying the moment.”

“At the end of the day, even with lots of hills, I’m not sore. I’m able to enjoy the moment. That, to me, is the redeeming feature of a recumbent. It’s so much more comfortable.”

Recumbent touring is a fabulous way to see the scenery. You will see more of it than on an upright bike, because your head is naturally in a more upright position. The days are less stressful because fewer body muscles are

By John Schubert



The Bike E The frame on this popular model is made of aluminum.



tensed all day long. And you have a guaranteed conversation starter whenever you hop into a small cafe.

All that said, picking a bike for recumbent touring offers you far more choices and significant decisions than picking an upright bike. Upright bikes have become so standardized that you find yourself discussing the virtues of millimeter-small changes, but recumbents have dimensions that vary by feet.

Moreover, these big choices show no sign of becoming standardized. The choices have been with us for 20 years now, and no one choice has proven superior in all circumstances. Each choice is the right choice for some riders. So don't think you can wait until next year to see what the marketplace decides.

The first choice is wheelbase. Recumbents can put the front wheel way out in front of the pedals, resulting in a steady ride, excellent comfort and lots of places to put panniers and other bags. These wheelbases are commonly over 60

inches, and in one extreme case (the RANS Stratus XL), 71 inches. Insiders refer to long-wheelbase recumbents as "LWB." Unless, of course, you use small wheel size to allow you to reduce the wheelbase to 50 inches, in which case you have a compact long wheelbase, or "CLWB."

Or you can put the front wheel behind the pedals, giving you a short wheelbase of around 40 inches, and sometimes less. These bikes are much more maneuverable. Whether they're sufficiently stable is a matter of personal preference. Say "SWB."

Or you can put the front wheel directly underneath the pedals. You then either raise the pedal spindle to keep the pedals clear of the wheel in sharp turns, or you instruct the rider to manage this occasional interference by thinking ahead (not unlike riding an upright bike with toe clips that overlap the front wheel). These bikes can have good weight distribution and maneuverability, with more stability than pure SWB bikes. "MWB" recumbents, as these are known, have wheelbases in the 40-to-50-inch range.

You'll note that these dimensions

overlap, and a quick visit to your local store is likely to find bikes that contradict these general numbers, or simply fall outside of these categories altogether. That's the nature of recumbents.

And, if you want to have your cake and eat it too, recumbents from Burley and Vision can be switched from long wheelbase to short wheelbase.

Another choice is where to put the handlebars. Most recumbents you see have handlebars in front of the rider, but a charming minority have handlebars below the seat. ("ASS" (above-seat steering) and "BSS" (below-seat steering), respectively)

Your wheel diameter can be 16 inches. Or 26 inches. Or anything in between.

Most recumbents can accommodate

Cannondale The only mainstream manufacturer of recumbents.



an aftermarket fairing, the better to make you aerodynamic and protect you from weather. Some have a "body stocking"

Bike Friday Sat R Day 16-inch wheels help this model fit in a suitcase.



option, a large spandex thing you use to increase aerodynamics even more.

Recumbent frames can be welded from steel or aluminum (the conventional way of making a bike), extruded from aluminum (as is the enormously successful Bike E), or, for the well heeled, made from carbon fiber (the 19-pound dual-suspension Lightning R-84) or Titanium (Easy Racers's TI-Rush).

There are recumbent tandems from makers too numerous to mention; fold-into-a-suitcase recumbents from Bike Friday and Lightning; three-wheel recumbent trikes from a growing legion of manufacturers; and the unique Bilenky Viewpoint tandem, in which the captain rides in back, in an upright position, while the stoker rides in front in recumbent position.

If you need a magazine as your recumbent accessory, the Easy Riders Recumbent Club chronicles the traveling joys and competitive successes of Easy Racers over their 20-plus years. For press coverage of all the brands, there's *Recumbent Cyclist News* and *Recumbent* &

Tandem Rider Magazine. These magazines are absolutely stunning in the amount of information they present in each issue, by the way.

Different recumbents have different seats. I've sat on dozens of recumbent seats, and never found one I didn't like, but that doesn't stop the manufacturers from trying to build even more comfort into their seats, and designs and features vary substantially among the brands.

And, for those of you who want to ride Adventure Cycling's rugged Great Divide route on a recumbent, the Lightfoot Cycles Ranger is a LWB recumbent mountain bike specifically designed to be good enough over uneven surfaces to do loaded touring on the Great Divide route and similar trails.

On a more prosaic level, recumbents also vary in those minor details that upright bike riders obsess over: gearing, tire width, number of water bottle bosses, and so on. Recumbents vary substantially in the choices they offer for mounting panniers and other accessories.

Hey, is that enough choice for you?

So far, only two major conventional bike companies have dipped their toes in the recumbent market. Trek did, with a reasonable-but-not-fantastic design, and discontinued it after two years, amid trade press reports that many in the company didn't support a recumbent. More recently, Cannondale has a

recumbent with many promising design features. But other than those two, this is a business of little companies.

I don't know how many recumbent companies there are, and some of the smaller boutique companies straddle the line between hobby and business. Even though you'll be buying your recumbent from a small firm, many of these companies have proven their staying power and their ability to service a national distribution chain and customer base. In the brand names mentioned in this article, I've made no attempt to mention every worthwhile company, or every company above a certain size.

Let's return to the choices. What choices should you make?

"There is no right recumbent for touring. There is a right recumbent for you for touring," said Rick Comar, director of marketing for Vision Recumbents. Comar has done 500-plus miles of touring in the Washington State mountains, and he favors his company's short wheelbase Model 44. Vision Vice President Grant

Who you gonna call?

BIKES/FAIRINGS

■ **BikeE**, 5125 SW Hout Street, Corvallis, OR 97333; (541) 753-9747; www.bikee.com

■ **Bike Friday**, 3364 W 11th Ave, Eugene, OR 97402; (800) 777-0258; www.greengear.com

■ **Bilenky Cycle Works, Ltd.**, 5319 N. Second St., Philadelphia, PA 19120; 1-800 213-6388; www.bilenky.com

■ **Burley Design Cooperative**, 4020 Stewart Road, Eugene, OR 97402; (800) 311-5294, (541) 687-1644; www.burley.com

■ **Cannondale**, 16 Trowbridge Drive, Bethel, CT 06801; 1-800-245-3872; www.cannondale.com

■ **Easy Racers Inc.**, P.O. Box 255-W, Freedom, CA 95019; (831) 722-9797; www.easyracers.com

■ **Greenspeed Recumbent Trikes**, c/o Peregrine Bicycle Works, Inc., 11 Commerce Ct., #7, Chico, CA 95928; (866) 478-2329, 530-566-9699; www.greenspeedusa.com

■ **Lightfoot Cycles**, 179 Leavens Road, Darby, MT 59829; (406) 821-4750; www.lightfootcycles.com

■ **Lightning Cycle Dynamics, Inc.**, 312 Ninth St., Lompoc, CA 93436; 805-736-0700; www.lightningbikes.com

■ **Longbikes**, P.O. Box 27, Castle Rock, CO 80104; 303-792-2242; www.tandembike.com

■ **Rans, Inc.**, 4600 Highway, 183 Alternate, Hays, KS 67601; (785) 625-6346; www.rans.com

■ **Vision Recumbents**, ATP, Inc., P.O. Box 249, Mountlake Terrace, WA 98043-0249; 877-433-4273; www.visionrecumbents.com

■ **Zipper Road Fairings**, P.O. Box 14, Davenport CA 95017; 888-946-7276, 831-425-8650; www.zipper.com

MAGAZINES

■ **Easy Riders Recumbent Club/Magazine**, c/o Laurie Smith, P.O. Box 1688, North Plains, OR 97133-1688; www.geocities.com/e_r_r_c

■ **Recumbent & Tandem Rider Magazine**, c/o Coyne Publishing, P.O. Box 337, San Dimas, CA 91773; www.rtrmag.com

■ **Recumbent Cyclist News**, PO Box 2048, Port Townsend, WA 98368; www.recumbentcyclistnews.com

Bower favors the long wheelbase, full suspension Model 54 for his 15,000 miles of touring.

So with Comar's apt disclaimer in front of us, and knowing that every viewpoint can be argued without malice, let's explore conventional wisdom:

▼ **Wheel size:** Most recumbents have a 16-inch or 20-inch wheel in front, and rear wheels ranging from 20-inch to 700C. (There are two different incompatible wheel sizes both called "20-inch," so you'll often see these guys make a careful reference to the head seat diameter.)

"I don't like 16-inch wheels, which some recumbents have. I think they should be at least 20 inch. I think it makes a big difference," said Chet Rideout, an Adventure Cycling member with well over 3,000 miles of recumbent touring and 20 years of recumbent riding experience.

Chet, a high school science teacher, currently rides a Vision R 40, in long-wheelbase configuration, and his wife, a RANS Stratus. And the conventional wisdom is indeed that smaller wheels don't handle bumps as well.

But there are reasons you might want smaller wheels. One reason is to have a folder. Small wheels fit into suitcases easier than large wheels, which is one reason why Bike Friday's Bike Sat R Day uses 16-inch tires. Another is to gain the benefits of shortening a long wheelbase (excuse me, LWB) bike, as Cannondale did by putting a 16-inch front tire on the dual-suspension Cannondale Recumbent, and bringing its "CLWB" down to 50 inches.

I've ridden both these bikes, by the way, and I won't say I didn't notice the small wheels, but I thought both bikes were delightful rides. The Sat R Day has the obvious attraction of going with you in a suitcase, and the Cannondale has a very well thought out dual suspension, which goes a long way toward mitigating the drawbacks of small wheels. The choice is yours.

▼ **Wheelbase.** Long wheelbase is the conventional favorite, but there are exceptions.

If any recumbent stands out as the

Fender Stratocaster of touring recumbents, it's the long-wheelbase Easy Racers Tour Easy. That bike's wheelbase has its roots in the cut-up tandem that was designer Gardner Martin's first prototype, back in the 1970s.

The conventional wisdom is that long wheelbases mean secure, sedate handling.

Your fellow ACA member Rideout put it this way: "My personal preference is a long wheelbase for touring," Rideout said. "It just seems a little more relaxed, a little more forgiving with the front wheel, as far as hitting differences in the pavement. With a short wheelbase, you have a lot more weight on that front wheel, and it can be kind of twitchy."

If you want to have your cake and eat it too, buy a Vision or Burley that converts.

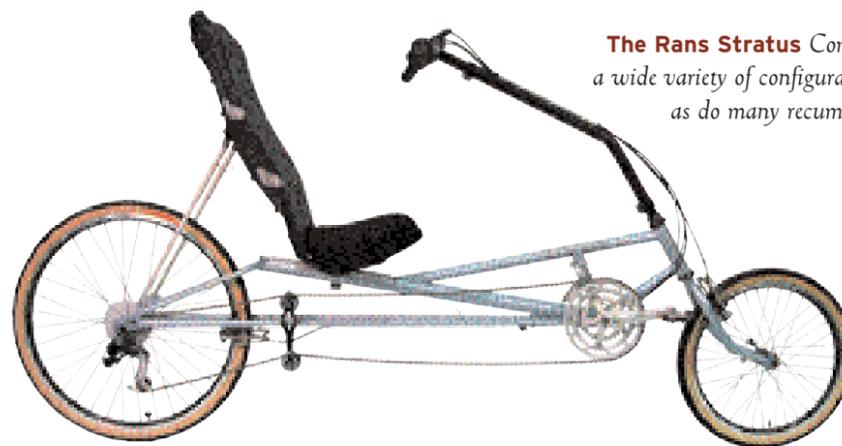
"At least two of our customers have told me that they commute year-round on the bike as a short wheelbase, and then switch it to long wheelbase for their annual vacation tour," Vision's Comar said.

▼ **How many wheels?** If the stability question of long versus short wheelbase leaves you undecided, you can put this question to rest forever by adding a third wheel.

"I believe the greatest advantage of our trikes is stability," said Ian Simms, designer of the Greenspeed recumbent trike. "When you have a loaded bike it can be quite difficult to maintain your balance at low speed up a steep hill, and I found you use a fair amount of energy just keeping it balanced. And restarts on hills are harder."

The Greenspeed is major fun to ride. A friend of mine commutes to work on his, in the Philadelphia suburbs, and it brightens his every morning. You'll never have to lean it up against a tree to unload the panniers, fall by losing your balance, or lack for a conversation piece. Trikes are indeed a viable option.

▼ **Should you buy a Bilenky Viewpoint?** This bike is clearly in a category by itself. Bilenky customers have toured cross country with front and rear panniers, and many Viewpoint devotees will gladly share their insights with you on Bilenky's web site.



The Rans Stratus Comes in a wide variety of configurations, as do many recumbents.

are wider than the body. Hence, ASS has been the favorite in fully-faired racers.

I suggest you try BSS before you buy ASS. The recumbent that kick-started the American recumbent movement in 1980, MIT Professor David Gordon Wilson's Avatar 2000, was LWB-BSS. (See how you get the hang of these acronyms after a

▼ **Where to put the handlebars?** Most customers vote for "up where you can see them," but think twice before blindly accepting this advice. I'm partial to below-seat steering (whoops, BSS), which allows both arms to be completely relaxed. As you cruise down the road, steering and balancing require minuscule fingertip muscle effort, and you can easily have one hand free simply resting on your lap. Talk about relaxed!

However, Rideout has a well-documented opinion on why above-seat steering predominates:

"Above seat steering feels more natural," Rideout said. "I run into a certain percentage of people who absolutely can't master under seat steering. At my high school, almost all my students hop on my [BSS] recumbent and ride right away. Maybe 5 percent can't ride the under seat steering. I don't know why. My brother can't ride one to save his soul. My wife can't do it. So she rides the RANS Stratus, which is a real nice recumbent."

ASS is more aerodynamic than BSS, because the rider's arms are within the profile of his/her body. With BSS, the arms



Greenspeed Trike The big advantage here is stability, says the manufacturer.

while?) The Avatar design became Dick Ryan's Vanguard and is now Longbikes's Slipstream 2002. Several other makers also offer BSS.

▼ **Foot height.** One of the more interesting questions you face is your foot height in relation to the seat height. The more beginner-friendly bikes tend to have the pedals several inches lower than the seat, and many people will tell you that's the best setup for touring. The seating position feels natural, and it's not intimidating to move your feet from the ground to these low pedals when you start and stop.

"Having a high crank spindle, spending too much time with your feet spinning above your seat, affects body comfort," said RANS's Mark Fischer. (RANS makes models with a variety of crank heights.) "For longer periods of time, the lower crank spindle is a more natural position. For a longer distance, that is more desirable."

If this question intrigues you, take a tape measure to the store. Measure the crank spindle height above the floor, and the seat bottom height above the floor, on every bike you test ride. These measurements can help you quantify the "seems to be easier to get started on" impression as you do your test riding, so you'll know if the fifth bike of the day was really different from the first bike, or if it was just that you'd gotten used to the bikes by then. And, of course, you'll want to take into account how the bikes handle. But no tape measure can help you there.

▼ **Pannier mounting.** Many of these bikes take standard front and rear panniers, but there's more to it than that. Recumbents offer more and better options for how you carry your gear, when compared with upright bikes.

Here's why: On a "wedgie," as recumbent riders refer to conventional bikes, your rear panniers are almost entirely behind the rear axle, placing that weight outside of the wheelbase of the bike. You have to put the panniers that far back because your flailing heels occupy the space beside the rear wheel in front of the rear axle.

For that reason, I keep telling wedgie



The Bilenky Viewpoint *This recumbent/conventional hybrid is clearly in a class by itself.*

riders, you need to put as little weight as possible in those panniers, and put substantial weight in your front panniers. But on a recumbent, your flailing heels are miles away, and you can fill up the space between the seat back and the rear axle with big huge panniers.

“You can have large rear panniers without adversely affecting the handling,” said Vision’s Comar.

Indeed, Vision once made a prototype set of panniers designed for this purpose, but never put them into production. Perhaps they’ll be spurred into action by the fact that Lightning offers such panniers, designed to work with Lightning’s bikes. These panniers have the additional advantage of aerodynamics. They add nothing to the bike’s frontal area, and smooth out the contours on the side.

There are other options. Unless you’ll need high ground clearance for off-road touring, you can mount your bags very low on a recumbent bike, to get a low center of gravity and extra-stable handling. Many riders put their bags under the seat, sometimes with cutting-edge racks they modify themselves. The writers at Easy Riders Recumbent Club Magazine do an awesome job of exchanging designs and ideas for carrying gear on recumbents. You can learn more at www.geocities.com/tourea-sylover.

And, of course, recumbents can tow cargo trailers, making panniers irrelevant.

Fairings, seldom seen on upright bikes, are an important part of the recumbent package, and not just for racing. Although they came out of the recumbent’s racing heritage, they add an important benefit for touring: keeping you warm and dry.

“I like the fairing for longer rides, mostly for weather protection,” Vision’s Comar said. “It keeps your feet from getting cold. The bubble goes right around your feet. You don’t need to worry about booties to try to keep your feet warm.”

He added that the fairing didn’t overheat him in the summer.

Many riders are charmed by the fairing’s speed.

“The fairing on one of my previous recumbents, an Infinity, would increase my cruising speed by five mph,” teacher Rideout said. “My speed in headwinds increases at least that much.”

Five is a lot, and not everyone will report such an increase. Still, Fold Gold rider van Naerssen also reported substantial results: “A fairing, according to a couple of studies, doesn’t kick in until you’re going over 12 or 13 mph. At that point, it does make about a five percent difference,” van Naerssen said.

“I can keep up a pace of about 22 mph with the fairing for four to five miles. And I’m an ‘old fart.’ I don’t think I can do that without the fairing.”

Easy Racers Founder Gardner Martin

is particularly enthused about the combination of fairing and body stocking (a spandex cover that meshes with the fairing and you to make an aerodynamic package without the complications of a hard shell)

“This is another kind of touring. People are riding body stocking bikes,” Martin said. “It’s almost a whole new level of experience.

“Once people get the fairing, they don’t want to ride without it. The Zipper fairing adds 10 percent to your speed. They spandex body stocking adds 15 percent, plus weather protection. We have one

50-year-old rider riding 140 miles per day with this combination.”

To most of us at that age, 140 miles per day sounds like a death sentence. But many recumbent riders say it’s no big deal. The bikes are simply that much different from wedgies.

I promised you choice. Lots of choice. The recumbent industry has delivered. Try several brands, be patient with yourself as you learn the new riding position, and these rabidly enthusiastic recumbent cycle-tourists will cheerfully welcome you to their ranks. 🚲

All kidding aside, Technical Editor John Schubert extends a hearty thank you to all the recumbent fans who called and wrote to help us with this article. Your expertise was downright awesome.