

There were many steps in the evolution of the mountain bike. There was no single inventor.

People have been riding off-road since the advent of the bicycle, but it took the 26 x 2.125-inch "balloon" tire to really fire people's imaginations about the possibilities of off-road travel. Ever since the balloon tire was introduced in this country in the early 1930s, there have been people riding off-road on fat tires, but those groups and individuals came and went. They either weren't connected to the bicycle industry or were in an area or time with little hope of inspiring others to use bicycles in this way. Those incidents remained isolated.

It wasn't until the 1970s in Marin County, California, that a group of cyclists had the tenacity to develop their hobby into what would become a national, and later, a world craze.

In the early 1970s bicycling made a resurgence in America. The popular bikes then were road bikes, and the San Francisco Bay Area, including Marin where I lived, was a thriving hotbed of road cycling. With so many cyclists in Marin, there was a high level of idea cross-pollination and a willingness to explore new ideas. Some of us road cyclists discovered off-road cycling in the form of cyclo-cross racing, a European off-road version of road racing using sculpted skinny tires. We trained on the local mountain, Mt. Tamalpais.

Mt. Tamalpais for decades before had been host to many isolated incidences of off-road, balloon-tire use. One group of off-road cyclists, based in Larkspur, was known as the Canyon Gang. ("Gang" in the sense of a group of friends; it was a non-violent group.) John York, Tom Slizka, Robert and Kim Kraft and their buddies even held races on Mt. Tam as early as 1971. These races were untimed and often impromptu, but their riding did not go entirely unnoticed by some of us local road cyclists.

In 1974, I and other members of road-racing club Velo Club Tamalpais began showing up to our club meetings aboard stripped-down 1930s and 1940s balloon-tire, one-speed bikes. Each of us had come across our ballooners in a different way, but we had all been influenced in some way by the Canyonites. We had discovered that these old ballooners were the ticket to exploring the dirt roads and trails of Mt. Tam and environs. Club member Marc Vendetti deserves credit for much of this. He had grown up in Larkspur where he had ridden with the Canyon Gang. His crossing over to road bikes and joining Velo Club Tam in 1974 was the catalyst for our ballooners mania.

An important element of these early bikes was their downhill worthiness. While road racing emphasized our muscular strength, ballooners gave us an outlet for displaying our bike-handling skills. Downhill runs were the ultimate test of handling. With downhilling the focus, many of us Marinites resisted multiple gears, opting to keep our ballooners as original as possible and saving our technical interests for our road bikes. The off-road frame of choice became the Schwinn Excelsior, which we found to have the best downhill handling traits and to be one of the most durable.

From 1974 to 1977 Otis Guy, Marc Vendetti and I stuck it out with one gear. Our usual ride originated in Mill Valley at the base of 2600-foot Mt. Tam, with an outstretched thumb at first, gaining elevation via pavement and car. Over time we rode further and further up the mountain until finally we just rode the whole way to the top, eschewing cars altogether. After all, we were top-category road racers, and this was power training. But pushing that tall 52 x 20 gear did begin to get old.

For many Marinites, the mountain's height and the limitations of one gear, left a roving eye for something better. That something better showed up in Marin December 1, 1974, at the West Coast Open cyclo-cross race. Three racers from Cupertino (Santa Clara County, 75 miles south) showed up with old balloon-tire bikes outfitted with thumbshift-operated derailleurs and drum brakes. Among Marin people to see these innovative bikes that day were Gary Fisher, Charlie Kelly and I.

Russ Mahon of the Cupertino group had first grafted derailleurs and thumbshifters onto a balloon in 1973. The Cupertino group, which never had more than 10 riders, fizzled out shortly after the 1974 race—but not before pollinating Marin.

For many years I heard nothing more about them. I told magazine reporters about them, but without names and people to call, the story never made it into a magazine. Who were those guys? I kept wondering. Over years back I made several attempts to track them down, but had no luck. Then in 1995, a friend of Russ Mahon's, who was doing a house foundation for Tom Ritchey, mentioned to Tom that he knew the person who first put a derailleur and drum brakes on a balloon tire bike. Tom expected the guy to say he knew Gary Fisher. When the guy told him of Mahon, Tom didn't believe it until he received in the mail, photographs documenting the South Bay balloon exploits. There were even photographs of Russ Mahon and cronies Carter Cox and Bernie Mahon at the December 1974 race, including Gary Fisher aboard a cyclo-cross bike.

Fisher was later the first of the Marin group to attach a derailleur to his old bike, cobbling together a 5-speed balloon, in the summer of 1975. His immediate hill-climbing prowess convinced some others that multiple gearing was the way to go. Eventually he added a front derailleur and three chainrings in place of the single chainwheel in front, and drum brakes front and rear to improve braking. All these parts added to the heft of the bike.

While a stripped down Schwinn Excelsior balloon (sans basket, rack, fenders, "tank," chainguard, and kickstand) weighed about 45 pounds, a multi-speed, mongrel-hybrid Excelsior weighed in at about 65 pounds. Over the next few years the bikes shed many pounds as riders substituted better and better parts from the road bike world. Gary Fisher and others built up many of these bikes for friends and acquaintances.

There was a bit of a rivalry among sub-groups situated around the base of Mt. Tam, and since many of the riders were road racers, it was only natural that a race be held to prove who was the fastest off road. The first formal, timed race occurred October 21, 1976, on the east face of Pine Mountain, just north of Mt. Tam. The 2.1 mile, steeply pitched, 1300-foot downhill vaporized the old coaster brakes' grease into a contrail of smoke. Because competitors needed to repack their coaster brakes with grease after the race, the course was dubbed Repack.

Charlie Kelly and Fred Wolf chose the course and operated two Navy chronometers. Riders were sent off at two-minute intervals, the best riders going last to build excitement.

In all, 24 Repack races were held from 1976 to 1984. The fastest time of 4 minutes, 22 seconds was set by Gary Fisher. I had the most wins with ten, and the second fastest time of 4:24. The fastest woman was Wende Cragg (5:27). Cragg was the first woman rider of the group, having started riding in 1975. Her fearless downhill and unparalleled streak of riding off-road 75 days straight, left her the undisputed "Queen of Klunking" for many years. Cragg also took many of the photos of the early days of the sport in Marin.

Repack was instrumental in bringing together all of Marin's ballooners sub-groups on a regular basis. This sped the growth of the sport and the bike. Additionally, a drought in Marin in 1976 and 1977 allowed riders and spectators to maintain full interest right through the winters.

By 1977 many Marin ballooners sported the finest and toughest road bike components from around the world. Even a few motorcycle components were included. But all these parts were attached to the old Schwinn frames, which were strong only by virtue of their mass. Built of thick-wall, mostly curved, mild-steel tubing, the frames alone weighed about 12 pounds. They had been built to take the abuse of the toughest paperboy, but use on Mt. Tam and Repack by adult gonzo athletes was certainly not what Ignaz Schwinn originally had in mind. The old frames kept breaking. It was time for a new frame.

The biggest riders had the greatest need for new frames. At over 6 feet and almost 200 pounds, Charlie Kelly had broken many a frame. I had been building road frames since 1974, so Kelly asked me to build him a ballooners frame. Because of my busy road racing schedule I declined.

Kelly asked another local framebuilder, Craig Mitchell, to build him a frame. Mitchell complied. It was the first mountain bike frame built with chrome-moly tubing, but Kelly reverted to his old Schwinn after two weeks because the Mitchell frame didn't handle well.

Later in 1977, Kelly again asked me to build him a frame. This time I agreed, and built ten frames using straight, chrome-moly, air-frame tubing, borrowing the basic geometry from my Schwinn Excelsior. I completed and built up the first one in September 1977, and raced it to victory at Repack. This was also the first time a ballooners had been built up using all-new parts. I finished the other nine bikes by June 1978. Called Breezers, they sold for \$750 complete with pump, waterbottle, spare inner tube and repair kit. The bikes are recognizable by the mid-frame, twin-lateral tubes that increased the lateral stiffness of the long frames. Nine of the ten frames were nickel plated.

Most Breezer buyers had long inseams, so in the ballooners tradition of one size fits all, the seat tubes of the first ten Breezers all measured 22" to the top. I chose the long length because the longest seat posts available were only 180mm long, and I made the head tube 5 1/4" long so that in case of damage to the specially built fork, a Schwinn fork could easily be substituted. For these two reasons, the top tube sloped forward.

Up until that point the old fat-tire bikes had been known, aside from ballooners, as clunkers, bombers, or beaters, owing to their rather ragged appearance. They had all seen a lot of years, many of them in junkyards.

The Breezers created quite a stir in the Marin bicycle community. Confirmed road cyclists who had been looking askance at their colleagues' ballooners riding, took a long look at the Breezer. Here was a shiny new, 18-speed, 38-pound example of a fat-tire bike. Suddenly it became difficult to call them clunkers.

By the late '70s, the Marin mountain bike movement reached critical mass and word spread out of the county, across the country, and eventually around the world. The first national story ran in the Spring 1978 edition of *Co-Evolution Quarterly*. Other stories soon leaked out of the county. *Outside/Mariah* magazine published a story by Charlie Kelly in 1979.

It was apparent that the fat-tire bike had hit a nerve. For some the news of a bike with fat tires let the mind loose to imagine whole new areas of travel away from cars. The bike's ruggedness signified freedom. For other potential riders, the upright seating position and comfortable saddle were inviting elements missing from bikes in shops.

I could see that fat-tire bikes were going to go places, as non-cycling buddies would ask to borrow my ballooners and come back with huge smiles on their faces, exclaiming, "Where has this bike been!" The bike had a friendly nature. The upright seating position afforded by the longhorn handlebars, the spring saddle, and of course the forgiving and cushioning fat tires, put the rider at ease. The fat-tire bike had the potential to dramatically increase use of bicycles as transportation tools. Though skinny tires worked fine for me on the road, I recognized that others who were less proficient, or less hardened to skinny-tire riding, would welcome the forgiving fat tires.

With national coverage in magazines about Marin's fat-tire bikes, local bike shops started getting inquiries for bikes and parts. In mid-1978, Erik Koski of the Cove Bike Shop in Mill Valley began a mail order business called TrailMaster to sell parts for fat-tire bikes. Later that year, seeing the interest in Breezers, Erik's brother Don Koski welded together a crude fat-tire frame, using the remnants of an old Schwinn Varsity and some electrical conduit. This frame was used by Mert Lawwill as the pattern for his Pro-Cruisers, fabricated by motorcycle frame-welding whiz Terry Knight of Oakland. The geometry was lacking, but the TIG-welded frame's price was right. Hundreds of them were sold.

In September 1978 six of us Marin riders headed out to Crested Butte, Colorado, having been tipped off by a *Co-Evolution Quarterly* writer in late 1977 about locals holding a "First Annual" ride in 1976 from Crested Butte to Aspen over 12,700-foot Pearl Pass. We were floored that people were doing the same thing 1000 miles away—we had to check it out. We rolled into town only to find that the "Pearl Pass Tour" organizers were ambivalent about holding the event that year, and that the "Second Annual" had never even happened! Crested Butte almost became another isolated incident on the off-road to mountain biking. But when these Buttians, regulars at The Grubstake Saloon and seasonal firefighters, saw that our group included a woman (Wende Cragg), their machismo kicked in. Later that week, at the crack of a shotgun, six Marinites and seven Buttians were off to Aspen. Within a couple of years all but one of the seven original Buttians had moved on to new

endeavors, but the Pearl Pass Tour has continued every year since then and has contributed important momentum to the sport.

In January of 1979, I and my road-tandem partner (and balloonner buddy) Otis Guy went to visit fellow road-racer and framebuilder Tom Ritchey, who lived south of San Francisco in Redwood City (San Mateo County). Ritchey had a very successful business making single and tandem road frames, getting his start at age 14. He was also a very accomplished road racer, and had once been on the Junior National Cycling Team. He was in the process of building a tandem frame for Otis and me for our transcontinental record attempt. I wanted to show Ritchey how I wanted the tandem's twin-lateral tubes attached to the seat tube. I brought along my Breezer as an example.

When I wheeled the Breezer out of Otis's truck, Ritchey's eyes lit up. He exclaimed that he was planning to ride down the Sierra Nevada's John Muir Trail in the summer on a bike he was going to make with 650-B tires, but the Breezer's balloon tires were the way to go. The 650-B is the metric equivalent of a 26 x 1 3/8" tire, but can be fitted with a 1 1/2" tire. Good quality 650-B tires and lightweight aluminum rims were already available, and they had been used for off-road riding in England for decades by members of the "Rough Stuff Fellowship."

Ritchey had been riding off-road for years with Jobst Brandt. "Jobst Rides," as they came to be called, included riding single-track on road racing bikes with nothing larger than 300-gram, tubular racing tires (sew-ups).

Ritchey, now game for rougher riding, decided to go all the way with the larger volume balloon tire. Gary Fisher, who had earlier chosen not to get a Breezer, was looking for someone to build him a fat-tire frame. Word got back to Fisher that Ritchey was interested in making such a frame and Fisher asked Ritchey to build him one. Ritchey decided to build three, one for Fisher, one for himself, and one for Fisher to sell for him.

At Fisher's request I sent my Breezer drawings to Ritchey. I had earlier offered Ritchey suggestions for design improvements to the original Breezer design: leave out the twin laterals, use a bigger diameter down tube, and use thicker chainstays. This would result in a frame 3/4 of a pound lighter while maintaining the necessary lateral stiffness, and have ten fewer welds. I didn't think this was any great revelation for a thinking builder like Tom Ritchey.

Later in January Ritchey borrowed Wende Cragg's old Schwinn and rode Repack. He came up for another ride in Marin in March 1979. He brought with him the three unfinished frames to show his progress, and delivered the finished frames about a week later. Then Ritchey built nine more frames on speculation that he could sell them. When it became apparent that his area wasn't up to speed with the bikes, he asked Gary Fisher if he could sell them. In September 1979, Fisher picked them up. Back in downtown Fairfax, he ran across his buddy Charlie Kelly. Showing him the gleaming frames crammed into his car, he asked Kelly if he would like to go into business with him to sell Ritchey's frames. They immediately pooled together their cash at hand, all \$200, opened a bank account, and came up with a name. A client from an earlier sale, James McClean of Santa Barbara, had suggested the bike be called a "mountain bike," so they named their business MountainBikes. It was the first business established to sell nothing but fat-tire bikes. Fisher and Kelly, along with

Ritchey, more than any others to date, showed a powerful commitment to the fledgling sport and got down to the business of getting fat-tire bikes into the hands of more people.

Besides having a good idea of what they needed to accomplish, both had natural talents for marketing. Fisher had a knack for colorful quotes and Kelly excelled with the written word. Neither excelled in ^{basic} business, ^{skills} but between them, they were quickly able to expand the awareness of fat-tire bikes to what turned out to be a large and receptive audience. Ritchey had considerable frame-building experience, and was already showing a great deal of ingenuity in making road racing bikes more mechanically efficient. He was a very capable machinist and a real artisan, and he was prolific. Ritchey was able to deliver to MountainBikes quality fat-tire frames, forks, handlebar/stems, and bottom brackets on a timely basis, and business soared.

In 1980, Charlie Kelly started the first mountain bike-specific magazine. His *Fat Tire Flyer* was all alone in this field until 1985. Filled with information on events, humorous anecdotes and even mountain bike comics, it reflected and amplified the growing enthusiasm for the sport.

Unanimity on a generic name was to elude the fat-tire bike for many years to come. Fisher and Kelly tried unsuccessfully to dissuade other companies from using "mountain bike" generically. Later, they failed in a bid to trademark the name. In 1981 *Bicycling* magazine held a contest to name the bike. The winner was "ATB," for All Terrain Bike. This turned out not to be a popular choice and slowly over the years it was supplanted by "mountain bike."

Near the turn of the decade, a few parts manufacturers started to gear up to offer specialty mountain bike parts. Most notable were two Japanese companies, Ukai (aluminum rims in 1979), and National Tire (CyclePro Snakebelly tires in 1980). Wheels built with these parts reduced the weight of a mountain bike by a total of six pounds, without any loss in strength.

The next step in the evolution was increased bike production. By 1981 a few large bicycle companies were eyeing the rapidly developing mountain bike market. A lot of people were plunking down \$1400 for a Ritchey MountainBike (sold by Fisher and Kelly). While Ritchey was an extremely prolific framebuilder, at 21 years old, raising capital to expand exponentially was not in the cards yet—he was too busy building frames. Fisher and Kelly were having too much trouble with the nuts and bolts of their business, and at the time there were no large-scale, high-quality bicycle subcontractors in the United States. The MountainBike team had complete faith in the bikes' future, but they hadn't the inclination to expand it to the next level themselves. I myself was building more Breezers, but I also chose not to expand my production.

Specialized Bicycle Imports of San Jose, a bicycle parts distributor, had amassed a small fortune developing and marketing high-performance road-bike tires starting in 1976. Company founder Mike Sinyard parlayed that into complete road bikes and then in early 1981, truly displaying that he had his finger on the pulse, bought four Ritchey MountainBikes and sent one to their factory in Japan. This became the model for the first Specialized Stumpjumper, which made its debut in September 1981 in Colorado at the Sixth Annual Crested Butte Fat Tire Festival. Its first model year was 1982.

7
From then on, every name in the bike business and then some jumped into the fray. Mountain bike sales tripled every year for several years. In 1985(?), mountain bike sales surpassed road bike sales. Even in Europe, mountain bike sales eventually supplanted sales of other bikes, bringing renewed vitality to bicycle sales in general.

Rapid expansion of the sport led to many trail-use conflicts, and trails started being closed to bicycles. Education about responsible mountain bike riding was needed, and organized representation was lacking. In 1983, several of us Marin riders and Jack Ingram of the East Bay, a member of the BMX industry, founded NORBA, the National Off-Road Bicycle Association. Besides maintaining trail access, NORBA's purpose was also to be the governing body of off-road racing.

A by-product of the racing was to develop a better bike for all. Hence, one of the few NORBA race rules was that racers were to be self-sufficient, not able to rely on outside help in the event of a mechanical failure. This was to reflect everyday riding situations and the fact that there were no bike shops out in the woods.

The following year NORBA's founders, many of whom needed to concentrate on fledgling businesses, transferred the reins of NORBA to Glenn Odell of Southern California, who in 1986 sold it to the American Bicycling Association (a BMX racing organization), who sold it in 1989 to the United States Cycling Federation (USCF).

For many years cross-country racing, hill climbs and observed trials were the only racing NORBA pushed strongly, as downhill racing was seen as detrimental to trail access. With NORBA's sale to the USCF—a member of the Union Cycliste International—a unified World Championship event was organized. At the Italian UCI representation's insistence, downhill events were reinstated.

Since then, downhill has flourished, making bicycle suspension one of the hottest topics in the sport. Many ski resorts have opened up their areas in the summer to mountain bikes, and a distinct sport of downhill mountain biking looms on the horizon. Whether this becomes the predominant element of mountain biking remains to be seen. Ironically, bicycles could become just another excuse to use fossil fuels.

But given the practical nature of bicycles, so incredibly efficient as transportation tools, increased awareness of bicycles generated by the thrilling spectacle of downhill racing will probably make the general public more aware of bicycles than ever before. And it is likely this will lead to an increase in use of bicycles for transportation. This might help counter the multi-billion-dollar automotive/petroleum industry advertising onslaught, which has so permeated our society and maintains our thirst for driving day in and day out.

The phenomenal growth of mountain biking is no doubt largely due to its accessibility. Many part-time cyclists found road bikes to be frail and skittish, and the mountain bike is easy to ride on the road or off.

As testimony to how popular the sport has become since the Repack days, cross-country mountain bike racing will be included in the 1996 Olympic games, not as a demonstration sport but as a full-fledged Olympic event. And this in a record time of only twenty years from the first timed race.

End

UNIVERSITY
OF CYCLING