Dirt Writer

Cross training with mountain bikes sharpens dirt riding techniques while building leg strength, cardiovascular and aerobic capacities. Mountain bikes range in price from around $275 to $2000. Mike Bell's Mantis (left) is an example of a high-buck bike; Charlie's Puch fits in at the other end of the price scale.

MOTO CROSS TRAINING

Dirt riders have been practicing cross-training techniques for years. Oh, we didn't call it cross training—at least not until recently—but that's what it was. Cross training refers to the beneficial effects that different forms of physical exercise contribute to an athlete's overall fitness and abilities. An example from dirt riding is running. Motocrossers recognized years ago that hoofing along for three to 10 miles several times a week greatly improved their cardiovascular and aerobic capacities. Increased physical abilities made them better riders. Likewise, weight lifting can improve a rider's performance.

Riding is still the best way to hone your skills while getting a good workout at the same time. If you could ride for three or four hours a day, five or six days a week, you'd be highly skilled and quite fit in a short period of time. For most of us, that's not practical. Time is one problem; bike maintenance is another. Your practice bikes would wear out fast with a training schedule like that!

Most of us find it more convenient to go running, work out at the gym occasionally and ride whenever feasible.

That's a good training program, but after a while it gets a little repetitive. For training to become part of your lifestyle, it has to be fun. Otherwise, you'll burn out and quit.

Enter cross training. My first exposure to the term came when I got interested in triathlons. Cross training is the current buzzword in the triathletic community. Obviously. In a sport where swimming, bicycling and running are involved, cross training is literally unavoidable.

As you've no doubt guessed from the picture above, one form of cross training we suggest trying is mountain bike riding. In fact, there's a very good three-page feature story written by John Lehrer, a former editor at *Bicycle Sport* magazine, about that very subject in this issue.

But there's more. Off-road bicycling, as John will explain, can be extremely beneficial to a dirt rider's training program, but there is a collection of other physically active sports that can also be helpful. Skiing, both downhill and cross-country, is a good choice for winter workouts. Basically, anything that works the same muscle groups you use when riding will be of benefit.

On occasion, we'll run articles, similar to the mountain bike story, which will introduce and explain the value of various cross-training routines. They'll help you to become a better rider, and equally important, they'll be fun to do!

Charlie

—Charlie Morey

CROSS TRAINING

THE MOUNTAIN BIKE WORKOUT

Hill climbing (left) makes those leg muscles burn. Wheelies are fun and develop balance. The no-suspension world of ATBs delivers excitement at relatively slow speeds. Perhaps the best part of mountain bike riding is the fact that you can do it anywhere, even in a concrete-paved urban landscape.

BY JOHN LEHRER

There's a new kind of dirt bike on the trails these days—it's quiet, inexpensive, handles great and gives you a terrific workout. It's super-light, too. In fact, it weighs about 200 pounds less than the bike you normally ride.

Oh yeah, I probably should mention that there are a couple of major differences between this bike and most dirt bikes. With this bike, *you* supply the engine and suspension—and not in the sense of aftermarket add-ons. These aren't do-it-yourself kit bikes; they come complete and are known by various names—mountain bikes, all-terrain bikes (ATBs), ballooners, fat-tire bikes and klunkers. They're the equivalent of the dual-purpose, off-road motorcycle and are a great way to get (and stay) in shape, and they're a lot of fun to ride, too!

How can riding a mountain bike help you get fit? A complete fitness routine should include activities that work on endurance, strength, flexibility and skill training. Riding a mountain bike hits all these areas—except flexibility—in one enjoyable activity. In fact, I'd say that riding a mountain bike may be the best way to get in shape for dirt riding. It's an integral part of the training of riders like former world-class motocross racer Mike Bell and Jeff Spencer, author of *Total Training* and a former Olympic cyclist.

Athletes like Bell and Spencer find mountain bikes appealing because they're go-anywhere, do-anything machines. You can ride them on the road (a lot of people use them for commuter bikes), but they have the gearing, tires and rugged construction to handle anything a dirt bike can. They're fun to ride and more comfortable than a 10-speed for most people due to the upright riding position and the cushy ride provided by their fat tires. Also, they require minimal maintenance; you can thrash these bikes and they'll keep coming back for more.

Ironically, mountain bikes were created about eight years ago in Marin County (just north of San Francisco) as a response to the closing of the trails on Mount Tamalpais to dirt bike riders. At first, mountain bikes were pretty much the exclusive property of a few frame builders like Joe Breeze and Tom Ritchey and their cycling cronies. Early in 1982, however, Specialized Bicycle Imports of San Jose, California

PHOTOS: MARK KARIYA

When the going gets tough, the tough...get off and push! Try running up a few dirt hills if you doubt the training value of off-road bicycling.

HI-TECH KLUNKERS

(now located in Morgan Hill, California), got into the act with the Stumpjumper, the first mass-produced mountain bike, which the company designed and had manufactured in Japan. The fat-tire revolution had begun.

In 1984, between a quarter and a third of adult bicycles sold were mountain bikes. There are dozens of brands currently on the market, and people are buying them to race, for touring and general recreational on- and off-road riding.

Let's look at fitness training and see why mountain bikes work so well. One of the major components of fitness is *endurance*, which refers to two qualities—general-body (cardiovascular) endurance and specific-muscle endurance. The standard activities for developing cardiovascular endurance are cycling, swimming and running; most dirt riders choose running for their aerobic training. But while running is an efficient way to develop cardiovascular fitness, it's also hard on the body, especially the knees and ankles. With each foot plant, two to three times one's body weight is transmitted up the skeletal system. Runners tend to develop a lot of overuse injuries. And because dirt riding is also a "compression sport" that stresses the ankles and knees, using running as a primary way to get endurance training might not be such a good idea for many riders.

Cycling, on the other hand, is a relatively stress-free form of exercise. Your hands, rear end and the bicycle itself bear much of your body's weight. It's excellent for riders who are or have been injured but want to stay in shape. "I used to run six to eight miles, three days a week," says Mike Bell, "but I can't anymore because of my knees [Bell has had five knee operations]. The doctor told me to get cardiovascular training from cycling and swimming; I've been riding a [road] bicycle for six years." Bell sometimes logs 250 to 300 miles a week. He rides his bicycle almost every day, in addition to swimming, weight work and tennis.

About two years ago, Bell discovered the mountain bike and its advantages. "If I get cramped for time, a mountain bike is great," he says, "because when you reach a certain fitness level, you've got to put in 50 or 60 miles on a road bike to get a good workout. Riding a mountain bike for 20 miles over rough terrain is just as taxing. I've got a four-mile course that's 75 percent dirt and sand, with telephone poles, railroad tracks and a drainage ditch to go over. Flat out, it takes me about 30 minutes to do it, which tells you how rough it is. With a mountain bike, I

WHAT TO LOOK FOR

Almost every manufacturer of bicycles has a "mountain bike" or all-terrain bike in its lineup. If you want the quality of construction and components to really take your ATB to the dirt, here's what to look for:

Frame: Look for chrome-moly tubing for strength. If it's "double-butted," all the better; that will make the bike a bit lighter. Most ATBs have head tube angles of 70 to 72 degrees, which is fine. If you want to race or have quicker handling, look for a head tube angle of 73 or 74 degrees.

Tires: Go for knobbies, or something like Specialized Bicycle Imports' "TriCross" if you really intend to ride your bike on all kinds of terrain. Tires with a center ridge work well in the street, but are a compromise at best in the dirt.

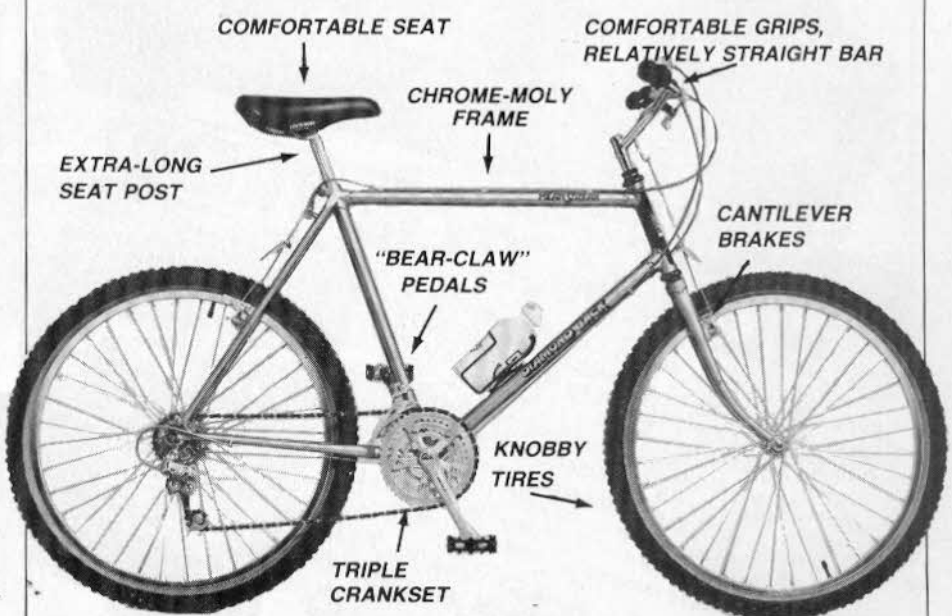
Sealed bearings: If you plan to get your bike really wet and dirty, get sealed bearings or sealed-mechanism bearings in the hubs of the wheels, the bottom bracket and the headset.

Component quality: In general, the more you spend for an ATB, the better the quality of components you'll find on it. At minimum, make sure your bike has cantilever brakes for sure stopping, a triple crankset for a sufficiently wide range of gears, a long seat post and quick-release seat post binder and "bear-claw" pedals. Also, be certain the handlebar isn't swept back, like those on a bike meant for cruising the beach; otherwise you won't be able to get forward enough on the bike when you're standing up and climbing hills.

Because a mountain bike frame is constructed differently from a road bike frame (it has a higher bottom bracket), you'll take a smaller frame size in an ATB. Buy the smallest size that fits you; you'll find a smaller frame is more maneuverable and handles better.

Cost: All-terrain bikes cost anywhere from $275 to $2000 for custom jobs. Unless you plan to race, I'd recommend bikes in the $350-$550 price range; they've got a few more creature comforts (better grips, seat) and slightly more durable components than less-expensive bikes.

Clothing: Don't forget to wear the right equipment—a bicycling helmet, gloves, stiff shoes (such as Nike lightweight hiking boots), maybe some pads and a long-sleeve jersey (depending on how crazy you get).



Diamond Back's "Mean Streak" is a typical midrange ATB—good quality at a sensible price.

can get a really tough workout in a very short time."

Riding a mountain bike will also develop the endurance and strength in the leg muscles that dirt riding requires. Steve Potts raced Pro class 125 and 250cc motocross bikes for nine years, and now races bicycles—road and mountain bikes. "To ride [a motorcycle] well off-road, you have to have good leg strength," says Potts. "The longer you can stand up, the better you're going to do. Once you have to sit down, you're history.

"Riding a mountain bike really works your legs. You have to spin the rear wheel to get up hills, which are often much steeper than on pavement," Potter adds. "And there's more resistance in the dirt. If there are a lot of switchbacks or ravines where you ride, you have to stand up out of the saddle and sprint to clear the section."

Probably as valuable to the dirt rider as the endurance benefits are the mental/physical skills that riding a mountain bike develops. "You can't ride a motorcycle every day," says Bell. "It's just too demanding. You have to do something to simulate riding, and riding a mountain bike is the closest thing there is."

Essentially, riding a mountain bike requires many of the same skills and techniques that dirt riding demands: the same emphasis on coordination, reflex development, balance and body positioning. "When you take a really steep downhill full of switchbacks, it's exactly the same," says Potts. "You've got to slide the bike, work the front brake and develop cornering skills. You get an upper-body workout, too, because you're always pulling the bike back toward you to get over and around obstacles."

Dirt riders can also use a mountain bike to develop their concentration without the same risk of injury that riding a dirt bike involves. Most of the injuries sustained in dirt riding result from riders being crunched by the bike, not just from falling. "You're wrestling a 225-pound machine, using all your muscles," says Mike Bell. "I tore the ligaments in my knees when my foot got twisted or pulled under the bike. When you get in trouble on a mountain bike, you can usually just throw it away from you."

"Every time you ride a motocross bike, there's a certain amount of stress just because you know you can get hurt big," says Potts. "So mountain biking is kind of a luxury. You can have fun with it; it's a little more recreational. It takes some of the mental pressure off."

There are other differences between riding a mountain bike and riding a dirt bike besides weight. Because you supply the power on a mountain bike, you have to keep the rpm high going up hills and use foot pressure on the pedals to control the bike in a slide instead of using the throttle. Because your legs take the place of the shocks on dirt bikes, you have to prepare yourself for harsh landings when you go off jumps. You also have to keep your weight back so you don't go over the bar.

It's easy to find places and the time to ride a mountain bike; you don't have to throw it in the back of a truck and drive an hour to get to a riding area. You can ride from your home on the streets to a trail or fire road, and mountain bikes are welcome in most parks and preserves—for the moment, at least. You'll be surprised, too, at how many out-of-the-way riding areas you'll discover while exploring on a mountain bike.

Or you can do what Mike Bell does. "I have a couple of tracks set up with double jumps, ravines, things that most people won't do," he says. "One of my courses is more than a mile long, with steep grades and two-foot-high jumps that are 10 feet across—it takes me 12 minutes per lap."

On the other hand, you can always improvise in a less elaborate manner. "For challenges, my friends and I climb rocks and logs," says Bell. "We'll ride on top of downed telephone poles or off picnic tables—whatever looks 'makeable.' Or we'll put a ramp against a wall and ride up it, then roll back, trying to stay balanced. Sometimes I'll just go out in the street in front of my house and do wheelies for half an hour to work on balance."

Training doesn't mean killing yourself. Training isn't just hard work and drills. Ultimately, it's got to be enjoyable or people won't do it for long.

Mountain biking is fun! Dedicated athletes like Mike Bell know that; he rides his mountain bike to visit his family, run errands and go to the beach.

Fitness, too, shouldn't be pursued in a hurry. It should be viewed from a lifetime basis. You need to do those things that will allow you to have a lifetime of good health and participation in recreational sports. The pursuit of fitness should mean continuous, progressive improvements in performance over a sustained period of time, which is best achieved by not overextending yourself.

That's the nice thing about riding a mountain bike: You can either work or play hard on it. You can use it to be daring, riding in gonzo-kamikaze fashion down the sides of steep hillsides. Or you can use it to cruise, kick back and take in the world at a more relaxed pace than usual.

That's why some people call mountain bikes "a bike for all reasons." DR