

by Jeff Kausch

# TRAINING BY MOUNTAIN BIKE

**When the weather is rough,  
off-road cycling is an alternative  
to conventional training  
— but it requires good technique.**

**T**he rapid technological development of the mountain bike has brought with it the exciting possibility of year-round riding to racers living in milder climates; and to those whose winters are long and cold, it makes possible a shorter season off-the-bike. This new freedom to ride regardless of the conditions, means you can more easily acquire several racing advantages such as improved hill climbing strength and diverse handling skills. Anyone can greatly benefit from riding a mountain bike in the off-season or when road conditions are less than ideal.

To better understand this view, let's begin with the machine's general advantages. If it's raining, a road bike with narrow tires and caliper brakes is not the safest or most pleasant bike to ride for those long training hours. Mountain bikes have been designed to work under the worst conditions — the best have withstood the extreme rigors of the Saharan and Himalayan treks, as well as the

grinding abuse of fierce, muddy United States races. Another general design advantage is their built-in versatility. They can easily be adapted to street or dirt use.

The wider tires on these bikes not only help to absorb incredible jolts, they provide much better turning and braking traction. Their triangulated handlebars, combined with a more forgiving head angle and fork rake, give you a comfortable and stable ride. Their triple chainrings ensure that you'll be able to ascend and descend all but the steepest and roughest hills you can find. Cantilever or cam plate brakes with heavy gauge cables and thumbshifters designed specifically for mountain bikes allow you to keep control more firmly gripped in your hands.

Oversize double-buttressed tube sets minimize lateral frame flex and transmit more efficiently physical exertion into forward, uphill motion. A seat post quick-release and a seat locator allow you to easily move your center of gravity down for a better downhill cornering position and back up for a better uphill traction position. Fenders keep you and your bike

cleaner throughout the winter. Wheels with hard anodized mountain bike rims and sealed hubs, protected by tires with several times the normal air volume, assure you of many smooth low-maintenance miles.

The safety and practical advantages of off-season mountain bike training are outweighed perhaps only by the potential physical ones. While most racers must succumb to a self-imposed indoor winter weight regime or practice a complementary winter sport to supplement their basic fitness, others have realized further advantages to winter mountain bike training.

Beyond the freedom of being able to ride almost any day, mountain bikes offer a more strenuous and less time-consuming workout. This is partly due to the greater effort needed to overcome the increased rolling resistance of dirt (and particularly mud) and also because most unpaved roads and trails are steeper than any paved ones. And riding a mountain bike on the dirt or in the mud is always great fun, especially once you've learned the basics.

Riding techniques have run parallel to the development of the mountain bike. Each technical modification or redesign offers more riding style possibilities. Better working, more positive wide-range derailleurs allow you to shift smoothly as you begin to climb, and the powerful brakes allow you to fly down hills safely, resulting in more of a gliding technique with little wasted momentum or energy.

This approach to more efficiently using momentum is a good technique to learn early on because the increased rolling resistance from knobby tires in mud obviously works against you most at slow, uphill speeds. Sluggish wallowing in thick mud can tire the best of riders in no time.

If you learn quickly to read the surface, to anticipate an incline with a shift just as you begin to feel yourself slowing down (when you can still ease up on the pedal pressure), you'll move with less effort and your derailleurs will operate far better. Logs, deep mud, loose rock or stream crossings should all trigger an anticipatory shift to an easier gear. The point here is: learn to avoid bogging down at slow speeds by selecting a gear low enough just before you need it. Then, you'll be able to maintain a more constant, easy pressure which will help you keep from spinning the rear wheel and losing uphill or obstacle traction.

Once you've learned the rudiments of uphill shifting well enough to be able to roll over muddy hills without slipping around or getting stuck, you're ready to learn some of the basics of wild, downhill mud cornering at speed.

A fundamental mountain bike rule is that the steeper the hill, the lower your

seat should be; this allows you to position your center of gravity farther back and lower down thereby making it easier to carry your momentum through the downhill corners. At times you have to anticipate a downhill soon enough to lower your seat before you find out you also need that hand on your brake. Once again, the primary approach is one of anticipation.

In the days of bombers and klunkers, the fastest way around a dirt corner was to barrel into it with as much momentum as you dared, lock up the rear wheel and slide from the top, down across the inside and out of the turn. Now that the brakes have been greatly improved, it's much better to anticipate the move by gradually slowing both wheels without skidding before you hit the corner, track on the shortest and smoothest inside line and use the release of your brakes as the accelerator to counteract the centrifugal force.

More anticipatory double braking will permit you to actually pedal out of the turn. The key to success is again to hold and control as much momentum as possible. And, no matter how positive these brakes, if the terrain and your rims are wet and muddy you need to begin braking even earlier.

Differing amounts of rainfall saturation over different types of terrain produce vastly different surface consistencies that demand different positions over the bike. You should adapt your stance not only to the steepness of the hill but also to the surface texture.

The wetter, rougher or rockier the surface, the more evenly distributed your weight should be over both wheels. If the terrain suddenly turns out to be soft mud, you should slide well back on the seat and if necessary, lift up on the handlebars to avoid sticking the front wheel.

Clearing obstacles requires a back and forth weight shift, and learning how to lift your rear wheel by pushing down on the handlebars. At the same time, curl your toes so your feet pull the back of the bike up as you clear the obstacle. This will save you from smashing your rear rim. Similarly, wide stream crossings require a position which allows you to clear underwater obstacles and to continue pedalling at the same time. Above all, stay limber with your elbows and knees bent so you can absorb and respond to changes in the terrain and the surface with the appropriate shifts in weight.

The further development of this riding style and machine refinements make it possible for even more cyclists to ride a bike year-round. With the mountain bike's shock-absorbing, stable geometry and better turning and braking traction characteristics, adjusting to an off-road bike is easy, provided you learn to watch out for the mud! ■