

THE PATH TO EXCITEMENT

Read All About It With the Right Map

BY GARY SPRUNG

"The idea of such a thing as a map is at once one of the most primitive and the most civilized of human feats. It is both a yen and a conception, like such other old but ever-new ideas as music and dance, myth and fiction, image and depiction, thought and symbol."

—David Greenhood, *Mapping*, University of Chicago Press, 1944

A mountain biker's need for maps differs little from that of primitive humans who scratched the route to water or food on cave walls. Cyclists, too, often develop serious demands for these precious substances. Fortunately, in this day of Landsat satellites and computerized topographic imagery, we more often need maps for pleasure than survival.

Beyond the mere information it contains, a map can provide armchair exploration entertainment, stimulating pleasant dreams of exciting adventures. Maps can delight the eyes with artful, elegant design.

I know one avid mountain biker who uses a map not for directions, but goals. He has outlined in red all the local trails he wants to master. When he travels one, he covers the red with a heavy black line so he can see his progress.

Directions and information about riding routes will always be the primary functions of maps. But what makes a good mountain biking map? As members of the trail user family, as fellow adventurers into the backcountry, mountain bikers generally share many of the needs of hikers and horseback riders. We want to know how far and how steep. We want to avoid obstacles such as cliffs or swamps. We prefer a route that will take us to beauty or excitement.

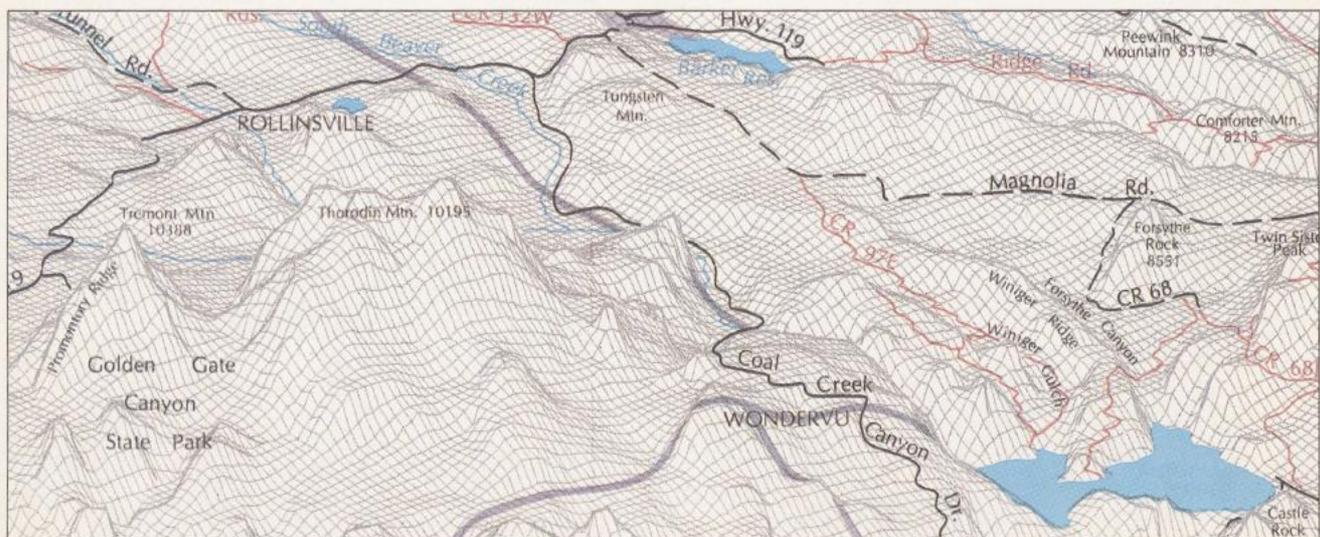
Still, our needs differ somewhat from other trail users. For example, a rock-strewn singletrack that may merely be uncomfortable for a hiker might be unridable for a cyclist. Any hiker can climb up a 500-foot-vertical, 30-degree slope, but only the strongest riders can conquer such an ascent.

Topography

So, beyond the obvious need for information about distance and location, mountain bikers are concerned with surface types and vertical relief. David Greenhood, in his classic book, *Mapping*, observed that relief includes "four principal facts: 1. the shape of a hill or depression; 2. its size; 3. the slope of the ground; and 4. the elevation of the ground." Picture maps can depict relief, but such topographic information is better described through the use of contour lines that represent imaginary horizontal planes cutting through the vertical features of the earth's surface.

All points on each contour line are at an equal elevation. The lines' paths and distances from each other draw a picture that establishes Greenhood's four principal facts. With a little experience, a topographic map user can form a mental picture of the lay of the land from a quick glance at the contour lines.

The principal source of topographic



Accurate and artistic, Zia Design's computerized 3-D map delineates the terrain of Boulder County for mountain bikers.

COURTESY OF JIM ROBB/COMPUTER TERRAIN MAPPING, INC.

maps is the U.S. Geologic Survey, which issues maps covering the entire United States at scales of 1:24,000 and 1:50,000 (map inches to actual inches). These have long been standard items in the pockets of backpackers, and they serve cyclists equally well. They're cheaper if purchased from the government, but you can also find them in stores that cater to outdoor enthusiasts.

When planning a new ride, however, topographic maps are not where I start my research. I begin with a larger-scale map issued by the U.S. Forest Service or other public land management agency. These maps usually offer little or no topographic information. Instead, they serve as up-to-date guides to human features, such as wilderness boundaries, trail and road conditions, buildings, land ownership, and resource and travel management. A USFS map, at one inch to the half-mile, gives a broad overview of recreation opportunities and lets me quickly find rides involving maximum singletrack, my favorite kind of route. In this way, I begin many of my adventures at home in Crested Butte, Colorado, poring over my map of the Gunnison National Forest.

When I've found a route, I turn to the more-detailed, smaller-scale topographic map. During the ride, I carry the topo maps, not the forest map that offers few clues to the lay of the land.

Maps for Cyclists

Though government maps are thorough, they don't always meet the special needs of cyclists. So entrepreneurs are creating specialty maps. By suppressing some features and emphasizing others, they can provide better information and entertain, too. One of the simplest was issued by the Winter Park (Colorado) Fat Tire Society. With no pretense of geographic detail or precision, this pamphlet gives a general picture of eight rides on one side, with detailed descriptions and elevation changes on the other.

A nice map drawn by Ray Ford in 1987 covers the Santa Barbara, California, area. It clearly delineates a variety of routes and shows whether they're on paved roads, unimproved dirt roads, or trails. It notes good camping spots, key peaks, and wilderness boundaries. The back side offers detailed descriptions of 20 rides. I especially appreciate his diverse, well-composed, black-and-white photos gracing the margins. There are no contour lines, so riders who want such detail for route finding are directed to the appropriate USGS maps.

The maps created by the bicycle stores in Crested Butte offer more because

they're based on photographic reproductions of the USGS topographics. The map by Steve Cook of Paradise Bike and Ski covers a large area and warns of private property and wilderness boundaries. Instead of trail descriptions, Cook offers a number system to rate physical strain, technical difficulty, trail surface, and other problems. Color coding gives a quick picture of beginner, intermediate, and advanced options. The map folds to a perfect size for pockets.

The best mountain bike map I've seen covers Boulder County, Colorado. Zia Design Group, a partnership of professional cartographers, published this masterpiece in March. The front has a compilation of USGS 1:50,000 topographics in black, with a precise overlay of bicycle routes shown in red. Many of the routes include mileage markers and all are named. The map also pinpoints every bicycle and accessory shop in the county.

Zia has included the requisite route descriptions and elevation profiles. Tidbits of historical information offer lots of entertainment. Other notations demonstrate that these people don't take themselves too seriously. One comment opines, "The more you drive, the less intelligent you get," with a credit to "Repo Man." The map key is introduced with a quote from Buckaroo Banzai: "No matter where you go...There you are."

What makes this map unique is a high-tech picture of the terrain on the back side. Zia has teamed with a Boulder company called Computer Terrain Mapping to produce a 3-D drawing of the mountains and plains. While a contour map requires educated imagination to visualize the shape of the land, this map uses a computer-generated grid that accurately portrays what an observer would see when looking at the mountains from the southeast corner of the county at an altitude of 40,000 feet. The cartographers used digitized data provided by USGS, which is increasingly computerizing its own mapping.

Authors Mary Morrison and Jim Robb note: "Part of our goal with a 3-D view of the Boulder County area is to strike a balance between art and geography, offering aid in the visualization of topographic maps. This type of imagery provides quick understanding of the complex physiographic features without compromising spatial relationships and accuracy...Vertical exaggeration renders the feeling of realism. Despite this, horizontal locations are accurate."

The Zia cartographers say they want to create similar maps for other mountain biking hot spots. A Marin County, California, map should be expected soon.

Guidebooks

Related to maps are guidebooks. Can a map substitute for a guidebook, or are they different creatures entirely? A guidebook will likely contain much more verbal information, including careful notations of junctions and landmarks. A good guidebook will also entertain with drawings or photos. But no verbal description can objectively portray terrain, nor can just a few photos. So my answer is no, a guidebook cannot substitute. Guidebooks and maps complement.

The Mountaineers of Seattle recently published new mountain biking guidebooks. I highly recommend *Mountain Bike Adventures in Washington's North Cascades and Olympics*, by Tom Kirken-dall. Though I have no plans to go there soon, I much enjoy perusing this volume. The photos are fun and the descriptions well-considered. The maps are simple and not adequate for navigation, but at least they give some idea of relief and the shapes of the land.

Finally, I want to mention that maps, like cameras, can interfere with your experience. If you want more adventure, more risk, more challenge, occasionally forsake a map and rely on your sense of direction, distance, and location.

Resources

USGS Topographic Quadrangle Maps: U.S. Geologic Survey, Map Distribution, Federal Center, Box 25286, Denver, CO 80225. \$2.50 each, plus \$1 shipping on orders under \$10.

Land Management maps are available at District Ranger offices and at agency offices in major cities. Usually \$2 each.

◆
Winter Park Fat Tire Society, Box 1337, Winter Park, CO 80482. Free.

◆
Crested Butte Mountain Bike Map: Paradise Bike and Ski, Crested Butte, CO 81224. \$6 postpaid.

◆
Crested Butte Bike Trails: The Alpineer/Bicycles Etc., Box 813, Crested Butte, CO 81224. \$5 postpaid.

◆
Santa Barbara Mountain Bike Routes: McNally & Loftin Publishers, 5390 Overpass Rd., Santa Barbara, CA 93111. \$3.95.

◆
Boulder County Mountain Bike Map: Zia Design Group, Box 578, Boulder, CO 80306. \$11 postpaid.

◆
The Mountaineers, 306 2nd Avenue West, Seattle, WA 98119. ■