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May - June 1987

Vol. II, No. 6



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Vermont
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Two Things You Need To Know About Mountain Racks

One. We've got a rack that's ahead of everyone. Our new MT-F front mountain rack. It has the aluminum shelf, like our rear MTN rack. It has the awesome rigidity, like our rear MTN rack. It doesn't interfere with any type of brake—like no other rack.

Two. We fit the smallest to the tallest fat tire folks. The wildly popular Blackburn rear MTN rack now comes in 3 sizes. It's only fitting. There's one more thing you need to know about. We now make the strongest cage known to mankind. The MC-1 MTN cage. No

more "Hit a bump, lose a bottle" syndrome. Jim Blackburn designs for mountain bikes. It's all you need to know.

blackburn
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MC-1 Mountain Cage



TO INTRODUCE THE SUPERGO ACCESS, WE'D LIKE TO DROP A FEW NAMES

As you can see, they're the biggest names in components. And for the first time, they're together in one great MTB. The new SUPERGO ACCESS. Columbus is already famous for the lightest and best handling chromoly. Now ACCESS takes the legend off road too. But Columbus double-butted chromoly gets even better with our own innovations. For example, we ovalize the seat tube at the BB for greater torsional

rigidity. A 3 inch long double-wall reinforcement protects the seat cluster area. Even ingenious spare spoke and pump clamping systems. And everything

Ovalized Seat Tube

including our chromoly fork is put together with the most meticulous TIG welding.

The result is a race-proven short-base geometry (19" frame 70/72; 42" WB; 22" TT; 17.4" CS) so agile the technical editor of Mountain Bike Action Magazine was inspired to write: "Perfectly balanced..."



Reinforced Seat Cluster

It's a superb climber... 27 1/2 lbs. light and responsive, with handling and component characteristics of bikes that cost twice as much."

To steer such a nimble frame, we use a hand-made Salsa chromoly stem and our new aluminum bar.

All this deserves the best component group. Shimano's Deore SIS/Biopace. And as usual, we've taken it a step further. Like the 600 EX free-wheel with precision sealed bearing system, Uniglide chain, and Tioga sealed bearing BB, and Tange sealed headset. MKS Graflight 2000 carbon fiber pedals instead of black plastic copies.

The Access rolls on three more big names. Namely Araya RM-25 rims and SR sealed bearing hubs. And they're fitted with Ritchey Quad 1.9 tires. Compare that with other brands' skinny 1.5 tires which are virtually useless in the dirt.



Salsa Stem



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Editor's Note

by Hank Barlow

saw as an opportunity and no doubt they'll sell more magazines than FTB or MBM but they sure as hell don't understand the magic and I'm not sure they ever will.

In any conversation of mountain biking, one name is always bound to come up—Joe Breeze. Maybe his role in the beginning has been exaggerated since he certainly wasn't the only one experimenting with chromoly frames but the fact is he was the first to go out and produce not one or even two mountain bike frames but ten of them. Joe started the produc-

tion of these marvelous machines; he broke the ice and demonstrated—whether accidentally or by design is irrelevant—that these things had commercial possibilities. Maybe it all would have happened without him but it didn't. And he's still in there producing bikes, the American Breezer. Every movement made a legend. Joe, whether he wants it or not, is one of mountain biking's Legends. He's also a fine gentleman.

Revisiting those haunts where Paul Gallaher shot the pictures for our first efforts stirred up all kinds of memories.

Who's next? Two guys actually, two who rarely speak to each other, Gary Fisher and Tom Ritchey. They used to be partners along with Charlie Kelly. Unfortunately the history of all that has been severely muddied by bad feelings and the changes people go through.

Tom and Gary are richly rewarding of an enormous thanks. They—along with Charlie—opened the door for commercial mountain biking. Each may in his own way be difficult to deal with but in the overall view of the sport's history, they belong in mountain biking's Hall of Fame.

Next in line is a bike itself though admittedly the decision to build the bike was a man's. Nevertheless, right along with buns of Charlie, Joe, Tom, and Gary we have to hang the original Specialized Stumpjumper. The first Stumpjumper is now a Legend. This is the bike that took mountain biking out of the realm of being a small clique gathering and thrust it bodily into the real world. Compared to today's Stumpjumper,

the original was a dog of a bike but it shattered the mold the cycling industry had become lost in. Specialized, more than any other company or individual, made off-roading possible for tens of thousands of us who couldn't afford to drop a thousand or more bucks on a bike. They're still an industry leader today. They may not sell the most bikes but I'd be willing to bet that more people identify Specialized with mountain biking than any other company.

Two more individuals are in my mind deserving entry into this Imaginary Hall of Fame of mine but they're two guys who have for a variety of reasons tended to remain rather obscure. Mantis's Richard Cunningham and Mountain Goat's Jeff Lindsay. The latter's early bikes, built out of oval tubing, were legends long ago. Jeff's bikes are still pretty rare and he's still not very well known but they ought to be. He was one of the earliest.

Richard has labored in relative obscurity in southern California. Yet within the inner circle of mountain bike builders and riders, his name has always stood forth. Long before it became the rage, Richard was building short, steep bikes with short-reach, high-rise stems. He's always marched to his own drummer and many a rider has heard his rhythm and paid heed.

The next two candidates are places. They too are Legends. The first is the Repack, Marin's wild downhill race that is no longer, at least the way it was then. The industry has gotten too big and sophisticated for such a crazy, fun spectacle as the Repack. But it still holds the key to understanding the sport's origins. The second is Crested Butte and the Pearl Pass Tour. This too has changed because of time, numbers, and dollars but one thing hasn't changed, the nature of the riding. Fat Tire Bike Week was a wonderful folk gathering of enthusiast fat

tired flyers. CB in September was the place to be for anyone who loved mountain biking. The ride over Pearl Pass may not be all that it's been cracked up to be but that doesn't matter. The core of Fat Tire Bike Week was the gathering itself. The single-tracking around Crested Butte is still hands down the best and Fat Tire Bike Week is still with us though somewhat diminished in its heyday. The Repack and Fat Tire Bike Week were the events that made mountain biking famous, more than any individual, bike, or component.

Every sport needs a hero. Smoking Joe Murray was mountain biking's. He was our first authentic hero and no one will ever be able to take that away. For awhile, he was all but unbeatable. It was as if every one else was racing for second. It wasn't true of course but that doesn't matter. He was the man, the top gun, the silent unknown who showed up one day at a race and quietly proceeded to dust the hottest racers. Joe's still around too, still racing, still a threat any time he's at the starting line. He now designs bikes for Marin Mountain Bikes and is starting to look respectable but he's still our first hero.

No doubt someone out there is screaming at me about Jacquie Phelan. Yep, her bust deserves a place in the Hall of Fame too. The only question is whether to go for glory as she did and bare it all or assume some semblance of propriety and modestly display her talents. Jacquie is one of a kind, a legend because of who she is more than because of what she did. True, her racing career was impressive but she'll be the first to admit that she all but raced alone. She probably would have won anyway; that's the way she is. And it's not her fault more women weren't racing. She did everything but drag them out onto the course. Jacquie has a champion's heart with a pixy's humor. She was and is mountain biking's mirror, the one we look to when things start getting overly serious.

Perhaps the grandest of all, the one who single-handedly did more for mountain bike racing than any other is Glen Odell.

Every sport needs a hero. Smoking Joe Murray was mountain biking's.

He took a fledgling organization and turned it into a major focus for the mountain biking industry. He got nothing out of it, not considering the incredible time and energy he put in but he did it anyway simply because he loved the sport. His focus was always trail access and environmental problems but he ended up having to spend all his time on racing since that was what the industry wanted.

There are others, so many others: Eric Koski, Keith Bontrager, Scot Nicol, Chris Chance, Ross Shaler, the triumvirate of Charlie Cunningham, Steve Potts, and Mark Slate, and on and on. They've all contributed. Many others I know nothing about since I'm a relative newcomer myself.

For now, I'll end with just one more, no doubt a somewhat controversial designation considering the perception many have of him. The last is Ross Bicycles's John Kirkpatrick. He's the one who put together the first industry mountain bike racing team. He outfitted them with outlandish, attention-getting team suits (stretch knickers no less), had special race bikes built for them (no, they weren't stock Ross bikes), sent them to races across the country, called them the Ross Indians, then splashed all that across magazines in full-color, multi-page ads. His motive may have been strictly promotional for Ross Bicycles but in doing so, he introduced the general cycling public to off-road racing. Because of John, mountain bike racing went from racing for donated pizza slices at the local pizza parlor to racing for a national championship with cash prizes. So despite a sometimes arrogant New York attitude towards the west, John's place in bronze is assured.

Without all these characters and all those I've not mentioned, all of us who love these fat tired flyers wouldn't know

what to do with our time. They took bicycling out of the dark ages, out of the polluted main streams of America, and showed us not the pot of gold at the end of the rainbow but the rainbow itself. They opened up the backcountry to cycling and for that, I will always be thankful. Hopefully, our efforts here at Mountain Bike Magazine are continuing their great legacy.

What we've decided to do is start a Mountain Biking Gallery of Fame. So now we need nominations. Send in who you think is deserving and why. We'll then select a dozen or so for entrance into this year's listing. Each year hereafter we'll add more names. We're also going to award a Mountain Biker of the Year Award. Only this year,

rather than limiting the selection process to accomplishments during the last year, we're leaving it open all the way back to the beginning. Next year we'll limit it to the preceding year. Along with this award, we want nominations for a variety of four specific categories: Photography, Writing, Industry, and Adventure. (Photos and writing published in competing magazines is perfectly eligible.)

Criteria is totally open. Send in who you think is deserving of these awards and why you think so. Include documentation when appropriate. Only typewritten, double-spaced entries will be accepted for ease of understanding. Next winter, after entries are closed and recipients decided, we'll throw a grand awards banquet—sure so far undecided. (Suggestions?) So start sending in those entries to Mountain Bike Magazine, Box 989, Crested Butte, Co., 81224.



ROCKY MOUNTAIN

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Mark Slate

What's new in shifters

Shifters - If it doesn't click it ain't trick, or at least that's the thinking this year. Practically every '87 model mountain bike features a Shimano or Suntour index shifting system. The concept is really quite simple. The thumb shift lever has "detents" which are engineered to correspond with the position of the rear derailleur in relation to the freewheel. This is where the simple concept turns into a difficult engineering exercise. There are many variables and factors to be considered: gear wire stretch, cable housing compressibility, rear derailleur geometry and spring tension, drop out design and dimensions, and, of course, cog spacing and attendant shift lever barrel diameter. Suffice to say that it's best to follow manufacturer recommendations and not mix parts.

The Shimano Index System (S.I.S.) was the first indexing system available and set the marketing trend requiring Suntour to follow suit with their "Accushift." It is interesting to note that Suntour introduced a similar system some years back called "Trimec." (With a name like that, it was probably doomed from the start. I don't know what it means but then I don't know what a "Deore" is

imperfect system would seriously damage the system's credibility. The wider gear ratios used on mountain bikes and the likelihood of contamination were cause for concern. Pre-production prototypes were passed out to a select group of ProAm racers for testing and evaluation. The developmental process took a good year. By this time the mountain biking public and manufacturers alike were more than ready to buy the system.

S.I.S. has been assimilated into two levels of component groups for mountain bikes: Deore and Deore XT. The XT is the more costly group, differentiated by attention to detail such as finish and styling. On some components the materials are of a better grade than the Deore group. Suntour offers their XC 9000 and XC 7000 Sport to cover the same two price points. I haven't yet set up a bike with Accushift so I don't have a feel for any differences between the Shimano and Suntour Systems.

If the manufacturer's advice has been followed and all compatible equipment used - shifter, cable, derailleur, freewheel, and chain - then adjustment is a snap. Install all the new components but the chain. Check

at the rear derailleur then grab the wire near the down tube like a bowstring. Pull hard. The rear derailleur will hit its stop and the gear wire will be adequately pre-stretched while seating the cable housings in their stops. Now set the adjustment screws for high and low gear cogs. Find this easier to do without the chain in my way. Some folks may feel it's easier to set the high and low gear stop screws properly if the chain is on. In any case, both stops should find the derailleur jockey pulley directly in line

with each cog. If you don't have a bike stand, go for a test ride. Make precision adjustments to the rear derailleur with one of the threaded barrel adjusters. There is one on the derailleur and one on the thumb shifter. If you have only hand tightened the freewheel you will need to make a cable adjustment after it is seated. The threaded adjusters require no tools and can be adjusted whenever need be. The system should shift crisply into all cogs with no running noise in any of the gears.

If you happen to bend your

Suffice to say that it's best to follow manufacturers' recommendations and not mix parts.

with the extreme cogs.

Now set the shift lever in the high gear position. Loosen the gear wire bolt in the rear derailleur just enough to pull the wire taut then tighten the bolt. Put the chain on if you haven't already. To measure the proper length for the chain, place it on the largest diameter cog and on the largest chainring. Pull the two ends until they overlap and determine how many links you may remove. Remember the chain needs a little slack in order to shift so if it looks too tight, leave a couple of extra links.

Feed the chain through the front and rear derailleur cages and fit the links together. Push the pin through the opposite side plate making sure to leave equal amounts protruding from each plate. The new chains are extremely narrow and this is more critical than ever. Flex the newly joined link and check for any binding. If the link binds, grab the chain on either side of the pin and gently but firmly flex it side to side. You're ready to shift.

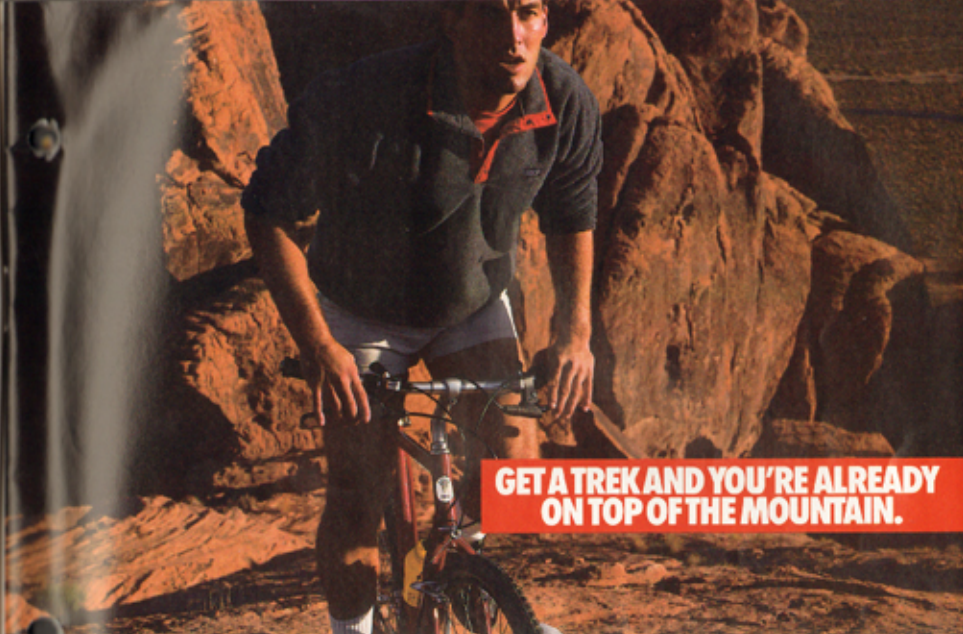
If you have a bike stand, put the chain on the middle ring and run the rear derailleur through its range. The upper jockey pulley should be in line

rear derailleur or derailleur hanger you can flick either system over to the friction mode for the ride home.

I haven't mentioned anything about front gear-changers. Although there are new components, they are essentially the same as previous models with some improvements to cage design and action. They're nicer than ever. A crude system perfected.

There is a new front gear changing system on the horizon that is at least as exciting as the indexing rear changers. Have you heard of the Brownie Automatic Transmission? You will be hearing more. Imagine a front gear changer that can be shifted under full power with no lag time and at the touch of a button. It is an awesome system with a lot of promise. I hope to be writing about it in depth soon.

Are these outstanding improvements really the latest word? I think just the latest word. There seems to always be a little more to go after. Let's get that chain to quit slapping around in the rough stuff for instance. I've got an idea how. Do the industry heavies in a position to make it happen see why it's needed.



GET A TREK AND YOU'RE ALREADY ON TOP OF THE MOUNTAIN.

TREK'S NEW MOUNTAIN BIKES RAISE THE STANDARD OF PERFORMANCE AND HANDLING HIGHER THAN ANYTHING ELSE VISIBLE ON THE TERRAIN.

Mountain bikes have come a long way from the rough trails of Marin County, California. And ever since, innovative new geometries and component designs have tried to keep pace with the serious off-road rider.

Now Trek introduces the

8000 series. The first all-terrain thoroughbreds to utilize Trek aluminum technology. And the first to offer fat tire fans a radical combination of both lightning-quick response and extreme shock dampening.



The 8000 is crafted from mid-size aluminum tubing, bonded to precision investment cast lugs. Since no heat is used in welding the frame,

resiliency, strength, and alignment are kept at a maximum. Durable polyurethane paint, electrostatically applied to resist nicks and dings, is the only fitting finish.



Then a group of the finest new ATB components are bolted on. Like Shimano's new Deore S.I.S. indexed thumb shifters. Biopace triple crankset. Fully-sealed bearing

mechanisms. Powerful under-the-bottom-bracket "U" brake. And a pair of lightweight, yet stomp-proof Rigid wheels.

To see our full line of mountain bikes, including the revolutionary aluminum 8000 series, see your nearby Trek dealer.

He'll put you on top of a Trek. And on top of the heap as well.

TREK
Built for speed. Very slowly.™

Imagine a front gear changer that can be shifted under full power with no lag time and at the touch of a button.

either.) Suntour introduced their system on the low end market and it was not accepted possibly only because of the lower quality association.

When Shimano first introduced S.I.S., it was only available in their finest component group, "Dura Ace," therefore creating desirability. The S.I.S. became talked about and highly sought but was only available for road bikes. Speculation of the perceived ease of operation on all terrain bikes, in their most "all" element, ran rampant. Shimano was biding their time however, realizing that an

the rear derailleur hanger for proper alignment with a derailleur hanger tool if possible. If not, bolt the rear derailleur in place then move the derailleur cage through its arc. Check for parallel alignment with the cogs. This is easiest to see if you hold the derailleur in line with the big cog with one hand and move the cage with the other while sighting from the top. If it needs to be set slightly and you're ambitious, you can use a large crescent wrench. If you're at all in doubt let a shop do it with the proper tool.

Next anchor the gear wire



© 1987 Trek Bicycle Corporation

The road heading to Deer Creek after climbing out of Capitol Reef on the Burr Trail.



Dennis Coello

A Lunar Landing

by Dennis Coello

Remember these thrilling words? "One small step for man...one giant leap for mankind." I do. A few of us were feverishly re-sandbagging an ammo bunker which the Cong had nearly blown the night before. One of the guys had a portable radio tuned in to Saigon, and.... But that was long ago, and approximately 240,000 miles from the "lunar landing" I'm referring to in this column.

It looks the same, or similar at least. Miles and miles of hardened sandstone labyrinths ("slickrock" to the pioneers, whose metal-covered wagon wheels and horses' hooves found traction difficult) lack only the lessened gravity to be authentic. Sculpted by wind and water over the centuries, these earth-bound craters and moonrock mountains are just a part of what this region offers.

So swallow hard, walk up to the boss, and tell him you've just got to have a vacation. Then use this piece to help you plan your trip.

Look at a Utah state map. Or better yet (in fact the best I've found on the Four Corners region) try the "Indian Country" map unfortunately available only to members of the Automobile Association of America. Drop your eyes to the south-central region, until you find the little town of Panguitch. Northeast of it is the even smaller burg of Torrey. You're right - nothing much to write home about in either place.

But between those two spots is some country beyond compare Red Canyon. Long Canyon, Bryce Canyon and Capitol Reef National Parks, Calf Creek, Boulder, The Gulch, Muley Twist...the list goes on and on. Seeing it all during a two-week vacation is difficult, cramming the best it has to offer into a madcap weekend is impossible. But its beauty makes any attempt worth a try.

My last visit there was the kind of harried three day "ride-and-drive" combination which work schedules so often require. Not

that I couldn't take the time; that, after all, is the best part of writing for a living. The rush was instead forced by my partner for the trip - Bert Fox - a bicycle products sales rep. He had read some of my books and articles, and upon finding I lived only thirty miles away wrote to introduce himself. Explaining he was an avid biker he asked if we could link up on the road sometime for a tour, so that he could test some products. I was impressed; here was a conscientious salesman, a biker who already knew what he sold but was wanting to know it even better. We met for breakfast, got along, and decided upon a route.

Our planning sessions went without a hitch until he told me he was diabetic. I was shown the travel pack of syringes, informed that like all active diabetics he merely monitored himself and adjusted his diet and dosages accordingly, and told me not to worry. As poker-faced as possible I nodded my okay.

But it was a lie. When he left I broke out my dictionary, for I couldn't quite remember what high school health class had told of the disease. Webster's wasn't much help. It said something about insulin deficiencies and sugar content of the blood. But it didn't say a word about what I should do if Bert keeled over. Somewhere in that foggy, frontal-lobe portion of my brain I seemed to recall the emergency treatment of diabetics was to quickly ingest sugar. Or was that for hypoglycemia?

I called a couple buddies. I could just as well have talked to a brick. One thought a candy bar was the answer. The other said he thought that would kill him. Great. I could compromise, I figured, with a Hershey's Semi-Sweet, but how do you inject chocolate? Growing impatient with my ignorance, and assuming I wouldn't understand the medical texts even if I took the rash action of visiting a library, I put it from my mind. Sort of.

But back to the route. Wishing to keep our options open, we

...one car at the Capitol Reef Visitor Center, and drove
other to Bryce. The two national parks are only 120 miles apart,
but the geology is amazingly different. Ask a ranger what "reef"
refers to and he'll ramble on about a "large monoclinical waterpocket
fold dipping eastward and trending north-south for about a
hundred miles." So let me help out.

Capitol Reef lies on the immense Colorado Plateau, a region
which eons ago was uplifted by plate movement far below the
earth's surface. In most areas the uplift produced symmetrical
landforms. But here the earth's crust wrinkled, producing a long,
curving barrier of rock.

Over millions of years the sandstone which makes up this
"reef" was carved into amazing shapes - primarily by water.
Ancient streams, melting snow and thundershowers created
gorges, while "waterpockets" came about by the combined
abrasive action of sand, rocks and water. Flash floods forced
rocks and sand into depressions in the reef, which bore deep holes
into the sandstone as they were whirled and tumbled by the
passing water. The resulting pockets or tanks fill up during a
storm, serving as huge rock canteens for animal and man alike.

Thus the terms reef and waterpocket. "Monoclinical" refers also
to the reef - "a mostly gentle fold of rock with one steep side" (in
this case the eroded eastern face). And "Capitol" comes from the
resemblance in early settlers' eyes of one huge Navajo sandstone
dome to the dome-shaped capitol buildings across the nation.

So much for shapes. Now add the colors of various sandstones
- Wingate and Navajo reds; the greens, lavenders, yellows and
grays of the Chinle; and the rich, chocolate hues of Moenkopi
rock. Toss in the abundant plant and animal life, centuries-old
fantastic dirt-road riding (REMEMBER: road-riding only in the
Park) which Capitol Reef offers, and you'll see why just a single
visit is so difficult.

And now to Bryce. Here you'll find a series of geologic
amphitheaters filled with multicolored limestone. Water has

*I fear the pavers will win
in the end. So pedal the
Burr Trail soon.*

eroded this sedimentary bed into tall, strangely shaped configura-
tions, and the sixty-odd pink and white rock layers change color
constantly.

In fact, it was these colors (and a few short hikes) which caused
us to leave Bryce late in the day. Our thoughts at first were to ride
the forty-five miles to Escalante that afternoon, and the remaining
distance through Boulder and Torrey to Capitol Reef the following
day. However, several factors forced a change.

First, the Boulder-to-Torrey stretch was paved a couple years
ago. That's great for tourism; tough for mountain bikers. The
route is still fantastic for its scenery. But who wants a mountain
bike on pavement all the time? Second, we wanted to see and ride
the Burr Trail again - at least that most gorgeous portion of The
Gulch, Long Canyon, and the miles from there to Muley Twist.
Obviously, there wasn't time unless we drove portions of the
route, and biked only the best.

But another problem came about through Bert's performance.
He had hiked long and hard in Bryce, and when we rode relatively
unloaded bikes had not a bit of trouble powering up hills or racking
up the miles. I'd watched carefully, but saw nothing that first day
out (or even on the trip) to indicate his diabetes was causing any
trouble. It was a good lesson for me, and perhaps a happy thought
for you parents if you've found your child is so afflicted.

Instead, Bert experienced difficulty exactly as do so many
riders on their first tour. He had not worked up to the weight of a
touring load, but simply had increased his miles and speed during
the few training rides his schedule had permitted before we took

off. And because this was a winter ride at high altitudes, that load
was even heavier than normal.

A tough pass exists between Bryce and Escalante. He was slow
going up, but he got there. But it was nearing dark and very cold.
And on the descent his muscles cramped.

We spent the night in a motel in Escalante (most of the evening
in "B & R's Country Thirst Buster Saloon"), then drove the
remaining paved miles to Boulder. It was a good choice, for I had
already pedaled it before and knew areas to hike and the best to
ride. We turned off at Boulder, onto the scenic dirt road. And
though there's almost no traffic whatsoever on the pavement in
these parts it's still a different world on dirt. You might have heard
about the controversy over paving this gorgeous Burr Trail, and
the decision for now merely to "improve" certain sections. The
Sierra Club and other environmental groups can be thanked for
their involvement. But I fear the pavers will win in the end. So pedal
it soon.

You'll want to ride the beautifully green and watery Gulch, the
high-walled, sandstone Long Canyon, and the fantastic mile-long
descent of Muley Twist. If you plan to bike it all (as I did a couple
years ago) you'll be depending upon water sources in sandstone
pockets and creeks, so be thoughtful. Pack along a water purifier.
Or a friend with a jeep.

I also suggest you write to Capitol Reef for maps, and updates
on dirt road conditions. You'll see from the maps the amazing
number of route options in this region. But you won't go anywhere
when the road is a swamp.

So plan carefully. And train for a tour, not a land race. Write to
me with specific questions (and a self-addressed, stamped
envelope) on the area and I'll answer them if I can, and if I'm not on
some long ride when they arrive.

But one more thing. Don't blame me if you find yourself return-
ing to southern Utah for every vacation. The moon may have its
effect upon lovers. But this state's lunar landscape has for many
mountain bikers an even stronger - and more constant - pull.

Touring Companies

American Wilderness Experience, Box 1886, N. Boulder, CO, 80306
Bicycle Africa, 4247 YH, 135th Place SE, Bellevue, WA, 98006
Bike Quest, PO Box 332, Brookdale, CA, 95007
Bonum Expeditions, Box 2236, Lecadia, CA, 92024
Brianhead Tours, PO Box 65, Brianhead, UT, 84719
Calypso Excursions, 12 Federal St, Newburyport, MA, 01950
Dusty Roads Mt Bike Tours, 23027 Crickiet Hill Rd, Cupertino, CA, 95014
Elk River Touring Center, Star RT, Slaty Fork, WV, 26291
Europeads, 883 Sineux Ave, Pacific Grove, CA, 93950
Kootenay Mt Bike Tours, Box 867, Nelson BC, V1L 1G5 Canada
Ottar Bar Lodge, Box 210, Forks of Salmon, CA, 96031
Outback with Bodish, Box 49, Chester, CA, 96020
Rim Tours, 94 W 1st North, Moab, UT, 84032
Road Less Traveled, HC 66 Box 33, Ashton, ID, 83420
Touring Exchange, PO Box 265, Pt Townsend, WA, 98368
Vermont Mt Bike Tours, PO Box 526M, Pittsfield, VT, 05762

Organizations

Coulée Climbers, 1501 Rose St, #32 La Crosse, WI, 54603
Farmington Valley Mountain Bikers, % Bicycle Cellar, 532
Hopmeadow St., Simsbury, CT, 06070
Mountain Bikers of Alaska, 4107 Charing Cross, Anchorage, AK, 99504
NORBA, PO Box 1901, Chandler, AZ, 85244
Recon Riders, 725 Sunny Manor Way, Santa Rosa, CA, 95401
ROMP, 218 Victor Ave, Campbell, CA, 95008
The Urban Nomads, PO Box 5627, Arlington, VA, 22205
The Trail Center, 4898 El Camino Real, Office 205 A, Los Altos, CA, 94022



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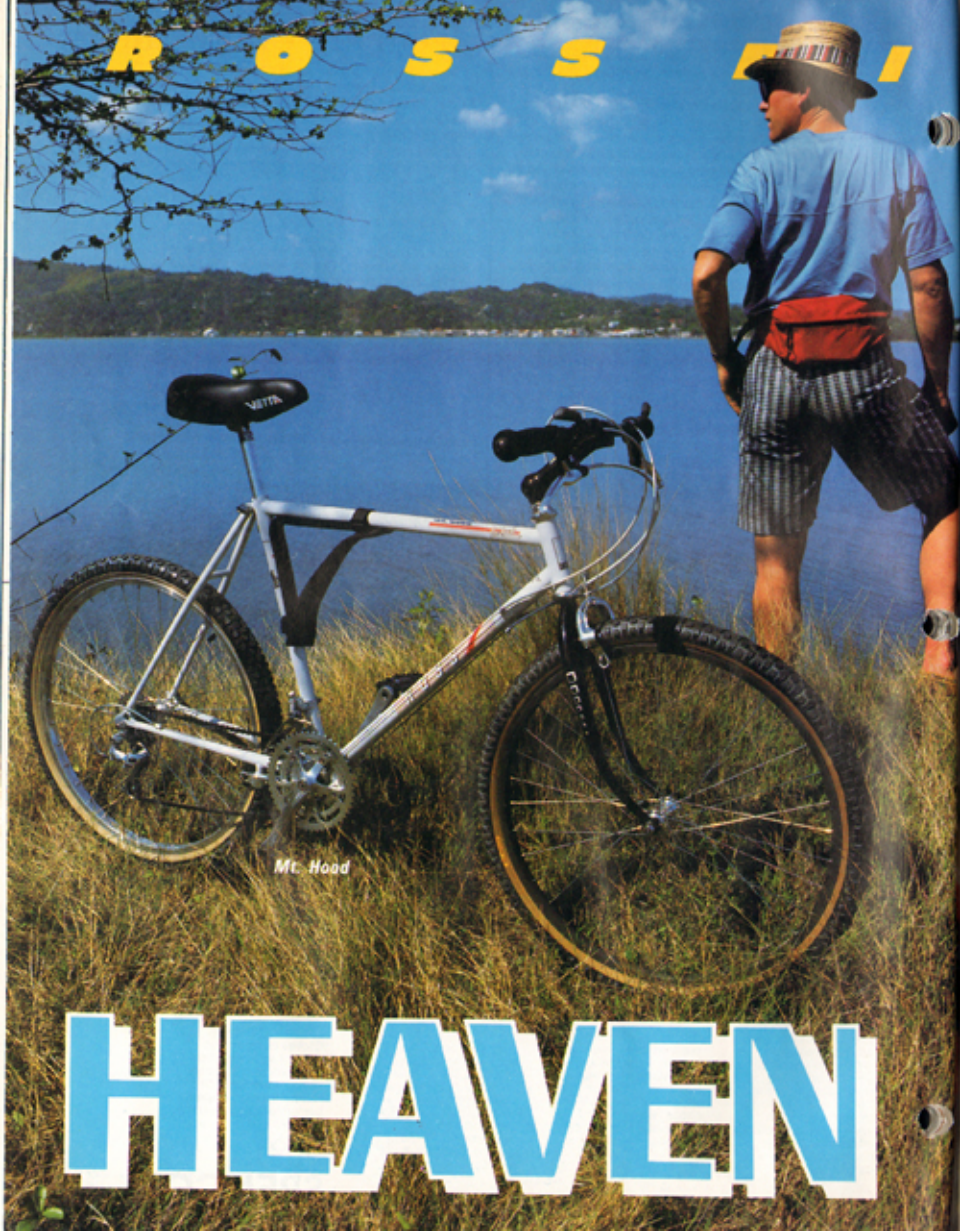


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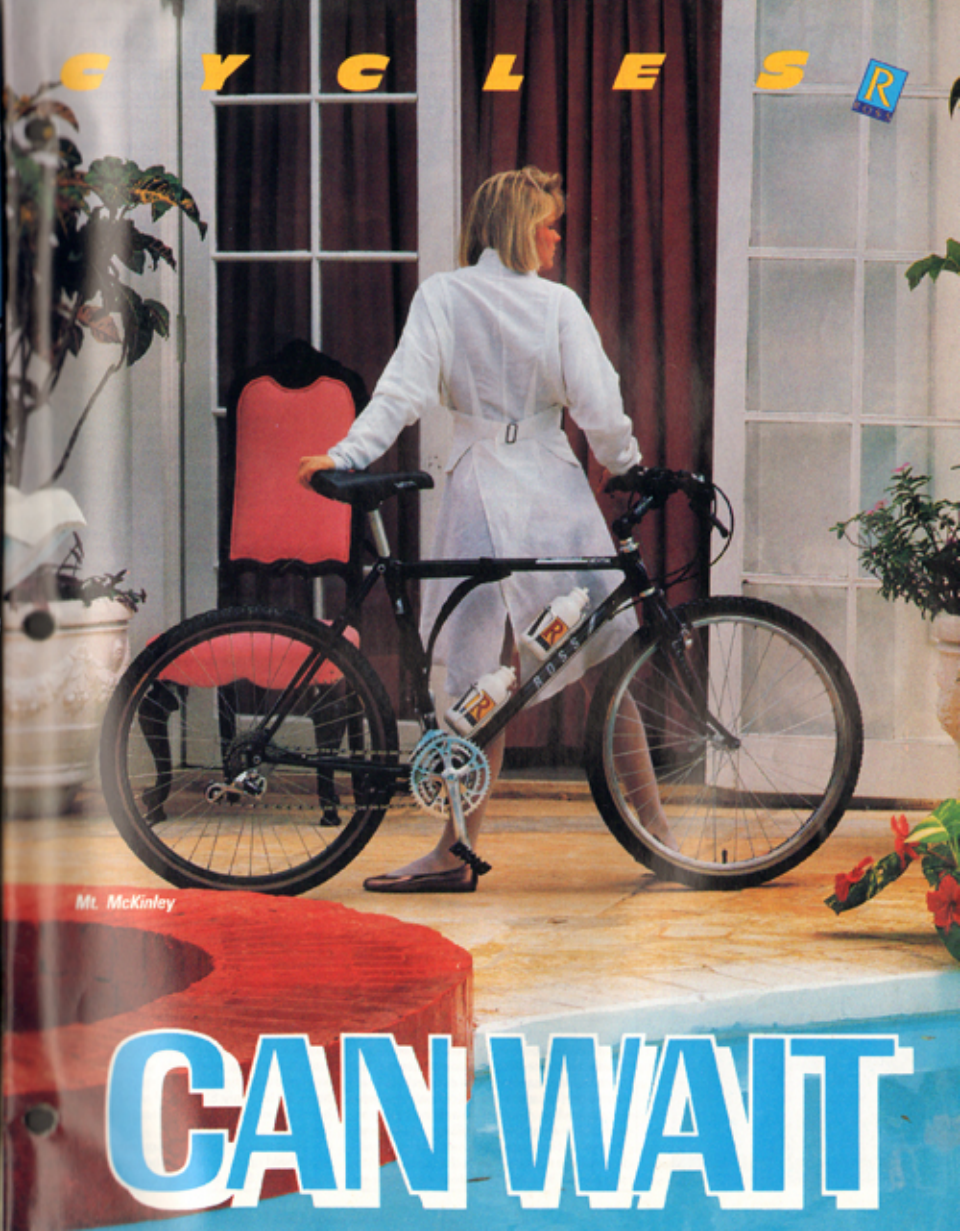
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Click shifting

by Greg Morin

Gregg is a bike salesman and mechanic at the Tune-up Bike Shop in Gunnison, Colorado and captain of the Diamond Back racing team.

To click or not to click? This is the question being asked by many mountain bike owners who wonder if this new shifting technology is really worthwhile. Walk into any bike shop or go to a race and you will see the new transmissions on almost all of the bikes. Can it really be that good? All this change in one year? Here's a look at some of the pros and cons of this new development.

Various manufacturers make index systems. Shimano developed the S.I.S. (Shimano Index System) for road bikes and Suntour and even Campagnolo weren't far behind in releasing their versions. The index system is now available for mountain bikes with Shimano and Suntour again the major producers. Here are our experiences with these two systems.

The Shimano Index System features derailleurs with totally sealed springs and adjustment screws so dirt and pebbles can't clog and hamper shifting. Cages on both front and rear derailleurs have been made thicker and stronger. The rear derailleur features a "Double Servo Pantograph" design, a fancy way of saying the derailleur closely follows the contour of the freewheel, resulting in quicker, cleaner shifting. The rear derailleur will handle up to a 32-tooth freewheel.

The front derailleur has a "Trailing Action Pantograph" design. The cage moves on an axis about ten degrees off-center. This causes the chain to engage the chainrings quicker for a quicker shift. The new Biopace II Chainrings also aid shifts because of the "Plateau Sections". These raised sections of the chainrings help lift the chain onto the ring for faster shifts.

Because of a shorter bottom bracket spindle, there is less flex so more gear combinations are possible before the chain rubs in the front derailleur cage. The Shimano shift levers have a flat, low profile design and a three-step lever reach adjustment for small or large hands. They also feature a barrel adjustment right on the shift lever to fine tune the system even while riding. The system can be turned off and changed to conventional mode simply by turning the switch on the lever housing from "S.I.S." to "F" (freewheel). A special cable housing, made of piano wire strands around a teflon sleeve has been designed by Shimano to cut down on cable stretch, allowing for maximum S.I.S. performance.

The Suntour Accushift System also boasts totally re-designed components. The derailleurs are sealed from dirt and the rear derailleur features a fixed, not floating, guide (upper) pulley. This design aids in shifting as well as making the derailleur stiffer and stronger. The cage pivot axle of the derailleur (where the cage meets the main body) is supported by a special integral bushing to

eliminate side play. The Suntour rear derailleur also works with freewheels up to 32 teeth. The front derailleur has a sleek new design with a deep cage to eliminate chain rubbing.

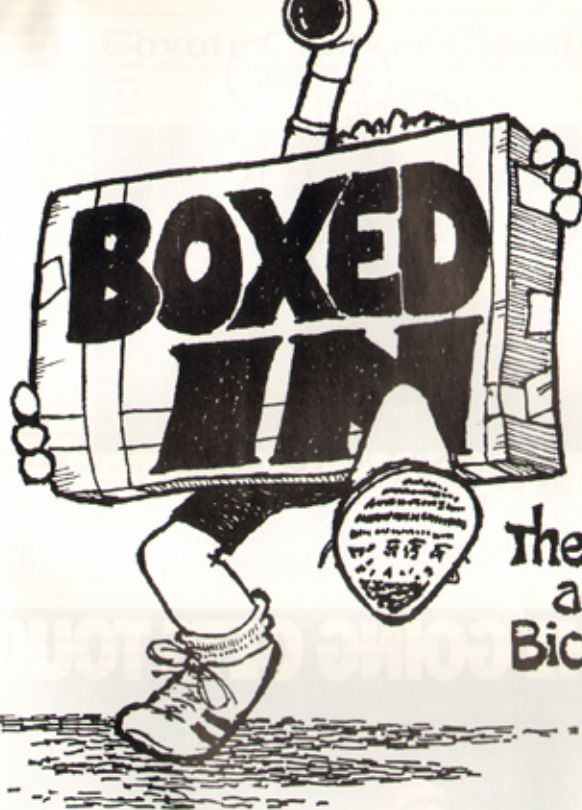
The shifters are available in the standard handlebar mount or with the levers grafted onto the brake levers. This new position allows the handlebars to be cut shorter because instead of two clamps taking up space (shifter and brake), you only have one. The Accushift System can be turned off by unscrewing the top wing nut and rotating the shifter housing.

Both systems allow the rider to shift without worrying about rugged terrain or losing speed. The Shimano System shifted slightly better, with no shift delays whatsoever including when climbing steep hills and shifting onto the large cogs in the rear without letting up on the pedals to shift (a no no on conventional systems). The front derailleur performed just as well, shifting up and down even under uphill pressure. There was also no overshift when shifting from the small to the middle chainring, common to older models. Even in the mud, the shifting was precise and quick, thanks in part to the new sealed derailleurs. The big drawback with the Shimano System is that there are more moving parts which are harder to service (especially the shift levers).

The Suntour Accushift rear derailleur seemed to take just a little longer to find the selected gear and would sometimes completely miss a shift until re-shifted. The front derailleur shifted perfectly, even while climbing and shifting the rear derailleur at the same time - a tough test! The shifters mounted on the brake levers may take some getting used to because the position is further forward than conventional shifters. The brake levers they're mounted on are plastic and give a "mushy" feel to the brakes. There's also no barrel adjuster on the Suntour shift lever; you have to undo the wing nut and twist the housing to switch to conventional shifting - a hard task while riding!

The Index Systems offer fast, hassle-free shifting, helping racers save precious seconds and novices make cleaner, easier gear selections for still more enjoyable mountain biking. But before rushing out to replace your existing shift system, first consider the facts of cost and compatibility. Expect to pay from fifty to a hundred and fifty bucks to upgrade a conventional system, depending what type of system you want and what type of freewheel you already have. So far, only Shimano freewheels can be used with the S.I.S. System, ditto with Suntour.

Then there's the biggest question of all—it will hold up to time and the rigors of off-road riding? Stay tuned.



The Tourist and the Bicycle Box

—GOLLIVER

"I guarantee it'll fit," the dealer piped over my doubtful stares. The box said "27 inch 10 speed" and my bike had fat tires and a very generous wheelbase, but what was I to do? I was due at the airport, and this box was free and available. The shop didn't stock mountain bikes.

Cyclists who drive to catch their planes may not appreciate the special problems which the bicycle box presents to the about-to-be-airborne bike tourist who arrives on leg-power alone. What's a tourist doing on a mountain bike, you ask? It's a good idea, from my viewpoint, but my reasons are another story for another day; I'm into boxes this outing.

Some airlines provide pack-

aging, but many don't, and the latter still like to ship their bicycles boxed. So you ride into your city of embarkation and begin the search for the bike shop nearest the airport, if it's a big city (good chance), this could entail camping out the night before in the immediate environs to get an early start. Once you've outsmarted the map and survived the traffic and found a carton to call your own, you're ready for the difficult part. Somehow you, your loaded bicycle, and that big, unwieldy box must traverse the one, five, or twenty miles remaining to the airport. You can walk it if you've time and need the exercise. If you're agile and a good packer, you can pedal

(extra flags and mirrors recommended for this option.) There's always hitching, if you're feeling lucky, or you can flap that cardboard behemoth and hope for a good updraft. Of course, springing for hotels and taxis would simplify things immensely, as the executive said to the wino; so would chartering a Lear and a limo, or dumping your baggage and buying new gear at the other end. We all have our individual budgets.

Besides, there are other ways. Some rare and thrice-blessed cities make provision for bicycles in their mass transit systems. They may not reach the runway but can speed you many miles along your route. In some bike shops there exist

friendly faces who, for gas and a cheeseburger, might sacrifice their lunch hour to better their vagabond karma by acting as chauffeur. Find out if there's a special airport bus service (usually from the glitzy hotel zone); these aren't cheap, but they're less crippling than cab rates.

Once you've stopped rolling, it's time to seek out a park or a wide place in the sidewalk for breaking down your machine. Passing pedestrians are often fascinated by this operation so be sure to set out an empty jar or a shoe box for tips in case you draw a crowd. A little flair and a zippy monologue here can keep them from drifting to the jugglers and fire-eaters down the block. Beguile the right audience and your transportation problems could end on the spot. If every little

rip and stain and customized tool doesn't have a good story, give it one. If you borrow with out crediting, you can always pay royalties later.

Naturally the road-bike box didn't fit my mountain bike with out some stuffing and stretching. Right angles became curves and planes became textured ranges. A wheel spindle punched its way to open air and had to be sheathed with stry cardboard and extra tape. The fit was so tight that I couldn't stuff in my panniers and tool bag behind the forks, as I do in happier circumstances. So, after packing the bike and racks, I tapped the box to sound out hollows. Finding one, I'd punch a hole to cram in tent or sleeping bag or air mattress or whatever. Cover the gash with a swatch of tape, and the package is as good as new. Weight is not a consideration in this packing scheme; if the box still rattles, you haven't stuffed enough.

Panniers with unremovable stiffeners don't cram well and don't travel well through airport luggage systems, which abound with snares for loose hooks and dangling webbing.



cartoon by Gary Oliver



cartoon by Gary Oliver

straps. The big difference between tossing bike bags onto one of their conveyor belts and tossing them onto the freeway at 5 p.m. is that in the latter case, you get to watch the carnage and nobody makes sappy excuses afterward. If panniers can't be coaxed into the bike box, cinch them together as tightly as possible with packing tape and cover with more tape all suspicious protrusions. Maybe the belts will eat some golf clubs instead of all your worldly things.

When possible, the best move is to find two bike boxes in the first place and cannibalize them to create one container big enough to hold your steed and all your luggage, too. This is tidy but leaves you with yet more bulk to transport to that distant airport.

If bicycles were intended to fly, they'd be suitcase-shaped, or at least there'd be box dispensers at airport information counters. Your logistical problems are the result of attempting an unnatural act. Cash in your ticket and pedal to your destination and all your problems will dissolve like smog at the city limits.

Coyote Clunker Classic III

by Ron Mosody

Team Bad Dog
race headquarters



Ron Mosody

The real reason Team Bad Dog couldn't resist going to the CCC was the house special at the BBQ...roast coyote. It was going to be a dog eat dog weekend.

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Most people remember the weekend of January 24th and 25th as Super Bowl weekend. I live in southern California and it was about all I heard from about the first of the year on. Train loads of t-shirts, sweatshirts, visors, caps, mugs, key-chains and anything else you could print "SUPER BOWL" on were arriving from everywhere they make all those things. Hotels were all reserved, popular restaurants were over staffed and cab drivers were getting personal loans using the expected crowds as collateral.

Meanwhile, about 150 miles southeast of Pasadena, another sports event was in the planning that was not being mentioned in the sports section of any newspaper. I admit it was facing strong competition but the Coyote Clunker Classic III deserves some mention, at least among mountain bike enthusiasts. Myself and Fellow Team Bad Dog members Lance and Margaret (we won't sit up, we won't roll over, and we won't pay our dues) got a flyer for the CCC III in December that gave the following description of the weekend's events.

SAT. A.M. COYOTE CANYON CHALLENGE -- a 36 mi. ride from Terwilliger to Borrego Springs, rugged and strenuous with a 3000 ft. elev. drop to lowest point in San Diego County.

SAT. P.M. COYOTE COOKOUT --

BBQ in Borrego for all participants. Roast coyote, house special.

SUN. A.M. LOS COYOTES HILLCLIMB -- 7 mi. to highest point in San Diego Co., 10 mi. scenic loop return ride.

It was a quick and easy "yes" decision. The three of us had been riding for months on suburban bike trails with only the fading backside of road racers for company. The prospect of mixing it up for a whole weekend with a group of mountain bikers seemed a much more sociable way to go off-road.

The fact that the ride started and ended in Borrego Springs was a large draw for us too. Borrego Springs is a small friendly town that can't ever get too big because it is almost completely surrounded by Anza Borrego Desert State Park - the largest State Park in California. Hundreds of miles of jeep trails and lightly trafficked paved roads criss-cross a variety of terrain from mountains and canyons to spring-fed oases and flat open spaces. Primitive camping space (no water or facilities) is almost endless and free and there is a State Park Campground with water, tables, restrooms and showers. In the summer the temperature is frequently in the 100 degrees as the locals say, by which they mean 110 degrees.

In the winter, the forecast is often sunny and in the 80 degrees.

Though a lot of people don't think of the desert as a very good place for exercise of any kind, to me it seems particularly appropriate for bike riding. It's clean, it's quiet, and the relationship of sun, shadow, and color is nowhere more dramatically played out, changing constantly during the day and making the same spot of desert into dozens of radically different views that can be fully appreciated and explored on a bike without intruding on the fragile environment.

The real reason Team Bad Dog couldn't resist going to the CCC III though was the house special at the BBQ -- roast coyote. It was going to be a dog eat dog weekend.

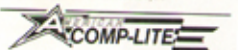
We sent off our entry forms, received our maps and information packets, and on the Saturday of the ride, us and about 100 other mountain bikers were up at various we hours of the morning loading bikes and camping gear to go looking for a little fun and SUN. Registration started at 7:00 A.M. at Christmas Tree Circle in Borrego Springs and we got there about 6:30.

We signed in, picked up route maps and meal tickets, and got in line to load our bikes on the truck that would haul them to the start. In line we met the only other semi-organized team to show: The Southland Off-Road Bikers, or SLOBs. They had team t-shirts with an entire paragraph of run-on

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scenery of the Anza Borrego Desert

sentences on the back of common ride quotes like: "There's no such thing as a dead end poison oak in your spokes is a sign of courage ..." etc.

Loading the bikes took longer than planned and things got about an hour behind schedule but no one really seemed to mind. It was already sunny and warm and everyone was enjoying being outdoors dressed up in funny looking clothes and discussing the relative merits of funny looking bikes with funny sounding names like Land Shark and The Big Pink (Bad Dog say "a lot of my friends are mountain bike riders and not all of them are transvestites.")

At the trailhead, we helped unload the bike truck and in packing our gear, we found we had too much food to carry so we had a second breakfast of excess fruit. We were straddling our bikes eating bananas when the ride officially started and when everyone was already out of sight the truck driver asked us if everything was OK. (This was typical of the whole ride - if you were stopped everyone who went by would ask if you were all right or if you needed anything. All the riders were concerned that no one got stranded out in the desert.) We were fine though - Bad Dogs just never start on time. Before leaving we took one more look at our maps and course descriptions.

The first few miles of this challenging ride begin on gently rolling hills. Then the dirt road deteriorates noticeably and plummets into Coyote Canyon. In a span of four miles, the road drops approximately two thousand feet. Deep ruts and large boulders cover the road surface and riders need to exercise utmost caution (a serious fall in this part of the ride means it will take a long time to get emergency help to you.)

The first ten miles of the ride were a descent from the mountains bordering the desert to the floor of Coyote Canyon. The trail gradually became a steep, rocky, rutted path providing beautiful desert panoramas and a true test of downhill handling skills.

The next approximate twenty miles was along the canyon floor. There's lots of vegetation due to the stream that runs near year-round, making this part of the desert a refuge for bighorn sheep. The trail was a dirt road, smooth but often sandy and crisscrossing the stream frequently. Although the water wasn't drinkable, the temperature was rising and splashing through felt good. The canyon narrowed so much at several places with vegetation so thick that the trail disappeared entirely and we had to ride the rocky-bottomed creek, sometimes hub-deep, for up to a quarter of a mile at a time.

The last six miles of paved road was welcomed after all that sand riding. At Christmas Tree Circle, the BBQ was well under way by the time I arrived (hey - I was taking pictures.) Everyone was comparing trail stories and showing off their new t-shirts - a yellow shirt with a skeleton riding a knobby fat tire bike past some cactus, a discarded water bottle lying in the sand, and over his shoulder a coyote on a mesa howling at the moon. Some said it looked a little like a Grateful Dead album cover but I don't think anyone minded in the least.

*All of our bikes
had semi-
limped across
the finish line
in various
states of
disrepair.*

All of our bikes had semi-limped across the finish line in various states of disrepair. We were too tired to work on them that night but we were up at dawn the next day and our team mechanic, Lance, had our bikes hanging on ropes from our picnic table cover and was attempting to make them rideable for the second day's events.

We found out why they call this the Coyote Clunker Classic. No matter how good a shape your bike started in, it's a clunker by the time you finish. Besides minor problems like dry chains and slightly bent rims, we found that the hubs on two of our bikes had been packed with water soluble grease and in spite of soaked hubs, all that riding in the creek had completely dried them out. We couldn't ride them in the hill climb the way they were but we were reluctant to leave the desert so early. Instead, we just put 'em back into shape as best as possible and spent the day on easier rides exploring some of the other scenic canyons. Come next January, we'll try again. Wouldn't miss it for the Super Bowl!

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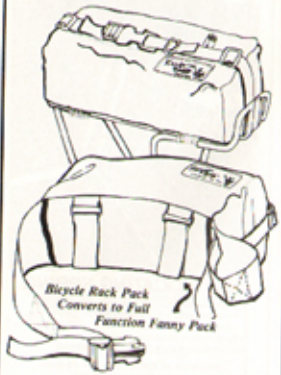
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Exploring the Grand Canyon

by Dugald Bremner

Tires roll soundlessly over the soft blanket of pine needles covering the road. Wild Turkey and mule deer scatter before us into the trees. As we get closer, the vivid colors of canyon light begin to tease our eyes through the forest greens. We arrive and walk the final steps to the Canyon's rim. Before us, two billion years of the Earth's history rises 6,000 feet from river to rim. In the distance, rising again as high, stand the snow-capped San Francisco Peaks.



(Top) Vishnu Temple with the San Francisco Peaks in the background as seen from the North Rim. (Middle) View from Sublime Point. (Bottom) Road to Cape Solitude.

Notice the design. Notice the details. Notice the name.

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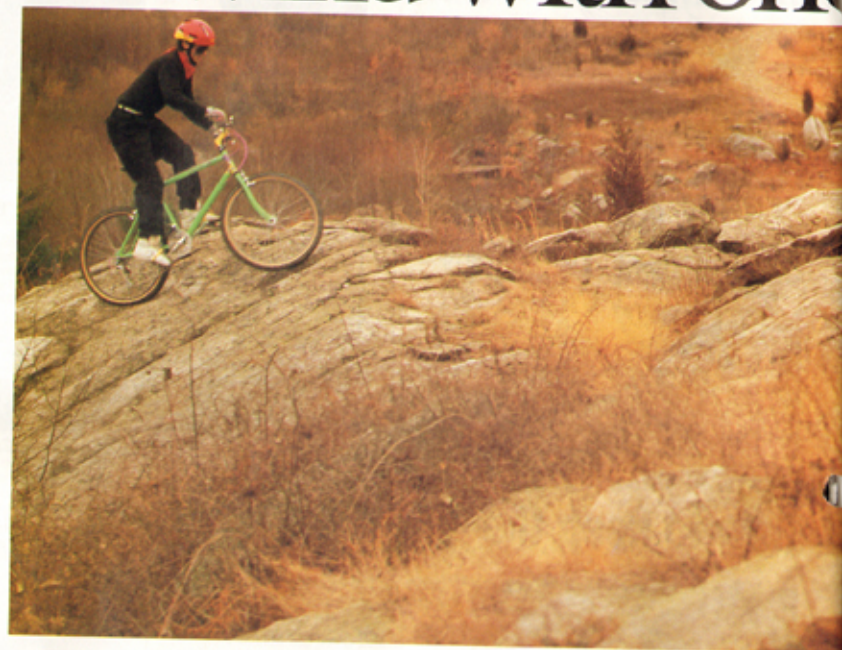
The Novara Ponderosa ATB



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Unwind with one on the rocks.



Work hard, play hard. And do it your way, on the new Cannondale mountain bike. The ultra-light, fat tube frame, precision SunTour AccuShift components and "bomb-proof" construction make off-road riding the ultimate in off-the-wall fun.

Pick any path with confidence. Cannondale's welded, shock-absorbing aluminum frame is the strongest you can buy. It's built to take punishment so you can take control.

We knew a frame this tough needed components to match. They had to be the SunTour AccuShift weathersealed components system. Every index shift clicks to where you want it. When you want it.

You need a quick stop as much as a quick start. So we added the SunTour XC9000 braking system. Considered the world's strongest.

No other production bike gives you everything you get from a Cannondale ATB. With a high bottom bracket for full 13" clearance. Sloping top tube for easy-on/easy-off. Recalculated geometry for even better responsiveness. And a tight rear triangle for the best traction on the trails.



There's a full line of Cannondale ATBs waiting for test rides at your favorite bike shop.

It all comes together to give you the confidence to go where you've never gone before. On the rocks, in the woods, through the mud.

Beautifully handcrafted and handpainted in an array of wild DuPont IMRON® colors, a Cannondale ATB looks as good on the street as it does in the hills.

Rust-proof, dent-resistant and rigid, the Cannondale frame sends every ounce of energy to the rear wheel. Quick, agile and responsive, it's bred to outmaneuver even the trickiest terrain, while the natural shock-absorbing

qualities of aluminum smooth out the rough edges of off-road riding.

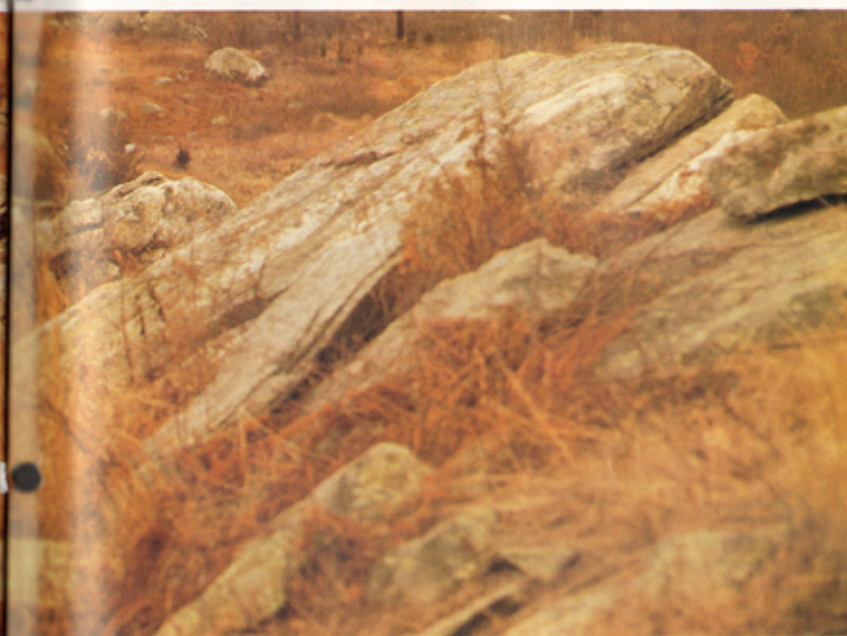
There's a full line of Cannondale ATBs waiting for a test ride. In a range of sizes, colors, graphics and rear wheel diameters with prices and component packages to suit any serious mountain biker.

So relax. A Cannondale ATB gives back everything you put in. And then some.

For a free catalog and the location of your nearest dealer call 1-800-BIKE-USA. (In PA and AK, 1-814-623-2626.)

cannondale

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The Magic Breath

by Teresa Bradford

Breath is our most precious possession; nourishment to our bodies! We can go weeks without food, days without water, but only moments without air. Yet, despite its vital importance, we give it little time or awareness. Breathing supplies the oxygen which keeps our metabolism burning. It provides oxygen to our blood which feeds muscle, tissue, nerves, glands and vital organs.

According to Eastern thought, breath is the hub around which the "wheel of life" revolves. The yogic word for breath is "prana" and is synonymous with respiration, life, vitality, wind, energy, strength. The science of breath is referred to as "pranayama" and is the practice of breathing control. A yogi's life is not measured by the number of days, but rather the number of breaths.

Proper breath control can also be used to maximize athletic performance. Exercise, (i.e., bicycling) which demands large quantities of oxygen for prolonged periods of time forces our bodies to improve those systems responsible for oxygen trans-

port. Let's look at the value of proper breathing.

Poor breathing robs you of energy and thus, life. Poor posture, lack of breathing awareness, and inactivity all lead to reduced lung elasticity and a depletion of oxygen circulation within our bodies. Our tendency toward shallow, rapid breathing, mostly in the upper part of the lungs, allows the blood to pool in the lower lung region and become stale with very little oxygen to nourish it.

Conversely, by increasing your knowledge and practicing proper breathing techniques, you can enrich your body with an additional 30 - 40 gallons of air each hour - as much as a 20 - 25% increase in blood oxygen per hour. The benefits are unbelievable - and some almost immediate!

- Some major benefits of "complete" breathing are:
- Higher levels of energy for longer periods of time
- Strengthening of the respiratory system
- Soothing and toning of the nervous system, thus relieving stress
- Improved intellectual capacity
- Better and more effective sleep
- Aeration of lungs (and phlegm removal)
- Lightness of body and mind

Physiologically, the objective of respiration is to get oxygen



Proper breath control can be used to maximize athletic performance. Poor breathing robs you of energy and thus life.

into the alveoli (tiny air sacs in the lung) where gas exchange (nourishment) occurs. Wastes are exhaled in the form of CO₂. Under normal conditions, only about 60% of these alveoli are open and functioning; the remaining 40% have no blood flow or gas exchange occurring. With exercise or respiratory stress, these dormant capillaries are recruited and begin to function. The already-opened blood vessels dilate even further to enhance oxygen utilization and carbon dioxide expulsion.

There are two ways to get air into the lungs - nose and mouth breathing. The upper airways of the respiratory system treat and conduct air flow while the lower, most distal airways are responsible for distribution of air and gas exchange. Nasal breathing is the most beneficial. The large surface area of the mucus membrane in

the nasal cavity treats the air by humidifying, warming, and filtering out foreign particles. But, because this is a high-resistance pathway, when increased volumes of air are needed, as with extreme exercise, mouth breathing, (the second path) becomes more prominent.

Although mouth breathing is not as effective in preparing the air to enter the lungs, less energy is expended and a greater volume of air is accommodated.

The primary muscle involved in breathing is the diaphragm, a dome-shaped muscle which separates the abdomen from the thoracic cavity.

During inspiration, a diaphragmatic contraction initiates breathing by increasing respiratory volume. The external intercostal muscles contract as well to elevate the ribs and aid in expanding the thoracic cavity. Thus, both the diaphragm and intercostal muscles expend energy to accommodate inhalation.

During expiration, the diaphragm relaxes, letting the lungs recoil (like a stretched rubber band being released), depressing the thoracic cavity and decreasing respiratory volume. Normally, expiration is passive. The abdominals come into play only to push against the diaphragm in forced expiration (as with extreme aerobic exercise).

So, how can we breath most beneficially?

Let your face and neck relax. Remember, air comes in through your throat, so if you are harboring tension in your neck, this will partially constrict your air flow.

Follow this exercise. Lay down on your back, bending knees, feet on floor. Press the small of the back against the floor and try to make the spine as long and extended as possible. Let your face and neck relax. Remember, air comes in through your throat, so if you are harboring tension in your neck, this will partially constrict your air flow. So, let everything relax, close your eyes. Take a few breaths, then place your left hand on your abdomen and your right hand on the upper part of the chest. Breathe...

As you inhale very slowly, your abdomen rises first, then the lower lungs (ribs), then the middle, and at the peak of inhalation, you feel the right hand rise also as you have moved air all the way to the very top of the lungs. And when you think you have fully inhaled, inhale even a little more!

When you exhale, do not just "blast" out the air. Use control and exhale slowly. Let the air from the top of the chest initiate the exhalation, pushing the rest of the air out from the top so that area slightly lowers first, then the middle chest; the abdomen is the last area to lower. When you exhale, don't allow the thoracic cavity to collapse. Think of the cavity which encases the lungs as a hollow space that is always expanded. When you exhale, keep the chest open and just allow the air to "fall" out.

Think of it this way:

Inhaling is like filling up a glass of water - from the bottom to the top; exhaling is like emptying that glass from the top to the bottom.

Keep in mind that lungs are of three dimensions so that when you inhale, not only do they puff up the chest, but they should also inflate at the back and sides as well - like a balloon, inflating in all directions!

I recommend these breathing exercises be done 5 - 15 minutes every day. The first weeks do them laying down, focusing all your attention on them while in process. At first it may seem mechanical and you'll find it's easy to "recruit" muscles to mimic the elevation, expansion, etc. Most of us have never been taught to breathe. To move toward proper breathing, we have some life-long patterns to change, and it takes time, persistence, and patience to make optimal breathing automatic.

When you become more comfortable with the technique, you can practice it sitting up. It is important that your back is straight and spine extended, so prop yourself up with pillows if you must. Your goal is to integrate this complete breathing technique into all that you do.

Don't get discouraged. You'll learn this breathing technique by practicing just as you learned to bicycle or swim.

By incorrect breathing, we are slowly suffocating ourselves. There is no alternative to proper breathing and to a regular schedule of airway cleansing. Although learning to breathe correctly takes time and patience, this awareness will enhance your training, vitality, and your life. Go for it and enjoy!

THE 1987 BRIDGESTONE MB-1

A REFRESHING
ALTERNATIVE
TO THE CLONES OF '87.

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These are 100% cotton Beefy-Tees, guaranteed to catch an eye with our "rad rider". Printed with hot pink ink on a variety of cool complimentary colors. Shown from left to right: teal, dark gray, navy, white, and wild berry. Also available in jade, royal, and black.

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A BIKE YOU CAN LEARN WITH, A BIKE YOU CAN GROW WITH

The front-end geometry of most mountain bikes is designed to keep unskilled or reckless riders upright on unpaved descents. This built-in autopilot steering makes it hard for a conscientious beginner to learn good technique, and frustrates those who already have it.

The MB-1 puts you in control. The fat tires have a large contact patch and provide plenty of stability without the need for a laid-back head tube angle. On the MB-1, you don't have to hit the bumps and hope for the best. And you can cut around a boulder when there's no room to carve a turn.

On steep 1-mile per hour climbs, when most mountain bikes transform the path ahead of you into a Ouai board, the MB-1 tracks straight and goes where your eyes point it. No aimless wandering. You'll have more fun on the MB-1 because you have more control. You'll become a better rider, faster. And you'll never outgrow your bike's potential.

A STEEPER SEAT TUBE ANGLE

Now this really matters:

The MB-1's 73° seat tube angle allows an efficient seated pedaling position without having to shove the saddle far forward on its rails. And it lets you make quicker transitions from sitting to standing. Since you don't have to shift your weight forward first, you'll slow down less as you stand up, and you'll spend less effort regaining the lost momentum.

Great theory, and it really works. Just like on a road bike.

SHORTER CHAINSTAYS, MORE TRACTION, FASTER ACCELERATION

The stubby chainstays on the MB-1 are only 16.875" long. They tuck the rear wheel in underneath you, so you can climb most dirt hills off the saddle, with comfortable, familiar road technique. No need to learn new and awkward tricks to maintain traction.

Acceleration is improved because they flex less under hard pedaling. They contribute to a feel which anyone who is familiar with fine road bikes will recognize and welcome.

VERTICAL REAR DROP-OUTS, SPACED 126mm

Vertical rear drop-outs keep the wheel in place without having to overtighten the skewer—which can damage bearings—and they greatly simplify removing and replacing the rear wheel.

But with the exception of the MB-1 and a handful of others—mostly custom—the drop-outs on mountain bikes are spaced 130mm. There's nothing intrinsically wrong with this, but hubs made to fit this spacing are generally stocked only by shops which specialize in mountain bikes and have an extensive inventory.

The 126mm rear drop-out spacing on the MB-1 accommodates a road-standard hub. These outnumber the wider hubs at least 15-to-1, and can be purchased in bike shops from Mt. Pilot to Hooterville.

STRONGER STEEL, A LIGHTER FRAME

The MB-1 frame is built with the best, costliest chrome-moly mountain bike tubing available—TANGE PRESTIGE. This is the only heat-treated chrome-moly made for mountain bikes, and its tensile strength is nearly 25% greater than all others. We guarantee strong joints with beautiful lugs and excellent brazing. The frame is made to survive years of hard use on the roughest trails.

A 50cm MB-1 FRAME WEIGHS 5 POUNDS EVEN. That's less than a lot of road frames, and up to 2 pounds lighter than 99% of the mountain bike frames on the market today.

Head Tube Angle Head Tube Angle Head Tube Angle

Everybody is concerned about head tube angle. But head tube angle is just one of many factors which influence a bike's steering.

The MB-1 has a 71° head tube angle, and it's the combination of this, fork rake, frame tubing, trail-center, head-clear width and height, stem length, wheels, and weight distribution which make it ride as it does.

Don't judge a bike by its head tube.



Our split cable housing stops reduce spanginess by eliminating a lot of cable housing, and make it easy to re-grease the cables without disconnecting them.

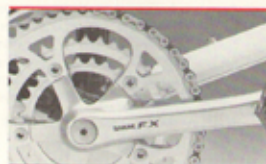


A FORGED CRANK WITH ROUND CHAINRINGS

SAKAE RINGYO (SR) doesn't maintain a high profile here in the U.S., so some of their finest products get overlooked. But a tour of their manufacturing, testing, and quality control facilities in Japan would impress the socks off you.

The MB-1's FXC-T310 crank has several things going for it. It's strong (both SR and Bridgestone insist that it pass tests which simulate far more abuse and much harder use than mere human pedaling ever could); it's rigid, attractive, and the large-radius webs between the crank arm and the 5 spider arms distribute the stress evenly.

We specified the MB-1 round chainrings because, despite computer testimony, we prefer the familiar, smooth feel of round rings, and suspect that were more efficient with them. The 50T large chainring is big by mountain bike standards—an advantage on fast descents or the flats. There's nothing unusual about our choice of middle (38T) and inner (28T) chainrings, but if you live in Aspen, you'll probably want a 24T or 26T. Switching is easy—this crank accepts SR, Sugino, Specialized, Shimano, and Avocet chainrings, round or otherwise, from 24T to 53T.



SUNTOUR WINNER FREEWHEEL

You may not care that the pawls of a Winner freewheel are 1/4" long and drive at near tangents to the inner body. It may bore you to hear that at least 2 pawls are engaged at any given time. And you may not give a hoot that Suntour takes great pains in the heat treatment of their steel.

But if you ride where there are no phone booths or bike shops, you might as well use a freewheel you don't have to worry about. For hard use on tandems or trails—or tandems on trails—SUNTOUR'S WINNER is our favorite, because it doesn't blow up. The MB-1 uses a narrow 13 x 28 six speed.



A CHEAP CHAIN

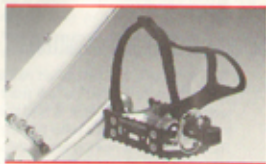
D.I.D., the manufacturer, puts out a 4-page brochure on the merits of their LANNER chain, but we like it for just 3 reasons: It's strong. It shifts well. And it's cheap enough to replace whenever you don't feel like cleaning it. We get rid of ours every 500 combined dirt and road miles, and the freewheel cogs last longer because of it.

SUNTOUR XC-COMPE PEDALS

Last year these were the choice on virtually every cost-no-object mountain bike, and this year, they're just as good.

The chrome-moly spindles are strong, the bearings are double sealed and easily serviced, the cages are replaceable, and the weight per pair is just 335 grams.

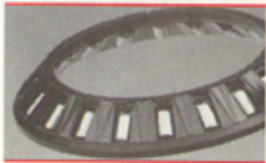
All that, and they're aesthetically inoffensive.



SEALED ROLLER BEARING HEADSET

Ball bearing headsets wear out quickly because the balls rotate very little in a headset—they just pound the same spots over and over.

Tange's GMASTER headset solves this problem with tapered roller bearings. These have many times the surface area of ball bearings, so they can withstand much more pounding. This particular model is superlight (130gr), easy to service (the locknut is extra tall and easy to grab), and should outlast ball bearing headsets 3-to-1.



FINALLY...A PRODUCTION MOUNTAIN BIKE WITH DROP-BARS!

Were it not for misunderstanding, mob mentality, City Life, the yuppie influence—and general inavailability, a lot of mountain bikes would have drop bars.

We like them for seated climbing because they make it easy to shift your weight drastically with subtle and comfortable changes in position. You can weight both wheels effectively without contortions.

We like them for off-the-saddle climbing because you can stand and lean forward without feeling cramped. Your arm and back muscles can pull hard on the bars and your wrists don't get strained. It's natural, familiar, and comfortable.

We prefer descending with drops, too. They put the fat part of your hand—a perfect shock absorber—directly on the bar. Your wrists don't flex with the bumps, so they suffer less on long descents. And if uprights make you feel as though you're on top of the bike hanging on, drops will make you feel as though you're inside the bike, in control.

Distance riding is far better with drops. Your hands can roam freely, and they always find a comfortable resting place. On rides of less than 10 minutes, it hardly matters; on rides which last more than 30 minutes, drops are a godsend.

DROP HANDLEBARS DESIGNED FOR DIRT...

We rode a lot of miles with a lot of different handlebars before designing our DirtDrops. We stole our favorite features from the 4 favorites, added a couple of our own ideas, and developed a bend which is both simple and extremely accommodating. There's bar where you need it and none where you don't.

...AND A MATCHING STEM

Our DirtDrop stem is based on Charlie Cunningham's Gooseneck—the original drop bar mountain bike stem—and Scot Nicol's similar "LD" model. This is a beautiful stem, and makes a major contribution to the success of our drop bars. The long shaft has nearly 3" of vertical adjustment to accommodate long or short arms, and different riding styles. It's cold-forged from 2017 T4 aluminum, for maximum strength. The bore diameter is 26mm, so it also fits IBS and WTB drop bars. It's strong, rigid, looks great, and positions the bars just right for trail riding.

HANDLEBAR-END SHIFTERS

Virtually every top pro and amateur cyclo cross racer in the world uses bar-end (finger) shifters, because they're compatible with drop bars, and they allow you to control the bike while shifting over rough ground. Your thumb maintains its grip, for uninterrupted security—even over rehardened footprints.

SUNTOUR's version is Frank Berto's favorite, and ours, too. The large drum moves cable fast, and the ratchet keeps the gear. For the fastest possible shifts, we use a special compressionless cable housing on the MB-1.

ARAXA RM-20 SUPERHARD ANODIZED RIMS

These are light enough for fanatics and strong enough for off-road tandem use. The hard anodizing is not just cosmetic. It makes the braking surface less vulnerable to wear caused by grit-impacted brake shoes, increases rigidity, and protects against salt corrosion. If a better rim exists, we haven't seen it.

PRESTA VALVE TUBES...

So you can use the pump you already have for your good road bike. Compatibility with gas-station air hoses shouldn't be an issue on a bike meant for trails.



DirtDrops are 41mm wide at the curve. The upper portion is straight, for maximum hand space. The lower grips are flared 12" for wrist clearance while climbing or sprinting, and more comfort on descents. The ends are cut short to give quicker access to the bar-end shift levers.

They're made to our specs by NITTO, out of thick walled heat treated aluminum, for extra rigidity and strength.



Shift levers should be judged not by how well they're able to overcome poorly executed and ill timed attempts by a rank novice, but by how well they perform in the hands of a moderately skilled user. The key to good shifting on steep descents is anticipating your needs, and making the gear before your spin's low and pedaling gets hard. The set-up we have on the MB-1 works better than anything else we've used—indeed or not.



RITCHY FORCE TIRES: RACING GRAIN: DURO (REAR)

One of our favorite rides has a hill which we've never climbed with any other tire. Coincidence? At the '96 NORBA Nationals, riders on FORCE tires took 1st and 2nd in both Men's Pro and Veterans, and 1st in the Women's Pro divisions. Coincidence? The front tire is a FORCE RACING. At 675 grams, this is the lightest full-size wire-beaded dirt tire made. The rear is a FORCE DURO. It weighs just 50 grams more, and has 20% more rubber, for better wear on those horrid paved roads we all must ride to get to the dirt.

This is the tire combination your friends will be trading up to.

CANTILEVER BRAKES, FRONT & REAR

Despite recent developments, many riders—including us—still prefer cantilevers. And we think Dia Compe #962's are the best of the bunch. The calipers are cold-forged for strength, and each bolt, washer, and spring is top quality. They're powerful enough for braking in watery mud, and sensitive enough for gravel or wet leaves. They're easy to assemble and adjust, not at all prone to clogging with mud. Easy to de-clog, simple to release for wheel removal, light and elegant.

Compared to other cantilevers, the #962's are a mechanic's dream. The external springs perform in the muddiest conditions, and can be tensioned independently, without any tools. They can be released in a second and a half, for much easier brake adjusting. The shoe height adjusts on an eccentric, so you can dial it in right at the rim.

RACING LEVERS

Dia Compe's Royal Compe levers are conventional high quality racing levers. The bodies are accurately cast, the levers are cold-forged, the mini-hardware has all the right features, and the anatomically-shaped hoods are made of an ozone-resistant compound. The advantages to this type of lever off-road are the same as they are on-road. They serve as rests while cruising, grips while climbing, and have plenty of leverage for the steepest descents.

SUNTOUR CYCLONE HUBS

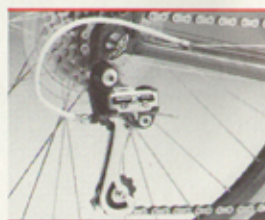
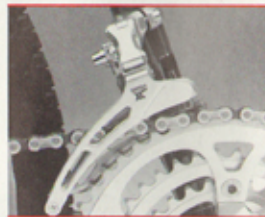
These have better seals than some sealed hubs which cost twice as much, and the cartridge bearings withstand radial loads (bumps!) much better than cup-and-cone sealed mechanism hubs. The bodies are cold forged, and the flanges are angled towards the rim to reduce stress at the spoke's bend. The axles are incredibly tough. We've yet to bend or break one.

SUNTOUR'S BEST OFF-ROAD DERAILLEURS

There are close to a dozen off-road front and rear derailleurs available. We chose an XC front because we used it on last year's MB-1 and we know it works well. It has a reverse action (push the lever forward to shift up) so it takes a ride or two to get used to, but it makes hard shifts better than any other we've used. The XC 9000 rear is new this year. It shifts as well as any we've tried, and Suntour assures us that, with redesigned pivots, a new brass bushing, a supported pivot axle, and reshaped pulleys, it's the best shifting and most durable derailleur ever made.



Force Racing (front) Force Duro (rear)



A LONGER SEAT POST, A BETTER SADDLE

The 2 most likely-to-be-replaced items on a new mountain bike are the saddle and seat post. Not this time.

The MB-1 has SR's MTE-300 seat post. It's 330mm long, so you can buy a properly small frame and still get the seat up where you need it. (If you need a longer post than this, you need a larger frame). It weighs just 335 grams, looks nice, and has a simple, reliable saddle clamp.

We chose a Sella Italia TURBO saddle because we just couldn't put a cheap seat on such a nice bike. It's not filled with jello or any of the new magic mushes, but unless you ride in blue jeans—or bolt upright—it's quite comfortable. And unlike wider saddles, it stays out of the way when you need it to. (Women may want a wider saddle for anatomical reasons; most shops would be happy to trade a suitable women's seat for the deluxe TURBO).



LIMITED EDITION

We plan to build just 300 MB-1's this year. For the name of the dealer nearest you, contact BRIDGESTONE CYCLE or one of the distributors listed below.

Bridgestone Cycle (U.S.A.) Inc.
15003 Wicks Blvd.
San Leandro, CA 94577
(800) 345-2830 (in CA)
(800) 847-5913 (outside CA)

Dave Cycle
1711 1st Avenue North
Birmingham, AL 35203
(205) 324-2766

Allied Cycle
50 Sun St.
Waltham, MA 02254
(617) 889-3571

District Cycle Supply
10747-2 Tucker St.
Beltsville, MD 20705
(301) 937-5580

Minwaukee Cycle
2654 Wisconsin
Milwaukee, WI 53213
(414) 258-9054

Island Cycle Supply
425 N. Washington
Minneapolis, MN 55401
(612) 333-7771

BKC
308 Tompkins
Syracuse, NY 13204
(315) 422-0101

Gordon Cycle Supply
700 E. 10th
Cleveland, OH 44108
(216) 681-4540

GEOMETRY CHART

Frame Size	Seat Tube Length	Top Tube	Front-Center	Wheel base	Standover Height	Frame Weight (lb-oz)	Fork Weight (lb-oz)
45cm	17.2"	21.65"	24.5"	41.38"	27.3"	4-12	1-13
50cm	19.7	22	24.72	41.54	30.2	5-0	1-14
53cm	20.9	22.4	25	41.77	31.4	5-2	1-14.5
57cm	22.4	23.2	25.8	42.64	32.9	5-3	1-15

The following specs are the same for all sizes:
seat tube angle: 73° head tube angle: 71° chainstay: 16.875"
bottom bracket height: 11.5" fork rake: 2.16" trail: 2.2"

BRIDGESTONE

Bridgestone Cycle (U.S.A.), Inc.

Bridgestone Cycle (U.S.A.) Inc.
15003 Wicks Blvd.
San Leandro, CA 94577
(800) 345-2830 (in CA)
(800) 847-5913 (outside CA)



ONLY ONE COLOR AVAILABLE.
White and dark gray, as shown, with a red and black band on the top tube.

George Theobald negotiating the cobbles of the Tahoe-Roubaix

Trail Tactics

by Hank Barlow

Single-tracking is an art. Properly done, it's as smooth and rhythmical as skiing. Getting to that point takes practice, lots of it. It also demands a higher degree of concentration than any other terrain despite the relatively slow speeds. Nimbleness is required of both bike and rider.

The trick is standing up. Novice riders can usually be recognized by how enthusiastically, if at all, they do so. They tend to be saddle burrs compared to veterans who stand almost as much as they sit. The rougher the terrain, the more they stand.

Contrary to what many a mountain biking newcomer thinks, out-of-the-saddle riders are more stable on rough terrain than in-the-saddle riders. It's like riding in the back of a pickup. Sitting, your body is jarred by every every bump. Standing, the bumps will still be there but you'll absorb them with your legs. That's what happens on a mountain bike. Sit and you'll bounce over every bump. Stand and you can float over them, letting the bike hop about as it will while you remain quietly stable above it. Standing lets you use body english to maneuver the bike instead of always steering the front wheel.

A common mistake of inexperienced riders attempting to stand on rough terrain is being in too low a gear. Standing provides more power and if you're in too low a gear, you can end up spinning the rear wheel and coming to a stop instead of jettisoning the bike forward with each stroke. A higher gear also makes it easier to balance on the pedals because of the increased resistance. Just don't get caught going into a climb in too high a gear since down-shifting on steep, rough terrain can be almost impossible no matter what derailleur system you're using. Even if you make the shift, it's hard on your equipment.

A higher gear also lets a rider use the quarter-stroke technique. This entails using only a quarter or so of a crank's com-

plete rotation with a quick backwards movement to the beginning of the stroke so that only one leg propels the bike forward, used when a full stroke will bang the pedal into the ground, possibly stopping or even tipping you over. A higher gear will squat the bike further forward than a lower gear. If everything is timed just right, a quarter-stroke or a series of quarter-strokes can get you up and over whatever obstacle you're attempting.

Out-of-the-saddle riding on single-tracks is just like running through the woods. Hands are held low, legs flexed, weight on the balls of your feet. The runner's forward stride is the cyclist's pedal stroke. The upright rider position of flat-barred mountain bikes makes the similarity even stronger. The primary difference is having something to brace your hands on.

Handlebars are held with a relaxed grip and only light pressure. The head is high while eyes watch the trail. Most of your weight rests on the balls of your feet while your thighs very lightly grip the nose of the saddle. Think of the position as a warrior's stance, a subtle crouching and concentrating of your energy.

This is where skilled riders excel. Weight is shifted between front and rear wheels according to traction needs but the action is so subtle that even very careful observation may not spot the movement.

The objective is to precisely distribute your weight between front and rear wheels. Too much weight on the front wheel can cause either an excessively heavy steering response or too abrupt a steering response and a loss of rear wheel traction during



Theobald

climbs. Too much weight on the back wheel can cause unwanted wheelies during climbs and a front end that pays little heed to your directions. This subtle shifting of weight between front and rear wheels is simply a constant advance reaction to terrain changes and is best accomplished out-of-the-saddle, not on it.

This is particularly true in sudden transitions, dropping into a sharp depression for example. A quick backward body movement and an unweighting of the front wheel just before it smacks into the far side can turn a jarring collision into a smooth curve.

Timing is the key. Release the brakes too soon and the bike will instantly accelerate so your speed through the depression may be far too high. Or if you unweight the front wheel too soon, you'll end up smacking it right into the opposite slope instead of gracefully swooping up the other side. An out-of-the-saddle position makes all this a snap.

That applies to small steps during a climb too. Again, timing is the key. Approach the step with a steady pace, not too fast, not too slow, then just before the front

wheel hits the step, shift your weight back and lift it over with a smooth but powerful pedal stroke. Done correctly, there's never a break in the rhythm. It's just like running up a hill only the motion is more fluid. The most common error made when attempting this maneuver is excessively lifting the front wheel and ending up doing a wheelie. The objective is to unweight it just enough to skim the ground surface.

More extreme steps can require a stronger lifting of the front wheel followed by a forward weight shift and an unweighting of the rear wheel to help it over. Immediately upon clearing the obstacle, assuming the hill continues, weight has to be shifted back to maintain traction. Being in the right gear for this maneuver is particularly critical since you want maximum forward surging of the bike with each pedal stroke. Again, overdoing the movement is a big problem. Too much lift and you'll do a wheelie and come to a halt. Time your lift with a strong pedal stroke and a slight forward movement of the torso to counteract any tendency to wheelie.

The idea is to become an integral part of the bicycle, to move as one with it.

The arms are critical in all these maneuvers. They are not lifeless appendages frozen hanging onto the bars. They should be constantly applying upward or downward pressure, working with the legs to power the bike forward. Be sure to hold the bars with a relaxed grip, not a death grip. The idea is to become an integral part of the bicycle, to move as one with it, legs and arms working in concert to create a stable base from which to work. Always the objective is minimizing torso movement since that's where most of your mass is located. Neutralize the torso and you free the arms and legs to control and move the bike around as needed.

The more often you come out-of-the-saddle, the better you'll get at it so start by standing on easy terrain then work your way onto ever rougher ground. Once you get all this wired - and it's not really all that difficult - you'll be ready to enjoy the ultimate mountain biking experience, single-tracking. So remember, when the going gets tough, the tough stand up.

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Profile

Ross Shafer with his son Max



Ross Shafer

"I won't ever get rich building frames; no frame builder ever does. It's one of those occupations done out of love, not for the money. So I decided if I'm not going to get rich, I might as well enjoy building frames. That's why I build custom frames only."

Ross Shafer's statement is bad news for all those would-be buyers of Solita Ala Cart mountain bikes. These superb, hand-crafted production bikes are soon to be collector's items. When the last frame is sold, Ala Cart no longer will be found on Ross' menu.

Profile

That's a serious loss to the community of mountain biking aficionados who can't afford Ross's custom frames. It's a little like hearing for years about this great house specialty at a little-known Mexican restaurant near the waterfront and when, after much effort, you finally get there, drink a few cervezas and eat a basket of chips with guacamole and hot sauce then sit down to order the meal you've dreamed about for years, the waitress tells you they no longer serve it.

The ultimate crushing blow! Learning there is no Santa Claus is merely a brief fluttering of an eyelid in comparison. For anyone who's recreational focus is filled with mountain bikes, for anyone who treasures hand-built, exotic bicycles, such a calamity can be so overwhelming that the immediate response might be to get up and silently leave the premises, head shaking, eyes blank.

Don't. Sit back down, relax, smile, have another cerveza. The Ala Carte was good - no arguing that - but the Salsa menu's centerpiece as always been the custom built frame, a frame designed specifically for you. Face it, that's what you really wanted in the first place. What made the Ala Carte so attractive was the price. If you could, you'd opt for the Moto frame anyway, one built for you.

The Ala Carte took too much time to build. I found myself running around, checking on other's work, building twenty of these then twenty of those. Maintaining continuity was difficult with the less experienced help needed to produce the frames. It was a production line, simple as that. The bikes were profitable and people loved them but I didn't love building them, not under those conditions. So I quit building them.

The custom bike is Ross's strength, his workmanship the glue that holds the dream together.

The Ala Carte took so much of my time, I was losing customers. I just couldn't get the bikes out fast enough so orders started dropping. Especially road frames. People have forgotten I build road frames too. Orders for road bikes are fewer and fewer every year. Now that I've dropped the Ala Carte, my order book is filling up again. I'm hoping I can pick up some more road bike orders too.

Like building road frames. Their design and construction is similar to my Moto frames with lugless brazing and frames that are generally smaller than standard road frames. My custom stem combined with a correctly sized top tube provides the proper rider position. Some of my road customers are people who bought a Moto frame previously.

What's entailed in purchasing a custom frame? Three things: time, money, information. If you want the bike now, don't go custom. Buy a bike off the floor. Its cost is a

major concern, don't go custom. A bike designed and built for one person is expensive, always has been, always will be. Your bike has to have a pretty high priority in your life to spend that much money on it.

The third ingredient is easy. Ross provides through his authorized dealers (you can only buy a Salsa through an authorized dealer) an easy to fill out form with a variety of measurements needed. Someone at the shop will then help you measure yourself. You'll also need to have some idea of what bicycle relationships you like - handlebar/saddle spacing, saddle positioning relative to the bottom bracket, whether you prefer being stretched out over the top tube



Fillet brazing of an unpainted Salsa frame.

or in a more compact and upright position. Once that information is put together and sent to Ross, he designs the bike accordingly. Every Salsa custom frame has its own drawing; there are no stock frames from which he selects the correct one for you. Ross is the grand chef insisting every ingredient for every meal be fresh and cooked to order.

He starts at the bottom bracket, positioning the saddle, seat tube, head tube and handlebars according to your needs. Though every frame is built from its own drawing, Salsa bikes share certain characteristics: basically they're short and steep. Head angles vary from 70 to 71 degrees, seat tubes range from 71 to 74 degrees. All his bikes have short rear triangles. He also builds smaller than normal frames, compen-

sating with a higher rise stem and extended seatpost. If you'd normally ride a 21-inch frame for instance, you'd probably ride a 20-inch or even smaller Salsa.

The smaller the frame, the lighter the weight, the stiffer the structure. I've built three bikes for myself so far and each one has been two or three centimeters smaller than the previous one. My next will be smaller yet.

Salsa mountain bikes have been at times described as thinly disguised road bikes not without some truth though with today's trend to steeper and shorter frames, Ross is no longer alone in this thinking. The description is also not too surprising since Ross was a road frame builder first. According to Ross his first mountain frame in fact was nothing but a thinly disguised road bike with fat tires. It's still running around somewhere down in the Santa Cruz Mountains.

Ross is a wonderful reminder of mountain biking's roots, roots that are often lost under the flood of production machines from every major bicycle manufacturer plus an unending stream of information generated by all of the mountain biking and bicycling magazines. More than any other product or even lifestyle change, these fat tired flyers have a direct line ancestry back to the 60's and early 70's generational rebellion. They are the living legacy from the Free Speech Movement. Country Joe and the Fish, hippies and communes, Ravi Shankar, and Jimmy Hendrix balancing thousands of counter-culture, back-to-nature, stoned out freaks on electric notes that stretched into eternity. It's a background that's usually lost in the 80's hyped up marketing efforts. It's also a background Ross knows well.

He used to be one of those hippy musicians, rocking out to the beat of life. He also had this dream at the time, a dream shared by uncounted thousands of like-minded souls of the sixties - to live on the land, a part of it, growing his own food instead of cruising through super markets filling a wire cage. In pursuit of that, he hitchhiked north to Canada to join friends on a communal farm. Only it didn't fit. A communal, self-sufficient farmer was not his path. Once again, he was on the road, hitchhiking back to California where he joined a Yoga House for awhile but that didn't seem to fill his needs either.

Not that he was worried about it all. He may have been wandering but inwardly he knew it would all work out. Ross had learned at a relatively young age not to fear the future, even death. He'd already died once. Been run over by a car. That was not too long after returning from Canada.

He remembers it clearly. He was riding his bike fast, hot-dogging past slow moving cars. The accident was his fault, totally. He whipped by a car stopped at a stop sign and swung a turn right in front of a car coming through the intersection. The driver never

Profile

had a chance; one moment the road was clear, the next it was filled with Ross on his bike.

The car went right over him but not the wheels. He ended up pinned under the back of the car, twisted up like a pretzel, one leg and knee wedged up into the space between the bumper and the car. To the people who ran up and looked at him, there was little doubt that his neck or back were broken - at a minimum.

Ross couldn't understand what all the fuss was about. His hearing has a crystalline clarity and everything was happening in slow motion. He curiously watched a man run up and put a jack under the rear bumper and start lifting the car. As soon as the body had lifted up a ways, Ross's leg was released and suddenly he could breathe again. His chest had been pinned by the trapped leg and he'd been barely able to breathe. His leg fell out and he crawled out from under the car and was carried over to the curb. Everyone looked at him like he'd risen from the dead. Ross was quite calm and clear through all this then the shock hit him.

His mother had been at home and had heard the squeal of locked up tires skidding on pavement and then the ensuing thud and, like all mothers, had wondered if her son had been hit. Then she dismissed the thought. Ross was more careful than that.

The yoga he'd been doing at the Yogi House must have helped him for his body came out of the accident in quite good shape considering. He was laid up for awhile with a slight skull fracture and severe, deep bruises but otherwise was fine. Ever since, he hasn't been afraid of death. It's just one more of those things that comes along and it really isn't bad. Not that he completely understands life or anything like that but there's just this basic over-all clarity deep inside - sort of a psychic counterweight to the waves life seems to serve up. That realization opened life's doors for him. Knowing everything is eventually going to work out has given him the willingness to try anything.

In retrospect, becoming a frame builder was the only logical outlet for Ross's talents. It just took awhile to manifest itself. At age sixteen, he started working in his former scoutmaster's machine shop. He stayed there three years, in the process building his first frame, a lagged road frame, in 1976. The building of the frame was generously aided by the experience he'd picked up in a jewelry class and a machine shop class. The jewelry class taught him investment casting while the machine shop class taught him the skills he was to later earn his living from. But that was still well into the future. At the time, Ross was more interested in becoming a professional musician. Working in the machine shop helped pay the bills while he and a friend pursued a musical career. (The music ended up being put aside before he continued p. 61)



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Rails to Trails Conservancy

by Gary Sprung

Railroads once linked every city, town and hamlet in America with a vast network of steel ribbons. Total rail mileage peaked in 1916 at 254,251 and remained at well over 220,000 miles through the 1950s. The figure as of 1984 is 152,000 and decreasing every year. Though the railroads are hauling more freight tons than ever, the companies have found that they make their profits on the main lines and lose their shirts on the branches and spurs. The time when every business sought a location along a rail line is long past. Competition from paved highways, river locks, barge canals, slurry pipelines, and airlines have shrunk the rail system. Some industry analysts say the most "efficient" system would total only 50,000 miles of trackage.

What does this fact of our modern economy have to do with mountain bikers? The corridors left behind when a railroad line is abandoned are invaluable to anyone who likes trails, especially bicyclists.

In Crested Butte the single most popular mountain bike ride, the "Lower Loop," uses the route of a branch of the Denver and Rio Grande Western which once served four coal mines. When coal was king, a dozen or more steam-powered trains plied these routes daily. When diesel engines and the decline of steelmaking eliminated the value of the coal mines, the rails disappeared along with the mines. The land of the railroad right-of-way was sold to various private companies and individuals.

Unfortunately, since those old rail beds make great bike trails, conflicts between the land owners and ambitious bikers have resulted. With a little foresight thirty years ago, the disputes between recreationists and landowners could have been prevented. The routes could have been sold to private organizations or public agencies who would have managed them for public fun instead of private profit.

In many parts of the country, citizens have now realized the importance and value of preserving the continuity of rail corridors after abandonment and removal of the rails. Though the process of converting rails to trails is fraught with difficult obstacles and potential controversies, 95 routes in 23 states have been successfully converted. Most of the conversions have been in the Midwest and East, with a several on the West Coast and a few in the South. In the Rockies and Great Basin, only Colorado has rail trails.

The idea is catching on fast. People increasingly realize that saving these corridors is a now or never situation. A national, non-profit organization, the Rails To Trails Conservancy, was established last year to coordinate efforts and provide guidance to local preservation attempts. Corridor preservationists seeking information and assistance have deluged the group and they've answered the call with sophisticated guides to the conversion process.

"It is truly ironic that this country spends

millions of dollars each year building new trails systems while an already established system of trail corridors along some of our most scenic vistas is melting away before our eyes," said the Conservancy's Executive Director David Burwell in testimony before the President's Commission on Americans Outdoors.

"It's not the rails or the ties that we're interested in, it's the right-of-way," explained Peter Harnik, the Conservancy's programs director. "These 50- or 100-foot-wide ribbons of open space through cities, suburbs, farms and forests are national resources that generally cannot be replaced. Once the linear continuity is broken up by land sales or development, it's lost forever. It's like trying to put Humpty Dumpty back together."

A prime example for mountain bicyclists of the value of saving these rail rights of ways is the Buzz Johnson Trail in the Lassen National Forest of northern California. This 25 mile, rail-trail park uses the former route of the Fernley and Lassen Railroad built in 1914 to haul timber from Westwood to Susanville. Flanked by steep cliffs and slicing through lush pine forests, the trail traverses the wild Susan River past excellent swimming and fishing holes. Included along the route are two huge tunnels and eleven trestles. The trail is named after a former Congressman from the area who obtained federal funds for the trail and pressed for exchanges of land between the railroad

company and the Forest Service and Bureau of Land Management. The trail is unpaved and accessible only to people on foot, horseback, and mountain bike. Motorized vehicles are prohibited.

Most rail-trails have been paved or graded with fine gravel and are of less interest to fat tire cyclists. But asphalt is expensive and the rapid rise of mountain biking popularity may eventually eliminate most of the demand for pavement or gravel, thus cutting the costs of rail-trail establishment.

The Rails-to-Trails Conservancy (RTC) has criticized three federal agencies - the U.S. Departments of Interior and Transportation and the Interstate Commerce Commission (ICC) - for the inadequate steps they have taken to preserve rail rights-of-way. The Conservancy has filed a lawsuit against the ICC in a federal appeals court in Washington, D.C. for its failure to enforce the "railbanking" provision of the National Trails System Act of 1983. In Section 8(d) of that act, Congress declared a policy "to preserve established railroad rights-of-way for future reactivation or rail service, to protect rail transportation corridors and to encourage energy efficient transportation use." The section goes on to state that if a state, local government or private organization will agree to assume full responsibility for management, legal liability and taxes on former rail routes, then the ICC "shall not permit abandonment or discontinuance."

The ICC interpreted the act to mean

that rail lines should be banked only if the abandoning railroad company voluntarily agrees. RTC argues that Congress clearly meant to require banking.

The railroad industry has opposed the RTC lawsuit with claims that mandatory railbanking of corridors amounts to unlawful confiscation of private land. RTC hopes the suit will be decided before the end of 1987.

Despite Congress's passing of the trails act, section 8(d) does not mention recreation as a purpose. The idea is that railroads may have more value than present economic uses suggest and that the nation may one day wish to reestablish transportation corridors. A precedent for that idea is today being set in Aspen, Colorado, where a trails-to-rails conversion process is underway.

When the Rio Grande abandoned the last eight miles of its Aspen branch in the early 1960s, Pitkin County persuaded the company to donate the property to the local government. The county established a recreation trail extending from downtown Aspen along the Roaring Fork River to the small town of Woody Creek. Now a private entrepreneur wishes to reestablish passenger trains from Denver to Aspen using the old route. The proposal created intense controversy in Aspen with significant opposition coming from property owners along the route and limited opposition from the hikers, joggers, and mountain bikers who use the trail. The Roaring Fork Railroad

Company promised to rebuild the trail along a parallel route and in a vote last November the public approved of the idea overwhelmingly. The railroad company is now going through the local planning process, renovating 45 railroad cars and trying to raise the \$18 million in startup costs. It's an important experiment testing the potential for profit from passenger trains.

Conversely, the controversy in Aspen also shows the value of rail trails to adjacent landowners. Are these people afraid of the noise or sight of the trains? The trains would pass by only a few times a day. The more likely source of their opposition is the enjoyment they get from the presence of an open-space corridor in their backyards and the financial value it adds to their land.

Adjacent landowners are a frequent source of opposition to rail-to-trail conversions. Usually they fear trespassers and vandalism. The conversion advocates may wish to take a closer look at the Aspen situation as a possible tool for persuasion. A study by the Seattle Engineering Department of the Burke-Gilman rail trail has shown a definite increase in the property values adjacent to or near the trail. Homes within two blocks of the trail were significantly easier to sell and sold for an average of six percent more than would be expected otherwise. Property crime rate along the trail was less than the rate for the neighbor-

continued p. 61

Be A Fat Tire Survivor

Snacking along the way keeps one fueled for whatever may happen.



by Bodfish

Finally, you manage to dislodge a string of free days from your work-a-day, bill paying, "get ahead" lifestyle. What are you going to do?...Call one of your loosely employed adventure buddies, (always explore the backcountry with at least one companion.)

"Hey, what d'ya say we throw the dirt bikes, camp gear and some grub into the back of my Cherokee and head up into the Sierra?" Any sierra will do.

She'll shoot some questions back at you, "How cold is it going to be up there?"

Could be nippy, as much as thirty degrees colder at night than most lowland locations. Tell her to bring her best sleeping bag and a small tent for keeping the wind chill and other "critters" from crawling into the bag with her.

"What should I wear?"

Tell her wool. It may be heavier than Poly-Entra-Life, or whatever, but it insulates/holds in heat even when wet - a behavior the plastics may never duplicate.

"How will we know where to ride?"

Buy a guide book or get advice at the bicycle shop nearest your target area and pick-up a map or two at the local ranger station. Confidence in your "sense of direction" will take you a long way and a degree of self-sufficiency is admirable but don't launch an expedition into the outback without U.S. Forest Service maps, U.S. Geological Survey topographical maps and maps, if available, from a regional bike shop. These and a compass may be what saves your buns when you get turned around out there...and believe me, at some point you will get turned around.

If you're driving to the mountains (It just wouldn't be mountain biking anywhere else) the quickest and surest way to get in the saddle is to choose a basecamp, not too close to a National Park or wilderness area (beyond temptation) so that you can ride day-long loops or clover leaf loops in every direction from camp.

happening so they don't have your vehicle towed away), and plot a loop that you can complete in four days from where you're parked - then give yourself five days to do it. Chances are it's gonna take a lot more effort to execute than you'll guess by looking at the maps. If not, you will have an extra day in there for some serious loafing or hiking.

Now that you're out of the car and cinching down on the toe straps, think for a minute - do you have a few tools with you, something to repair a broken chain or to adjust sloppy brakes or an errant derailleur with...Hmmm...maybe you should have taken that bicycle repair class offered last month at the bike shop. A small tube or can of chain-lube will most likely come in handy at some point during your ride. If you're using the basecamp method of bike touring you'll be able to leave the larger tools, extra pedals, tub of waterproof boat trailer bearing grease, spare spokes and possibly a spare freehub in the trunk of the car.

Water? What are you going to do about water when the two bottles under you are empty? You might ask someone at the ranger station about springs along the route you've plotted. Springs are often designated on the U.S.G.S. topo and Forest Service maps, however, many of these may be contaminated, seasonal or permanently dried-up. It's best to talk with someone who's been in there recently. In fact, show a ranger the route you have in mind and tell him when you expect to return.

If there is a spring along your route what are you going to do with it before you drink

Reading the Backcountry Maps

Map reading is tough enough but applying a web of squiggly lines on a piece of paper to the turf on which you stand is no small task. There are a few folks who possess the mysterious "sense of bearings" that make map interpretation seem effortless, even though, you can't possibly look at the map too much when fat biking in the outback.

Forest Service maps are covered by a grid consisting of one half inch (or less) squares. These squares also appear on the U.S. Geological Survey maps. They are one inch across on the fifteen minute series topographical maps and two inches across on the seven and a half minute series maps. Each of these squares represent one square mile. These one mile across sections will aid you in calculating distances between springs, camps and intersecting roadways. Look a little closer and see that these sections (squares) are numbered up to thirty-six (36 squares per township). This numbering system is the same on all government maps.

As you wander the forest you'll notice the yellow or silver locator-tags (called K

tags) nailed five to six feet high on occasional tree trunks. These tags often have a nail driven into the section number that corresponds with your present location. The nail or hole is located in the exact area of the square where you stand. Many K tags have been vandalized by gun-toting "woodsmen," however, if you get up close you can usually determine the difference between a single nail puncture and the several smaller dents and holes made by the plinker's BB's.

All Forest Service maps have township numbers running vertically at the edge of the map and range numbers running horizontally along the bottom and top. These numbers (followed by a letter denoting direction) are also scratched on the K tags.

The green portions of the map identify Forest Service land (We all own this property, right?) while the white spaces are privately owned. If you run into gates where the road crosses the white section of a map and the gate is locked (or the property is posted with NO TRESPASSING signs) and you cross the gate, you are breaking the law. If the owner asks you to leave and you hesitate, you can be arrested and may have to pay a hefty fine.

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it? Boil it, filter it or treat it with chemicals but don't guzzle it until you've exterminated or evicted the tenacious little parasites that would love to set up shop in your intestinal tract.

While we are on the subject (the digestive tract) you will be wise to carry a wad of toilet paper and a pack of water-proofed matches. Not enough has been said in the literature about what to do with your feces when you're miles from the nearest commode or cafe restroom. The best you can do to insure that more streams and springs aren't infected with harmful bacteria and parasites is to find a location at least one hundred feet from water and dig a hole at least six inches deep and deposit your feces there (burn the toilet paper as thoroughly as possible, and bury. Throw some leaves or pine needles over the excavation site so that animals are less likely to find it and dig it up).

Finding your way through the web of National Forest roads, fire lanes, cattle trails and logging spurs is no easy task. One of the first things the surviving mountain bicyclist understands is the importance of climbing to the top of the nearest ridge or lookout for a few minutes of reconnaissance. It's here that you attempt to identify the various creek drainages below you and match them to corresponding peaks and ridges. (peaks with lookouts are the easiest to spot.)

You can also use these peaks, ridges, lookouts, lakes and shadows to orient your map toward north. A compass will work nicely for this purpose too, (remember,

magnetic North is different than true North. At the bottom of your topographical map the degree of adjustment necessary for the area is indicated.)

Many times, how long you survive in the outback is more a matter of comfort than anything else. Be sure to bring along a cushy sleeping pad, a couple pair of socks (keep

dry socks on your feet), and toss in an extra pair of riding shorts or better yet, a pair of short's liners - I've been using all-cotton boxers as liners for the last one hundred thousand miles and can report complete success at avoiding rashes, blisters and boils. (Yes, I know, it's about time I change 'em.)

Another way to stay relatively clean on a tour is to live by the Bodfish touring motto: "Swim-a-day." We've jumped in some mighty icy creeks (the coldest being Snowshoe Creek in British Columbia) in the name of hygiene. You never regret it but stripping down on the bank of a 45 to 50 degree creek for a brief baptism is mentally one of the toughest hurdles you'll encounter on any journey. The secret is to quickly shed and plunge, think about it afterward.

If this sounds a bit too earthy for your tastes (there are those among us who have vowed never to sleep on the ground again), you may wish to basecamp at a Bed and Breakfast or a Hot Springs Resort (this way you can also avoid the cold dip). The fact remains, unless you are with a guide/mechanical type you'll need to learn how to read the land, the maps and the weather as well as how to trouble-shoot and repair the glitches that often occur in your machine beyond the ten mile mark (walking range) on any outing.

The steps necessary for a summer of successful backcountry journeys are simple and quickly become routine. The most important may be the first I mentioned...Take a Buddy. Sure, you're one tough and competent dude (or dude-ess) and you may have already survived ten years of solo mountain biking in the South American Rain Forests but the time will come when you need a partner to get you out of a backcountry predicament.

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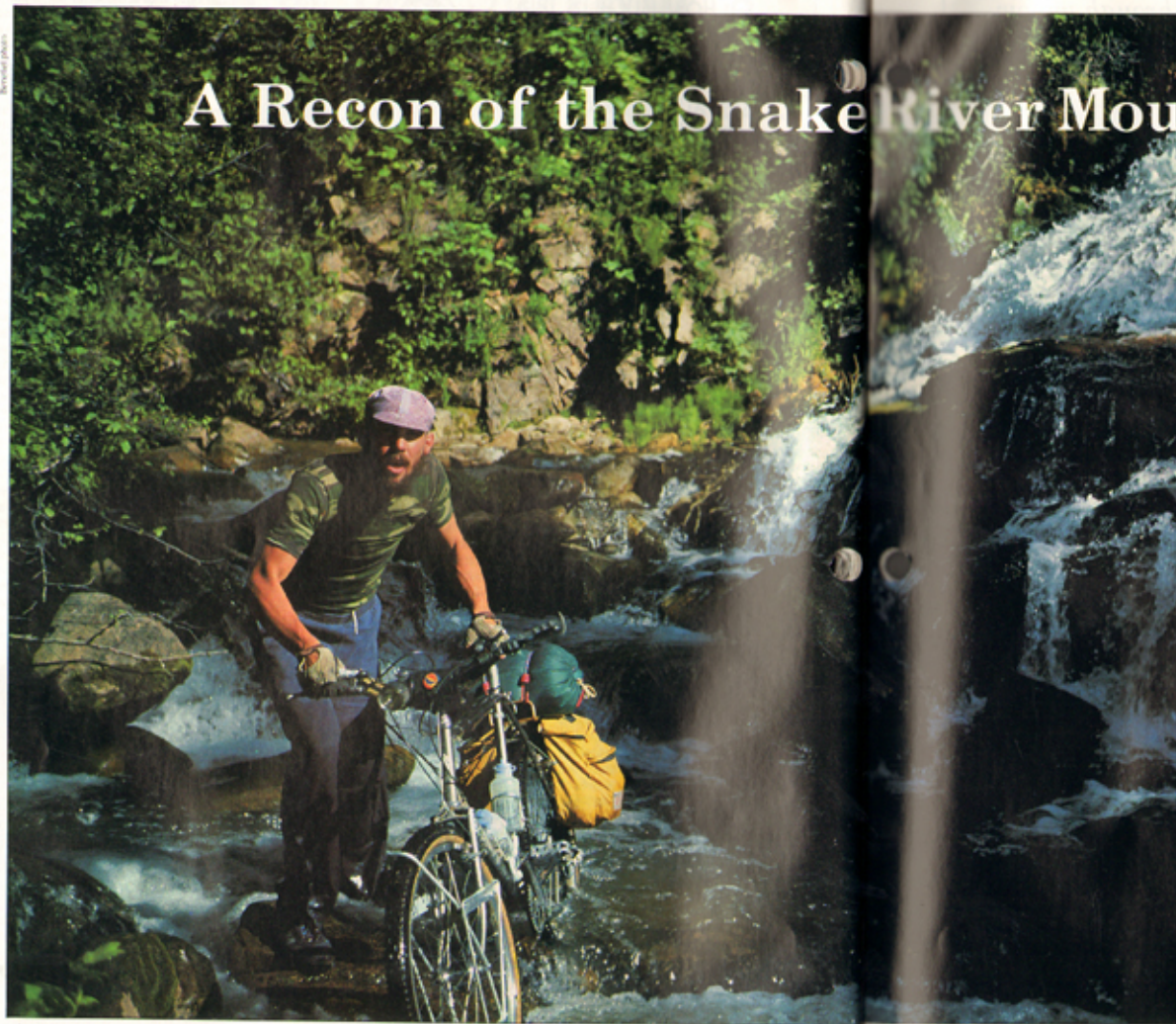


NEW LOOK

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A Recon of the Snake River Mountains



A survivor of another Abuse Tour.

by Keith Benefiel

Adventure (ad-ven char) n. 1. A risky undertaking. 2. An unusual or suspenseful experience.

There is always an element of risk in mountain riding, a risk that can be lowered by an experienced and competent rider on a mechanically sound mountain bike but never negated. Of course the relative risk, hazard, difficulty, etc. of any given tour can easily be increased by unexpectedly radical terrain, adverse weather conditions, large carnivores, or any number of other things which conspire to make the outcome of the undertaking uncertain, keeping the rider on the edge of the saddle. These are the trips I like best, the Abuse Tours.

The downstream ride began on good trail through willow meadow but any visions I had of coasting down the last twelve miles were dashed as the canyon showed its true character.

I don't have to go far to find them. Our cabin sits at the bottom of Teton Pass, which separates the Teton and Snake River mountain ranges of Northwestern Wyoming. While the Grand Teton are the drawing card for millions of visitors including thousands of back-country travelers, only a handful of hunters and cross-country skiers ever really penetrate the wild country of the Snakes.

Two years previous, my wife and I did the first cycle-crossing of the range via the saddle between Taylor and Big Elk Creeks. The tour down Big Elk was marked by the trail vanishing for ten miles plus some twenty odd creek crossings. Progress was hindered by bikes heavily laden with camping gear and cooking gear and food but we were certainly glad to have them on bivouac.

There was one more obvious route over the range which looked negotiable by mountain bike (on the map). By traveling fast (which means solo) and light, carrying only tools, rain clothes, and my "blue bag" with the barest survival gear and space blanket, I planned on a seven hour, thirty mile "abuse tours recon patrol". Diane was to meet me on the other side at trail's end with the Volkswagen to avoid a fifty-five mile paved ride back over two mountain passes.

Hindsight tells me that a long leisurely breakfast and eleven o'clock start was probably a mistake, but that's what makes adventures.

A five mile spin up the pavement of Fall Creek Road brought me to the Mosquito Creek Canyon logging road. Gradually ascending this hard packed dirt, I passed deep forest and meadows with big pad ponds alternating with clear-cut and charred slash pile. At Elk Gulch I left the road, which continues up valley five more miles, and crossed the creek at an old washed out log bridge, preferring the virgin timber stands to slash and burn for scenic value.

From the ex bridge, an overgrown jeep trail led a mile up to a seasonally abandoned hunting camp, a ghost town in the summer wilderness. This marked the beginning of the pack trail winding its way up, contouring around steep sidehills a hundred feet above the creek, now just white noise - invisible in the heavy timber. Major game trails cross and spur off the main route, most indistinguishable from the other, but map, compass and memory from another trip kept me on route to Mosquito Pass, at 8500 feet, an opening and trail junction. I'd been this far before and was familiar with the location of a spring where I refilled three 27 oz. bottles and had a bite and a pipe.

I felt a bit weak, but dismissed it as being from the effort of jamming up through the heat. I'd recover quickly.

The junction was three way, back the way I had come, up to the right or up to the left. Having already had enough "up" for awhile and not wanting to return, I lowered my seat and dove straight over the pass into the bush down a thin game trail. The map showed the trail I had left as looping back down to the creek a mile down.

The game trail petered out at an unoccupied "spike camp" hacked out of the woods. After scouting unsuccessfully for the main trail, I shouldered my machine and bushwacked up to the ridge top where the trail was supposed to cross. There it was.

By now I was getting weaker, which seemed unusual. I was in what I considered good shape and had done tougher trips this summer. I was also committed, the return being longer than continuing.

Across the Wyoming/Idaho line now, I flew down a good trail

following an unnamed tributary of the East Fork of Palisades Creek. The downhill rush bottomed out as I left the thick trees and cruised into the sage and boulder strewn creek bottom of the East Fork.

The East Fork itself traversed a canyon too steep for trails, so my way lay over one more pass, a steep mile and a half which would drop me to the drainage of the North Fork of Palisades Creek down which the remainder of the route went.

I found myself laboriously pushing my bike in places I should have easily managed in my 24/34 granny. By the top of the pass, I was exhausted and semi-collapsed against a giant white pine, a true grandfather tree to which was nailed a sign: Long Pine Pass.

I barely had any appetite for the last of my food. This was unusual as appetite was something I usually never lack. This and my now reeling weakness led me to believe that I was suffering from the rapid onset of one of those body-slam types of flu. I had heard it was "going around." Lovely.

It was a rough boulder hop and rut slide down the horse trail to the creek and blasting across in a spray of cold water refreshed me. I revelled in a spot of sun before it disappeared behind Thompson Peak looming above on the west.

The downstream ride began on good trail through willow meadow, but any visions I had of coasting down the last twelve miles were dashed as the canyon showed its true character. As the creek wandered back and forth and the canyon narrowed, creek crossings became frequent to avoid impossibly steep side hills. Progressing down, more tributaries came cascading from steep rock slopes to swell the flow of Palisades. Each crossing was a little deeper, a little swifter. After the second ford they were unrideable. After the tenth, the waist deep torrent was almost unrideable.

The steep canyon walls, cleft by waterfalls, were spectacular but I was oblivious to the scenery. Instead, I was engaged in what was beginning to be a survival struggle.

Finally the canyon opened to a wide meadow. Cow moose and calf took their leave as I came on the scene. To reach the meadow I had to cross the malevolent creek once more. The sheer rock buttress I faced left little choice.

Fifteen feet downstream, the not inconsiderable flow of water roared over a log and brush dam to plummet over the rocks twenty feet into a pool. No mistakes were allowed. A bike length into the stream and the water was breaking over my chest. The cycle, which had been my upstream brace, suddenly became buoyant, slamming into me. The current pinned me between cycle and the sharp sticks of the brink. After a long fight, I extracted myself and machine and lay on the shore, heaving breath, totally soaked, asking myself, "Am I having fun yet?"

I vowed that if one more crossing presented itself, I'd set up a space blanket lean-to, build a fire, and dig in. The thought didn't particularly appeal to me but another swim appealed less.

It was getting dark and beginning to rain. I had ridden off my last map...ah, adventure.

Across the marshy meadow, I climbed up to some higher ground and found a trail. A major trail. With signs. AND A BRIDGE!

The bridge was literally the last thing I saw. The overcast night sky combined with my being in the trees and deep inside a canyon made for visibility usually found in deep cave systems. I followed the trail only by bashing into the logs and rocks to each side. I

continued p. 60

See Schappert



Don Bank enjoying a cruise through the Vermont countryside.

Touring in New England

by Nancy Schappert

strung along the roads.

Pittsfield is a classically New England village, picturesque in the best Wyeth sense and home to some three-hundred inhabitants and imbued with a tangible peacefulness. The village is protectively hedged in by the Green Mountains whose old, rounded hills keep the summers mild and the winters brisk and are all but synonymous with "Vermont". Our first deep breath of that clear, cool Vermont air immediately dissipated any residue "city-worries" we might have drug along. This historic mountain hamlet has one country store and a gas station plus the expected white clapboard homes. All surround a village green complete with flagpole and bandstand. This is "Hometown, U.S.A."

Our destination was the Pittsfield Inn, located right on the village green. We pulled up to the Inn and instantly knew everything was going to be wonderful. Even in our most vivid dreams, we couldn't have imagined a more perfect place to experience a New England vacation. Everything was exactly as I had imagined it would be only better.

The Inn was a three-story, white clapboard house completely refurbished to pristine condition. This was our home for the next three days, physically, mentally, and spiritually. Colorful hanging baskets and

wicker furniture adorned a porch running the entire length of the house. Acres of lush green lawn invited us out for leisurely strolls or games of croquet. Lawn chairs came complete with an afternoon newspaper, happy-hour beverages, and hors d'oeuvres.

My sister and I had come to Pittsfield to experience mountain biking Vermont-style and as I got out of the car and looked over our surroundings, I felt like I had stepped into a Currier & Ives painting. The front door opened and out stepped the innkeeper, Tom Yemmerell, with a warm, enveloping welcome that made us feel part of the family. He then led us into the house to meet another biking guest and to show us our rooms.

An almost overwhelming feeling of nostalgia swept over me as I stepped through the door and glanced around at the dining room, parlor, and spacious staircase. The beautiful woodwork and even the smells carried me back to my childhood and vacations at my aunt's sprawling, New England home. I found myself looking down the hall expecting to see her walk out, arms opened for her nieces to run into them for hugs.

I stepped into the parlor and blindly followed Tom to meet our fellow cyclist and slowly returned to the present though the mood never really departed.



Tom Yennerell (front), owner of the Pittsfield Inn, and Peter Hike (background) working up an appetite for dinner.

We climbed higher and the meadows gave way to birch and pine trees. We passed old farm houses and New England saltbox houses.

The rooms had been newly redone to successfully capture an aura of timelessness. The works of local artisans adorned the walls while the rooms were dressed out with lovely antiques. Filling my senses were a potpourri of bright wallpapers, quilts, and fabrics. My bed was just like the one my aunt had, big and fluffy and covered with a patchwork quilt bedspread. Large windows looked out over the lawn at breathtaking views of the surrounding hills.

After finally settling in, we went for a short ride before dinner. We needed the exercise to clear our heads after the hours of driving and absorbing so many impressions and memories. I also wanted to get acclimated to the countryside just a bit since the morning would find us on our first "official" ride and I didn't want to be bringing up the rear before we even started! Tom pointed us in the right direction, up past the company store and out onto a jeep road.

The hills invited us on, past lush fields of daisies, meadow grass, and flowers. We climbed higher and the meadows gave way to birch and pine trees. We passed old farm houses and New England saltbox houses. After about forty minutes of a gradual uphill, we stopped to contemplate "world affairs" beside a pond stocked with fish. I lay back in the grass and imagined David Thoreau may have felt a lot like we did at that moment.

Time passed unnoticed until we reluctantly got on our bikes for a great downhill ride back to the Inn and dinner. Our cheeks rosy from the cool Vermont evening air, we changed and headed down to the dining room. Immediately upon crossing the threshold, my mouth started to water. Tantalizing

aromas wafted out from the kitchen and my raging hunger made itself even more known. For a moment I found myself heading into the kitchen to taste things on the stove before suddenly remembering where I was.

The gourmet cuisine was as exquisite as the Inn is picturesque. Every course was a symphony in flavor, right down to the home-made desserts. We then retired to the Inn's tavern (formerly the living room) for a taste of the local flavor. The Inn has one of the few liquor licenses in town so in the evening, the parlor becomes a local's meeting place to swap stories and weave tall tales. It was quite an experience to hear them tell of their adventures.

The next morning we awoke to a crystal clear, sunshiny morning. We quickly got dressed and headed down to breakfast, wondering if breakfast would meet the standards set at dinner. We weren't disappointed. Choosing the cold option, we were served homemade croissants, granola, fresh fruits, juice, and coffee. Everything was so good that if my sister hadn't gotten me up and out, I might still be there eating!

Bikes and riders were loaded into a Bronco and driven to our starting point, a jeep road winding past an old logging camp and cemetery. After half an hour, we turned onto another jeep road, this one overgrown with lush green vegetation.

This particular ride was pretty technical and though the scenery was striking, I was concentrating more on staying with the bike than flinging away memory shots for later. Parts of the trail were so overgrown, we were literally hacking our way through! It

was truly an experience to remember. I managed to stay with the group throughout even though at times doing so was questionable. The group was really fantastic and everyone helped each other through the rough stuff. With our bond forged, we headed home with an appetite worthy of the dinner that awaited us.

Up and out early the next day, our group was a little larger because Tom had invited some of his local buddies to accompany us on our two-part mountain bike excursion. We rode all over the countryside in the morning, our eyes devouring some of the most spectacular scenery I have ever witnessed. Picturesque farms and houses dotted the landscape with the most gorgeous vegetation anywhere on earth. The air was cool, perfect for riding, and the morning dew had left a glistening sheen on everything. I thought about pinching myself to be sure I wasn't dreaming but then the hills brought me back to reality as I found myself huffing and puffing to get up them. The route made a circle that brought us back to a scrumptious tail-gate picnic lunch.

After lunch, we divided up into two separate groups, the "cruisers" and the "bruisers." Being a glutton for punishment, I joined the "bruisers." We rode, pushed, grunted, and snorted to the top of this particular hill where I found myself at the head of what turned out to be the longest screaming single track through the woods I have ever ridden. I stayed on the bike but there were quite a few questionable moments as I bounced over logs, splashed through streams, and ducked under trees. I must have enjoyed it though because when we reached the end, I was ready to do it again!

The sunlight was fading fast as we regrouped and headed back to the Inn for cocktail hour. We were psyched! I've found in the past that nothing cements a friendship quicker than a good mountain bike ride and these Vermont adventures didn't let me down.

We were leaving the next day; it was time to return to the "real world." I couldn't believe how fast the time had flown by nor how much we had accomplished in just a few days. We'd arrived tired and we were leaving refreshed and revitalized. Somehow, after our stay in this country inn, the world just didn't seem so intimidating.

We left with smiles on our faces and tears in our eyes, proof of our mountain biking triumphs. The friends we left behind at the Pittsfield Inn are incentive enough that someday I shall return and the next time, I'm going to ride those hills to the top!

*For more information on these Vermont Mountain Bike Tours:
Contact - Tom Yennerell, Pittsfield Inn
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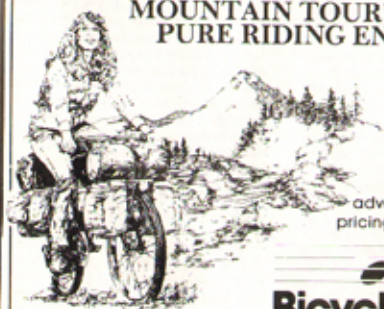
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by Sally Burkholder



Crystal Mill along the Crystal River upstream from Marble

No Access to Marble

Ten days for a bike tour—let's go to Colorado. That was our decision last November. Veterans of many summers of bicycle touring, we wanted to try a tour on our mountain bikes and Colorado seemed like a good location. We've toured in Alaska, Maine, Nova Scotia, Ireland, the Pacific Northwest, and Canada so we were ready to try mountain biking in Colorado. We knew that jeep roads through the mountains and ghost towns were almost limitless and we knew breathing would be difficult for our sea level lungs.

We seldom plan specific routes prior to a tour and this trip was no exception. We arrived in Denver and found that the only transportation out of the city that day was to Loveland. That's where our tour started. We were on the road by 8 a.m. the next day and climbed 3000 feet. Our legs and lungs survived day one, and day two took us over Trail Ridge Road with a high point of

12,183 feet. That was a bit of a challenge for two bodies less than 48 hours from sea level living. Lots of rests, lots of water, and lots more rests got us over the top to a great downhill ride.

While our bodies had a good workout, we really hadn't challenged our mountain bikes. All the riding so far was on good pavement. We studied the maps and found a route for our tour along the western slope of the continental divide. We chose roads that took us through Granby, Kremling, State Bridge, and Wolcott the next day. It must have been the hottest day of the summer, and we encountered dirt roads, construction, and a five mile hill climb before a final glide down to Wolcott.

If you've ever travelled from Vail to Glenwood you might have noticed Wolcott. It's a wide spot on the old road, off the main highway, with a general store across the street from the bridge. I'm not sure what else the store has for sale but you can buy grape popsicles at

2 for \$1.28 and that includes tax. We sat in the shade of the building and downed enough popsicles to spend \$3.84, and then felt that we might survive the heat to see another day.

In the late afternoon we covered up with a little more #12 sun block and continued our trip down river to Eagle where we began our first test of the "mountain qualities" of our bikes. We took a short cut to Aspen over Crooked Mountain Pass at 10,300 feet to Meredith above Reudi Reservoir and then climbed another 1,500 feet over the hills via foot trail and logging road to Lenado, Woody Creek, and Aspen. Our bikes were fully loaded with camping gear, food, tools, and clothing. We rode most of the route but found occasion to push the bikes through some mud and up some cliff like sections of the trail. Uphill really wasn't too bad but for downhill we do want to commend the folks who invented the cantilevered brakes. Downhill riding takes a lot more effort, hand strength, and guts than one might imagine. This sport is not for the weak handed bike rider who can't take a little bouncing on the downhill side. The bikes can take it; the question is can the rider?

In Aspen we decided to seek advice for a preferred route over the mountain to Crested Butte. It was June 25, and we wanted to go over either Taylor Pass or Pearl Pass. In bike shops, sports shops, and on the streets, we asked about the routes and met with a real lack of information. The advice seemed to be "there's no way, the snow will be too deep; those passes are closed until August." No one could tell us if we would face patches of snow which bikes could be pushed through or miles of waist deep snow which might be impossible to pass. The best advice seemed to be to go to the town of Marble and try Schofield Pass.

If you are not familiar with Colorado, you need to realize that the distance from Aspen to Crested Butte for a crow is 25 miles. Over Taylor Pass it is about 35 miles, Pearl Pass about 30 miles, and via Marble and Schofield Pass about 60 miles. All of these are reasonable. The alternatives include the route one might take in the winter via

Glenwood Springs, Grand Junction, and Montrose at 250 miles. It's one of those places that's just around the corner but sometimes you can't get there from here.

We took the available advice and headed for Carbonade, Redstone, and Marble. About 5 miles from Marble, the road turns to dirt and the most challenging day of our ten day tour began. We cruised up to the Marble Store and discovered that two bikers had come over from Crested Butte just a few days before. They were described as "tired out" and had only been carrying day gear. In the next six hours and 3,000 feet, I wished several times that I had only had day gear.

The first few miles were steep. It's a real thrill to push your bike up the road with your nose to the pedals. That's steep. The only positive thought was that we wouldn't have to come down that section. After passing the Colorado Outward Bound School, the road rolled a bit and riding was possible up to the ghost town of Crystal. From Crystal we pushed up another steep section and faced our first avalanche filled gully. The snow was probably 75 feet deep and covered the road and the creek and filled the gully. We pushed the bikes up and over this obstacle of about a quarter mile. Hot sun, beautiful scenery, and red koolaid snow cones contributed to our will to keep going. The second avalanche shoot was similar to the first but slightly steeper. A new technique of standing uphill from the bike, locking the brakes, taking a step and pulling the bike up to you was developed. I'm quite sure that there are enough protrusions on a bike so that it would act as a good ice ax if a self arrest was necessary as bike and rider slid down the steep snow. Luckily we did not have to test my theory.

The next section of "road" was hardly rideable. Large boulders littered the road with a sheer drop to the creek. A lack of thick air for our five-days-from-sea-level-lungs didn't help. The road finally flattened out near what appeared to be the top of the pass. The creek, however, provided one more almost insurmountable obsta-

cle. The road crossed the creek under almost four feet of water rushing to a cliff edge where it fell and ran under a snow bridge. We had two choices and neither was good. We elected to cross on the snow bridge and then traverse a steep scree field to the road. I will only say we made it.

It was 4 p.m. by the time we were across and we began riding up the road which was twelve inches under water from the overflowing creek. We broke into a beautiful meadow and approached a highway sign which we were sure would declare the top of the pass and the elevation at this point. We approached the sign from the back. The other side read "No Access to Marble."

We crossed the meadow and much to my dismay found that about another mile of waist deep snow had to be negotiated before reaching the top of the pass at 10,707 feet.

But as with all big climbs on this trip, the ride down the other side made all the climbing worthwhile. After only about half a mile of downhill snow, we came to a smooth jeep road and a long downhill glide to a

short snow slide and scenic meadow where we camped for the night. The next morning we coasted for about ninety minutes down through the scenic valleys to Gothic and Crested Butte. In Crested Butte, the mountain bike capital of the world, no one seemed to know if Schofield Pass was open to Marble!

With three days to go, we rode the long way to Gunnison over Kebler and Ohio Pass at 10,033 feet. From Gunnison we climbed back up 2,500 feet to Taylor Reservoir and then over Cottonwood Pass on the final day. Our lungs and bodies, now accustomed to the altitude, the sun, and the long climbs, rode with ease over the 12,126 foot pass and then cruised with joy for two hours down, down, over 5,000 feet to Buena Vista, Salida, and eventually back to Denver by thumb and friendly pickup driver.

There's an unending supply of great mountain biking in Colorado and not many folks really out there touring. Our best advice is to explore your own route, get off the main roads, and don't let anyone tell you there's no access to Marble.

Along with any riding in this area come the beautiful wildflowers.



Cycling in our National Parks



Grand Canyon National Park, Arizona

by Mark Reaman

Millions of people visit America's National Parks and other federal lands every year and hundreds of thousands bring along their bicycles. Citations for taking bikes into unauthorized areas vary from park to park. For example, the initial fine at Mount Rainier National Park in Washington is \$50. Last year, less than half a dozen citations were issued there.

A \$15 fine is handed out at Point Reyes Seashore in California. It was at Point Reyes

that one of the biggest mountain bike controversies originated. Mountain bike use was allowed unchallenged until 1984, when bicycle use was estimated by the National Park Service to be 300 to 400 users per week. When the Park Service moved to close all trails, more than 2,000 people signed a petition and forced a public hearing on the matter.

John Sansing, Point Reyes Superintendent, does not know how many mountain bikes use the area today but estimates that between 2,000 and 4,000 total bicyclists, mainly from the Bay Area, use the park annually.

"There are violations of the wilderness zone and a few instances of irresponsible bicyclists," he said. "However there are 59 miles of trails open to bikes at Point Reyes. We are also coordinating an inter-agency bicycle use map that should illustrate long distance loops and trails networks."

At Utah's Zion National Park, a \$25 citation is issued if caught riding on prohibited trails. Repeat offenders will have their bikes impounded and then will be turned over to the magistrate court where they can face a steep \$500 fine. While there have not been instances of repeat offenders at Zion, approximately 40 citations were issued to mountain bikers caught riding on prohibited trails in 1986.

"It is hard to sympathize with someone who says they didn't know mountain bikes aren't allowed on the trail. It is pretty obvious. Signs are posted at the park offices and at all trail heads," explained Paul Kirkland, Zion's back country coordinator.

"Most of our violations come from locals who choose to ignore the rules," Kirkland said. "It's a little cat and mouse game. I can sympathize with them to a degree but unfortunately I have to enforce the rules."

No Bikes In The Wilderness

It is the reasoning behind these rules that has the fire of controversy. The Wilderness Act of 1964 prohibits the use of mechanical transport in designated wilderness areas. The four agencies primarily responsible for managing such public land, The National Park Service, the United States Forest Service, the Bureau of Land Management and the Fish and Wildlife Service, differ slightly in their mountain bike policies but all consider bicycles "mechanical transport" and thus prohibit them from much of the land they manage.

Groups like the Sierra Club also consider mountain bikes to be dangerous to the environment and in May of 1985, the club issued a policy which puts mountain bikes in the same category as motorcycles, dune buggies, and other all terrain vehicles.

The first bikes designed for off road riding appeared in the late 1970's. Since approximately 1982, sales of mountain bikes have exploded and it is estimated that by 1990, almost half of all bicycle sales will be mountain bikes.

According to a 1985 article in Backpacker Magazine, mountain bicycles are being used to reach isolated and relatively unvisited wildlands in a fraction of the hiking time because the latest mountain biking technology makes it possible to ride fully

loaded bikes up grades as steep as 18% or more. Mountain bikes have established themselves as an alternative means of entering wildlands. This is what makes federal land managers worried.

The speed and strength of mountain bike sales have taken these land managers and rangers by surprise and so the government is grappling to deal with mountain bike rules and regulations.

What Is The Problem?

In December of 1984, a backcountry management plan was compiled for Canyonlands National Park in Utah. The environmental assessment issued with that plan states that rangers should "allow use of mountain bikes on designated four-wheel drive roads only." The report states that "although visitors participating in these activities may be displeased with such restrictions, unesthetic environmental impacts and visitor conflicts among user groups could be a problem."

On a five point scale with 1 being positive and acceptable and 5 being negative and unacceptable, mountain bikes were rated a 4 in terms of impact on visitor experience, a 3 under the categories for park operations and cultural resources and they were rated a 2 in terms of impact on biological and abiotic resources.

During a speech before the International Congress on Trail and River Recreation, Richard Spray of the U.S. Forest Service seemed to concur with the assessment that mountain bikes have little impact on the land.

"Findings so far indicate that there is very little impact from a mountain bicycle. Those preliminary findings also tend to confirm most managers' intuition. Certainly a climbing rider does not have enough power to spin the wheel and displace soil as does a motorcycle. Braking and skidding on a downhill run can cause a slight problem, but no more than perhaps a descending vibrum boot and certainly less than a horse. In wet weather, on the wrong soil type a mountain bike can cause ruts that are at least potentially damaging, however, mountain bikes are messy in the mud and it is apparent that most people stay home in wet conditions. I simply think we have bigger impact monsters to tackle than mountain bikes when it comes to physical impact," he stated in the speech.

Still, most managers of public lands continue to use the mountain bikes' environmental impact as the primary excuse for not

allowing the bikes on public land.

"With the advent of mountain bikes, the Park Service has reviewed their use from several standpoints: First, their potential impact on resources; specifically trail erosion, cross country impacts, etc. Second, the impact on the mandate to maintain the natural setting unimpaired. Third, what the impact on visitors' backcountry experience should be in a National Park and

Findings so far indicate that there is very little impact from a mountain bicycle. Those preliminary findings also tend to confirm most managers' intuition. Still, most managers of public lands continue to use the mountain bikes' environmental impact as the primary excuse for not allowing the bikes on public land.

finally the intent of the Wilderness Act for designated areas," explained Homer Rouse, Associate Rocky Mountain Regional Director of Park Operations.

The Chief Park Ranger for the Rocky Mountain National Park in Colorado agrees with the decision to limit mountain bike access to the backcountry. "In consideration of traditional values and uses, effect on the experience of other visitors plus potential adverse effects such as trail erosion—the continuous tracks caused by bicycles on steep trails become channels for water—we believe use of bicycles on trails is inappropriate," said David Essex.

"Presently we are also working to reduce conflicts concerning traditional uses, adding a non-traditional use would create further conflicts," he concluded.

"These rules were implemented to provide necessary controls for the preservation of natural and cultural resources for which we have the responsibility of protecting," said Joshua Tree National Monument Superintendent Rick Anderson. "No studies on impact of bikes have been conducted at Joshua Tree National Monument; however, abuses by bikers going crosscountry have been observed. The tracks from these vehicles do cause an increase in wind, water and soil erosion."

Another argument made to prohibit mountain bikes in certain areas is that mountain bikes are dangerous and conflict with more traditional trail users such as hikers, backpackers, and horses.

In a paper written by Scott Hawick for the Journal of Energy Law and Policy, he mentions that as early as 1981, in Marin County, California, serious injuries to hikers had resulted from collisions with speeding off-road bicyclists.

Paul Kirkland of Zion National Park feels safety is a valid reason to prohibit mountain bikes on backcountry trails. "In Zion it is more a safety factor. The trails are steep and precipitous with some pretty serious switchbacks."

"You combine a mountain bike speeding

down into a group of hikers and you have a problem. We've had mountain bikers plow into hikers or have to lay the bike down on the trail before hitting a group," Kirkland said.

During his speech to the International Congress on Trail and River Recreation, Richard Spray felt it was not worth worrying too much about mountain bike access to wilderness.

"To give you a general idea of the magnitude of opportunity for mountain bike recreation in the National Forest, consider the following: There are 342,000 miles of roads on the National Forests of which 69% or 236,000 miles are classified as 'high clearance vehicle' or lower standard. These are mountain bike trails! By comparison, there are only 90,000 miles of trail in the National Forests including that which is wilderness. All this opportunity and very few mountain bikers know about it," he said.

It Won't Get Better:

Managers of federal lands appear to think that even though mountain bikes have a limited impact on the land, it is simply better to keep them off of the public lands they manage. Their attitude is 'why open up another can of worms?' Even though studies are showing mountain bikes have a very limited environmental impact, it would still be best to ride somewhere else. The managers are not sure what mountain bikes can do and they seem to feel that too many bikers are irresponsible.

Several chapters of regulations governing mountain bike use have been reviewed, revised, and updated. Public review was completed last August and final publication of the revised regulations is expected early in 1987.

However, those rules will not change much. Bicycles will be allowed on established roads, parking areas, and designated routes if they are within areas of the park formally zoned for development and special uses.

So when visiting any public lands, especially a National Park, it is best to write to the park rangers for their specific rules regarding mountain bikes and remember that you will have very limited access to the backcountry on your bike.

*Mountain Bicycles on Federal Lands: Over the River and Through Which Woods? by Scott Hawick



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Bike Tests



Schwinn Paramount

After having just negotiated a particularly steep, gnarly climb or a fast, twisting single-track, all of a sudden riders realized how superbly the bike performed.

Schwinn Paramount. Ned Overend signature Model

Schwinn's flagship mountain bike, the Paramount, has arrived. It's both exciting and disappointing. Exciting because the bike was designed with extensive input by Ned Overend, 1986 NORBA National Champion. Disappointing because the frame is not a hand-built creation from the Paramount factory. Not that it's flawed, it isn't. It's a fine product from Schwinn's Mississippi factory but still, it's a production frame as opposed to a hand-built frame that the quality Schwinn Paramounts are famous for. But a production Paramount also has a distinct advantage: price. The frame set including headset, bottom bracket, and uni crown fork - sells for approximately \$490. This means it's possible to have a top-of-the-line mountain bike, one built out of the lightest Prestige tubing and equipped with full Shimano Deore XT gruppo (currently the rage though at a premium price) including the lightest rims mounted with the best dirt tires, for about a thousand bucks.

Here's how Ned recommends setting up a Paramount: Suntour XC seatpost, Pearl Izumi saddle, Manis stem, Salsa Motorbars, Suntour XC Comp pedals. Specialized X-26 rims with straight-gage 14 spokes (2 cross in front, 3-cross in back), Deore XT hubs, Deore XT derailleurs and cranks (round or Bio-pace. Ned generally uses round 26/36/46), either Suntour XC roller-cams or Shimano U-brakes front and rear, six-speed freehub (generally 13-30), and either Specialized Ground Control S or Rit-

chey Force tires (depending upon the type of terrain you'll ride - rough ground requires more air volume which the Ground Controls have). Set up accordingly, the bike's price would be about \$1,050 - an impressively low price-tag for a bike of this quality.

Geometry is steep: 71-degree head, 74-degree seat. Ned's objective was to place the rider in a strong position over the bottom bracket. Remember, Ned is also a top road racer - he was named to the US Road Team for the 1986 World Championships - and is famous for his hill climbing abilities - both on and off-road - and The Paramount reflects that.

He also recommended placing the front wheel well forward so riders don't feel like they're about to dive over the bars on steep descents. Consequently the Paramount has a relatively long front/center, 26.125 inches. Combined with the 17.375-inch chainstays, the resulting wheelbase is also longish, 43.5 inches (21-inch fork).

Steering effort is very light. It's quick too, typical of steeper headed bikes. Considering its race geometry, the Paramount is surprisingly comfortable. Credit for that goes to the longish wheelbase and the lightweight Tange Prestige tubing. Prestige tubing comes in a variety of gauges and the Paramount is built out of some of the lightest, and therefore less rigid, available. Ned believes too many mountain bike frames are too stiff and that such stiffness is unnecessary for efficient climbing. Stiff frames may be in theory more efficient but when riding off-road, that rigidity can be-

come tiring during long rides. The downside to a softer frame is too much flex under heavier riders. While lighter riders had no complaints about the Paramount's frame, heavy riders did.

So how does the Paramount ride? It's a bit of a sleeper. Unlike many high-priced custom frames, there's no immediate sense of a distinct personality. There's even a tendency to forget about the bike and get on with the ride. Then, after having just negotiated a particularly steep, gnarly climb or a fast, twisting single-track, all of a sudden riders realized how superbly the bike performed. It does exactly what you want it to do quietly, smoothly, efficiently - pretty much the way Ned races. That longish front end was especially appreciated during some steep downhill on Moab's Slickrock. There was never any sense of being on the edge of pitching over the bars on even the steepest descents - and the Slickrock has some unbelievably steep sections.

Climbing was where the bike shone, except for heavy riders. Fitted with Avocet Fat Slicks (2.125 version), a 24 tooth granny ring, and a 28-tooth big cog, the bike scooted up incredibly steep slopes on the Slickrock. The handling at slow speeds was impeccable and riders felt as if they could precisely thread the front wheel wherever they wanted it to go.

The test bike was equipped with Shimano U-brakes front and rear with excellent results. The brakes worked smoothly and powerfully, enabling riders to drop down the steepest pitches with only the one or two

fingers operating the front brake lever - the rear brake was barely used during those plunges. (Using the rear brake would only lock the wheel up, resulting in unnecessary skid marks on the rock.)

The only real criticisms of the Paramount were in small details such as the brake cable braze-ons. They're too flimsy and too small for oversized brake cables. Unfortunately, considering the rest of the bike's quality, the little things seemed to glare out at the world but according to Ned, Schwinn has made on-line changes to correct those flaws.

The Paramount more than adequately fills the role of Schwinn's mountain bike flagship. It could be one of the best buys on the market though admittedly a \$1,000 bicycle isn't exactly a bargain. You don't have to be an expert to enjoy the Paramount either despite its full-race pedigree. It's one very hot bike with excellent manners. To say it performs with grace in all conditions is not an exaggeration.

Marin Team Comp

Marin Cycles is a new California mountain bike company who gained immediate recognition with the addition of Joe Murray to their staff. Joe was mountain biking's first hero, a guy who won the NORBA Championship two years running, 1984 and 1985, and so dominated off-road racing that he won almost 80% of the races he entered. Not until Ned Overend came along was Joe pushed with any regularity. Last year was a rough one for him with mechanical problems and injuries cropping up plus he switched companies midway through the season. Nevertheless, any time Joe is in a race, every racer, including Ned Overend, keeps one eye out for him. He's always a threat to win.

Joe is Marin Mountain Bike's chief designer for all models including their flagship, the Team Comp. The Team Comp's geometry is strait race with a 71-degree head angle, 73-degree seat tube, 17.25-inch chainstays, and 42.25-inch wheelbase. The fillet brazed Prestige frame is tricked out with top of the line Shimano Deore XT derailleurs, crankset, rear U-brake, cantilever front brake, and hubs plus Suntour XC Comp pedals, Suntour XC seatpost, Salsa stem and Salsa Motorbar.

The bike has a personality that immediately reveals itself. The steering is quick almost to a fault. A thought is all that's needed to change directions. More than that and riders at first found themselves constantly making corrections. Yet despite that quickness, the steering effort was surprisingly heavy, possibly because of the long reach Salsa stem it was equipped with. That steering took getting used to but after some steady riding, riders felt at home with its handling. Unfortunately we were unable to

Bike Tests

keep the bike long enough to be able to experiment with different length stems to see how they affected the handling.

The steering response may have been influenced by the frame size, 19 inches. It was a tad too small for most of our riders so the front wheel may have carried more weight than would a slightly larger frame. Frame sizes come in 1-inch increments so getting a correctly sized frame is easy. A 20-inch frame might have been better for us.

This may seem strange but some of the testers (only the male riders) who rode the bike started feeling as if they were Joe himself and their riding reflected that. Rider positioning was sort of a crouched stance, like a tiger ready to explode into action. It was perfect for pounding up hills or sprinting towards imaginary finish lines. Aggressive attitudes on the Marin became the norm. This was only disconcerting during steep downhill. A distinct move back from the front wheel was mandatory. Joe can hammer down hills on this bike as hard as he goes up but not us. Downhills brought out the caution signal. This is clearly a race bike, not a cruiser.

with smooth, fillet brazing of the Prestige tubing. Fortunately, the Team Comp does not come equipped with Joe's personal choice in gearing. Having in the past attempted to ride his standard low gear of a 34-tooth chain ring and a 28-tooth cog, the presence of a triple with 26/36/46 rings and a 13-28 freewheel was welcomed. As always, the Shimano Deore XT click-shifting rear derailleur worked to perfection. It hit every cog cleanly and smoothly. The only thing we had to get used to was the very slight delay between clicking the shifter and the solid thunk of the chain landing on the next cog. The Deore XT front derailleur's performance was what we learned to expect. Shifts were flawless as long as riders paid attention and didn't attempt to force down shifts on steep hills. It still shifted, just sloppily. But that's not the derailleur's fault.

Our only complaint with the component selection, and this is as usual strictly a personal point of view and one we've regged at in the past, is the mixing of brakes. The Team Comp had a Deore XT U-brake in the back and Deore XT cantilevers in front. If



Marin Team Comp

Rider positioning was sort of a crouched stance, like a tiger ready to explode into action. It was perfect for pounding up hills or sprinting towards imaginary finish lines.

The bike's only real fault was that constant state of aggressiveness it seemed to generate. Even when cruising, riders felt as if they were on the verge of hammering the pedals. The bike wanted to go and go hard. The Team Comp is not a bike for every rider. It demands a higher than average ability level but it also responds accordingly. If that's a fault, there are quite a few other bikes out there that wished they had the same problem.

Frame quality was what you'd expect

you like cantilevers, we still feel you should put them front and rear. The 1987 Deore XT cantilevers are simply refined versions of Shimano's always fine cantilevers. They stopped the bike smoothly and powerfully but in the opinion of everyone who has tested the cantilevers and the U-brake, the U-brake is superior. Like Ned Overend, we feel that the front brake is the most important and that's where the most powerful brake should be located. The Shimano U-brake may not be in the opinion of some the

Bike Tests

most beautiful bike to look at but it does the job wonderfully and deserves to be mounted front and back.

The Marin Team Comp is not a production version of Joe's race bike with modifications to make it more tractable for recreational riders. It's full race so now you too can find out what it feels like to be Joe hammering up a hill, dropping riders in your dust.

Rocky Mountain Blizzard

We were first introduced to Rocky Mountain Bicycles during the summer of '86 with their hand-built racing bike, the Team Thunderbolt. We were impressed. The bike was hot, a regular rocket. This year we have the Blizzard.

Essentially it's the same bike as the Team Thunderbolt but instead of being hand-built in Canada out of Columbus tubing, the Blizzard is tig-welded in Japan out of Prestige tubing. The geometry is identical to the Team Thunderbolt. A 69-degree head tube is mated to a 73-degree seat tube, 17.25-inch chainstays, and a 43-inch wheelbase. The most notable feature is a severely sloping top tube. This all adds up to one high performance mountain bike, a bike with reasonably quick steering, good climbing traction, and excellent downhill capabilities.

The Blizzard is a fairly conventional off-roader. A year ago, that wasn't the case. That's how things in the world of mountain biking are changing. One year your design is on the leading edge; the next it's middle of the road. Does that mean a designer has to constantly change designs to satisfy the latest craze, in this case the trend to ever steeper and shorter frames? No, if anything, there seems to be a settling down of experimentation, even a touch of reversion with a shade longer wheelbases and slightly more relaxed angles. Evidently, mountain bikes are not turning into fat tired roadies. We're not in danger of seeing 74-degree head angled mountain bikes.

Almost everyone who rode the Blizzard liked it. The grin factor consistently registered high marks. If there was any griping, it was focused solely on the front end, specifically the head angle. In downhill and on rough terrain, the bike was a sweetheart. The bumps and gnarls of fast downhills were absorbed and passed over like so much chaff on a strong wind. But getting to the top of that hill brought out the bike's other character, a front end with a bit of a wheel flopping tendency and a steering response a tad on the heavy side. A distinct effort was required to make a change in direction. Once that effort was initiated, the bike responded instantly, smoothly. But at slow speeds during technical climbs, some of the riders complained about a lack of precision in the steering. That's also typical of slack-angled head angles and those who com-



Rocky Mountain Blizzard

In every other respect, the bike is a goer. Out-of-the-saddle climbing seemed the natural technique and the Blizzard responded impressively.

plained prefer steeper angles. Riders who were comfortable with 69-degree heads loved it.

In every other respect, the bike is a goer. Out-of-the-saddle climbing seemed the natural technique and the Blizzard responded impressively. Just as with the Team Thunderbolt, the bike encouraged aggressive pedaling, just plain old hammering on the cranks.

One of the bike's best features was the hand-built stem with a wonderfully short handlebar. Hand positioning was perfect. This might seem a small item but considering all the bikes out there with poor stem/handlebar combinations, anytime a bike shows up needing modifications in this regard has something going for it.

Components were top-of-the-line across the board - Shimano Deore XT. The seatpost was a Suntour XC with a Pearl Izum saddle perched on top, again top of the line. The wheels were hand-built in the Rocky Mountain factory with Araya RM 20 rims then mounted with Ritchey Force tires. Only two complaints surface with the components and both are pretty standard around MBM offices. First, we still prefer having the same type of brakes front and rear, either cantilevers or U-brakes or roller cams. The Rocky Mountain had a U-brake in back, cantilever in front. Secondly, we'd definitely recommend replacing the Shimano Deore XT pedals with Suntour's XC Comp pedals with clips and straps. The Shimano's are good, very good in fact, but the XC Comp's are still better and for this hot a bike, appropriate.

Most mountain bikers' focus is on the products coming out of Japan and the U.S. Well, there's another force to be reckoned with, the Canadians. We've now seen a number of very fine machines come south and we've yet to not be impressed. No doubt they're a bit more difficult to locate but if they keep putting out such fine bicycles, they'll more than likely start showing up in more US shops if only because the shops seek them out. And with the Canadian/American exchange rate, some fine buys are possible. The Blizzard may be one of them.

Fisher Montare

This is Fisher MountainBikes' most popular model featuring a tig-welded frame built in Japan to Gary Fisher's exacting specifications. Since the Montare is somewhat more expensive than other comparatively equipped made-in-Japan mountain bikes, the logical question to ask is why pay more for a bike with Fisher's name on it? Because you're often getting more bike for your dollar.

In what way isn't necessarily immediately visible. It's little things like oversized motorcycle-style brake cables with brass ferrules and teflon lined cable housing. Thicker cables may not seem like much but they increase braking efficiency by eliminating cable stretch. The teflon housing reduces friction for a lighter braking effort. The Montare also has slotted cable stops for easy cable removal plus the rear roller cam brake comes equipped with a removable brake cover for better performance in

Bike Tests



Fisher MountainBikes Montare

The Montare is a bike anyone can ride off-road and feel at home on. The handling is quick without being demanding. Its front end lets you hit rougher terrain faster than you might have wanted to.

muddy conditions.

Those are just a few of the little things you get along with Fisher's name. Those ideas are garnered from years of experience building and riding off-road machines. So while it's true you may be paying more for a bike with Fisher's name on it, you're also getting more than you might from another bike.

The Montare's frame design is conservative with its 69.5-degree head angle and 71.5 seat tube. Gary believes that recreational mountain bikers are better off with moderate angles. He feels that steeper angles require more demanding rider skills inappropriate for recreational mountain bikes. Rounding out the bike's geometry are 17.5 inch chainstays (20.5-inch frame size); smaller frames have 17.25-inch stays, larger have 17.75-inch stays), and a 42.625-inch wheelbase (wheelbases also change with frame sizes) with a 1.75-inch fork rake.

The Montare is a bike anyone can ride off-road and feel at home on. The handling is quick without being demanding. Its front end lets you hit rougher terrain faster than you might have wanted to. Just hold on to the bars, shift your weight back, and ride it through while applying judicious amounts of back brake. The bike will buck its way through without tossing you aside like a banana peel. Fishers have always been known as fine downhillers and the Montare is no exception to the rule.

While the bullmoose bars have been replaced with a made-in-Taiwan copy of the famous Salas stem, Gary still tends to set up his bikes with an overly long reach stem. If it

fits you, it's great. If it doesn't - and that is true more often than not - it's a bit of drag since that means changing stems. Bringing the hands closer to the saddle can result in major changes in the bike's feel. But Fisher has always been known for long reach stems and some things never change.

Surprisingly, the bike wasn't as good a climber as had been expected. We suspect it was caused by a short front/center and a

longish rear/center. Gary's latest competition bikes are quite the opposite with extremely short stays and longer wheelbases. But then the Montare isn't a race bike. It's an all-around mountain bike suitable for touring, hard-core recreational rides, and casual racing. The handling is forgiving enough that riders can get away with a lack of refined skills yet it still delivers when really pushed.

Obviously the Montare is no entry level mountain bike. Not unless the buyer has no doubt whatsoever that this is the sport for him or her. But for someone who's been into mountain biking for awhile and is ready to step up into more performance, the Montare is ideally situated. For the dollars, you'll get fine components and a well-built frame incorporating all of Fisher's years of experience in the world of off-roading. The Montare may be made in Japan but it's a Fisher to its core and many a rider thinks that is more than worth the extra cost. Its handling is performance oriented enough that you'll continue to enjoy it as your skills improve but it doesn't demand high skills to ride it in the first place. It's certainly one of the more fun production mountain bikes we've ridden.

Takara Highlander

If you've been around the mountain biking scene for very long, you've seen the rather astounding improvement in the bikes. The quality machine that can be bought for not much money has continued to go up every year. In '87, that means excellent brakes, sealed (semi) hubs, light rims, and still better derailleurs, click shifting units no less. Unfortunately there's also a down side



Takara Highlander

The bike's handling is fine, neutral and forgiving yet responsive enough to negotiate single-tracks smoothly.

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Wyoming Adventure

continued from p. 44

could hear the creek, the raindrops dripping by stages through the thick pine canopy, and my tires rolling over the still-hard trail but I couldn't see beans.

My weakened condition had me supporting my weight on the saddle, shuffle-rolling along. There was no question of stopping. Wet as I was, even if I could start a fire in the soaked woods, I was already hypothermic. Best be on my way. I hoped my wife wasn't frantic with worry, initiating rescue procedures.

What's in the Blue Bag?

That mountain bikes are efficient backwoods trail transportation in many instances is established. So efficient are they, that a matter of hours could land a rider deep in 'de woods. In case of mishance, breaking a crucial part of bike or body, getting lost or bewildered, etc., help is a long way off and just walking out could take over a day. On a road trip, making a phone call or sticking out a thumb can get you home. In the heart of darkness, hitching is not an option.

Best bet, as the boy Scouts say, prepared. A comprehensive tool kit is primary on the equipment list. It should be considered a bicycle component. With it one should be able to perform at least the following tasks: repairing a flat, straightening a wheel, replacing spokes, removing a broken derailleur and shortening the chain for a one speed rideable vehicle, tightening crank arms, bottom brackets, hubs, replacing a cable, tightening a freewheel cover plate. Rocks and limbs will be available for the difficult leverage and brute force jobs.

It should be a hot, short ride in the desert that doesn't see foul weather gear alone. Nine consists of lightweight nylon waterproof parka and pants, rubberized cotton work gloves and a light wool hat.

This rain gear lives in a blue river runners stuff sack, tough and, with its roll and snap-lock closure, totally water-proof. Sharing the small blue bag is the "possibles" sack, the survival kit.

This 4 1/2" x 4 1/2" cylindrical nylon bag is more than a talisman, it is the American Express card of the wilderness. I don't

I slammed into something. It was a sign with a big roof. Trail head. Next to it was our orange bag, my frantic Diane sleeping soundly in the back seat. I collapsed inside as she loaded the bike up on the rack. "Tough trip huh? If you hadn't gotten here by morning I would have worried," she said. "She knew my trips, having participated in other brutal trips into the outback, some of which included inadvertent beightings."

So, to paraphrase Rudyard Kipling: "A ride is just a ride, but a good adventure is a story."

leave home without it.

The alpha articles are those hallmarks of humanity, knife and fire making tools, in this case a full BIC lighter and steel waterproof match safe as backup. More matches are held inside the watertight with a cork.

The basic first aid kit needs to stop bleeding, dress abrasions and wounds and perform tasks such as removing slivers and easing severe pain. An "ace" bandage can help splint a break or make a sprained limb capable of travel.

The need for shelter is answered well by the 2 oz. Space Rescue Blanket, a 5' x 8' sheet of aluminized mylar, which, rigged with a 20' or 30' length of nylon cord can provide shelter from wind and rain and act as a reflector, lean-to, or wrapped around a body as a reflective sleeping bag.

Rounding out the contents of the possible's sack is one or two concentrated food bars, laden with calories, carbohydrates, and protein. I chose a flavor I'm not partial to to lessen the chance of it being consumed in a non-emergency situation. Health food stores have a good selection.

The contents of my "blue bag", like my helmet, I hope I'll never have use for but the food bar is the only unused item in it. Sooner or later I'll eat it, too.

Anyone who ventures into the woods must take the responsibility for dealing with whatever situation might arise or travel with someone who will be responsible for them.

Ross Shafer

continued from p. 37

really got involved in the bicycle industry but has recently been resurrected as an escape from bikes.)

A strange background for someone who has become known as one of the finest craftsmen around? Not really. Every frame builder I've met so far has more than just a little of the artist in him. (I use the male gender since I have never met a woman frame builder though I've heard of Georgiana Terry and her frames designed for women.) His is a proud tradition of blending art and practicality and his frames display that. Like most hand-built mountain bike frames, Ross's frames are lugless and he takes great pride in the beauty of his fillets. So smooth and even are they that he refuses to sand or file them even when someone specifically and strongly requests the extra work. After a careful examination of his fillets, even the pickiest of critics have to agree that his fillets need no further work. They are superb. The best way to see them is before the frames are painted but unfortunately that's not practical.

There's a practical reason for leaving the fillets untouched but for paint: the quality and evenness of the fillet is right there to be examined. Sanding or filing can weaken a joint by accidentally removing too much material. Undercutting of fillets during the finishing stage is one of fillet brazing's biggest problems. On a Salsa, there's never any question about the brazing; it's right there for all to see, covered by nothing more than a thin sheet of paint.

Ross also takes great pains to see that every bike he builds, no matter what size or geometry, is recognizable to any cognoscente of custom bicycle frames. The bike you order may be built for your body but you can't tell Ross how to attach the seat stays for example; that is part of his art, part of the Salsa style. And Ross takes great pride in the Salsa style. It's that kind of focus on detail that makes certain bikes classics. The one that you want to hold on to if only to pass on to your kids, the one that every time you take it out for a cruise through the hills, you know fellow bikers will look at it with fondness, even envy. That's what classics

are all about and in the opinion of many a mountain biker including fellow frame builders, that's what Ross builds.

He may be difficult to talk to over the phone and he may not go out of his way to befriend fellow bikers, but there's a reason. He's focused on exactly what he's doing and has little time for anything else. Not that he's one-dimensional; he's not. In fact, there are far more bikes running around equipped with the famous Salsa stem than there are Salsa bikes. He also has Salsa handlebars and portage straps plus a popular t-shirt with the colorful Salsa logo. All bear the Salsa stamp of quality.

He's also a husband (his wife is a graphic artist and designed the Pepperman logo) and a father. Balancing the often conflicting demands of work and family isn't easy, especially when he makes a point of delivering ordered goods on time - an often too rare quality amongst many a mountain bike frame builder. Any spare time - and too often there seems to be a severe lack of that - goes to the family. So he works hard to maintain that focus and that means limiting any interactions with customers. He prefers

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Rails to Trails

continued from p. 39

hood as a whole. That despite the 7,000 people per day who use the trail, 10% of whom are bicycle commuters.

RTC has written an excellent guide to the conversion process called "Converting Rails to Trails: A Citizen's Manual for Transforming Abandoned Rail Corridors into Multi-purpose Public Paths". It's available from the Conservancy for \$5, plus \$1.50 for postage. (1325 Massachusetts Ave., N.W., Washington, D.C. 20005; phone 202/783-0980.) RTC also publishes a legal manual, available for \$25 plus postage, and a fascinating newsletter for members. (Membership dues begin at \$18.)

Another resource particularly valuable to mountain bikers is the wonderful book "Tracking the Ghost Railroads of Colorado"

by Robert Ormes. Colorado once had a fantastic array of standard and narrow gauge railroads crossing almost every mountain range and reaching deep into the wilderness. Some of these routes have become jeep trails but many are sinking into obscurity after reverting to private ownership. Ormes' guidebook gives high quality maps, historical details and good verbal explanations, including the ownership status of the routes.

RTC also recommends "Right of Way: A Guide to Abandoned Railroads in the United States" by Waldo Nielsen (available from Old Bottle Magazine, Box 243, Bend, OR, 97701). The book covers more territory but is less detailed and explanatory than Ormes'.

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