

## Singletrack Mind: Mountain Bikes.

This morning's ride was going to be nice and easy: a few miles of down some well-worn singletrack before coming home for Sunday bacon and eggs...or so you thought before grinding gravel in what ended up being a three-hour screaming death march up a nearly vertical hill and down some nightmarish roosting halftrack that filled your drivetrain with grit, grass, and mud, gave you a taste of your handlebars, and turned your knees into bacon. Your quads feel like they were injected with fire. You're wearing dirt under your helmet. You're getting up tomorrow to ride it again.

Frame? Carbon, aluminum, or titanium. Titanium is a little heavier and more expensive, but it'll last longer than the former two and is not easily damaged. Carbon fiber doesn't show the same kind of metal fatigue as aluminum does, but it's not indestructible. Aluminum is light and has been around for ages. This is one of those topics in mountain biking that everyone seems to have a strong opinion about, and you'll have one too.

Full-suspension? Yes. Suspension improves traction, so when you're bouncing around boulders and root systems that somebody sharpened that morning, you'll have better control with front and rear shocks. You'll be able to climb more efficiently, too. For aggressive riders who face even more aggressive terrains, take all the suspension you can get. Downhill bikes are going to have about 200mm of front suspension travel. All that speed demands it. Free-riders, mountain cross, and everyone else won't need that much.

Brakes? Disc. Consistency in stopping power is key. V-brakes are great...in dry, optimal conditions...mostly. Oh, disc brakes are heavy? So is your bike when it lands on your head because your v-brakes didn't grab in the mud. Whatever your set-up, move your levers so your the first joint of each index finger meets the curve of the lever: think "trigger." You want them placed where it feels natural to you.

Wheel size? As if the 26" vs. 29" debate wasn't enough, 27.5" wheels have begin appearing. It's up to you. The evidence supporting one or the other doesn't seem reliable consistent. The argument is that bigger wheels have better rollover and traction, but that smaller wheels are more durable, lighter, maneuverable, and have better acceleration. 26ers have been standard for years: they're round and they roll. There's your answer.. Your tire type is going to depend on what you're doing: DH, snow, street, 4X...get the tires for the terrain, because the terrain isn't going to adapt to your tires. Your tires are far more important than trolling the internet about wheel size.

Shoes? Tires for your feet. You can get a velcro or a ratchet system. Velcro's comparatively inexpensive. Ratchets are secure: you won't feel a fraction of slippage. If you're a hard rider or racing cross country, by all means, go for ratchet straps. If you can get them with screw-in spikes to fight mud and sludge when you're shouldering your bike, do it. You know your terrain, you know your bike. Get whatever you need to grip both. Lighter riders will be fine with a secure velcro shoe: get lugs that are gonna work for your trails and faces. Hike til you can bike, then get back on and go.

Gear? You should probably get some glasses if you're planning on anything hardcore or racing: you don't want to end up with roost, rocks, or refuse in your eyes. That'll just slow you down. Wraparounds provide the most coverage. Get them with interchangeable polycarbonate lenses

and make sure they fit under your helmet. Your helmet should be foam with a hard shell: basic stuff. Look for light, well-vented models that meet ASTM or Snell Foundation standards. A fit adjuster is very desirable and make sure you've got nice wide straps to keep the thing on your head when you're going vertical down the bad side of a cliff. Other A+ features include removable visors, and female riders might appreciate a hair port if they wear their hair back. Water bottles are a must for anyone who's going to be out in the heat for long: stay hydrated. If weight's not a problem think about a back-worn hydration system, though be advised...you'll be wearing it on your back, which might not appreciate it. A water bottle isn't an option: it's an absolute necessity.

#### Road Rage: Road Bikes.

Charity rides and long-distance biking have seen a big increase in interest over the last few years, with thousands taking part in various races, tours, and cycling events every year. Road bikes are meant for hauls: that can be a few breezy miles to burn some calories in the morning, a weekend trip up the coast with hundreds of other cyclists, or at the extreme end, the Tour de France. What casual riders are probably going to be most concerned about is comfort. On that note, much is made about frame geometry: the angles of each tube relative to each other. That's a huge conversation and one that, in this context, would bore you away. Here's what's basic: road bikes are tough on the back. Because of the way the handles are set up, most road bikes have you hunched over: that's your most aerodynamic position for racing. Although that position offers you the least amount of wind resistance, it's also very uncomfortable. Road bike makers know this, so they've designed frame geometries for endurance (read: "comfort") for mere mortals who are NOT doing the TdF anytime soon. One of the choices you can make in choosing a road bike is in picking one with straight handlebars, not unlike those on a mountain bike. That puts you more upright and takes strain off your lower back. You'll be able to ride longer. Comfort will increase your speed: no need to make it a death march. Stiff tubes will help: they'll absorb shock. Foam padded handlebars will help relax your grip, which will help relax your shoulders. A slightly-wider saddle will increase comfort, though narrow saddles are better for control and make pedaling easier by keeping your form tight. Best thing you can do for comfort, however, is go see a fitter at a shop after you buy your bike. A fitter will check your pedal stroke, posture, and make all the necessary adjustments with seat and handlebar height that affect comfort and performance. You may not be able to drop five figures for a TdF-worthy bike, but that's no reason why you can't have your bike optimized to your needs. Those things are all adjustable for a good reason: you. There has been a cool new development in shifters that's worth talking about. The way a mechanical shifter works is...well, you press a lever and your chain derails (why your shifter is called a "derailleur") and shifts onto another gear (technically a sprocket, since it's driven by the chain) and changes your pedal stroke. New, electronic shifters employ tiny motors that shift gears at the touch of a button. This is more precise, quite fast, and very smooth. It's also more expensive than mechanical braking and may not allow for side of the road repairs if something goes wrong.

Disc brakes haven't caught on the way they have in mountain biking, so don't look for those just yet, but keep an eyes out for chain-keepers and ultra-light frames: Cannondale's SuperSix Evo Black Inc is just 11.9 pounds...which disqualifies it from UCI events (in other words, you won't be seeing it at the Tour de France).

Shoes: road shoes are like the ice skates of cycling: you can't really walk in them. That fact is mitigated by the fact that a good pair is stiff, yet comfortable, and does what they're supposed to

do: your feet on the pedals. Look for breathable uppers and thin outsoles: you want them stiff and light. If it feels like a brick on your foot, don't get it.

Gear: unlike the barbarity faced by mountain bikers, your main concern is going to be trying to maintain the most comfort on long rides and, if you're racing, staying aerodynamic. Road helmets may have channel-like vents or be nearly as smooth as a swim-cap: same idea, except swimmer generally don't have to worry about knocking their noggins against asphalt. Look for reflectors and lights for dusk or night rides and helmets that meet ASTM or Snell Foundation standards.

All-American: The Cruiser.

There's no bicycle design so classically All-American looking as the cruiser. There's something about the curves and simplicity of the design that call to mind other American classics: the fins on a Cadillac or a 1957 Chevy Bel-Air, perhaps. It's the look that cruiser buyers love, whether they're customizing a Schwinn Sting-Ray into a low-rider with ape hangers and oceans of chrome or casually riding it stock on the boardwalk in the summer. It's not a bike that tests your lactate threshold, not a bike that wants to be the center of debate about speed or maneuverability. The cruiser has nothing to prove. It's a bike made for riding. It's not talking about performance: if there's air in the tires and grease on the chain, it'll perform. 26" is a good size for most adults, though anyone over 6'2" should look at off-set/forward pedaling or 29" models to accommodate their height, longer pedal stroke. Men's frames have a straight top tube. Women's frames have top tubes that are set at an angle: this is called a step-through frame: it preserves your modesty if you're wearing a dress or skirt and getting on and off the bike. Get whatever style of frame you like, just make sure it's the right size. Ok, time to talk speeds or, even less accurately, gears. A single-speed bike is probably what you learned on as a kid. It's good for flat riding. The coaster brake is applied by pedaling backwards. It's not great for hills, unless you're going down them really fast...which might not be such a great idea. A single-speed cruiser looks clean. No bells and whistles...unless you put actual bells and whistles on it. If you want a multi-speed cruiser, go for a three speed. Three speeds have no derailleur to fight with and still utilize the familiar coaster break: they retain the classic look of a single speed, but with a little extra juice for hills. Go for an aluminum frame: the lighter weight and freedom from rust is worth paying a little extra for. Shoes: nah, don't worry about it. You don't need anything special for a cruiser. As for helmets, you should wear one just because you never know what's going to happen, but you probably don't need to get anything like the stuff worn by mountain or road bikers. Still, avoid toy store stuff: protect that head with a plastic and foam helmet with a chinstrap.