



49 °F

Forecast | Road Cams

Read the Trib first. ONLINE EDITION Mail Tribune



Today's News | Classifieds | Autos | Homes | Jobs | Tempo | Health | Community | Home Delivery

SECTIONS

Home Page

Local News

Sports

Business

Obituaries

Life

Opinion

Tempo

AP News

Weather

Classified

Archives

Site Map

ARCHIVE SEARCH:

SPECIAL SECTIONS

Since We Asked

Outdoor Journal

Menu Guide

How To Guide

Health

Readers' Choice

Real Estate Showcase

Real Estate Guide

Joy Magazine

Homelife Magazine

Wedding Guide

Passport to the Rogue Valley

SHOP OUR VALLEY

AutoFinder

HomeFinder

JobFinder

Classifieds

Place an ad

TOP JOBS

EXTRA

NIE

Personals

Movie Times

TV Times

Advertisements ▼

LIFE

August 13, 2004



EMAIL THIS STORY



PRINTER FRIENDLY VERSION



SUBSCRIBE TODAY

Puzzle pieces turn into map of mountain bike trails

By **BILL KETTLER**
Mail Tribune



□ Former Greensprings resident Lled Smith has created a full-color map of more than two dozen mountain bike trails in Southern Oregon. He's just completed a similar map for the Bend area and hopes to create others as well.

Mail Tribune / Jim Craven

Lled Smith wanted a better map of mountain bike trails in Southern Oregon, so he made one himself.

Now the 34-year-old Bend bicyclist hopes a few thousand other riders will want one, too.

The former Greensprings resident rode local trails before he moved to Central Oregon. When he came back to the Rogue Valley for a cycling vacation, he was surprised to discover nobody was making the kind of detailed topographic trail map that he wanted.

Smith was in a perfect position to make his own map. He had recently earned a degree in geographic information systems from Central Oregon Community College, and knew how to use computers to store, analyze and display information that could make detailed maps.

He also knew the trails.

Advertisement

The idea for a bike trail map took shape while Smith worked at his day job, teaching people how to use geographic information systems, or GIS. The map became a spare-time project for the hours he wasn't working or raising an infant daughter with his wife, Becky. He collected data from public maps and government agencies and fed it into his computer, along with latitude and longitude coordinates for the trails.

"I'd figure out one piece of the puzzle and put it in (the computer), and then another," he says.

The puzzle took four years to assemble.

| |
|--------------------------|
| E The People |
| Volunteer |
| Moving here? |
| eSouthernOregon |
| CUSTOMER SERVICE |
| FAQ's |
| Advertise with us |
| Home Delivery |
| Employment |
| Contact Us |
| Media Kit |

What emerged is a full-color map of more than two dozen trails in three of Southern Oregon's most popular biking areas: Mount Ashland, Brown Mountain and the Applegate Valley. The map displays trails in ways that combine traditional mapping techniques with displays that were impossible in the days before GIS.

Each route is printed in highly visible red ink on a traditional topographic map that includes the familiar elevation contours, but the contours have been rendered in colors to emphasize relief: valleys are shades of green; low ridges are rendered in tans and light browns; mountains shift from pale rose pink to dark gray as they rise.

Every trail is also displayed in "profile" as a chart that graphs elevation lost and gained along the way. Riders can instantly compare the trails' relative steepness: some drop 1,000 feet a mile, while others maintain a fairly constant elevation.

"We give all this technical information so people can decide whether they should do the trail," Smith says. "You can look at the profile and if it drops 3,000 feet, maybe you know that's way too much for you."

The GIS software gave Smith powers that would have made ancient cartographers swoon. He rendered the trails from a "bird's-eye" view (known to cartographers as "oblique") by shading the landscape to create the illusion of three-dimensional relief as it would be seen from the sky.

"The oblique views give people an idea of what they're going to ride before they go out there," Smith says. "They can see the easy trails and the hard trails."

"If you look at a basic topo map it's hard to see how steep things really are. A lot of people don't know how to read contour lines."

There are large oblique views for each trail area, and smaller, individual "thumbnail" obliques for each trail.

The map is coated with a water-resistant material to extend its life expectancy in the rough-and-tumble bike environment.

"Our goal is have a map that will last a season," says Smith's wife, Becky, who does "everything but the map design — from catered lunch to marketing, sales and baby sitting. You name it."

The Southern Oregon map also gave the Smiths a basic template that they plan to use to make other trail maps of popular biking areas. They recently finished the first of two Bend-area maps, and they plan to make maps for the Southern Oregon coast, Klamath and Lake counties, the Umpqua region and for trails around Grants Pass.

"Our goal is to create an inventory of maps and reprint them every year," Becky says. "We'd like to start 2005 with seven maps."

Cyclists say the Smiths' maps, which retail under the Treadmap name, make the trails more accessible to local riders and visitors as well.

"They make people more confident they can find their way," says John Ford of Bear Creek Bicycles in Ashland.

The maps' road directions to each trail are helpful, too, Ford says. "People from out of town want us to explain to them exactly how to get to every



trail. That's impossible."

The bike trails are also open to hikers, and the maps include many forest roads that provide trail access. Those features could make the maps attractive to people who would never think of mountain biking, says Gwen Haynes of Sim's Cycle in Medford.

"I think the maps are cool," Haynes says, "and I don't even ride a mountain bike."

Reach reporter Bill Kettler at 776-4492, or e-mail bkettler@mailtribune.com

[Mail Tribune Home](#) | [Local News](#) | [Sports](#) | [Business](#) | [Obituaries](#) | [Life](#) | [Opinion](#)
[AP News](#) | [Archives](#) | [Site Map](#) | [Community](#) | [Classified](#)

Copyright © 1997-2005 Mail Tribune, Inc. All rights reserved.
[Privacy Policy](#) | [Terms & Conditions](#) | [Website Feedback](#)



paid advertising

Student Loan Consolidation
Conference Calls - \$50/Month
Home Security Systems
Trunks, Footlocker, Trunk, Footlockers
home equity loans
helzberg

Slippers
Student Loans
afsa
teleconferencing
Memory Foam Mattress