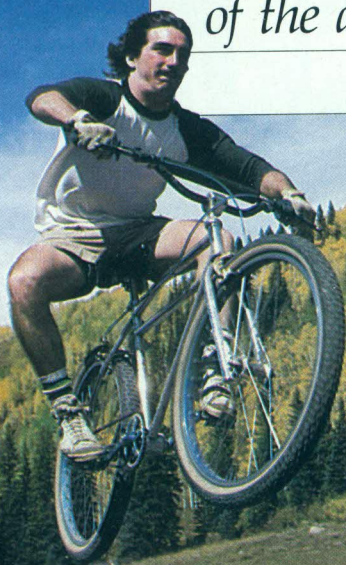


FAT IS BACK

*The triumphant return
of the all-American, indestructible,
balloon-tire bike*



By Craig Vetter

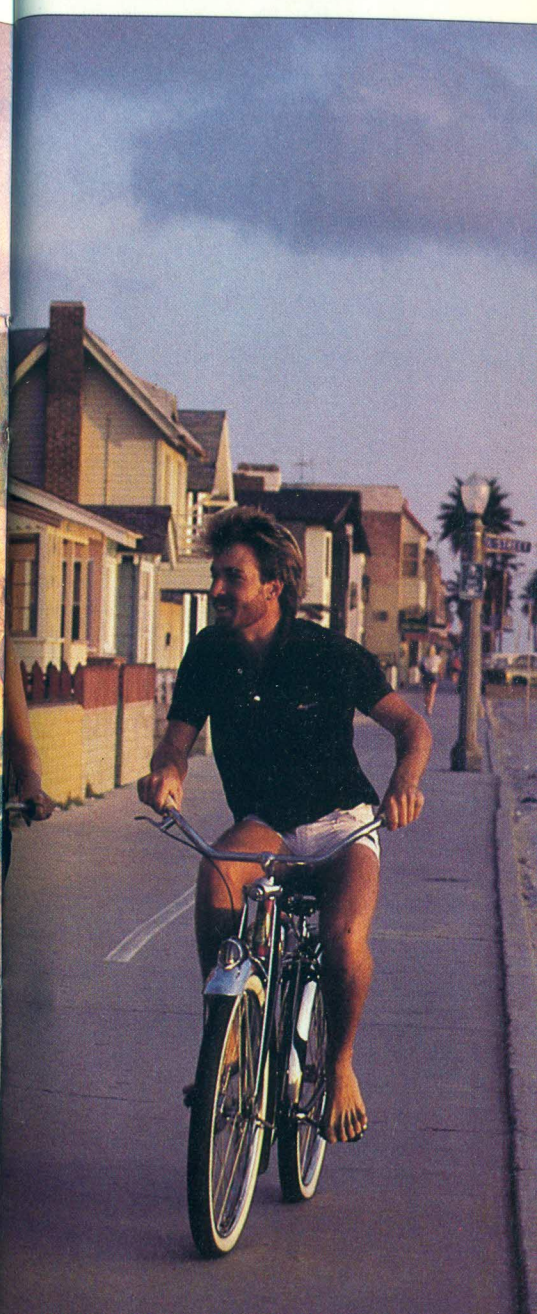
Remember those big old balloon-tire bikes that everybody rode before the spindly thoroughbreds from Europe took over? The Schwinns, the Elgins, the Roadmasters that you sat right up on like an American; the paperboy bikes, the one-speed coaster-brake mules that you could grind right through your mother's flower garden, up and down curbs, and over rocks and broken glass without blowing out the tires. Well, they're back and all over the place, some of them rescued from the junk heap and restored to their original glory, but most in a lightweight, hybrid reincarnation that's the product of ten years of dedicated fat-tire technology. If you're like me and you never did get used to the continental crouch that the road bikes force you into, or the metric sort of skittishness of

those delicate wheels at 30 miles an hour, and if you like to get off the pavement and onto the dirt sometimes, these machines are likely to get you very excited about bicycles again.

California has pretty much been the center of the fat-tire renaissance. Down south around Venice, Huntington Beach, and Newport Beach people call these bikes "cruisers" and dress them into mint condition with whitewalls, speedometers, and mudflaps, and then parade them up and down the cement strand that runs along the edge of the beach. Up north around Marin County, they call them "mountain bikes" and cast the frames out of new-age tubing, fit them with as many as 18 speeds, and then ride them like rodeo ponies on the fire roads that crisscross the flanks of Mount Tamalpais above San Francisco Bay.

CRUISER BIKES

*Balloon-tire classics
from the chrome-and-
whitewall era*



Vintage two-wheelers: A 1950s Schwinn Panther (inset). Cruisers at Newport Beach include, from left: a 1930s Schwinn Motorbike; a 1940s Schwinn DX with torpedo light; Shelby's streamlined beauty from the 1930s; the Schwinn Panther. Schwinn's 1950s Red Phantom (far right) sports a rear light that comes on when you brake.

BARON WOLMAN

BARON WOLMAN

The long, flat promenade that runs north along the sand from the pier in Newport Beach is a great place to show off anything, and along here on any weekend these days there is a steady patrol of old Schwinn and other fat-tire classics. Some are rusted and run down, but many have been restored to catalog condition, all the way to their rocket-ray headlights. And if you grew up in the Fifties or before, the sight of a Black Phantom rolling toward you with its chrome fenders, spring forks, and fake gas tank with the horn inside will jerk you back to your kidhood like almost nothing else.

The new appreciation of these bikes began around Newport Beach in the early Seventies, but Ignaz Schwinn started the whole thing in 1934 when he introduced the Aerocycle, a bike with a frame that suggested an airplane fuselage. A Schwinn ad from that year described it as "Another basic and radical improvement in strength and beauty in streamline appearance." The bike had two-and-an-eighth-inch tires—an idea that Schwinn had brought back from Europe in 1933—and the Aerocycle began a tradition in which American bicycles took their design touches from automobiles and their

names from fighter planes, trains, and even ships. Through the Thirties and Forties, Schwinn and his partner, Adolph Arnold, came up with new models every year or two. The Aerocycle was replaced by the Autocycle, which was replaced by the Excelsiors, and then by the flashier Wasps, Phantoms, Panthers, and Spitfires of the Fifties. Competition was robust in those years, but Schwinn ran an aggressive advertising campaign designed to make every kid who didn't have one of its bikes feel like a wimp. It worked, and in time Schwinn took a huge share of the market and sold millions of these bikes along with a lifetime guarantee. Deluxe models came in 14 colors, including two-tones.

Most of them have been lost by now, taken for scrap during the Second World War, or thrown out when the kids grew up or when the racing-bike fever of the Sixties hit, so it isn't easy to find the parts to restore a cruiser to original shape anymore. Girls' bikes from those years—like Schwinn's pink Hollywood—are generally easier to find than the boys' models, because girls didn't ride them as much or beat them up the way the boys did. In my neighborhood, when you got a new bike you immediately stripped it of any hot-dog parapher-

nalía so you wouldn't be called a cherry. These days, for the most devoted of the cruiser collectors, it's exactly the doodads one threw out—hand grips with streamers, fighter-plane decals, front plates, chain guards, front-hub fold-down footrests for riding friends on the handlebars, even boltheads with AS (for Arnold/Schwinn) engraved on them—that are prized most highly.

Prices for these cruiser bikes vary wildly, of course, depending on their age and condition. If you get lucky you can pick up an old beater for almost nothing, but if you want one that looks like a brand-new cheeseburger with everything on it, the asking price is likely to begin somewhere around a thousand dollars.

About the same time the old bikes began to reappear in the beach towns of Southern California, a loose group of cycleheads in Marin County were beginning a less gentle experiment with ballooners in the hills just north of the Golden Gate. The locals here had been taking their one-speeds onto the 140 miles of fire road in this watershed since they were kids, but in 1974 a Category 1 road racer named Gary Fisher

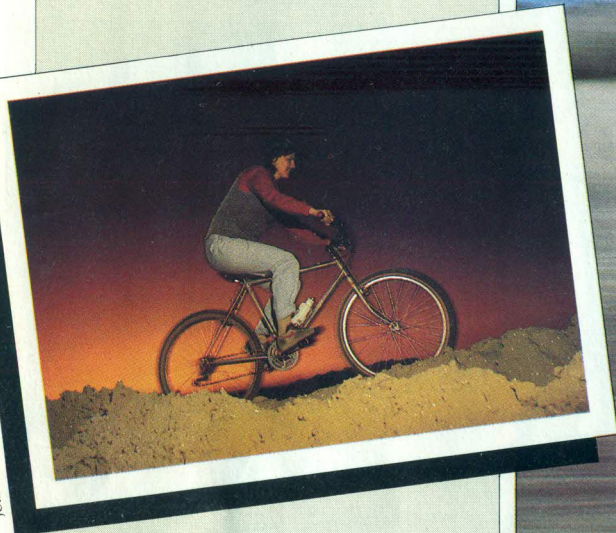
changed everything by grafting ten speeds onto his favorite old Schwinn, a 1941 Excelsior. On the next run up to Kent Lake he put a mile between himself and his buddies, and in the ten years since then, fat-tire technology has produced an entirely new genus of balloon-tire bike that's light and tough and requires very little maintenance.

I was living in Marin in those years, and when I got my first fat-track they were still being called klunkers, or trash-mobiles, or bomber bikes, or goat bikes. Mine was a 1979 Schwinn Spitfire, which I had custom-fitted with ten speeds, drum brakes front and rear, heavy-duty front forks, thumb shifters, and straight-across, high-boy handlebars that—unlike standard upright bars that swept back toward you—put your hands straight out in front for unparalleled comfort and control. I also had a quick-release seatpost so I could put the saddle high on the way up (to get enough leg extension while remaining in the seat to keep the rear wheel down) and low on the way down (to lower my center of gravity) or on rough terrain (to stand sometimes, which helped absorb shock and let me use body English).

The first time I rode that bike I felt like a kid on Christmas.

OFF-ROAD BIKES

*Knobby-tire
hill climbers for high
performance*



Backcountry technology: Climbing in low gear (inset). Laying a fat-tire machine into a skid (right), a maneuver unbeknownst to skinny-tire thoroughbreds. Notice the control. Forging an alpine creek in Colorado (far right). Off-road bikes can seemingly go anywhere, providing, of course, it makes ecological sense.



You may lose some of the mechanical advantage on these simpler, heavier machines, but you gain the view, and pushing all that wind is good for the heart—and when you get going no-hands, good for the spirit.

When I got onto the steep dirt among the redwoods and madrones, though, the aerobic demands turned brutal. This was the kind of work that could wear you out if you had the lungs of a Doberman and the legs of a Clydesdale. But there were tricks to it: Breathe out on the weak leg and in on the strong, my friends said; traverse the steepest hills; plan ahead for gear changes so that you never shift with the gears under heavy pressure; keep your weight over the rear wheel; find a rhythm and hold it, a rhythm that lets you rest on the easier stretches.

That first long trip to the ridge felt like I was pulling a wagonload of rocks, but you get what you pay for, and the trip down was like nothing so much as a wild ride on a horse that fears nothing. You have to watch the ground and the tree limbs at the same time, and about the only thing that limits your speed is your courage and how comfortable you are

when you're headed—sideways—for a 300-year-old oak. Or the ravine that marks the edge of the trail.

Every once in awhile we'd see Fisher and his bunch up there on the quick, lightweight chrome-molybdenum versions of the Excelsior that Joe Breeze had designed and built. Breeze is another serious road racer, and his nickel-plated second-generation frames sported 18 speeds, cantilever brakes, and light, knobby tires. They weighed about half of what mine did and cost about \$1,000 a copy. The people who owned them handled the ups at nearly Jeep speed and the downs like fine ski racers. Most of these guys are by now involved one way or another in making and selling such state-of-the-art bikes. Back then they were making their high-speed runs to discover what broke first and how to make it stronger. The ultimate test, of course, had to be a race: a long, nasty downhill that would be hairy even for the pros. And for the amateurs, well, amateurs always get a little more than they bargain for when they play with the big boys.

They call this test the Repack. It's just under two miles long, with a vertical drop of some 1,300 feet through the

conifer and oak forest that spills down from Bolinas Ridge to the town of Fairfax on a dirt fire road of straights, long S turns, off-camber corners and hairpins, over rocks, roots, sand, and ragged erosion slashes, with pitches that could put you on your butt if you walked them. It got its name, they say, when these guys first found the run. They were all riding old one-speeds with coaster brakes, and they stood so hard on them on the way down that the grease in the brake drums literally burned away and had to be repacked.

When I ran the Repack for the first time it was still an underground race. Word of mouth gathered about 30 of us in the parking lot of the Fairfax Theater, where our bikes were heaped like scrap onto a flatbed truck and driven to the ridge. We rode another two miles of steep dirt from there to the start, and then, with the itchy tension of risky doings in the air, everyone jabbered and made last-minute mechanical adjustments. A half-dozen of the turkey vultures that prosper in these hills rode in low and swept us with their shadows. One of the racers screamed up at them, "Not today you bastards," but you couldn't blame them for checking us out. Together we

must have looked like the James Gang on bikes: 16 to 50 years old, in jeans and ragged shirts, suits and ties, and even one tuxedo; on junkers or custom junkers except for the six or eight Breeze models. These were the only high-tech versions being made then, and they were beginning to be called mountain bikes because it seemed a bit much to be asking a grand for something called a klunker.

Fisher and the other pros took off first at two-minute intervals, and because the first 100 yards were almost flat, they each left the line standing up, pumping with all they had, which was plenty. Then they dropped out of sight. I started somewhere around the middle of the pack and did just what the first guys had done. This turned out to be deeply stupid because just beyond the out-of-sight point were 150 yards of the steepest downhill my bike and I had ever seen. I squeezed the back brake all the way shut—which got me sliding but didn't seem to slow me at all—and for the next several seconds I juked and flew and found out just how tough and stable 40 pounds of bike on fat tires can be. Near the bottom I hit the skinny end of an erosion cut and lost my grip on the

brake, and the only thing that kept me up and shot me out into the first S turn was my own dumb momentum. From then on I was trying for control, which I found only sometimes, when I wasn't all the way sideways or all the way off my pedals like a cowboy who can't get the stirrups back. About two-thirds of the way down the hill a small crowd had gathered along the road and in the trees at the worst of the hairpins. A lot of them had cameras and were waiting for the ultimate action shot: a man and his bicycle soaring over the high dirt cliff into the mesquite and buckberry below. They got two of those shots in this particular race—one of a man who broke his collarbone—but they didn't get me. I had much too much speed going into the turn, so I laid the bike over, threw a plume of dust that made all photography impossible, popped up, and rolled through the turn at wheelchair speed. The more bloodthirsty of the tree creatures moaned and hissed.

I finished the race in 6 minutes, 36 seconds, and for most of that time I was going faster than I wanted to. Gary Fisher won that day, in a time just over his course record of 4 minutes, 22 seconds.

During those years in Marin I was also foolish enough to race my bike in a 20-mile Enduro called the Zero's Notch. I crashed it into huge madrone trees, rode it through rocky streams, and flew it out of control down ravines where there was no trail at all; the worst I did to it was bend the derailleur a little. Most of the time, though, I just took long, quiet rides in the hills and used my klunker for almost all my in-town transportation. These bikes are as good—maybe better—on gnarled city pavement as they are in the dirt, which is why the messenger boys in San Francisco and Chicago and New York never gave them up.

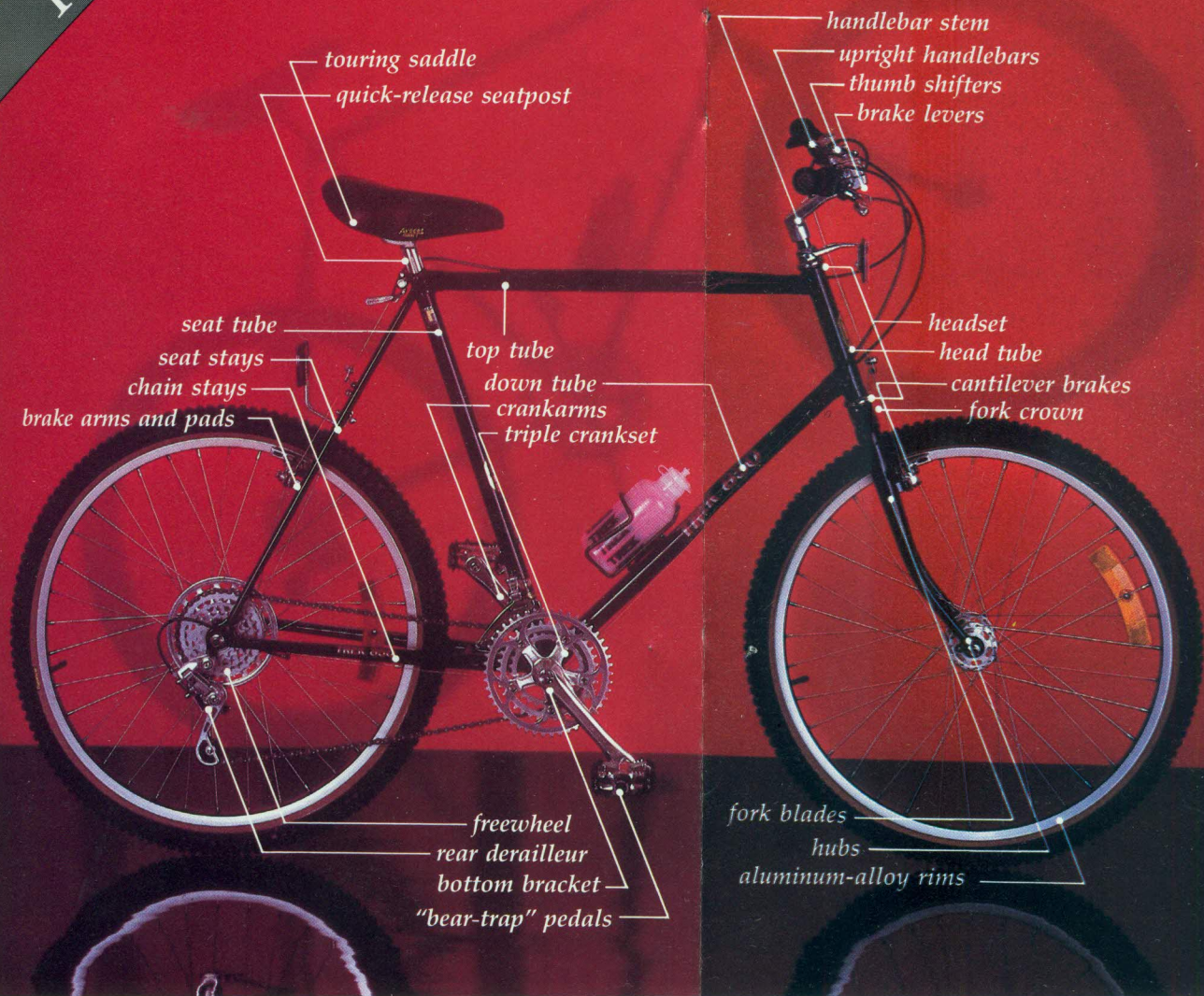
These days there are more than 20 companies making 10-, 12-, 15-, and 18-speed mountain bikes. There are clubs, a racing circuit, factory racing teams, tour operators, and even a magazine called *Fat Tire Flyer*. Prices start around \$300 for the assembly-line American and Japanese versions and range all the way to \$2,000 and more for the handmade, custom models like Gary Fisher's MountainBikes. What you get for two grand from Fisher's outfit is the result of everything he and his friends learned on the Repack, and the combination of design, craftsmanship, and lightweight, filet mignon components begins to approach the precision and performance of the finest European road bikes. The frame is the stretched-out Joe Breeze variation of the old Excelsior geometry ("But the credit really ought to go to Ignaz Schwinn," says Fisher), except that the mild steel tubing Schwinn used is a lighter, stronger, chrome-moly now, as are the crankset, the "bear-trap" pedals, and the one-piece "Bullmoose" handlebar and stem designed by master frame builder Tom Ritchey (who makes some of Fisher's frames as well as his own bikes). The brakes are cantilevered, rather than the heavier and less precise drum-style, and the tires are a light, translucent kind called skinwalls. Altogether, Fisher has managed to cut the 46 pounds of the Excelsior to 25 pounds for his Competition model and still keep most of the toughness of the old horse, making his bikes perhaps the hottest on the off-road racing circuit.

If you're not going to race, though, the machines in the \$300 to \$500 range are likely to give you most of what you want in an all-terrain bike. And once you climb on almost any of them, you're going to wonder how the original good idea of balloon tires under a big, tough frame ever got set aside.

It won't happen again. ○

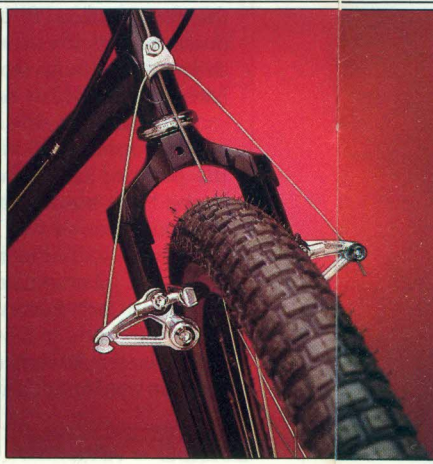
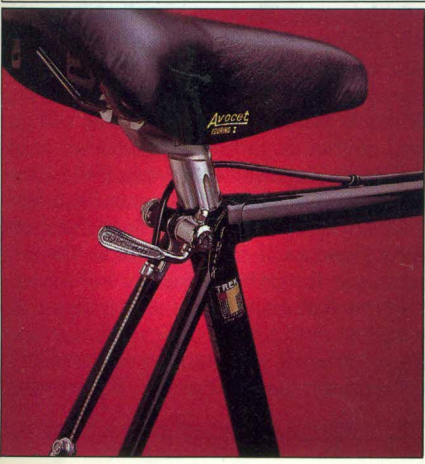
Craig Vetter last wrote for Outside on Yvon Chouinard (March). A former resident of Marin County, California, he now pedals his customized Schwinn Spitfire through the streets of Chicago.

EAT PARTS



Abuser-friendly components: The quick-release seatpost (below, left) should be longer than on-road versions, and the seat tube should be reinforced. Look for cantilever brakes brazed onto the frame (below, center), with oversized pads and alloy brake arms. Note the beefy fork blades and wide skinwall tires.

High-boy design: Upright handlebars make handling a breeze. Bars and stem should be chromed with hefty brake levers, thumb shifters, and hand grips.



FAT-TIRE TECH

*Unraveling the mysteries of
shopping for an off-road bike*

Just when you thought it was safe to go back in the bike shop, just when you'd finally figured out the differences between derailleurs and had the names of Italian frame builders rolling off your tongue ... along comes the off-road bike. And you're confronted with another dilemma: rows upon rows of bikes with fat, low-pressure tires; 18-speed gearing; upright handlebars; motorcycle brake levers—and price tags spanning a \$2,000 range.

But the gap in performance between assembly-line off-road bikes and hand-built models is not as great as it seems. In an effort to capture a share of the burgeoning market, manufacturers are offering features in low-cost off-road machines that have traditionally been reserved for far pricier on-road bikes, and lower price barriers are continuing to erode. In fact, only the sub-\$300 "facsimile" models currently lack off-road ability, and even in the affordable \$300 to \$400 price range, there are plenty of tough bikes.

This is immediately obvious in the frames. From about \$300 up, off-road bikes are built with 1.125-inch chrome-molybdenum top tubes and 1.25-inch down tubes, as opposed to the one-inch and 1.125-inch tubes used in effete road versions. Chain stays, seat stays, and fork blades are also bigger, and the actual tubing is usually thicker than that used on the road. The result is a strong, resilient frame. In contrast, off-road bikes under \$300 are often built of weaker, conventionally sized carbon steel tubing.

Even more than the frame, though, it's the lightweight aluminum-alloy rims and knobby skinwall tires that make good off-road bikes ride the way they do. You shouldn't find a bike over \$300 without them, but there are two things to watch out for: First, heavier gumwall tires are sometimes substituted for skinwalls; and second, 1.75-inch tires are sometimes used instead of standard 2.125-inch models. The skinnier tires absorb less shock and can rattle your bones.

Bargain-basement bikes often strike out completely in the wheel department. Sub-\$300 machines typically roll reluctantly on heavy steel rims, and when the rims are wet, it's hard to stop the bike.

There are differences in gearing, too.

Alloy triple cranksets are *de rigueur* for climbing unpaved, ungraded slopes. It's impossible to find a bike selling for more than \$300 that doesn't have a triple crankset (cheaper models use heavy steel double cranksets), but not all models are created equal. What you need is wide-range gearing with very low lows and moderate highs, but many inexpensive cranksets can't accept an inner gear smaller than 32 or 34 teeth. Since the largest rear cog generally available has 34 teeth, this means that it's impossible to have gearing that goes below a 1-to-1 ratio, gearing you'll need for those vertical climbs. Better cranksets offer inner gears with as few as 24 teeth.

Also note that low-cost pedal crank-arms are often available only in the standard 170-millimeter size, even though most off-road riders favor longer cranks for added leverage.

Brakes, too, vary from one bike to the next. Cantilever brakes brazed onto the frame for rigidity are standard on off-road bikes selling for \$300 or more, but careful inspection is still in order: Inexpensive cantilever brakes sometimes use undersized pads and brake arms made of flexible pressed steel rather than much stronger forged aluminum alloy. But even these brakes are better than those used on some cheaper bikes: flimsy, spongy side-pull brakes that are good for little more than a roll around the block.

The least-expensive fat-tire bikes, then, won't last long if used off the road—they just look as if they might. But the better \$300 and \$400 machines are fine for most riders, whose outings may well consist of an occasional foray through the woods or the local park. Among the more worthy off-road models are the Marukin North Star (\$379), the Miyata Terra-Runner (\$400), the Univega Alpina Uno (\$300), the DiamondBack Ridgerunner II (\$350), and the Raleigh Elkhorn (\$370).

Mid-Priced Refinements

If you'll be touring the passes above Crested Butte or want to compete in off-road races, you'll be better served by a bike in the \$500 to \$750 range. These bikes hold up better to the demands of hard riding on rough terrain, and they sport a host of refinements.

Gearing, for instance, typically drops to well below that 1-to-1 ratio needed

for steep climbs. Longer cranks ease the job, and better derailleurs shift nimbly through the gears. Massive brake calipers and pads are pulled by levers that look beefy enough to reel in motorcycles.

While virtually all off-road bikes have quick-release seatposts, the \$500-and-up models (as well as some of the less expensive ones) also have frame reinforcements to prevent the seat tube from cracking from frequent use of the quick-release lever. Likewise, while rugged upright handlebars top the front end of nearly all off-road bikes, the welded chrome-moly bars and stem found on bikes in this price range are more durable than cheaper steel versions.

Chrome-moly pedal and hub axles easily outlast the carbon steel components often used in lower-priced bikes; the "bear-trap" pedals themselves also take more abuse and work better than the smaller BMX pedals used on less expensive machines.

Shielded bearings in the hubs, bottom bracket, and headset help the mid-priced bike stand up to inevitable dousings. Rear wheels are built with reduced "dish" for extra strength, and the overall finish is cleaner, with no spotty paint or welding gaps.

Specialized's StumpJumper (\$750) was the first production-line off-road bike, and it set many of the standards for mid-priced machines. The company's StumpJumper Sport is nearly as good, and at \$500 is probably a better value.

Other mid-price contenders include the Ross Mount Whitney (\$540), the Fisher MountainBike Montare (\$650), the Trek 850 (\$664), and the Fuji Mt. Fuji (\$580).

These bikes set a standard that's hard to beat, yet you *can* spend up to \$2,000 for an off-road bike. What all that extra money buys is a flawlessly handcrafted machine built to your specifications, with the most exotic components your heart desires. If you want a "camo" or polka-dot paint job, you can get it.

Such top-flight bikes weigh four or five pounds less than the 32-pound standard for low- and mid-priced models and look almost too pretty to ride. But the superior components, frame reinforcements, and meticulous handwork make these bikes the most rugged imaginable. Among the best: various models from Tom Ritchey, Fisher MountainBikes, Mountain Goat, Joe Breeze, and Mantis.

Sizing and Maintenance

Size—and the particular bike you choose—depend on your intended use. Ultimately, most fat-tire use may well be in the city, but the bike industry is just now awakening to that fact. While it's great to have a bike that can jump over curbs and potholes, the lugged tires, the ultralow gears, and most other trappings of the off-road bike are more than you need in town. Ironically, then, the very deficiencies of many of the under-\$300 bikes make them fine for use around town. Still, you may want to replace the

knobby tires with higher-pressure, raised-center ones, and even take a hacksaw to the mountain-man handlebars. Trek and Raleigh now offer fat-tire bikes designed for urban use.

If you plan to ride your bike mainly around town, size it just as you would a standard ten-speed. In your stocking feet, you should have one to one and a half inches of clearance between your crotch and the top tube. For the backcountry, though, you'll need a smaller frame that lets you adjust the height of the saddle to suit the terrain. That calls for three to four inches of clearance between your crotch and the top tube. An extra-long seatpost (available with many of the better models) is a good idea.

Backcountry riding also demands more attention to maintenance. The important thing is to keep the drive train and brake system clean and lubed, especially the chain, derailleur, and brake pivot points.

But that doesn't mean that you can neglect the rest of the bike; even the smallest problem can become a major disaster "out there." Before heading for the hills, be sure your bike is in good shape and that you know how to keep it that way. Always carry along the necessary tools—patch kit, pump, spare tube, and chain rivet tool, at the very least. It's one of the little ironies of off-road riding that to get away from it all, you have to take a bit of it along with you.

—Thom Lieb

FAT TRACKS

The great backcountry impact debate

Now that fat-tire bikes are loose in the hills, an obvious series of questions has come up: How much disruption and damage are these machines likely to bring to parkland and wilderness trails, and what restrictions should be put on their use?

According to the Wilderness Act of 1964, "mechanical transport" is prohibited from official wilderness areas. National parks are closed to bikes except on roads and marked (usually paved) bike paths, and national forest land is also off-limits unless designated as multiple-use.

Practically speaking, though, official reaction to off-road bikes has often been played out locally, and rules vary from place to place. In Boulder, the bikes have been banned outright on all trails and in public parks. In the Tamalpais watershed in California's Marin County, the rangers forbid the bikes on hiking trails but allow them the run of the fire roads under a 15-mile-an-hour speed limit. In other places where mountain bikes are begin-



Off-road ethics: Ride the roads, not the trails.

ning to proliferate, the political tug of war is just beginning. The National Off-Road Bicycle Association (NORBA) is currently involved in an environmental impact study it hopes will influence a broader interpretation of the law, and is trying to promote rider awareness and responsibility.

My experience in the Marin Hills convinced me that mountain riding is one

of the great outdoor pleasures, a new way to get into the country, and there ought to be a place for it. But... these bikes are a clear danger to hikers, and when they're ridden hard or recklessly, they push a lot of dirt around on the trails. Considering the extreme fragility of hiking trails and many wilderness ecosystems—not to mention the fragility of the "wilderness experience" itself—keeping them off the hiking trails seems right to me. Despite the efforts of groups like NORBA and the good intentions of most riders, the reckless few will continue to cause problems.

Meanwhile, there are plenty of Jeep roads and fire trails lacing the backcountry. Most are deserted and ecologically tough enough that mountain bikes should be allowed on them under whatever agreement can be worked out between the cyclists and the government landlords.

For more information on off-road etiquette and the current status of off-road riding, write NORBA, 2175 Holly Lane, Solvang, Calif. 93463.

—C.V.