



**So You're Planning a Cross Country Bike Tour?**

**Here Are Some Things you Should Know©**

**By**

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## Preface:

**It was one of those dreams that people have and talk about. “One of these days I’m going to do a cross country bike trip.” But days turn into years, years turn into decades and not much happens. Oh, there was a lot of biking, even a tour across Iowa with the RAGBRI (Register’s Annual Great Bike Ride across Iowa) but not *the* cross-country.**

**With a 70<sup>th</sup> birthday approaching I realized that time was running out. It became obvious that if this tour were put off much longer, it would have to be done in a wheel chair or on a walker. So it went on the schedule. I negotiated a leave of absence from work and started telling people that the summer of 2006 was the time for the great bike ride. I even signed up with the Lance Armstrong Foundation to raise money based on the trip. There was no turning back.**

**My wife Barbara thought it was a great idea but absolutely refused to let me go alone and volunteered to drive a “sag wagon.” And, sometime around the first of the year my son David decided that he was going to come too...on a recumbent. So there we were, a happy band all set to conquer the country by wheel. Since we live in the mid west and I only had 6-weeks to get this done, the decision was made to conquer half the country, i.e., travel between the west coast and the mid-west. At a distance of about 2000+ miles, it seemed enough of a challenge to satisfy the dream.**

**Starting to plan for the trip I found that there was no one place to find answers to the many questions I had. What route should I choose? What kind of bike would be best? What about ancillary equipment (racks, panniers, etc)? What about pedals, shifters, and brakes? In the end, I was able to assemble answers to many of my questions in an ad hoc sort of way, from a variety of sources, including bike shops. Much of it was wrong.**

**Having completed the trip and learned a lot along the way, I decided to write this book. The goal is to help others, contemplating similar trips, prepare. The book is organized in two parts. Part 1 contains the text with comments about the things I’ve learned. Part 2 is a summary and checklist of items for those not interested in my musings. Hopefully both parts will be of use.**



**This trip has been one of the high points of my life. Getting in touch with the country and its wonderful people again, seeing the incredible scenery and, of course spending real time with my family. I wish you the best and may the wind be with you.**

### **Route:**

So where do you want to go, north to south, east to west, through the mountains, across the desert or plains? And how far do you want to travel, 1000, 2000, 4000 miles? Do you expect to travel alone, with a group, with a commercial tour? Here are some things to think about.

### **Physical Condition**

What kind of shape are you in? Are you an occasional rider (20 – 40 miles each week) or a distance rider, used to doing 50 – 100 miles in a single day? Most of the commercial tours expect you to be able to do 60 miles each day and some of the group rides are planned around 80 or more miles each day. This may be a stretch for the occasional rider. Also, are you used to climbing? Many of the routes have long, steep, climbs that can be challenging.

Although I have been riding for many years, I would still classify myself as an occasional rider, going out for 20-30 mile runs on a Saturday or Sunday. I am not particularly fast and avoid group rides (because I am usually at the tail end and feel like I'm holding people back). I did the RAGBRI about 15 years ago but have not done a century (100 miles) for at least that long. Because of this, I decided to go it alone (with my merry band, including wife Barbara in the sag wagon and son David). I felt this would give the most flexibility and allow me to set my own pace. In the end, I was surprised and pleased at what we were able to do. My initial plan was to cover about 50 miles each day, including our time in the mountains. We accomplished this in the (early) mountain stages but by the time we reached the plains, we were able to cover 60 – 70 miles each day, depending on the wind. On two occasions, with favorable wind conditions, we did centuries. The clear message is that you will get stronger as the tour progresses.

### **Maps**

The Adventure Cycling Association has a wide variety of route maps that are excellent and cover a great deal of the country. They can be found at [adventurecycling.org](http://adventurecycling.org). The maps are presented in great detail, with very specific side comments and descriptions of the routes. One finds them in the map cases of riders all over the country. They also list hotels, motels, campgrounds and bike shops. This is a great resource to use to start making choices about routes.

### **Selection**

I had initially thought to go due west from Chicago to Los Angeles, since it looked like the most direct route. Reading the description of the route, however, dissuaded me. It was described as long, boring, stretches with no resources or accommodations. After consulting with my team, we decided on the Northern Tier. The reasons...

1. Frequently traveled route (i.e., by other bikers)
2. Great scenery
3. Availability of accommodations

4. Availability of bike shops (particularly in Washington, Idaho and Montana)
5. Good roads (very little gravel)

These turned out to be pretty good criteria for selecting a route.

As it turned out I wouldn't say that biker traffic was exactly heavy, but we did meet other bikers occasionally...perhaps one or two every few days. Also, people we spoke to along the route were used to seeing bikers. One day when we were stopped for a rest someone said "Hi Dave" (my son's name), and there were fellows he knew from his hometown, Fairbanks, Alaska.

### Direction

With the route selected, the next question was should we travel East to West or vice-versa? We had this vague notion that the prevailing winds would be west to east. Not so. As the fellow from Adventure Cycling told me, "prevailing winds are only at 30,000 feet." And this was our experience. The winds shifted day-to-day, based on the weather patterns. Nevertheless, we decided to travel west to east because of the mountains. I expected that they would be a great challenge and didn't want to have to deal with them at the end. An early mentor of mine once told me "Harvey, do the hard things first, then you don't have to worry about them." It was good advice at the time and was good advice for this tour.

### Experience

The Northern Tier route from Adventure Cycling starts in Anacortes, Washington and crosses the Cascades and Rockies before reaching the plains. There are 5 steep mountain passes to cross. One reaches the plains in Eastern Montana, about 900 miles into the trip. Then there are rolling hills all the way through western North Dakota. (This means that the climbing is not over, it's just spread out.) The terrain starts to really flatten out in eastern North Dakota, Minnesota and Wisconsin. But even then one encounters rolling hills.





**We traveled in June and July and found the temperatures to be cool in the mountains and very hot on the plains. We rode in jackets and leggings for the mountain stages and shorts and shirts in the plains.**

## The Bike

There are lots of choices here. Decisions must be made about the frame and its material, shifters, gears, pedals and saddle. Let's start off with the easy stuff first...the saddle.

### The Saddle:

Every bike that I looked at had a pretty conventional road bike/racing-type, saddle. These are very narrow and, while some are cushioned, they are mostly hard. When I brought this up in the bike shops I got one of those, "well you have to suffer a little on these trips." Not wanting to seem like a sissy, I went along with the standard product. This was a big mistake! I spent about a week into the tour on one of these and thought I would die. The hardest part was not the climbing, legs or wind, but the discomfort of the saddle. I couldn't believe it. The thought that this would be the limiting factor in the tour completely confounded me. So, after a week of suffering I went into the nearest bike shop and bought a big, soft, cushioned, touring saddle for men, fit to my size. It was great and the problem was mostly solved. I say mostly because I also discovered something about the source of the pain. I had thought it would be some sort of bone bruise but it's not. When you have seat pain the thing that hurts is the muscle group at the juncture of your legs and back (a massage therapist called these the deep hip rotators and adductor muscles inside the thigh that attach to the ischial tuberosity...i.e., the sit bone). The pain can be relieved by pretty conventional stretching techniques:

- Lie on your back, feet flat on the ground, knees bent gently
- Bring the knee of one leg to your chin, stretching those muscles
- Stretch your leg straight out and bring your knee to your chin again
- Repeat with the other leg
- Repeat the exercise 3 or 4 times

If you do this exercise early in the day, and at times when you are feeling discomfort, it will relieve the pain. As time passes you will also develop a kind of callous over the area, but that will take many weeks.

### Gears:

Most touring bikes have 27 gear positions, 3 in front and 9 in the rear. This is fine but if you are going to be doing any serious climbing, particularly if you are lugging equipment, you will benefit from having the small front sprocket be a 26 toothed, "granny" gear. (Remember, it's easier to push a small front gear than a large one.) When I bought my bike, the dealer told me that the stock small front sprocket provided by the manufacturer had 32 teeth, that it would be fine and that I had to expect to work hard up those hills. After some trial runs I asked him to swap out the small gear in front for something more suitable to climbing, i.e., smaller. "Can't be done" he said, "without changing the entire derailleur system." Well, that was baloney. Part way through the tour, my small front gear was damaged and had to be replaced. The shop I stopped in did not have a 32-toothed sprocket so he put on a 26. It worked fine and was particularly good on the climbs. Might as well get it right at the start.

### **Shifters:**

These will break your heart if they are not right. It is not a place to go on the cheap. Think about it...you will probably be on your bike 5-6 hours each day and will find yourself shifting gears every few minutes. That means 150 – 200 shifts each day. If your system is not stable, i.e., the derailleur does not put you in the right position without jumping, skipping out or hanging up, your life will be miserable.

There is also the issue of shifter maintenance. When I bought my bike I asked the dealer if there was anything I needed to know about the derailleur. I was told to just leave it alone because it was too complicated. This was simply impossible. You will find that the system will need adjustment every day and you might as well learn how to do it before you leave on the trip. Otherwise you will be in and out of bike shops, when you can find them, every few days. Ask your dealer for a manual on how to do this for your bike. The owner's manual is usually not sufficient because it doesn't deal with adjustments. Once you get the hang of it it's pretty easy to make basic adjustments. Some can even be made while riding, without stopping. Anything really complicated can be handled by a technician. (See section on bike maintenance for more information.)

### **Pedals**

The main issue here is clips or not. Most riders have taken to using shoes and pedals that are positively joined, i.e., with cleats. These are called clipless pedals (which seems like a misnomer). The shoes have cleats and snap into the pedals. If you haven't ridden this way yet, it's worth learning. The positive connection will give you extra power and can relieve the strain on your feet because you can pull rather than just push from time to time. It takes a bit of getting used to because there is a tendency at first to forget that you are locked in. My son and I decided to bite the bullet and didn't regret it for a moment. It will take a few falls to get used to the linkage but after a while it will seem like the most normal thing to do. Also, one can buy pedals that have cleat receptors on one side and are flat on the other. This is useful for times when you may not be wearing your biking shoes or when you want to ride unhooked.

Buy this setup before you leave and practice with it on familiar territory. You will find that the danger periods come when you are stopping and forget that you're locked in. Suddenly you can't get your feet to the ground and panic sets in. A few falls will get you used to unlocking your feet ahead of time. Also, be sure that the spring tension in the pedals is not too tight, thereby inhibiting the unlocking process. There are adjusting screws on the pedals so you can set the tension to your needs.

### **Frame**

One consideration is whether to purchase a touring bike (i.e., one with attachment points to let you carry racks or panniers) or a straight road bike. This will largely depend on how you plan to travel, i.e., camping, "moteling," supported or unsupported. Another issue is the selection of frame material, i.e., steel, aluminum, titanium, or composite.

Regardless of your travel plan, you will find that you will have to carry, at a minimum, a bit of food, 2-3 bottles of water, personal items (wallet, etc.), simple tools, and rain gear. Even if you travel supported, your support team may be an hour or more away when the rain cuts loose and you don't want to be out there getting drenched. This means that you need to have the ability to attach a rack or panniers to your bike, which puts you into the category of touring bikes with metal frames.

Comfort is also a consideration. Being on the bike for 5 or more hours each day, you want to be able to find positions of maximum comfort in terms of reach, bend and visibility (i.e., looking at the road). It's also important to be able to change your position from time to time, so look for comfort in multiple positions. The only way to



be sure about this is to test-ride the bike for at least an hour. I spent several months trying out different bikes until I found one that fit the bill.

I had all kinds of lectures from people about the differences between steel, aluminum, composites, or titanium frames. The issue here is road shock. While most roads are basically in good shape, you will encounter some in need of repair. These are going to be bumpy and may run on for hours. Therefore one needs to have a bike that can take hits from time to time without coming apart or transmitting stiff shocks to your arms and neck. This means steel is the best. It weighs a bit more, but the difference is marginal compared to the weight being carried.

**There is one other thing you may want to consider. My son, in his own inimitable way, decided to ride a recumbent. I thought he had lost his mind because they look so awkward. But he was concerned about back and neck pain and took the plunge. It was amazing. In the initial stages of our tour he trailed behind me, particularly on the hills. But as he got stronger he pulled in front and stayed there. After a while, I gave up trying to keep up with him, even when climbing. And, of course, he**



**had no seat discomfort because he was riding in what amounted to a chair.**

## Ancillary Equipment

### Camp or Not, Panniers or Trailer

This is a major decision. Camping is less expensive but, of course, requires that you carry more equipment. Depending on your selected route, even if you decide not to camp, you may find there are places where there are no motel accommodations. So there may not be a choice...you may have to carry some camping gear either way you decide.

Panniers are a tried and true method for carrying gear. I have talked to people who use them and have been told that they actually increase bike stability and are easy to manage. My consideration would not be stability as much as wind drag. You will find that your life will be hard or easy on any given day, depending on the wind. I have had days riding with the wind in my face, where I struggled to make 35 miles. This type of wind can be a particular pain if you're climbing (either mountains or rolling hills), if it's hot, and if you are in traffic. Even cross winds can be annoying. If they are strong enough you may have difficulty holding the bike upright.

Panniers add to the frontal and crosswise area of the bike. Because of this they will increase drag and, hence, wind resistance. Trailers are low, narrow, and streamlined, offering less wind resistance. They would be my first choice for carrying a lot of gear. I have checked with folks who use them and they are easy to manage, even on downhill runs.

### Racks, packs and toolkits

Whether you are supported or not, camp or stay in motels, you will need to carry certain things during the day. These include maps, a compass, a small pocketknife, wallet and money, rain gear, food, water, a hand pump, and other personal items. You probably won't be able to squeeze all of this into a handlebar pack. I found it useful to carry two packs, one on the handlebars and another on the rear rack. These rear mounted "rack packs" come in many designs. The one I bought fit on the rack, was no wider than me, and was expandable so that I could carry extra water bottles in hot weather.

I also carried a small toolkit with Allen keys, valve adapters (for the Presta valves), 2 extra tubes (because sometimes flats come in pairs), screwdrivers (flat head and Phillips, to adjust the derailleur) and a 15 mm wrench to tighten pedals (which I never used). The Allen keys and screwdrivers can be bought in fold-up combo kits. While I found these kits satisfactory for the Allen keys, the fold up screwdrivers just didn't cut it and were a nuisance.

I didn't have any flats but my son got one on the second day *from a pointy rock*. Fortunately, it happened right in front of an ice cream stand so we could take advantage of their outdoor tables to change the tube quickly. Even better, a fellow pulled up in a huge RV and offered us his foot pump.

### **Bike Carrier**

If you are riding supported, and are not part of a formal tour, you will have to put the bike up on your car from time to time. There are all kinds of good reasons for this and it isn't "cheating." If nothing else, you will have to get your equipment to the starting place.

One can choose from top mounted and rear mounted rigs. Either way, I think the key is to be sure that your bike is positively attached to the car with a latch and not held on by some sort of bungee strap. This will give you peace of mind when roaring down the highway at 60 or 70 miles an hour. It is also useful to be able to lock the bike (or bikes) to the mount. Then you won't have to worry about them when you stop for meals or overnight. We chose a system that locks the front fork and ties down the rear tire. It worked beautifully, could be locked, and we never had a problem with it.

### **Computer**

I had given up on wheel-mounted computers some years ago because of their unreliability. They were always breaking down and I found myself replacing them quite often. So, I didn't buy one for this trip. Fortunately my son brought his. And, when he left the tour after the first 1000 miles (for new job and family reasons), he let me use the one he had brought. It was wonderful to have and I found myself using it constantly...for speed, distance, average speed and time. It helped me navigate, because I knew how far I had come and it helped me plan and adjust the plan for the day because I knew how fast I was going. It was also fun to have and they are now much more reliable.

### **Compass**

The Adventure Cycling maps are so good and so detailed that one does not often need a compass. (In the initial planning stages I thought to carry a GPS. I didn't carry one and it would have been totally unnecessary.) However, there were a half-dozen times when it was good to have a compass along because I was a bit insecure as to my direction. One time, in particular, I got lost in Wisconsin and ended up going back and forth for a while, over rolling hills, looking for the correct road. I was glad to have the compass. This is not an expensive purchase and I highly recommend it.

### **Mirrors**

Being an occasional rider, I find mirrors annoying and do not use them. My son, fortunately, had better sense and had one mounted on his handlebars. During the time that he was on the tour, I relied on him and his mirror to let me know what was happening to our rear. After some goading from him, I bought a mirror that I could mount to my glasses because my handlebars are less conducive to the mounting of mirrors.

When David left the tour I began to use my mirror more and more, mostly for safety reasons. It took a week or two to feel comfortable with it. This is because the

mirror does not give a direct view of rear coming traffic. One has to turn one's head almost 90 degrees to the left to get a clear view. Nevertheless, it did the job and I would not ride without it today.

The message here is get a mirror and practice with it ahead of time.

### Pumps

Most high performance tires hold in excess of 100 psi. After 3 or 4 days you will find that pressure has dropped to about 80 psi and your tires need to be pumped up. This is not something that can be done with a light hand pump. If you can find a gas station you may be able to use their pump but most of these are set for 35 psi and will be of no use. And, most commonly these days, gas stations are just extended convenience stores, may not even have air pumps or will have little flexibility with respect to the air pressure in them. You will need a foot pump.

However, even if you are supported you will also need a light hand pump to carry with you. In this case, it would serve as something to get you back on the road if you have a flat, until your support catches up or until you can get to a proper pump.

### Gloves

You will be spending 5-6 hours each day leaning on your hands. The weight will be supported by the heels, sides or palms of the hands. Without proper protection, i.e., padding, you will find the situation very uncomfortable. Once more, this is not the place to be saving pennies. Buy a good pair of gloves. In fact, buy two pair so you can switch from day to day and let one pair dry out.

### Helmet

Just a few things about helmets:

1. Don't even think about riding without a helmet. Downhill speeds can be 35 – 45 mph in the mountains or hills. If you fall at that speed and are not wearing a helmet you will have one heck of a headache, if you survive at all.
2. If your helmet is older than 2-3 years, buy a new one. The material tends to degrade with time.
3. A visor is very useful. It will keep the sun out of your eyes while you ride (in the AM going east or in the PM, going west).
4. You may need to place a cloth "do-rag" of some sort inside the helmet to keep your head from getting sunburned (guys with thin hair) and to keep bugs out of your hair. (A fat beetle flew into my helmet one day and I had to pull over to keep him from making a nest in my hair. The crawling around was very distracting.)

### Clothing

The usual biking shorts (padded), shirt, shoes and sox will be needed. I carried 3 pair of shorts and shirts but some folks get away with 2. I recommend bright yellow for the shirts because of their visibility on the road. Red and, even, fuchsia shirts are not as easily seen by motorists. I also brought one of those bright yellow,

**lightweight, vests for road visibility. It was useful when the weather was cool but as soon as things heated up, I put it away and never took it out again.**

**I also carried rain gear...jacket, pants, helmet cover, shoe covers and pack covers. The weather conditions were such that I only used the rain gear twice, but it was good to have it at the time. It's miserable getting rained on with no protection. I also found the jacket to be very useful for warmth and wore it frequently in cold or just chilly weather.**

**Because we were going to be in the mountains I also carried some cold weather gear...warm gloves, neoprene shoe covers and a heavier jacket. Surprisingly, the coldest conditions occurred on the *downside* of the mountains. One moves at 35-45 mph on these runs and the wind can make things very chilly.**



**I also brought normal clothing...shorts, jeans, sandals, tee shirts and the like. It was very nice, at the end of the day, to be able to shower and change into clean clothes.**

**As we moved into the plains and the weather warmed up it became possible to start sending things home. So, gradually, day-by-day, we mailed home things like the cold weather gear, jeans, and other assorted items that seemed to be excess.  
(Another good reason to travel west to east.)**



### **Shoes**

If you use cleats you will have a choice between racing and mountain biking shoes. Buy the kind that will let you walk easily. They will do the job with respect to providing extra power and will make it easy for you to get around during the day.

Perhaps more important, get the right size. This is no time to be modest about shoe size. You do not want a shoe that will be too tight because your feet will swell during the day making things very uncomfortable.

### **Creams, sprays and lotions**

This is pretty straightforward. You will need good sun block for the hot weather. (Don't forget to put it on your neck.) I also carried insect spray to protect against mosquitoes. When the weather is hot you will want to pull over under some shady tree to give yourself a break. Unfortunately that's where the bugs go as well. Hence...carry insect repellent. Finally, you may want to think about using Vaseline or something similar to prevent chafing. The sun block and grease can be put on once a day but it is useful to carry the bug spray with you.

### **Cell Phones**

While reception is quite variable across the country, and especially poor in the mountains, we still found it very helpful to have cell phones in our packs. Because we rode supported, and the support usually started out several hours behind us, we used the phones to coordinate meeting places. Not knowing how much camping we would be doing, I also bought phone chargers for the car so we could keep the phones working under any conditions.

## The Ride

### **Support or Not?**

I went for support because the tour was a celebration of my 70<sup>th</sup> birthday and I didn't know what to expect. That said, I did see other old guys like myself making the cross lugging trailers (or just credit cards) by themselves or in small groups. It's an individual choice based on your health and experience. If this is your first such endeavor, I would recommend support of some sort. In our case, it was my wife driving the SUV.



She had a wonderful time, as did I having her along. It was great knowing that, in a pinch, there was someone to call for help and that she would only be an hour or two away. In general we would meet up mid-day for food and replenishment of water and at the end of the day to find accommodations or camp.

### **Safety**

Most tour maps will put you on secondary roads wherever possible. And, most of these roads will have soft shoulders varying from 2 – 4 feet in width. Nevertheless, from time to time, the roads will be heavily trafficked. Now, the vast majority of drivers are very generous to bikers. In my experience, 99.99% of drivers will pull to the left, splitting the centerline with their vehicles, and giving you plenty of room. But there are always going to be some who are distracted and do not recognize your existence.

The implication here is that *you must be continually aware of what's going on around you in all directions*. You must not only be aware of the traffic behind you but also of oncoming traffic. For example, you may expect that the RV approaching behind you will pull to the left when passing. But, if there is a truck coming towards you at the same time, and it's a 2-lane road, the RV driver may be nervous about pulling to the left and will just hold direction and pass you with inches to spare. This can be hair-raising if you are not off to the right on the soft shoulder. Not only will the close brush be nerve racking but, in passing, the RV will create suction that will pull you to the left, into the following traffic.

In one extreme case, I was approached from the rear by two heavy-duty trucks, carrying gravel or dirt. We were coming to a right turning intersection. As we got closer I could hear them slowing down so it was clear they were going to turn. I expected them to let me go straight ahead (not turn) since I was in front and had made no indication that I was going to turn. As we approached the intersection it occurred to me that they might just make the turn without regard to me. I slowed down enough to let them by and avoid being cut off if in fact they did so. It was fortunate that I did because the first truck just plowed through the right turn with no regard to my presence. (The second truck slowed down to let me through.) Had I not been aware of what was going on I would have been wiped out.

Also, when the wind is behind you, you should be able to hear following traffic. But when the wind is in your face or coming from the side, you may not be able to hear things behind you. Another reason to use a mirror and be aware of traffic in all directions.

### **Start and Finish**

It was interesting to see how this worked with my little band. My companions, wife and son, tend to be late starters while I am an early starter. The first few days, we would be lucky to get on the road by 10:00 or 11:00 in the morning. This made for late finishes. As the weather got hotter, it was clear that early starts would be better. So, gradually, we hit the road at 9:00, then 8:00, then 7:30, in the morning. All to beat the heat.

Early on we found ourselves actually riding only 3-4 hours each day, making 45 – 50 miles. As we grew stronger, however, that extended to 5 - 6 hours in the saddle and we found we could make 60-70 miles per day. (On several occasions, with good wind, we even did centuries.) Towards the end, it was not a problem to consider 6 - 7 hours riding with distance goals of 70 - 80 miles.

### **Stretching and Breaks**

One of the nice things about traveling in your own group is that you have complete control over breaks. Our routine was to stop after about 15 minutes of warm-up riding to stretch out. Early on we found ourselves stopping every hour. This extended to every 2-hours as we got stronger.

Stretching out once or twice each day seemed to be sufficient. We would stretch out our calves, interior leg muscles (adductor muscle groups), neck and upper back (posterior cervical muscles), and seat muscle group. Over the course of the day, as the seat began to twinge, I would call breaks to stretch out these muscles again. I was also having occasional numbness in my feet from the combination of heat and pressure. At each break therefore I took the opportunity to remove shoes and socks and massage my feet and calves.

### **Speed**

I didn't keep records for overall average speed but the daily average varied considerably with the wind and terrain. Also, our speed increased, as we grew stronger. Here are some typical averages:

- Climbing in the mountains...5-6 mph
- Downside of mountains...35 - 45 mph
- On the flats, wind to our backs...17 – 25 mph
- On the flats, wind in our faces...10 - 12 mph
- On the flats, no wind...13 – 15 mph
- Rolling hills, climbing, against the wind...5-6 mph
- Rolling hills, climbing, with the wind...13-14 mph
- Rolling hills, climbing, no wind, 10 – 12 mph

For planning purposes I usually estimated about 13 mph.

### **Wind, Weather and Temperature**

It's probably clear by now that weather conditions are very important to the ride. These are totally unpredictable from day to day. One day could be hot with the wind in your face (a miserable day for riding) and the next day the sky could be overcast, bringing cool weather, with the wind at your back (a wonderful day for riding). I encountered one day when the wind seemed to be at gale force levels, in my face, and was only able to make 35 miles, laboring in my granny gear most of the time.

We were fortunate on our tour to have little rain. Others are not so lucky and battle wet weather for long periods of time. This can be difficult because riding in the rain is not only uncomfortable but is probably not too safe.

Since there's no predicting the weather patterns, the bottom line is that one has to be flexible with regard to daily distances. This is probably academic for younger people who can call up extra resources of strength to go those extra miles under duress. But us older folks may need to adjust our goals if the weather is inclement.

### **The Body**

In preparing for the trip I was sure that the key things to be concerned about were my leg strength and wind. Perhaps because of this I had no issues with either. The main issues for me were my seat, head and neck, and hands and feet. I have

addressed the seat issues earlier so this portion will be concerned with the other parts of the body.

#### Head and Neck:

The main issue with regard to the head is overheating. I discovered almost at the end of the trip that cooling the head was a great way to stay comfortable in hot weather. (I got this from watching the Tour de France, seeing those magnificent riders dowsing their heads with water on the tough climbs.) So, carry extra water and periodically just pour it over your head. You will be amazed at the effect.

Your neck will start to ache from looking up while riding. Some of this can be prevented ahead of time, when fitting yourself to the bike. Don't get a fit that causes you to look up at too steep an angle. Two things will help you during the ride. First a stretching exercise:

- Sit on the ground with your back straight
- Put both hands behind your head
- Slowly push your chin down to your chest and feel the stretching of the muscles in your upper back
- Hold the position for about 10 seconds
- Repeat as needed

Second, expect your neck to get stronger as the ride progresses. This particular discomfort will be less noticeable over time.

#### Hands and Feet

I have talked about hand protection using gloves in an earlier section. Another thing to consider is varying your hand position to prevent numbness. I found myself using four different hand positions, switching about every 10 or 15 minutes. I used three positions on the upper part of the handlebars, moving from front to rear, and one position on the under slung part of the handlebars. If a hand does get numb just, literally, shake it off. The feeling will pass.

Feet are a different matter. This was a totally unexpected issue. I regularly found myself having acute foot pain after about 4-5 hours of riding. At first I thought it was just a matter of tying my laces too tightly. Not the case. I believe it was a combination of heat, pressure and swelling. I dealt with it by removing my shoes and socks at break times and massaging each foot and calve for a few minutes. That seemed to take care of the problem, but I noticed that I had to do it more frequently as the day wore on.

#### Food and Water

Hydration is the critical issue for this type of ride. Even champion racers falter if they get dehydrated. The experts recommend drinking a 22 oz bottle of water every hour while biking, whether you feel thirsty or not. A common problem is to go too long before hydrating (say 2 hours) and then having problems catching up. That

means you will have to carry at least 2 bottles of water with you and replenish them at every opportunity. I took to carrying 3 bottles on the plains because it was sometimes hard to refill. Then I could use some of the water to cool my head. Remember, coffee or soft drinks are not the same as water. In fact some of them contain caffeine, which is a diuretic and will further dehydrate you.

Food is less of a problem. Riding burns lots of calories. The experts tell us that this type of riding can burn from 500 – 900 calories per hour, depending on how hard you're pushing. You may burn 3000 – 5400 calories over the course of 6 hours on the bike. That's equivalent to lots of food. In fact, I found that I could eat pancakes for breakfast every day and still lose weight on the trip. There is really no magic formula for food intake. Just be sure that you take in enough food to replace what you burn up. The only issue is when to take it. I found that a power bar at the start of the day was enough to get going. This was followed by a real breakfast a few hours later and a real lunch at mid-day. By real I mean, one where you stop and sit down to eat for 20 – 30 minutes.

#### The View

One last thing...you will be traveling through some of the most beautiful terrain in the country. Don't forget to stop and "smell the flowers." You might even want to bring a small camera.





## Bike Maintenance

Don't let this section scare you. One doesn't have to be a bike mechanic to undertake one of these trips. I'm certainly not. And, if you travel with a commercial tour, the leaders will have enough basic repair knowledge and supplies to get you through any but the most extreme situation. People have asked if I brought an extra bike. Hardly. But there are some simple things you should be able to do and these are described below.

### Tires and Tubes

Your tires will lose pressure from riding and will need to be pumped up every 3-4 days. Required pressure may vary from 85 – 120 psi. Check on the side of the tire for the manufacturer's specification.

Because of the high pressure required by most new bike tires you will need a foot pump to inflate them. Be sure that your pump attachment matches the valves on your tires. Many new tires have the Presta valve instead of the older Schrader valves. If you have an older pump that is matched to the Schrader valve you can purchase an adapter in any bike store that screws onto the Presta valve. They work perfectly well and cost about \$1 each. I carried three with me just in case (and lost one). A colleague of mine fastens one to his toolkit with a safety pin.

Be prepared to handle flats. My son had one the second day out on our trip, caused by a pointy rock. I carry two extra tubes, having had the experience of riding through a hazard area and getting two flat tires at one time. This happened on a small country road in Italy and I ended up walking many miles to get to a bike shop.

Many new tires have a Kevlar® belt running under the tread area. This is comforting to have and will help provide some puncture prevention.

### Shifters

Continuous use of the shifters will cause them to need adjustment, both front and rear. You can tell this is happening because the chain will skip sprockets or fail to settle on the sprocket you want. This can be disconcerting, e.g., when you are climbing and need that special low gear or the one just next to it for a particular grade.

Adjustments are needed because of cable stretch, loosening of adjustment screws or damage to the derailleur itself. There are several ways to handle this:

1. Get help. Try to get into a bike shop or technician at least once a week and have the shifters inspected and adjusted.
2. Learn how to do this yourself. There are several sources on the web that can help with this (see, e.g., [sheldonbrown.com](http://sheldonbrown.com)). The following technical material is borrowed from Sheldon Brown's website.

There are two types of adjustment you can learn to do yourself. Limit stop screws will allow you to set how far the derailleur can move from left to right. There are two such screws at the front derailleur. They are sometimes marked H (for high) and L (for low). The L screw limits the derailleur from going past the small sprocket. If it is too tight you won't be able to move onto the small sprocket. Too loose and the chain will overshoot and get wedged between the sprocket and the frame. The H screw controls the movement with respect to the large sprocket. Too tight and you will not be able to move onto the large sprocket. Too loose and you will overshoot and the chain may come off.

There are also limit screws at the rear derailleur. Once again we find L and H screws (by the way, some bikes are not marked but you can easily tell which is which). Now the L screw controls the chain's shift to the large sprocket and the H screw controls the shift to the small sprocket. If the H screw is too tight you will not be able to shift to the small sprocket. Not much effect if it is too loose. If the L screw is too tight you will not be able to shift to the large sprocket. Too loose and you may find your chain wrapped around a spoke.

The other adjustment is for a loose or tight cable. This can be managed by turning the barrel adjusters (located, usually, on the handlebars by the cable housing and back by the rear cluster). There are two of these and the forward one can actually be adjusted while riding. If you are having trouble shifting to larger sprockets, tighten the cable. If you are having trouble shifting to smaller sprockets, loosen the cable.

I would suggest that you spend a few minutes with a technician in your local shop before you leave for the tour. Go over the adjustments for your bike so you know which direction to turn the barrels and limit screws. Write it all down so you don't forget.

### Chain

If you are not a long distance rider it will come as a surprise to find out that chains are not indestructible. In fact, with heavy riding, they have a useful lifetime of about 1000 - 1500 miles. What happens is that they stretch from heavy use. This will cause them to skip sprockets.

There is no way to fix this and so the chain must be replaced. Not to worry, this is not a big deal. Any bike shop can do this for a nominal cost (about \$20). It takes a good technician about 15 minutes to check the length of the existing chain and install a new one if required. Just expect that it will happen and have your chain checked as a routine, or simply replaced, after you have covered about 1000 miles.

As long as we are in this section we might as well discuss the demon called "Chain Suck." This term is applied when the chain is pulled up into the lower part of the sprockets, usually during shifting. It's a miserable feeling because it locks the rotation of the pedals and can destabilize the bike. "Chain Suck" is caused by

**physical deformation of a sprocket or, sometimes, by burrs.** Burrs can be taken out by simply filing them off. (For this reason, it's not a bad idea to carry a metal file with your toolkit.) If the issue is not burrs, but is in fact deformation of a sprocket, there is nothing to do but replace the defective part. This will require a bike shop and technician and is not usually something you can handle on your own. Again, it's not terribly expensive or time consuming to do this. The only issue is whether the shop has a sprocket to fit your bike.

### **Brakes**

**Check brake pads before you leave on the tour. If they are OK, there should be no reason to worry about them again.** I traveled 2300 miles, covering 5 mountain passes and enumerable hills and had barely any wear.

The cables are another matter. They should be checked from time to time for stretch or loosening. You will know they have stretched if you have too much play when you apply the brakes. If the handles go more than two-thirds of the way to the bars when you brake, you may want to tighten the cables. This is an easy thing to do. Just loosen the holding bolt, pull the cable taught and then tighten the bolt. Be sure to check and see that the brake pads are not rubbing against the wheel. Give the handles a squeeze and spin the wheel. If there is rubbing you will hear it.

### **Starting Off**

**Before you start off in the morning, check the various securing bolts and screws to be sure they are tight.** These include handlebars, stem, seat, brakes, rack and any other brackets. Don't tamper with adjusting screws unless required.

**It is also a good idea to check tire surfaces to be sure there are no bits of glass or metal embedded in them, waiting to cause a puncture.**

**Also, have a mental check list (as a pilot might)...e.g., water, food, money, tools, raingear, sunglasses, bug spray, hand pump, etc.** It's a real nuisance to have to go back for something you forgot.

## Closing

This tour will be one of the highlights of your life. It certainly was for me. You will never forget it. The biggest danger is that you talk about it too much and bore your friends. And speaking of friends, they will be incredulous. For the uninitiated a 20-mile bike ride seems a lot. Covering thousands of miles is beyond most people's imagination and seems amazing.

If you can get to a computer from time-to-time, you will be able to set up and maintain a log (see <http://www.crazyguyonabike.com>). We set one up and loved every minute of it. Our site had almost 2500 hits over the course of the trip, indicating that our friends were also interested in tracking our progress. Creating the log helped us remember where we were and some of the interesting things that happened. If you wait to write things down until the end, it will be surprising how much information will slip away. One can also load pictures into such a log. See <http://www.crazyguyonabike.com/journal/dershin2006> for our log as an example.

Many people use these trips as charitable fund raising opportunities. We signed up with the Lance Armstrong Foundation and told all of our friends. Hundreds of people donated money for cancer research and support. It helped give extra meaning to the tour.

This can be a way to get back in touch with the USA. We found ourselves traveling through rural America...Washington, Idaho, Montana, North Dakota, Minnesota and Wisconsin. Most towns had fewer than 1000 residents and some fewer than 100. This can be eye opening for urban types (like us). There are no crowds, buses, malls, or Starbucks. Instead, one finds wide-open spaces, vistas that stretch to the horizon, agriculture of various types, ranches and, in the mountains, incredible scenery and some wildlife. We saw deer everywhere, many different types of birds, fox and porcupine, mountain goats and skunk. Our route paralleled the Burlington Northern and Santa Fe rail tracks for a good deal of the trip so that freight trains were a constant companion. (We even had a few toots from the engineers). People were very friendly, curious and helpful. Food and lodging was inexpensive.

Good luck on your tour. If you have questions, you may contact me at  
[harvey\\_dershin@yahoo.com](mailto:harvey_dershin@yahoo.com).



## **Handy Summary & Check List**

### **1. Route:**

- **Maps: The Adventure Cycling Association ([adventurecycling.org](http://adventurecycling.org).)**
- **Selection:**
  - Frequently traveled route (i.e., by other bikers)
  - Great scenery
  - Availability of accommodations
  - Availability of bike shops (particularly in Washington, Idaho and Montana)
  - Good roads
- **Direction:**
  - It doesn't matter
  - Prevailing winds are only at 30,000 feet.
  - It will be cool in the mountains and hot on the plains.
- **You will get stronger as the tour progresses.**

### **2. The Bike**

- **Saddle:**
  - Buy a big, soft, cushioned, touring saddle
  - Seat pain is caused by the muscle group at the juncture of your legs and back
  - The pain can be relieved by pretty conventional stretching techniques:
    - Lie on your back, feet flat on the ground, knees bent gently
    - Bring the knee of one leg to your chin, stretching those muscles
    - Stretch your leg straight out bring your knee to your chin again
    - Repeat with the other leg
    - Repeat the exercise 3 or 4 times
- **Gears:**
  - Consider having 27 gear positions, 3 in front and 9 in the rear
  - Get a small front sprocket (a 26 toothed, "granny" gear) for climbing
- **Shifters:**
  - Buy a good system
  - It will need adjustment every day, learn how do this
- **Pedals:**
  - Use clipless pedals
  - Practice with them ahead of time
  - Adjust the screws on the pedals so you can set the release tension to your needs.
- **Frame**
  - Frame material
    - You will have to carry, at a minimum, a bit of food, 2-3 bottles of water, personal items (wallet, etc.), simple tools, and rain gear.
    - You will need to attach a rack or panniers to your bike, which puts you into the category of touring bikes with metal frames.

- Steel is the best. It weighs a bit more, but the difference is marginal compared to the weight being carried.
- Comfort
  - You will be on the bike for 5 or more hours each day
  - Find a bike that allows positions of maximum comfort in terms of reach, bend and visibility (i.e., looking at the road).
  - Look for comfort in multiple positions.
  - Test-ride a possible bike for at least an hour.

### 3. Ancillary Equipment

- Panniers or trailers?
  - Trailers are low, narrow, and streamlined, offering less wind resistance.
  - They are easy to manage, even on downhill runs.
- Racks, packs and toolkits
  - Carry two packs, one on the handlebars and another on the rear rack.
  - Rear mounted “rack packs” come in many designs and are expandable
  - Carried a toolkit with
    - Allen keys,
    - Valve adapters (for the Presta valves)
    - 2 extra tubes
    - Screwdrivers (flat head and Phillips, to adjust the derailleur)
    - Metal file
- Bike Carrier
  - Top mounted or rear mounted rigs.
  - Be sure that your bike is positively attached to the car with a latch
  - Be able to lock the bike (or bikes) to the mount.
- Computer
  - Useful to know speed, distance, average speed and time.
  - Helps navigate
  - Fun to have.
- Compass
  - Not an expensive purchase
  - Good to have
- Mirror
  - For safety
  - Takes a week or two to feel comfortable with it
  - Practice with it ahead of time.
- Pumps
  - Bring a foot pump, somehow.

- Also will need a light hand pump to carry on the bike.
- Gloves
  - Get a set that are well padded
  - Bring two pair to change off from day to day (and let one pair dry out).
- Helmet
  - Don't ride without one
  - If your helmet is older than 2-3 years, buy a new one.
  - A visor if very useful.
  - A cloth "do-rag" will keep your head from getting sunburned and keep bugs out of your hair.
- Clothing
  - Bring at least 2 sets of biking shorts (padded), shirt, shoes and sox
  - Yellow shirts are most visible on the road
  - Bring rain gear...jacket, pants, helmet cover, shoe covers and pack covers.
  - Depending on the route, bring cold weather gear...warm gloves, neoprene shoe covers and a warm jacket.
  - Normal clothing...shorts, jeans, sandals, tee shirts
  - It will be possible to mail home things that you no longer need as the trip progresses
- Shoes
  - Choose between racing and mountain biking shoes.
  - Buy the kind that will let you walk easily, i.e., mountain biking shoes
  - Get the right size.
- Creams, sprays and lotions
  - Sun block
  - Insect repellent
  - Vaseline or something similar to prevent chafing.
  - Put the sun block and grease on once a day
  - Carry the bug spray with you.
- Cell Phones
  - Reception is quite variable across the country
  - Nevertheless, helpful to have cell phones
  - Bring phone chargers for the car

#### 4. The Ride

- Support or Not?
  - This is an individual choice based on your health and experience.
  - Choose support if this is your first such trip

- **Safety**
  - **Ride the soft shoulders**
  - **Be continually aware of what's going on around you in all directions.**
  - **You may not be able to hear things behind you when the wind is in your face.**
- **Start and Finish**
  - **Start early to beat the heat.**
  - **Early on in the tour plan to cover 45 – 50 miles per day.**
  - **You will get stronger**
  - **Later you will be able to do 60-70 miles per day.**
- **Stretching and Breaks**
  - **Stretching out once or twice each day is sufficient.**
  - **Stretch calves, interior leg muscles, neck and upper back, and seat muscle group.**
- **Speed, (some typical averages):**
  - **Climbing in the mountains...5-6 mph**
  - **Downside of mountains...35 - 45 mph**
  - **On the flats, wind to our backs...17 – 25 mph**
  - **On the flats, wind in our faces...10 - 12 mph**
  - **On the flats, no wind...13 – 14 mph**
  - **Rolling hills, climbing, against the wind...5-6 mph**
  - **Rolling hills, climbing, with the wind...13-14 mph**
  - **Rolling hills, climbing, no wind, 10 – 12 mph**
  - **For planning purposes I estimated about 13 mph.**
- **Wind, Weather and Temperature**
  - **Totally unpredictable from day to day.**
  - **Be prepared to adjust goals if the weather is inclement.**
- **The Body**
  - **Head and Neck:**
    - **Cool your head with water**
    - **Don't get a bike that causes you to look up at too steep an angle.**
    - **Your neck will get stronger as the ride progresses.**
  - **Hands and Feet**
    - **Vary hand position to prevent numbness.**
    - **Switch about every 10 or 15 minutes.**
    - **If a hand does get numb just, literally, shake it off. The feeling will pass.**
    - **If you have acute foot pain remove shoes and socks at break times and massaging each foot and calve for a few minutes.**

- **Food and Water**
  - Hydration is a critical issue
  - Drink a 22 oz bottle of water every hour while biking, whether you feel thirsty or not.
  - Carry at least 2 - 3 bottles of water with you and replenish them at every opportunity.
  - Coffee or soft drinks are not the same as water because some of them contain caffeine, which is a diuretic
  - Riding can burn from 500 – 900 calories per hour, depending on how hard you’re pushing.
  - Be sure that you take in enough food to replace what you burn up.
- **The View**
  - Don’t forget to stop and “smell the flowers.”
  - Bring a small camera.

## 5. Bike Maintenance

- **Tires and Tubes**
  - Pump up your tires every 3-4 days.
  - If you have Presta valves, bring adapters so you can use a Schreder type pump.
  - Carry extras
  - Be prepared to handle flats.
  - Carry two extra tubes
- **Shifters**
  - Continuous use of the shifters will cause them to need adjustment, both front and rear, because of cable stretch, loosening of adjustment screws or damage to the derailleur itself.
  - Learn how to do the basics yourself (see text for details)
- **Chain**
  - They will stretch from heavy use.
  - A useful lifetime is about 1000 - 1500 miles.
  - Have your chain checked as a routine, or simply replaced, after you have covered about 1000 miles.
  - “Chain Suck” is caused by physical deformation of a sprocket or, sometimes, by burrs on a sprocket.
  - Burrs can be filed off. (Consider carrying a metal file with your toolkit.)
- **Brakes**
  - Check brake pads before you leave on the tour. If OK, there should be no reason to worry about them again.

- Regularly check cables for stretch or loosening (see text for adjusting).
- Starting Off
  - Before you start off check securing bolts and screws to be sure they are tight (handlebars, stem, seat, brakes, rack and any other brackets).
  - Don't tamper with adjusting screws unless required.
  - Check tire surfaces for glass or metal that may cause a puncture.
  - Have a mental check list (as a pilot might)...e.g., water, food, money, tools, raingear, sunglasses, bug spray, hand pump, etc.