

BIKE KNOWLEDGE

By
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The bicycle is one of the most elegantly engineered devices ever created. With little more than 200 watts of human non-polluting power (1/4 horsepower), it can carry its rider to work or school at a decently swift pace. It can be used to haul commercial goods in areas where traffic would block motorized vehicles. In large cities, bicycle messengers are the mode of choice for document delivery “when it absolutely has to get there immediately”. It helps make its rider healthier, happier and stronger. Its cost / benefit ratio is ridiculously small. It consumes no petroleum-based fuel. It brings a childish grin to its rider’s face. It asks for little in return.

Not all bikes are created equal. At the turn of the century, during the first cycling craze, most bikes were high-quality handmade durable devices meant to withstand many miles and punishing roads. Even in today’s dollars, these bikes were very expensive. High quality bikes are still produced today but are typically not sold at discount stores, where cheap copies of quality bikes are typically sold. The least expensive bike shop bike is a better quality buy than even the most expensive discount store version. Since most bike shops offer at least some service with their sale, most will take much greater care in assembly and offer bikes that hold up well over the long haul. We simply cannot afford to sell the cheapest products available because we then have to fix them if (when) they fail. Think of a bike as a tool or machine rather than a disposable toy.

WHAT KIND OF BIKE SHOULD I BUY?

The type of bike that you buy should correspond to its intended use. A “gnarley” dual-suspension mountain bike will look really menacing and will impress your friends but will be a very clumsy and inefficient commuter, so think about how and where you think you’ll be riding. If you live in Moab, Utah and ride rough, steep mountain paths, then the brakes and suspension of a high quality mountain bike would be a necessity. A “chopper” will draw lots of stares but due to its weight and riding position, will be a chore to propel more than a few miles. A friendly local bike shop can answer most questions and steer you in the right direction. The shop’s motivation should be as follows: sell the customer the right bike for the job at a reasonable price and the customer will end up having fun and coming back for a lifetime.

GENERAL FITNESS OR CASUAL NEIGHBORHOOD OR BIKE PATH RIDING

These bikes are generally called “cross”, “hybrid” or “comfort” bikes although these terms may be mixed or matched depending on the manufacturers marketing lingo. The emphasis is on short-distance comfort (usually 5-25 miles). These bikes tend to be upright, with cushy saddles and shock-absorbing seatposts and forks. They will have very user-friendly gear systems that will allow even the novice to climb steep hills (slowly). The wheels will be taller than a mountain bike’s and the tire width will be in between mountain and racing sizes. These are very practical bikes that will roll well on pavement but can also be ridden on an occasional dirt or gravel road. Starting prices are around \$200. Pavement bikes priced below this price point are built with components so flimsy that they tend to have lots of durability problems.

OFF-ROAD SINGLETRACK TRAILS

If your general intent is to ride on trails that most people would only hike, then you may need a mountain bike. A mountain bike that will withstand repeated off-road abuse will set you back at least \$500 for a “hardtail” and \$1000 for a dual-suspension. These bikes will cause you to grin uncontrollably and make you feel like a kid again when used as intended (at least until your first spill). Many pretend mountain bikes are available for less than these price points, even at bike shops, but these beefy-looking bikes serve almost no useful purpose, and because of cost-cutting on critical components, will nickel and dime you endlessly on maintenance. Mountain biking is loads of fun where trails are plentiful but the Miami Valley has few legally accessible trails, clay mud that clings to tires and halts progress, and a complete lack of mountains.

LONG, FAST ROAD RIDES

If you long to cover substantial distances at brisk speeds then a road bike is the ticket. Road bikes lay your torso down for better aerodynamics and better pedaling efficiency. This position allows you to use your upper body for leverage against the pedals (think wheelbarrow) but takes some getting used to. Drop handlebars allow a variety of hand positions and narrow, high-pressure tires roll fast and cut through the air. If you don't plan to ride 80 miles per week, at least 20 miles per ride, then go back to the hybrid paragraph and re-read it. Road bikes need to fit precisely and will not tolerate unpaved roads, but the Miami Valley has many smooth, lightly traveled back roads and very active riding groups. Starting prices are around \$500. These bikes are very addictive, especially after the initial break-in period.

RECUMBENTS

Recumbents are laid-back designs that sometimes even use backrests and/or underseat steering. These designs take all the load off of the hands but also prevent the rider from using muscles above the waist. The further back the angle, the more “re-learning” the rider must do to learn to balance at slower speeds. The lowest, most laid-back designs are some of the most efficient vehicles in the world, at least on flat ground. Climbing hills and nimble maneuvering are not the recumbent's strong suit. Hauling recumbents can be awkward with some models and replacement parts are sometimes not typical off-the-shelf items. Starting around \$600.

BMX / FREESTYLE

These are the bikes that most kids 6-15 year-olds are riding. These are extremely durable, very maneuverable and the best choice for riding very aggressively for very short bursts. Their small bombproof wheels and simple (no gearchange) design makes them ideal for tricks and stunts, which often end in a crash. Durable ones start around \$200. BMX bikes have very long crank arms and are basically intended to be pedaled while standing, so riding any appreciable distance is awkward.

CYCLOCROSS

Cyclocross bikes are best described as road bikes with slightly wider and knobbier tires and more powerful brakes. They combine the power and speed of a road bike with the ability to venture off-pavement. In Europe, specifically Belgium, cyclocross racing is a very popular sport that involves multiple short laps of a spectator-friendly circuit containing sections of smooth pavement mixed with dirt trails, mud bogs and barriers meant to force dismounts, running and remounts. A brutal workout. Usually over \$1000.

TOURING

Tourers are intended to carry rider and lots of gear across continents. Think of these as sluggish road bikes with greater tire capability and mounts for fenders, racks and other stuff. If you want to run away for six months and ride through Canada to Alaska, then down the coast to Baja then you will want a touring bike. Usually over \$1000.

This is by no means a complete summary but I've tried to hit the highlights. Following I'll supply info on how to ride, nourish and maintain.