

# ***Fat Tire Flyer***™

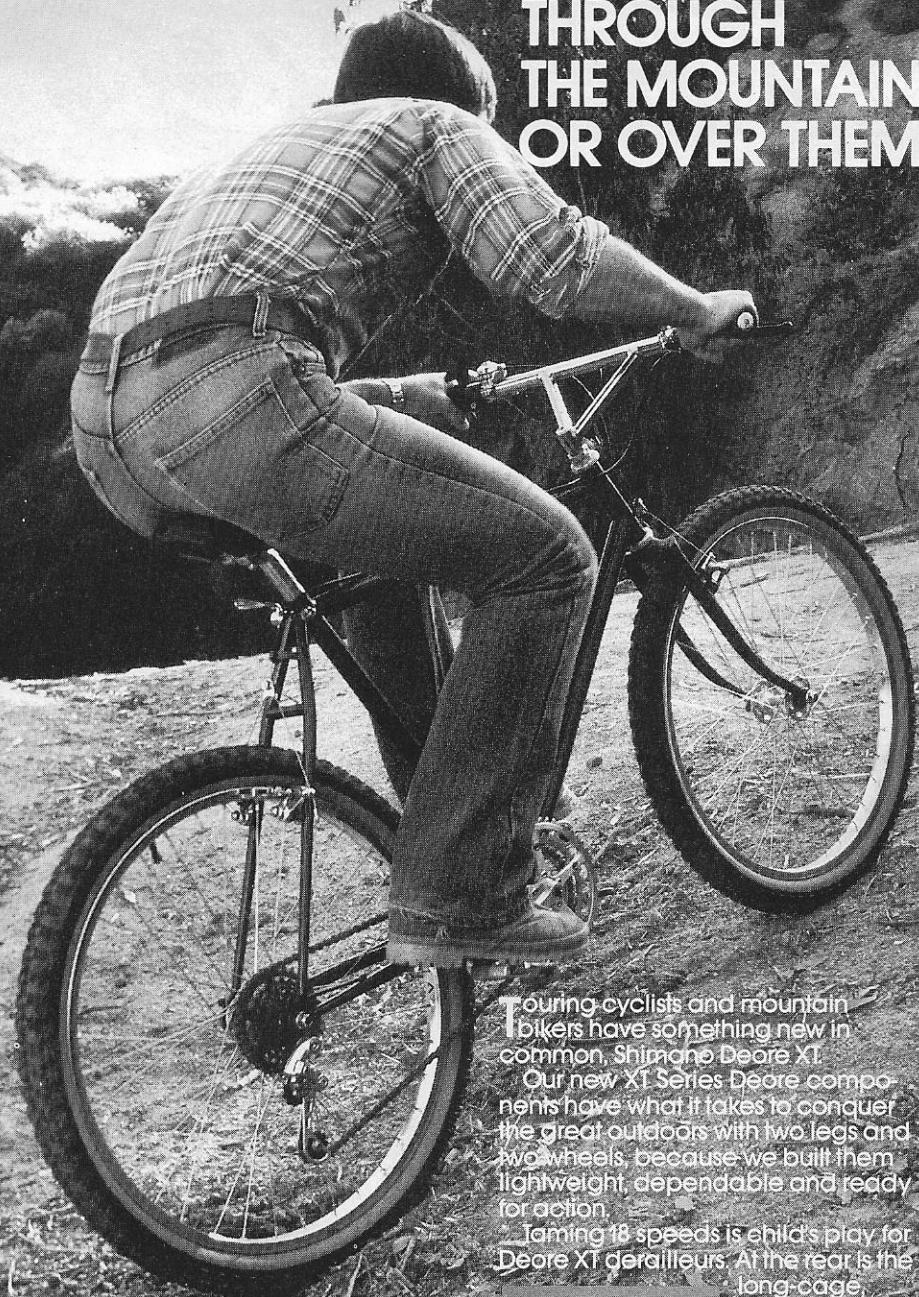
JANUARY/FEBRUARY 1984 • VOLUME 4, NO. 1

\$2.00



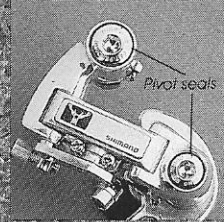


# THROUGH THE MOUNTAINS OR OVER THEM...



Touring cyclists and mountain bikers have something new in common, Shimano Deore XT. Our new XT Series Deore components have what it takes to conquer the great outdoors with two legs and two wheels, because we built them lightweight, dependable and ready for action.

Taming 18 speeds is child's play for Deore XT derailleurs. At the rear is the long-cage, high-capacity M700, sealed at the pivots and

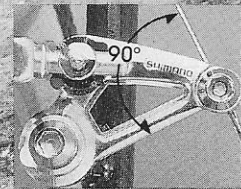
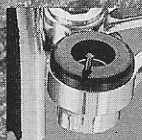


This light alloy, long-cage Deore XT derailleurs has special dirt seals for increased reliability.

featuring Centeron automatic alignment. Up front, Deore XT shifts with Shimano's famous Trap-Ease efficiency and the extra strength of a cold-forged outer link.

Deore XT also means safe, controlled decel-

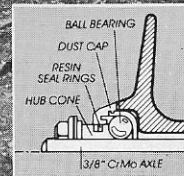
eration with the all-new MC70 cantilever brakes. Cleverly designed and fully adjustable to fit all popular



For maximum braking power the Deore XT cantilever pulls with optimal 90° efficiency.

bosses (including Mafac), the XT brake arch is buttressed and cold-forged for rigidity and strength. The unique arch design also provides peak pulling efficiency, creating a 90° angle between cable and arm when pad contact is made.

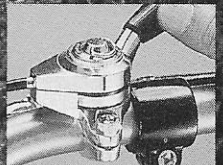
XT large flange alloy hubs are special, too, rolling on 3/8" chromoly axles



Sealed hub design gives Deore XT free-spinning action and easy adjustability. Fits all standard freewheels.

and featuring Shimano's revolutionary new sealed design. Double-ring seals at both ends completely seal

the entire hub from damaging dirt and moisture without sacrificing serviceability.



Uni-shift, ratchet action makes Deore XT thumb shifters foolproof and easy to use.

The human side of Deore XT shines right through in our engineered brake and shift levers. Specially designed to keep your hands on wide stance bars, these XT levers put all the controls right at your fingertips.



Cold-forged alloy brake lever is rugged and perfect for mountain bike bars.

Standard Deore and Shimano 600 Series levers are available for touring bicycles.

Deore XT components are ready for the great outdoors, and they are waiting for you at your local bike store.

# DEORE XT

TOURING AND OFF ROAD  
COMPONENTS

**SHIMANO**



# Fat Tire Flyer™

P.O. BOX 757, FAIRFAX, CA. 94930

## MANAGING EDITOR/PUBLISHER

Denise Caramagno

## EDITOR

Charles Kelly

## ART DIRECTION

David & Pamela Ross

## GRAPHICS

Imagine That Studio  
Larkspur, California 94939  
(415) 927-0996

## PHOTO EDITORS

Wende Cragg  
Dave Epperson

## PHOTOGRAPHERS

Denise Caramagno  
Wende Cragg

## PRINTED BY

Ovid Bell Press, Inc.  
Fulton, Missouri 65251

## COVER PHOTO

Fred Wolf and Son, Joshua, at  
Tamarancho, Marin Co., California  
Photo by Wende Cragg



JANUARY/FEBRUARY 1984 • VOL. 4, NO. 1



*Crested Butte 1983*

## 4 GUEST EDITORIAL

## 5 FAT FEEDBACK *Readers Reject Our Values*

## 5 AN OPINION: NORBA National Meeting *Everybody has One*

## 6 FAT TIRE BIKE WEEK *Soon to be a Legal Holiday*

## 8 TRAIL ETIQUETTE *Which Fork Do I Take?*

## 10 PRODUCT REVIEW

## 11 WRECK TIPS *by Art Read* *A Take-Off on a Satire of a Put-On*

## 14 RACE REPORTS *Hard News*

## 16 TECH TIPS *Our Friends the Fossil Lubricants*

## 17 FAT NOTES *All the News That's Fat to Print*

## 19 NORBA VS USCF *When Acronyms Collide*

## 23 MUDPUP *by Kevin Coffey* *Our Hero Sells Out*

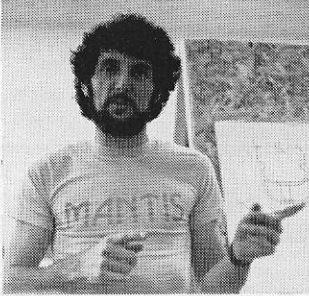
FAT TIRE FLYER is published bi-monthly by the Fat Tire Flyer, P.O. Box 757, Fairfax, CA 94930, (415) 488-4047. ©1983 Fat Tire Flyer. All rights reserved. Reprinting in whole or part is expressly forbidden, except by written permission of the publisher.

"FAT TIRE FLYER" is a registered trademark of the Fat Tire Flyer. Any use of this mark without written permission is prohibited by law.

Postage paid at Fairfax, CA. One year subscription, 6 issues, \$10.00. Foreign subscriptions \$16.00 (U.S. Currency).



# Editorial



## GUEST EDITORIAL

*The following is an open letter to the "off-road cycling public" from Richard Cunningham of Mantis Bicycle Company. A copy is given to each Mantis customer.*

Hello,

In the past, when a sport as exciting as off-road cycling began to mushroom into the marketplace, all aspects that could prove to be profitable were exploited. In this quest, the early pioneers of the sport often overlook the rights of others due to their enthusiasm. Examples of this phenomenon most recently have been off-road vehicles such as motorcycles, snowmobiles, four wheel drives, and so on. At first, when the sport was new, this attitude was relatively harmless. But as the sport grew, the irresponsible element grew along with it. The result is obvious; the percentage of irresponsible people was small, but their numbers were many. The entire sport became a victim of strict legislation.

Enthusiasm is the most important ingredient of every sport. It is easy to understand how that very ingredient, if unchecked, can lead to the sport's demise. My point is just that. The manner in which the sport of off-road cycling is conceived determines a great deal of how it will be in the future. The wilderness experience is a shared activity. The future of off-road cycling will be assured if all of us display an attitude of cooperation toward the non-cyclists we encounter on the trail, and develop an awareness of the laws governing the areas where we ride.

As a manufacturer of off-road bicycles, Mantis is asking all those involved in this new sport to join us in adopting these simple but important ideals. We want the off-road cyclist to be considered in the public eye a responsible part of the wilderness experience, not just one more threat to its existence.

Wende Cragg



## SUBSCRIPTIONS

A subscription to the **FAT TIRE FLYER** will guarantee that you don't miss a single action-packed issue. At \$10.00 per year or \$18.00 for two years (a savings of up to 25% off the cover price) you just can't lose! Foreign subscriptions are \$16.00-1 yr./\$28.00-2 yrs. (U.S. Currency)

Just fill out the order form below and start receiving the world's leading magazine for Fat Tire riders.

NEW  RENEWAL

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Send with check to:

**FAT TIRE FLYER**

P.O. Box 757

Fairfax, CA 94930



## NOTICE

from the Fat Tire Flyer

To any and all Fat, Creative people! In order to provide a complete, well-rounded, and objective publication, we need your help. Photographers, writers or just plain readers/riders, we need your stuff. Unsolicited manuscripts are always welcome as are letters or comments. Photographs should be black and white.

Send all materials to:

**FAT TIRE FLYER**

P.O. Box 757

Fairfax, CA 94930



# Fat Feedback

Editor:

I object to two pictures that were shown in the July/August issue. These pictures (on pp. 4 and 21) show dudes going downhill with their rear brakes locked and throwing up huge dust clouds. A dust cloud does not mean high speed, as evidenced by the dude with the most dust having one foot on the ground and his bike at an unrideable angle. Anyone who gets off on dust clouds is really out of it.

These pictures should be banned as obscene because it encourages immature young riders to imitate. This not only causes unnecessary erosion, but risks getting the wrath of the Sierra Club against mountain biking in general.

Akos Szoboszlay  
San Jose, CA

*Editor's Note: The photograph in question was taken on a logging road. The riders would be hard pressed to equal the environmental impact of logging trucks.*

## ANOTHER VIEW

Editor:

Please send information on how I could get a glossy of the picture in the Poetry Corner on page 21 of your publication "Fat Tire Flyer" in the July/August issue.

B.R. Mauk  
San Anselmo, CA

Dear Flat Tire People;

FTF is great in a non-slick, B movie sort of way, about the only improvement would be more photos and technical articles for us neophytes who aren't in Marin and don't have much

access to experienced riders who have already learned things the hard way. All the bike stores in town are selling Fat Tire bikes hand over fist, but if you ask a technical question or try to order an odd part, they treat you like a mentally disordered sex offender. In that same vein, I would be interested in conducting any organized (or preferably not so organized) groups in this area for weekend rides, dirt road camping/touring, fun ride/picnics, etc. The bike store bulletin boards around here seem to have plenty of info and flyers on upcoming off-road races, but there must be other people out there interested in the more casual aspects of Fat Tire Flying.

Cruisenly yours,  
Bryan J. Williams  
Sacramento, CA  
P.S. Bring back the sick cartoons.

Dear Fat Tire People;

As I see it, there are only two major problems with being around fat tires. The first is that they are addicting, although I'm sure I'll be able to tell my boss that those two days he couldn't reach me last week were two of the most productive days that I have spent for him in two years. But the second is not so easy to handle. The fact is, Fat Tires and their components, as you well know, are contagious. I'm not so sure I'm going to be able to handle the payments on my house as easily as my boss now that other members of my family are also convinced they also need Fatties under their butts.

Allen Luce  
San Anselmo, CA

## An Opinion . . . by Denise Caramagno

### NORBA National Meeting

The first national meeting of the National Off-Road Bicycle Association took place in the gym of the Crested Butte School on September 16. It was attended by about 25 NORBA members and 75 non-members.

New NORBA chief Glenn Odell presented himself to the crowd, made a few statements regarding the purpose and direction of NORBA, and his role in the organization. The floor was then opened to general comment, and at that point the meeting lost most of its direction and cohesiveness.

The meeting followed a number of events including the paradise Divide Stage Race, the Suntour Fat Tire Seminar, and the race awards ceremony. Speakers did not identify themselves as members or non-members. Many in the crowd had already started celebrating, and in the absence of strong control of the floor the opinions heard for the most part represented those with the loudest voices.

This is not to say valid opinions were not presented. One view of the apparent antagonistic attitude on the part of some other wilderness users

toward cyclists was that this attitude is a result of personal prejudice rather than any ecological belief. Some people are offended by the sight of machinery, albeit benign machinery, in wilderness areas previously accessible only to hikers and equestrians.

Odell concluded that the only counter to this argument is an environmental impact study. Once it is evident that bicycles create no greater impact than horses or hikers, we can begin to confront the real issues. Another valid statement made was that there are places where bicycles just don't belong. We need to identify these areas and respect them.

The meeting disintegrated as participants trickled out, thinking, no doubt, about the long day ahead of them, the first day of the Pearl Pass Tour. A few remained to argue issues that did not warrant discussion in a "national" meeting. Odell finally adjourned. Perhaps next year's national meeting can be preceded by local meetings, so that local issues can be hashed out and brought before NORBA in a more condensed and thought-out form.

Superior service, repair  
and performance  
modifications of  
water-cooled German  
bicycle transporters.



*mellow motors*  
SERVICE (415) 924-2211 • (415) 924-6509  
PARTS (415) 924-8312  
65 INDUSTRIAL WAY  
GREENBRAE, CA.

RENTALS  
by reservation

mountain bikes only

Stumpjumper • CyclePro  
SR • Ross • Fuji  
Ritchey MountainBikes  
Steve Potts  
Cunningham

parts & accessories

Blackburn, Shimano XT, Kangaroo Bags

Complete selection of mountain bikes  
from \$300

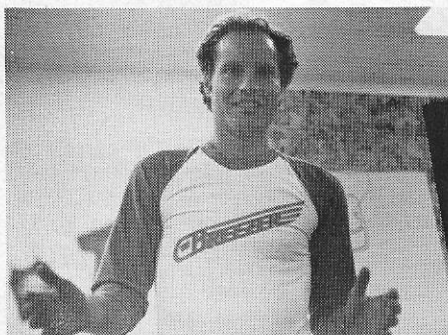
POINT REYES BIKES  
Highway 1 Point Reyes 415-663-1768



Jon MacIntyre adjusts a doodad.



Robert Stewart gets down.

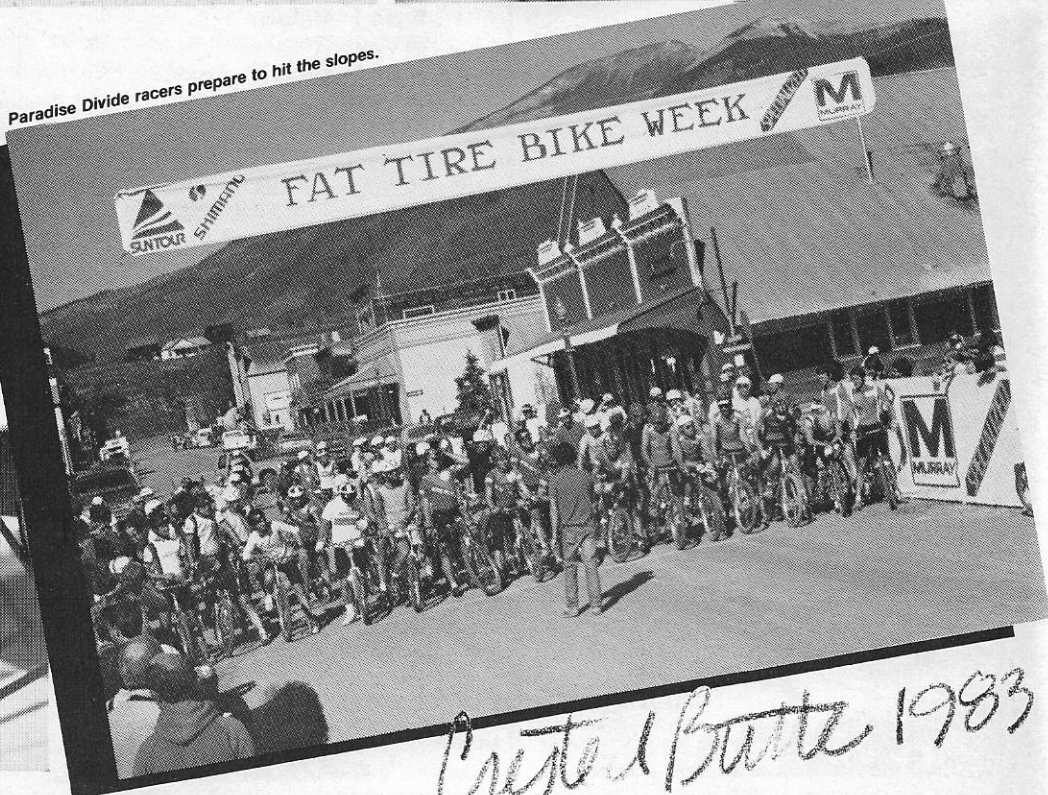


Joe Breeze tells about the one that got away.



"Rude Girl" Custom Frame from Ibis

Paradise Divide racers prepare to hit the slopes.



*Crested Butte 1983*

**F**irst there was the Pearl Pass Clunker Tour. It spawned the Paradise Divide Stage Race to handle all the competitive energy that gravitated to Crested Butte in connection with the tour. Now there is Fat Tire Bike Week, a series of events in Crested Butte to attract/entertain the fat masses in town before the race and tour.

Sunday, September 11 saw the final race of the Crested Butte Mountain Bicycling Association's summer series. On the very tough Gunsight Pass course local favorite Steve Cook clinched the series with an impressive win, retaining the Pneumatique Jaune (Yellow Tire) which signified the series leader.

Monday through Thursday was set aside for informal day touring and training for the racers, many of whom had come

from sea level to this 9,000' elevation. Each morning the pile of bikes in front of the Forest Queen was larger as the number of cyclists in town grew. As the local breakfast hangout the Queen was the planning site for dozens of rides and the meeting of the minds for the riders. Tour groups of five to fifteen cruised in and out of town all day, exploiting the magnificent weather and scenery and enjoying miles of bad road. At any given time from Monday on, a dozen or so riders could be seen orbiting on Elk Avenue, the main thoroughfare, either just returned from a ride, looking for someone to ride with, or merely orbiting.

On Thursday the Fat Tire Expo opened at the town hall and that same afternoon the Bike Rodeo featured an obstacle course, a bike limbo, and a stunt contest. The winning limbo height was 33", and the winning stunt... A hand-spring over the bars!

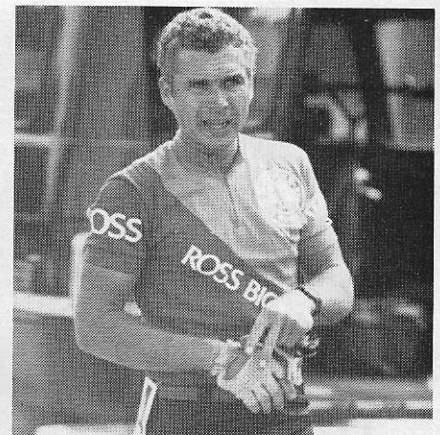
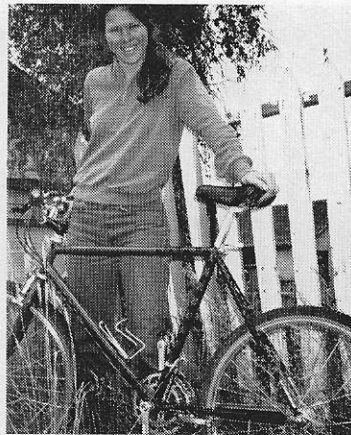
Later that afternoon a Framebuilder's Seminar gathered virtually every important domestic off-road custom builder, including Tom Ritchey, Joe Breeze, Ross Shafer (Salsa Cycles), Richard Cunningham (Mantis), Charlie Cunningham (Indian), Peter Weigle, Chris Chance (Fat Chance), Craig Mitchell, Dan Nibbelink (Rough Rider), Steve Potts, and Scot Nicol (Ibis). Time did not permit this group to adequately explore all the technical areas that called for attention, and the seminar was limited to each builder speaking for a few minutes on the things he considered most important. On Friday the main event was the Paradise Divide Stage Race, followed by the Second Annual Suntour Pearl Pass Seminar. This presentation, mostly for members of the bicycle industry, featured some in-depth discussions of the problems facing the Fat Tire industry, along with a slide presentation prepared by Ichiro "Sonny" Kawai.





Steve Cook triumphs in first stage of Paradise Divide Race.

Jenny Nichol and Custom Ibis.



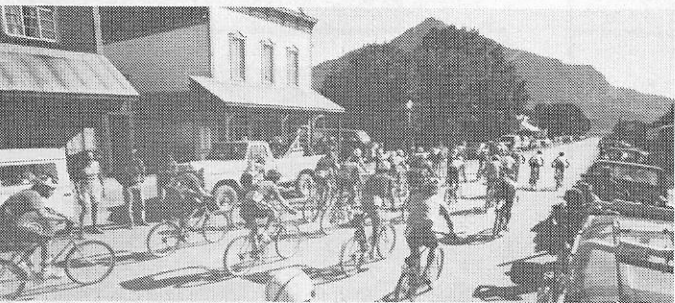
Clark Roberts points out "Booboo" that kept him from winning.



Betsy on her bike.



Bike Week Registration.



... "And they're off!"



Tom Ritchey addresses Framebuilders.

Photos by Denise Caramagno

The Eighth Annual Pearl Pass Tour started under sunny skies in contrast to last year's drizzler. The huge mob, nearly 300 strong, immediately strung out for a mile or so, and when the leaders took the first beer break five minutes into the ride, the last riders were still leaving town.

With fine weather the trek to the campsite was impressively scenic, most riders taking three to four hours to cover the eighteen miles climbing to 11,000 feet.

The campsite was already staffed with a cooking crew who had brought up supplies the night before including seven kegs of Watneys beer. Dinner was plentiful in spite of fears that there wouldn't be enough for the enormous group. During dinner campers were lectured on the ecological impact of a group this size and admonished to keep it to a minimum. The lecture was apparently effective, because after camp broke the next day, the signs

of its existence were minor and transitory, especially by comparison to the extended presence of cattle.

The trek over the summit at 12,700' resembled a migration. It is unlikely that any other group this size uses this road for any reason. Not that the road is likely to suffer from the traffic; granite boulders are much tougher than even Fat Tires, and the road surface consists of little other than granite. A pause at the top for each of the troops, a few photos, and then down the toughest test of bike and rider yet devised.

The descent to paved road is about seven miles, but it seems to take forever. Riders can choose between going fast and needing frequent rests from the battering, or going slow in order to keep moving. Several bikes fell victim to mechanical failure here; the wonder is that any survive.

Pavement, and a twelve mile coast

into Aspen. At this point it was hard to figure whether the party was over or just beginning. The front of the Jerome took on the appearance of a Tokyo subway station while two hundred muddy cyclists partied as though it was everyone's birthday. This was a tough act for anyone to follow, so at about six o'clock they took it on the road, as the majority of the troops returned to Crested Butte via chartered and heavily insured bus. History does not record how many bikes were jammed into the truck, but it was probably a record. Some stayed at the Jerome and planned to ride back the next day by another route. Did they make it? Well, that's another story entirely.

The Pearl Pass Tour is threatened by its own success. It threatens to draw more people than the support systems can handle, and in the future no doubt it will be limited in some way. As a forum for Fat Tires however, it is hard to top Fat Tire Bike Week.





## TRAIL ETIQUETTE

While riding on public lands remember that others are using the area for recreation too, and that bicycles are still an unexpected occurrence on the trail. So...

**YIELD**-always yield to the passage of hikers and folks on horseback, even if at times it seems inconvenient.

**PASSING**-when overtaking others let them know of your presence well in advance of passing, this is especially important with horses. Each horse will react differently to the sight of riders without four feet. In some cases it may be necessary to actually dismount and lift your bike off the trail to allow passage on narrow trail sections.

**HORSES**-when passing a horse from the rear, announce your presence to the rider and horse, bikes are very quiet and whizzing past a horse at speed could cause serious accident.

**EROSION**-one instance where a bike makes a contribution to trail erosion is on wet areas. This can be avoided by carrying or walking the bike, this will avoid lasting deep wheel ruts.

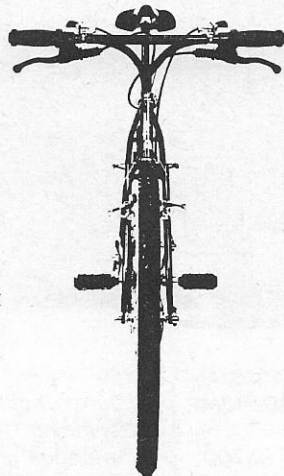
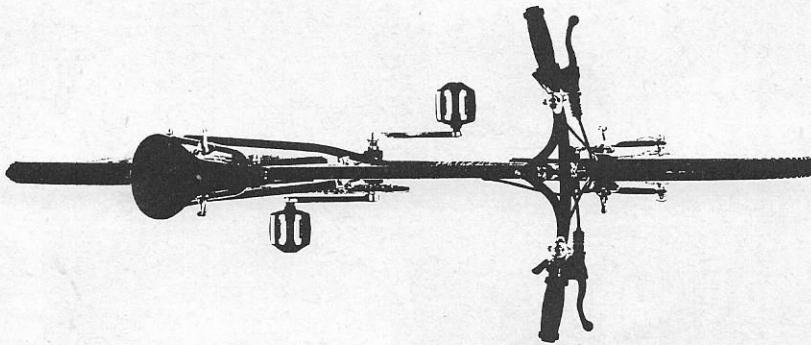
**SPEED**-safe speeds are relative to terrain and your own capability as a rider. Switch-backs should always be approached with the anticipation of other park users.

**STAY ON TRAILS**-Try to minimize your impact, never ride off of established trails.

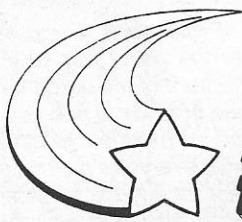
**LITTER**-pack out what you pack in.

**REMEMBER** that biking on public lands is in its infancy, and that courtesy will insure its lasting acceptance.

Courtesy of: **POINT REYES BIKES**  
Highway One, Point Reyes Station, Ca 94956  
(415) 663-1768



Here is what you get  
When you take a ...



# FAT CHANCE

THE ULTIMATELY ADAPTABLE ON & OFF ROAD FAT BIKE

28 lbs. of overfat technology.  
Custom built in two models.  
One is fully fillet brazed, the  
other, heli-arc welded.

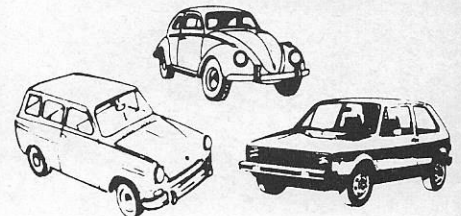
Handbuilt with Reynolds 531  
including tandem fork blades  
& American 4130 chrome-moly.  
Take a CHANCE! GET FAT.

Call or write for the fattest dealer near you.

**FAT CITY CYCLES**

331 Somerville Ave., Somerville, Mass. 02143 617-625-4922

## SPECIALISTS IN THE REPAIRING OF VOLKSWAGEN



- TUNEUPS
- TRANSMISSIONS
- ELECTRICAL
- BRAKE SERVICE
- MOTOR REBUILDING

## GERMAN AUTOS OF MARIN

(415) 453-5801

754 SIR FRANCIS DRAKE BLVD.  
SAN ANSELMO, CA.

(Just West of Chevron Station in the Hub)

OPEN 5 DAYS A WEEK  
8 A.M. - 5 P.M.

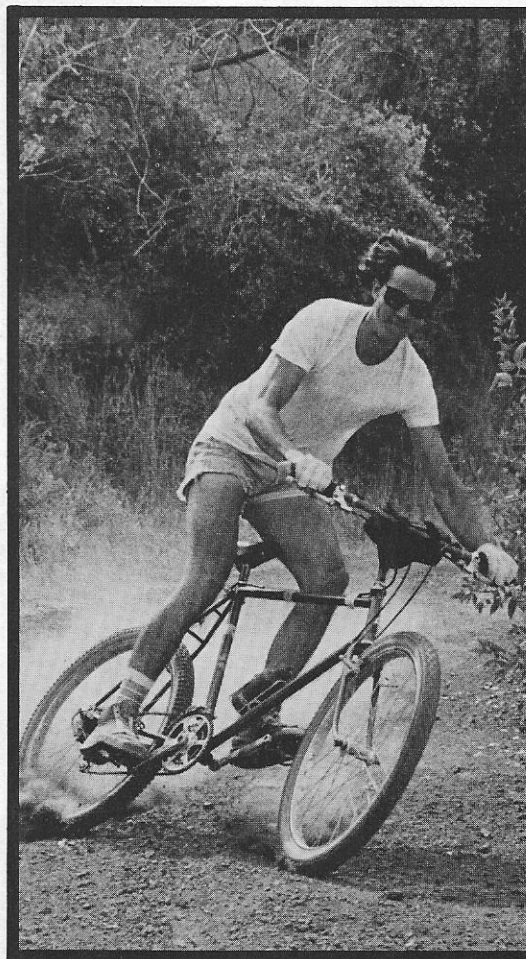
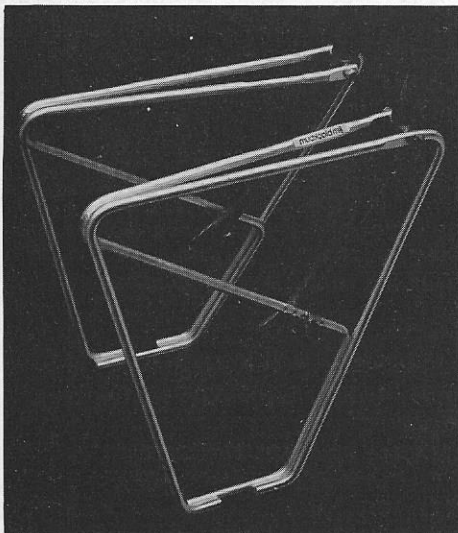
OVER 20 YEARS  
EXPERIENCE



## PRODUCT RELEASE

### BLACKBURN CL-1 FRONT RACK

Jim Blackburn Designs is introducing a new product that should be handy for off-road tourists, the CL-1 Custom Low-rider front rack. This rack will only mount on bikes fitted with a special braze-on on the fork blade. The design features extreme rigidity, according to the manufacturer, and allows them to dispense with the over-the-tire hoop. This leaves plenty of clearance for fenders or fat tires. The special braze-ons are already featured on some top-of-the-line fat tire bikes, and any existing bike can be retrofitted with them.



**MARIN'S  
MOUNTAIN BIKE  
HEADQUARTERS**

# Village Peddler

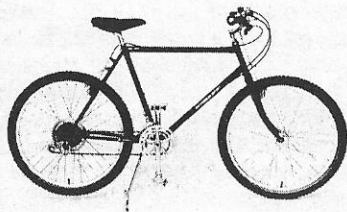
featuring:  
SPECIALIZED STUMPJUMPER  
CYCLE PRO CUSTOM 5  
CYCLE PRO RAM  
KHS SUNDANCER  
KHS EXPEDITION 15Spd  
SEKAI MOUNTAIN BIKES  
STUMPJUMPER SPORT  
LAGUNA MOUNTAINEER  
ROSS MOUNTAIN BIKES



1141 Magnolia  
Larkspur, Calif.  
(415) 461-3091

## Calling All Puget Sound Fat Tire Lovers

Check out our  
Hi Tech components  
and Ross Mt. bikes




SEND FOR FREE SALES FLYER  
OF MT. BIKE ACCESSORIES

Emeka  Wheels


2 Stores

Downtown  
Poulsbo, WA  
Ph. (206) 697-2420

744 Bay St.  
Pt. Orchard, WA  
98366  
Ph. (206) 876-2571



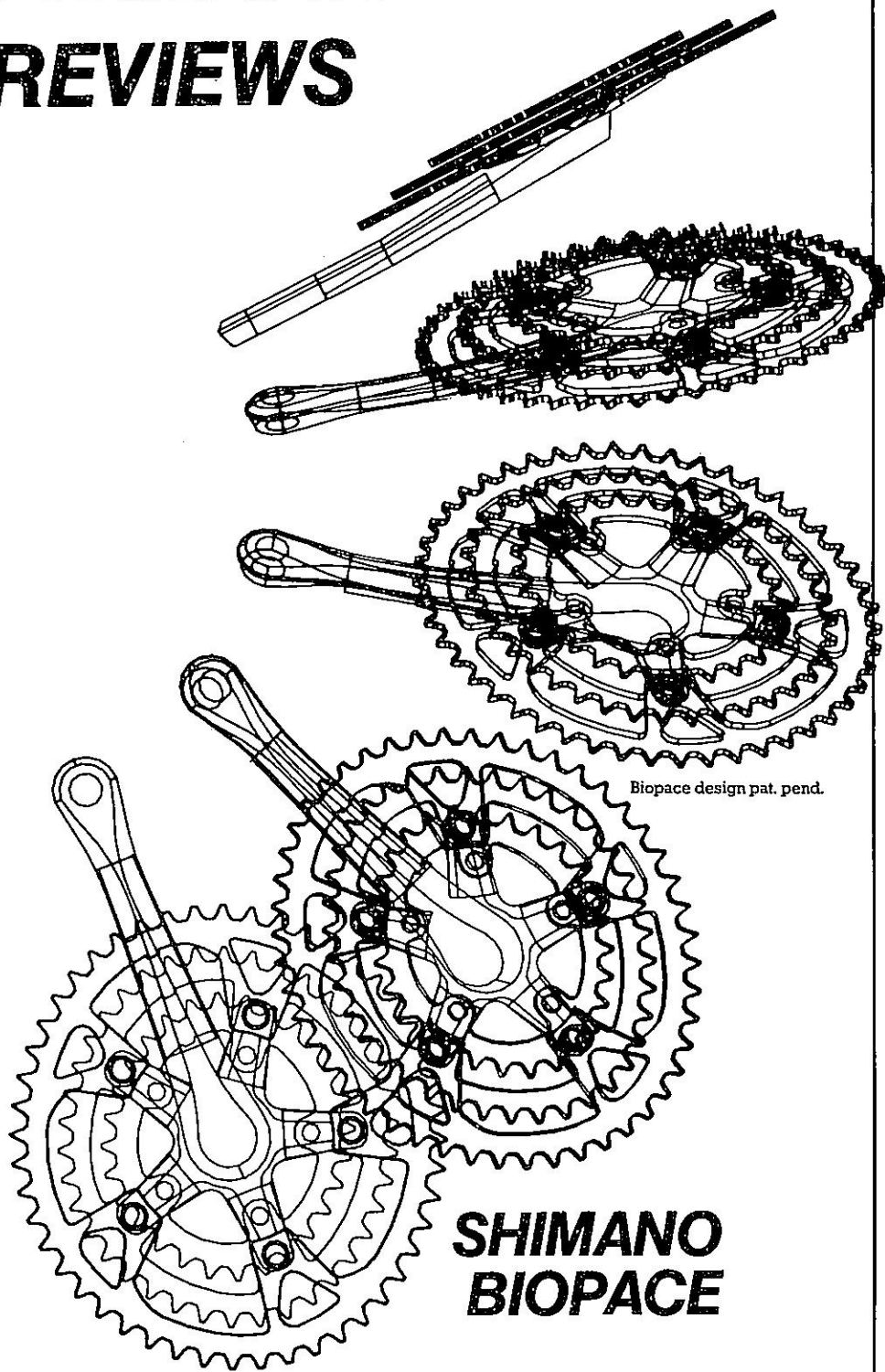
*ibis*  
Performance Balloons  
Brochure \$ 2.00



**IBIS CYCLES**  
BOX 422 Walnut Creek Ca. 94596 (415)939-8270



# PRODUCT REVIEWS



Biopace design pat. pend.

## SHIMANO BIOPACE

The Biopace chainring system is a set of three chainrings with the Japanese standard bolt pattern found on Sugino and Takagi crank arms. The chainrings are 48, 38 and 28 teeth, and are unusual in that they are not circular. Nor, Shimano is quick to point out, are they "elliptical," like those made some

years ago by Durham. Instead the shape is a "point-symmetric egg curve," a shape which has three axes of varying lengths. The shape is not as extreme as the elliptical rings were, but it is much more complex and is the result of extensive computer studies of the biomechanics of the knee.

### Fine, you say. Does it work?

I'll get to that. The reason that the Biopace is not round is that the rider's strength varies from one point of the crank's revolution to another. When the pedal is traveling straight down and the rider's weight is directly over it the most power is transferred to the wheel. As the rider pushes the pedal over the top he has the least strength. This of course was also the premise behind elliptical chainrings. When the shape of the chainring is varied each revolution of the crank represents several different "gears" (amounts of resistance) that make more effective use of the dynamics of a circular stroke. In the Biopace system the chainrings have different degrees of the unique shape, with the shape of the inside rings very pronounced.

### All right, now does it work?

The manufacturers claim that the Biopace is most effective for climbing, so I put the system on my bike for the Pearl Pass ride and Fat Tire Bike Week in Crested Butte, Colorado. The elliptical chainring doesn't easily lend itself to quantitative analysis, except perhaps by time trials, and we weren't quite ready for that. For this reason our reactions to it can't be backed up by chapter and verse of data.

### Sure. Does it work?

I enjoyed the Biopace for some kinds of riding. Although at first I was aware of the fact that they weren't round, as soon as I got used to it I forgot all about it. They just begin to feel normal.

In rocky country and on rough roads I stand up a lot, and I found that the Biopace took excellent advantage of my leg strength as I shifted to a less rhythmic standing pedaling position. On climbs the pedals seem to slip forward just as they should be bogging down, and the bike seems to climb almost eerily. If the bike remains at a constant speed, rather than slowing down, then accelerating, as the rider hits different parts of his stroke, he will use less energy to overcome inertia. This seems possible with the Biopace.

I noticed a couple of areas where there might be room for improvement. The large ring is a 48 tooth, and coming down mountain roads I wanted a bigger gear than the 96 inches possible with a 13 tooth rear, something around 108. When I tried to spin at a high RPM to compensate for the undergearing the arhythmic motion was a drawback.

I took off my 24 tooth inner to put on the 28 tooth Biopace, and I missed my lower gear. One reason for this might be psychological, since in the high Rockies no gear seems low enough. With the 28 tooth and a 32 tooth rear the gear is 22.75" and with a 24 tooth and a 32 it is 19.5".





# QUICK-RELEASE SADDLE CLAMP

This is not to be confused with the quick-release seatpost clamp. Several companies have introduced this component, a seatpost with a quick-release saddle clamp that allows the saddle to be moved from its normal position centered over the post to a position up to three or four inches behind it.

My first reaction was "Why do I need it?" This question has not yet been answered. About the only time I want to move my saddle is when I'm climbing something very steep, and then I want to slide forward, not back, so I can keep the front end down and my weight over the pedals. On downhills, even very radical ones, I'm content to lower my saddle and not use it at all when the going is really rough. On high-speed corners the rider doesn't want his weight that far back, since this tends to wash out the front end.

Having that out of our system, let's ex-

10-12 SPEED HUBS FOR M/B, TANDEM, AND BMX • O/R OR BOLT-ON • SEALED M/B PLATFORM PEDALS

# BULLSEYE!

LIGHT  
TOUGH  
SEALED  
SERVICEABLE



**Bullseye**  
AMERICAN MADE  
418 S. VARNEY ST. BURBANK  
CALIFORNIA 91502 (213) 849-1300

WHEELCHAIR HUBS • 44T BMX ELLIPTICAL WHEEL • RACKSTAND • 28T ELLIPTICAL M/B GRANNY GEAR • HEADSET PROTECTOR • SEALED BOTTOM BRACKETS • SEALED BEARING PULLEYS • WRITE FOR FREE CATALOG


amine the component. Does it do what it is supposed to do, and does it do it effectively? The answer to this is no. When the quick-release lever is opened, it releases the entire seat clamp. In a system where the tilt of the saddle is determined by the clamp. This means that every time the saddle is moved the angle of tilt must also be checked. But wait, that's not all. When the clamp is loosened, the saddle rails al-

so slide through it. The saddle can end up with the clamp at the extreme ends of the rails, which can stress them and break them eventually.

Only one more complaint. On most designs the provision for keeping the saddle vertical is not adequate, and the saddle rocks slightly. Our conclusions here are: if you need this kind of product, wait until a better design comes along.

# WRECK TIPS

BY F. EWE BAILOUT



"EFFIE"  
"ADVICE FROM THAT BRAIN-DAMAGED BUSY-BODY"

EFFIE'S "FLIRT WITH THE DIRT" DIPS BY THE SLEEK GEEK BOUTIQUE

TOO MANY BARE-HEADED ENDOS, ASPHALT NOGGIN-PLANTS, AND SINGLE-MINDED STOPPAGE OF 30-MILE-AN-HOUR TREES HAVE SEVERELY RE-WIRED THIS GUY'S CENTRAL CONTROL PANEL!

SOMETIMES YOU HAVE TO KNOW ABOUT DIFFERENT KINDS OF BRAKES....

LIKE WHEN YER BRAKE PAD MONEY GETS SPENT ON BUBBLE GUM AND YOU COME UP WITH THESE...



EVEN WHEN HE'S SPORTIN' SOMETHING MORE CONVENTIONAL THAN ERASER BRAKES HE STILL DON'T KNOW LIGHT FROM REFT!

SO? WRIGHT? RONG? WHO CARES?

THESE BRAKES DON'T LAST LONG ENUFF TO MATTER ANYWAY!



SO THAT'S WHY YA GOTTA KNOW ABOUT RIM BRAKES!

CRUNCH!

OOOO... W' THE'RE HARD TO BREAK, YEE!

SPLAT!



...AND DRUM BRAKES!

LUDWIGS® ARE NICE IF YOU CAN FIND A BAND IN THE AREA...  
...NICE SOUND!

BUT THESE 55 GALLON JOBS WORK JIST FINE!

BOINT!



BUT SIDE PULLS ARE GREAT! JIST PULL THE BIKE OVER ON ITS SIDE!



Cart Read © 83



# Race Reports



by SeeKay

For those who have never been there, Repack is just another hill. After all, there are thousands. And a dry recital of statistics still leaves something to be desired: 1200 vertical feet in 1.8 miles of dirt road.

But Repack is a feeling, and a tradition. This is the first place that we know of where balloon-tire off-road races were held on a regular basis, and the course has a history.

The first riders to come upon Repack used one-speed, coaster brake bikes since that was all that was available at the time (c. 1975). After a trip down the hill it became obvious to the riders that this was something special, since all the kinetic energy collected on the way up was turned into heat, centered on the rear hub. The hubs were literally smoking, as the grease was heated far beyond whatever temperatures it was designed to withstand; any that wasn't vaporized generally ran out of the hub and dripped down the spokes. Spit would boil away in seconds when applied to the hub surface. And on the ride home the dry hubs would complain loudly. It was time to "repack" them with grease.

Fred Wolf of Fairfax gets credit for suggesting a timed race down the hill, which first took place in October, 1976. Although informal group dicing had taken place there, it was hard to pass a slower rider if he didn't want to be passed, so in order to decide once and for all who was the fastest rider (or at least for that week), a small group of friends organized a time trial of sorts. The first timing devices used were a ship's chronometer and an alarm clock with a sweep second hand, and the first race had seven riders. Their names are given as Alan, Bob, Bob P., Fred, and so on in the "official" statistics.

Word spread among the locals, and a couple of weeks later another race was organized. This time there were eleven riders, and Joe Breeze rode the first recorded time under five minutes. Five minutes became the mark to shoot for.

Just about this time the first digital stopwatches came on the market, timing could be done down to the hundredth of a second, and as contestants pushed closer to the limits of possibility, placings were often decided by fractions.

The timing was handled by assigning starting times two minutes apart. Both watches were started simultaneously at the top of the course,

and the finish timer would ride down ten minutes ahead of the first-starter. Since the top of the hill is out of communication with the bottom, it was essential that the finish timer rode carefully, since a crash could put him out of position to observe the finish. Ten minutes after the timer left, the first rider hit the course; when he finished the timer would subtract his finish time from the start time, and voila! instant results. After the race the starter would bring down the other watch for a comparison; if they were still synchronous the results would stand and no arguments were permitted.

For three years the "Repack" series was conducted as an underground event. No permits were secured, no helmets required, and you took your own chances. The underground network spread the word, and at the appointed time twenty to fifty riders would show up. Even without any entry fees promoters rounded up impressive prize lists of tires, drum brakes, derailleurs, and so on from local bike shops.

When Repack surfaced, it did so with a bang. A cameraman for a nationally syndicated TV show became aware of the event, and asked if a film crew could come out to cover it. There were no objections, and when word got around that riders had a chance for stardom, the largest starting field yet was assembled, nearly 75 participants. The resulting footage was aired in March, 1979, and this marked the end of the first Repack era.

During the filming a rider crashed badly near the camera crew and broke his wrist. Understandably upset because he was unable to work, he sued the TV station. The outcome of that action is immaterial, but the fact that legal action had been brought impressed the promoters with their liability exposure, and they decided it wasn't worth it.

This year off-road race insurance has become available through NORBA, and once again the legendary Repack is back in action. On October 8, 61 riders blasted the gnarliest race course known to balloon tires, emerging white-knuckled and bug-eyed and joining the small number of cyclists who can claim a "run down Repack."

## RESULTS

<b>18-34 EXPERT (Overall Winners)</b>	
1. Jim Deaton	4:41:50
2. Joe Breeze	4:43:70
3. Michael Jordan	4:45:88
4. Roy Rivers	4:52:33
5. Otis Guy	4:53:18
<b>18-34 NOVICE</b>	
6. Larry Slate	4:53:26
7. Marcus Gannister	4:58:56
12. Joe Sloup	5:03:86
<b>35-Over</b>	
11. Bob Burrowes	5:03:42
<b>15-17 Expert</b>	
18. Peter Lewendal	5:16:40
<b>1st woman</b>	
Denise Caramagno	6:08:02

# Mountain Mania

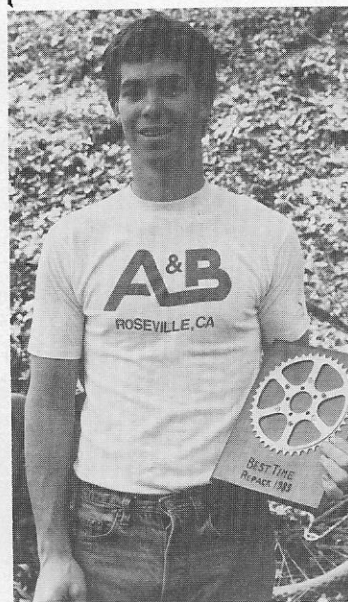
September 18, 1983

The Mountain Mania race covered 26 miles of dirt roads and logging trails in and around El Dorado National Forest. 85 started, with Joe Murray of San Anselmo, riding for Ritchey MountainBikes, taking his first win. Joe's time of 1:46:58 was nearly three quarters of an hour faster than promoter Bob Edwards had expected; in all some 48 riders finished ahead of the 2:30 Edwards had estimated as the winning time. (2:30 would have captured 33rd Novice.)

Third place finisher Mike Jordan of Redding rode the last 7 miles on a flat, finishing only 5½ minutes back. First Novice was John Pimentel of Marysville, 7th overall and 12:32 off Murray's time.

## RESULTS

1. Joe Murray, 1st Expert	1:46:58
2. Jeffrey Kausch, 2nd Exp	1:48:48
3. Mike Jordan, 3rd Exp	1:52:23
4. John Lee Stein, 4th Exp	1:53:52
5. Kurt Kabica, 5th Exp	1:54:37
6. Jim Deaton, 6th Expert	1:58:26
7. John Pimentel	
1st Novice	1:59:26
10. Dana Grossman,	
2nd Novice	2:00:03
11. Aaron Smith,	
1st One-Speed	2:00:11
61. Craig Smith 1st Over 35	2:52:17



JIM DEATON, Repack Winner 1983

# TOUR de BLUFF

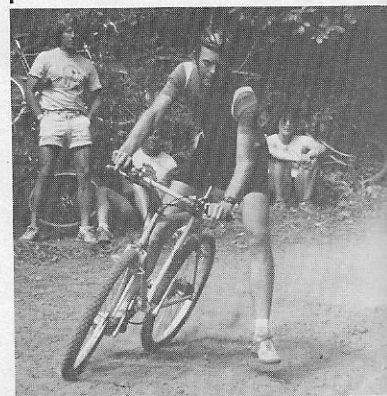
On October 9 over 100 riders took part in the "Tour de Bluff," an off-road event held in Bluff State Park, Groton, Connecticut. The tour and time trial was the inspiration of Bob Harrington and David Koss of New London, and was sponsored by the Wayfarer Bike Shop, Trek Bicycles, Security Seal Company, and Eclipse.

The tour covered ten miles, on a course pioneered by Harrington and Koss during a series of winter Saturday rides. 96 riders completed the tour, with 10 to 15 others riding part of the way. 45 riders finished the six mile time trial, which had been shortened from 12 miles. The original course had been two laps of the same circuit, but a number of riders quit after one because it included a 100' carry through the Atlantic Ocean.

The party and picnic afterward drew some 200 Fat Tire Fans. Next year's event will have two more major sponsors and the promoters expect 200-300 riders.

Fat Tires are alive in the East!

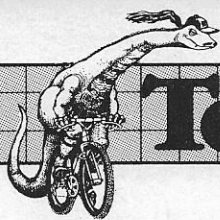
B. Harrington



GARY FISHER, Riding Repack







# Tech Tips by SeeKay

Nearly all of the new off-road bikes on the market come with flat handlebars. In many cases the bars are wider than necessary for the rider, especially women who have narrower shoulders than typical male riders. Ideally the bars should be about shoulder width or a little wider; if they are much wider than the rider's shoulders they can be uncomfortable on a long ride.

If you decide that it is necessary to shorten the bars, do it in small stages, moving the controls in and trying it before cutting off more. A little cutting can sometimes go a long way, and it is always easier to make the handlebar shorter than it is to make it longer.

For those who are still asking, "What is the most important piece of maintenance I can do for my bike?" You weren't? Here it is anyway: Oil your chain. Often. With anything. But oil it. Some lubes are better than others, but any lube is a lot better than none. Avoid the thin, spray-on type if you have the luxury of choice, because dirt and mud sucks that stuff out of your chain faster than you can spray it in.

Here is the ultimate chain-lube tip according to the Cook Brose at Paradise Bike and Ski (Crested Butte, CO). Arco Graphite Motor Oil. Regular old thirty-weight. Yep, that's it, and two bucks worth is about a year's supply. They

call it the "Secret Stuff" there, but if you're reading it here, it isn't a secret. I hope. Anyway, the graphite penetrates to the deepest reaches of the chain and keeps things sliding even after the oil is gone.

Keep in mind that most of the moving parts in your bicycle are in the chain, and a worn out or a poorly lubed one can be vulnerable under tough conditions. If you don't lube it at least carry a chainpunch to put it back together, because a bike without a chain is hard to have fun with.

A number of off-road bikes on the market sport cranks longer than those used for similar size road bikes. The reason for this is the trade-off between short and long cranks. Short cranks are easier for the rider to spin at a high RPM, while long cranks deliver more leverage to the chainwheel (gears being equal). Thus track bikes have short cranks, about 165mm, so riders can spin more fluidly. Road racing bicycles have medium length cranks, 170-175 mm.) so the riders can spin freely, but still pull higher gears when it becomes necessary.

Riders in rough terrain find that they rarely have the opportunity to maintain a spin for any length of time. Instead they are called on for tough climbs, as well as "trials-type" situations where extra leverage is necessary to get the bike over an obstacle. For this type of riding crank lengths run from 175-185 mm. A tall rider, who uses a 175 mm road crank might then use a 185 mm crank off-road.

In racing situations, especially downhills, long cranks can help the rider accelerate out of turns, although they give up a little ground clearance.

## UPHILL TECHNIQUE

Most riders prefer riding their bicycles to pushing them, even in some situations where pushing might be more efficient. On a long, rough climb this becomes the equivalent of "trials," as the rider tries to prevent the deadly stall which forces him to put down a foot. Once stopped on a steep hill it is difficult to get going again.

In order to keep from stalling the rider must conserve his energy with a moderate pace on the easy parts, looking ahead for places where the grade gets steeper or there are obstacles such as rocks or a loose surface. When these appear, accelerate just before reaching them; this is why you are a saving some reserves of energy.

If you have the "bear-trap" type pedal with a large surface area, try sliding your feet forward on steep climbs. Classical cycling wisdom says that you use the balls of your feet over the axis of the pedal, but changing position is not an option when the rider has clips and straps, so they use a position that works for everything. Since most off-roaders have the option, they can change position on the pedals, and by putting the arch over the pedal shaft the rider can move forward to help keep the front end down and

# MAKE MOLEHILLS OUT OF MOUNTAINS.



Tackle even the toughest terrain with confidence with Dia-Compe's new System 2 Cantilever Brakes. Designed exclusively for the rugged world of mountain bikes, System 2 brakes are a combination of technical innovation and craftsmanship. The cold-forged alloy lever is mounted in a beautiful black anodized bracket. They come complete with adjusting barrel and lock ring for fine tuning and are slotted for easy cable installation. The new cantilever arms are extra thick

cold-forged alloy for strength, and longer for more leverage and greater stopping power.

Even the cables and brake shoes are new. Thicker cables handle stress better and larger brake shoes stop faster.

System 2 Cantilever Brakes from Dia-Compe, built tough to take it.



**Dia-Compe Inc.**  
Cane Creek Road • P. O. Box 798,  
Fletcher, NC 28732



to get his weight directly over the cranks. By using the arch of his foot the rider shortens his leg extension, allowing him to straighten his knee more and use the power of the thigh muscles to compensate for the loss of the use of the calf muscles.

## CHAIN STUFF

As a rider climbs a steep slope he is usually in a low gear, meaning that the chain is on the inner front chainring and the inner rear cog. In this position the chain is close to the side of the tire, in some cases almost touching it. For a number of reasons moving the chainline out is impractical, so we must learn to live with this situation.

Problems crop up if the rider tries to descend without shifting. As the chain starts to bounce around it is likely to snag in the side knobs of the tire, and then catch between the tire and the chainstay. Since the chain is relatively slack in this gear the rider must shift up as he crests the slope. By shifting to a larger chainring the rider puts more tension on the chain, and by moving it away from the tire he reduces the chance of the chain catching on the tire.



## Fat Notes

On June 2/ the control of the National Off-Road Bicycle Association was handed over from the interim board of directors to Glenn Odell of Solvang, California. Mr. Odell, in addition to being a contributor to the FLYER and other publications, is also known for his successful promotions of the Central Coast Clunker Classic (with Ira Hughes).

Glenn's plans for the direction of the organization are for it to no longer be a non-profit body, but a profit-making venture with him as sole director.

The change is certainly not without controversy, and a number of questions are raised. At the same time, any organization benefits from strong leadership, which had not been provided by the interim board, due in part to the lengthy decision-making process.

Questions remain. Will the leadership respond to the membership, since there is no longer an election process? Glenn responds, "If I'm not responsive to the membership, someone else will start an organization that is, and they'll put me out of business." Glenn believes that the free market will be the ultimate test of his direction, and that if he can't deliver the goods, someone else will.

Since the major profit Glenn expects to make will come from sales of his insurance package to race promoters, will environmental and access issues take a back seat? Glenn assures us that they won't. "Without access to public lands," he says, "areas in which to stage events will be severely limited. Besides, I'm a rider, too, and I'll use any means at my disposal, including NORBA, to keep these roads open."

It remains to be seen whether governmental bodies will respond differently to a profit-making rather than a non-profit organization.

## Test drive any Mtn. Bike in stock? Fat Chance!

Yup. Also Tom Ritchey, Moots, Stumpjumper, and Univega. Right here at the #1 Mtn. Bike stop in New England. Any one of them. Any time.

But we don't drop you like a hot knobbie once you've made your selection. Nossir. We help you set up your bike, offer practical advice on how and where to use it, and troubleshoot when necessary.

What do we have besides the best selection of Mtn. Bikes for the area? Only a fully stocked parts department and beaucoups of mud-tested accessories,

by mail if you need it. Also bike tours of varying lengths and difficulty, and a schedule of races to keep you on the roll.

We're on the main street of beautiful downtown Plymouth, across from the Cinema. Stop in and talk to us. We'd like that. Race and tour schedule free. Catalog \$1.50



**White Mt. Cycles  
Greasey Wheel**  
40 Main Street,  
Plymouth, NH 03264  
Toll Free 1-800-223-5001

Since response had been limited at best, any would be an improvement.

In the meantime, promoters looking for event insurance and riders looking for membership should contact Glenn at:

National Off-Road Bicycle Association,  
2175 Holly Lane, Solvang, CA 93463, (805)  
688-2325. Tell 'em the FLYER sent you.

Look for a production aluminum off-road frame early next year from Cannondale... and remember, you read it here.

## HAPPY TRIALS

Tom Hillard of Santa Rosa reports that a recent "trials" event generated a lot of enthusiasm. The object of trials riding is to complete the course without putting a foot on the ground. The obvious advantages of this kind of contest

*Continued on page 22*



FROM COSMIC CYCLES  
& FLAGSTAFF, AZ.

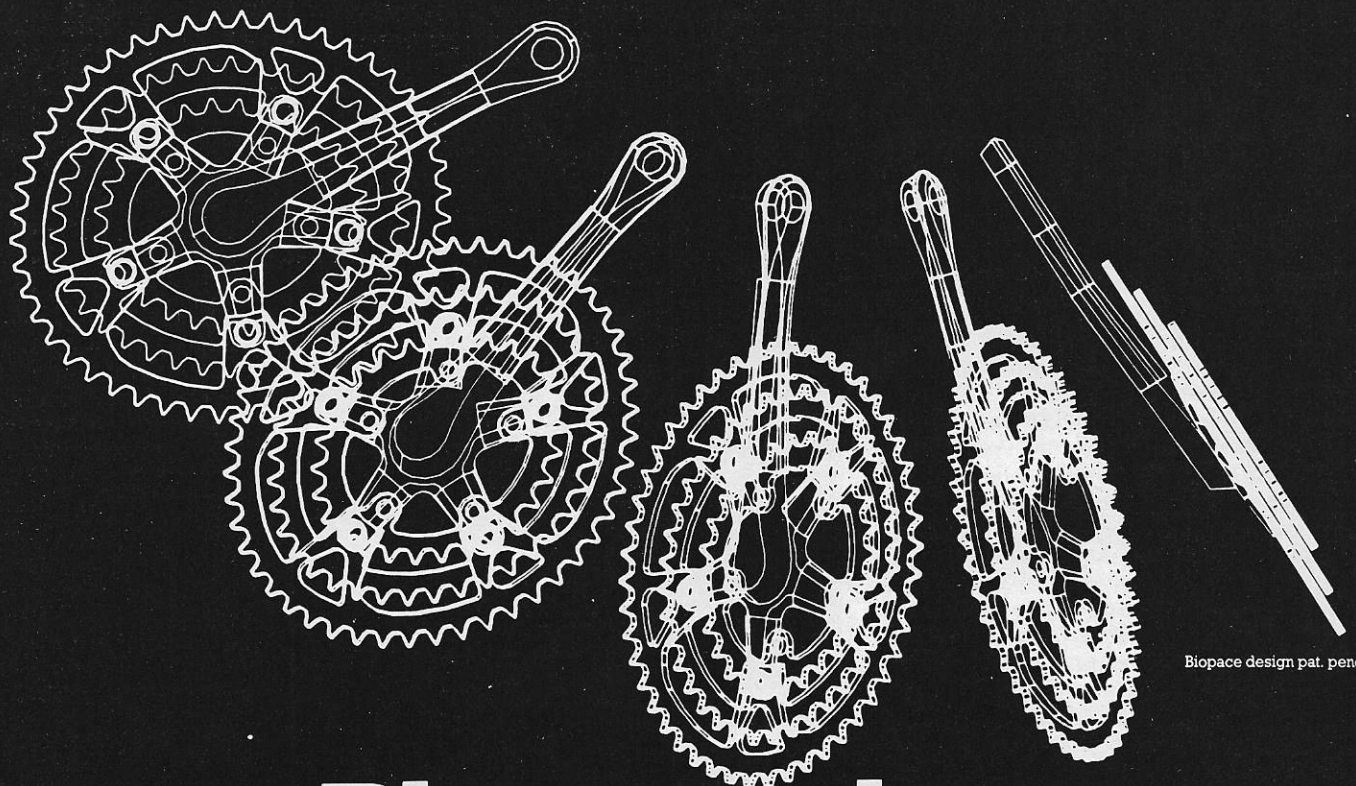
# ROFFSTUFF

SPECIALTIES

If you ride hard, (who doesn't), you need the finest parts. We've got 'em for LESS than anyone.

Send for your FREE Ruffstuff catalog while they last.

1109 S. PLAZA WAY No.250  
FLAGSTAFF, AZ. 86001



Biopace design pat. pend.

# Biopace wins the uphill battle.

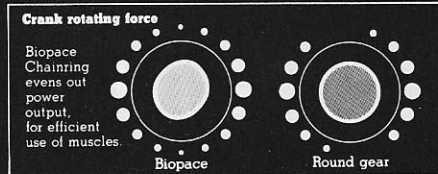
## CLIMBING IS EASIER WITH THE COMPUTER-DESIGNED CHAINRING.

If you want proof positive of the superior efficiency of Biopace chainrings, then riding is believing.

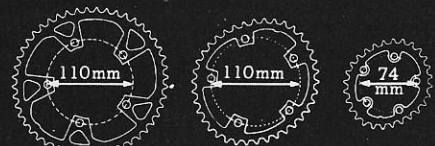
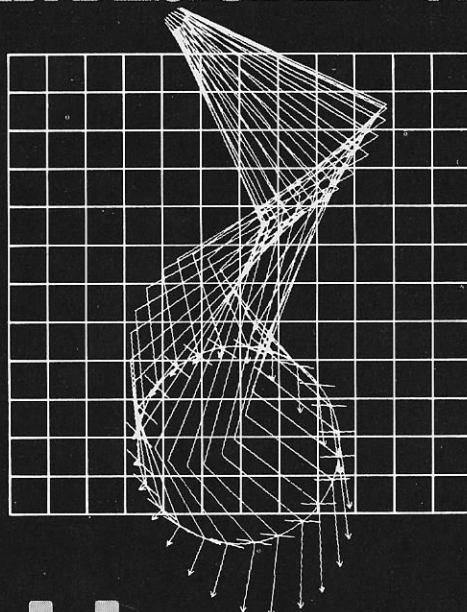
The difference is immediately obvious, but nowhere is it more apparent than in climbing.

Biopace gets the most power from your pedalling muscles because its unique shape was biomechanically engineered to reduce wasted motion.

While conventional round chainrings produce little power at full leg extension, the Biopace shape regulates crank rotating speed to "fill the gaps."



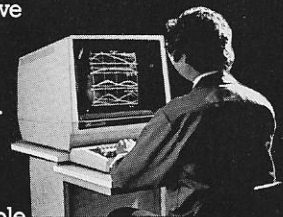
The Biopace design creates a natural application of power, allowing the leg to extend quickly and rhythmically, to reduce body sway and pedal pressure.



Biopace is available in 110/74mm bolt circle diameter triple ring sets.

With Biopace your climbing efficiency is maximized, for faster ascents most likely in higher gears.

Lighter, more rhythmic pedalling is just one of the five extraordinary features found only in the Biopace design.



For the whole story, please write to Shimano for a free Biopace Technical Booklet.

But better still, get in gear with Biopace and aim for the summit. You'll prove it for yourself.

# biopace

Computer-Designed Drive System

**SHIMANO**



# NORBA & USCF on a collision course!

Most cyclists are aware of the existence of the USCF (United States Cycling Federation), and competitive road cyclists must be members to compete in sanctioned road events. Since the USCF sanctions virtually every road race in this country, the effect is that in order to participate in road racing a cyclist must be a member. The USCF has been empowered by the worldwide cycling body, the UCI (Union Cyclists International), to sanction all bicycle racing in the United States.

So far, so good. When the only kind of racing was road racing or cyclocross, no one had a problem. Then along came BMX, which developed its own formats and sanctioning bodies. The USCF told the BMX'ers in effect, "If you persist in engaging in these unsanctioned (by us) races, you're all going to lose your Olympic eligibility." This was the heaviest threat the USCF could come up with.

The BMXers laughed all the way to the bank. With a large Pro category whose riders were raking in great money, and a race schedule that lets riders compete practically every weekend of the year if they want to, the BMX riders could care less about the Olympics. Besides, the Olympics don't have a BMX event.

The USCF has given up on BMX. After all, there is virtually no exchange of riders between BMX and road racing, and there is nothing to threaten the riders with.

Now, along comes NORBA (National Off-Road Bicycle Association). The USCF has found it insulting that someone held a race and didn't invite them. According to spokesman Les Earnest of Los Altos Hills, the USCF considers off-road races nothing more than cyclo-cross (more on that later) and insists that they have the right to sanction them. In this area, however, they have a valid threat, since a great number of road cyclists are riding in off-road events sanctioned by NORBA. The USCF has the power to deny or withdraw membership from these riders, many of whom are still interested in road racing.

There is a major difference in the approaches to sanctioning by the two bodies. The USCF gets \$10 or six percent of the prize list, whichever is greater. NORBA's insurance package goes for a flat rate of \$90, and after three races in a year by the same promoter the fee is cut in half for the remainder of the year. Needless to say, NORBA is quite sure it can exist without any help from the USCF. While there is no limit to the amount a competitor can win in a NORBA event, USCF riders are limited to \$1000 per day winnings in order to maintain their amateur (?) status, and any amount over that goes right back to the USCF. As an example of this, Davis Phinney won some \$25,000 in one day of the Coors Classic, of which \$24,000 went to the USCF. We know who they were rooting for!


There are only two possible outcomes of this

conflict. Either the two parties will learn to work together, or there will be a confrontation. Glenn Odell of NORBA has indicated that he is willing to work with the USCF, but not to give them a percentage of the prize list. He has suggested that a joint sanction would be possible in order to permit USCF riders to compete, but that the sanction fee paid to the USCF would be a flat rate, and a small one at that. Odell insists that he is concerned with the riders' Olympic and amateur status, and to that end he is willing to modify his standard entry form to include a section for USCF riders to indicate their affiliation, and that winnings by such riders in excess of \$1000 per day will be returned to the USCF.

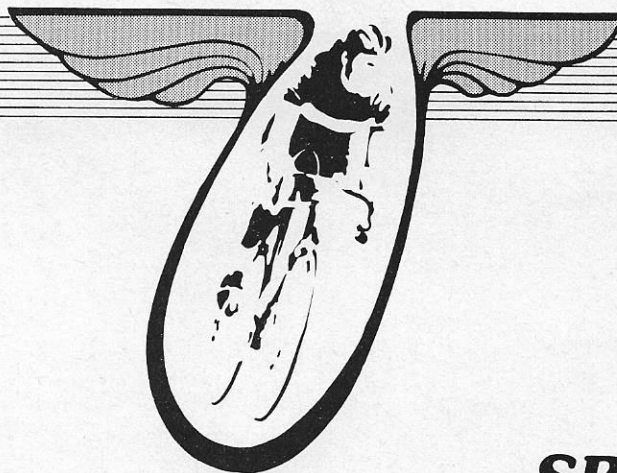
If it comes to a confrontation, both sides will lose. Riders will be forced to choose which type of racing they like and stick to it. Although it is unlikely that NORBA would care if a rider races on the road, the USCF would have to make good on its only available threat, banning riders from competition. The next action will be November 11 and 12 in Washington, D.C., where the American Bicycle Federation, a lobby group, has invited representatives from all aspects of cycling including BMX, the USCF, and NORBA, to a conference aimed at settling differences.

## CYCLO-CROSS OR CROSS COUNTRY?

Les Earnest of the USCF has stated that off-road racing is the same as cyclo-cross, and for that reason the USCF is entitled to sanction it. Actually, in spite of their similarities, they are quite different in one major respect which goes deep to the heart of the dispute. In USCF races, including cyclo-cross, riders may receive unlimited mechanical assistance, up to and including spare bikes. In the National Championships two years ago the winner used three different bikes on each lap, with a team of assistants shuttling them around the course.

In order to more nearly duplicate the conditions of real off-road riding, and also avoid the establishment of enormous support crews, the NORBA rules prohibit mechanical assistance from anyone except another competitor. After all, one of the reasons for racing is to develop better machinery, and the availability of spare bikes doesn't help that. Because of the necessity for spares, cyclo-cross is usually conducted on a closed circuit course, usually no more than a mile per lap. There are several pits on the route with spare parts and mechanics. By contrast, NORBA racing is usually conducted on a long course, obviously with no pits and no spares. 

## NOI PARLIAMO ITALIANO



**SBW**  
**Sunshine Bicycle Works**

737 CENTER BLVD. FAIRFAX, CALIFORNIA 94930  
(415) 459-3334

# ◆ RITCHEY ◆

## THE MOUNTAIN BIKE

*This is the machine that gave the movement its name. Every off-road bicycle on the market uses elements introduced by Ritchey.*

## THE DESIGNER

*Ritchey designs are based on a sound background of racing, touring, building, and engineering experience, along with a respect for the history of bicycles. The Ritchey designs of the eighties fulfill the needs of modern cyclists without ignoring the lessons of one hundred years of bicycle construction.*

## THE BUILDER

*Acknowledged as one of America's finest builders, Ritchey is responsible for pioneering, developing and popularizing the technique of lugless fillet-brazing. Ritchey has built frames, handlebars and stems for thousands of racing, touring, tandem and mountain bikes in more than a decade of framebuilding, including the most balloon-tire bicycles made by any domestic custom builder.*

## THE STATE OF THE ART

*A fine bicycle is more than a collection of components, it is the ride that is the sum of its elements. When you are ready to experience the state of the art, ride a Ritchey. There is nothing like it.*

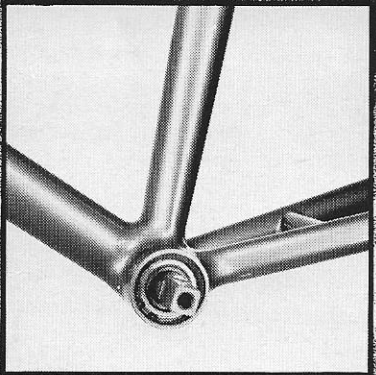
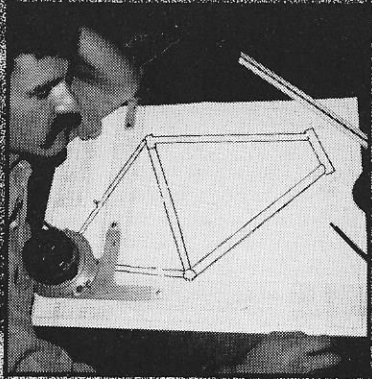
*Dealer Inquiries Welcome. Write:*

*Ritchey  
Rt. 2, Box 409, La Honda, CA 94020*

*MountainBikes  
Box 405, Fairfax, CA 94930*









# THE BEST DESIGN FOR LESS



**MONTARE**  
designed by Tom Ritchey

Performance is the sum total of hundreds of factors. Excellence is the product of experience. In the tradition of the Ritchey MountainBike, we have designed and engineered this newest, most affordable model. For about \$650, you can own an all-terrain vehicle with a great heritage. Why bother with imitations?

**FREE CATALOG WITH THIS AD**



1501 SAN ANSELMO AVE., SAN ANSELMO (415) 459-2247

MasterCard/VISA

\$650.00



Wende Craig

## FAT NOTES *Continued from page 17*

are that it doesn't require much area, and those who don't feel that they want to exert themselves in a long race still have a format in which to test their riding skill.

Although a special bicycle is not necessary for this type of event, Tom suggests that anyone serious enough about it to spend a little money consider buying one of the cheaper off-roaders on the market, which tend to have shorter wheelbases and higher bottom brackets than the fancier models. Get a Sugino triple crankset and remove the two outer gears, leaving just the small chainring (24-28 teeth); with a five speed this gives ratios from under twenty to about fifty inches (speed is not the object). Tom also suggests a skid-plate for the chainwheel and high, turned back bars that will allow the rider to shift his weight far back for vertical descents.

Here are the simple rules they have worked out for this event:

1. Rider must go through the whole section.
2. Rider cannot touch ribbon on flags.
3. Scoring starts when front axle crosses the start gate.
4. Scoring ends when rear axle crosses the exit gate.
5. Riders must enter and exit their proper gates or get five points.
6. Riders must keep red ribbons or flags on their left.
7. Points are as follows:
  - A. Doesn't put foot down--0
  - B. Foot down once--1
  - C. Foot down twice--2
  - D. Foot down three or more times--3
  - E. Stops with foot down, both feet down or on same side of bike, hits ribbons, goes wrong way, or refuses to ride section--5
8. No practicing the section. Rider may watch or walk the section only.
9. Rider must make sure judge is watching and get tag punched, failure to do so--5 points.
10. Rider may start on any section then ride the rest in order before starting the 2nd or 3rd loop.
11. Rider may come to a stop in the section provided they don't put their foot down or hang on a tree or rock with their hand.

### NORBA PAYS OFF

If anyone had any questions as to the benefits of a body like NORBA, some of them were answered during Fat Tire Bike Week in Crested Butte. There were two major accidents during the sponsored events, one during the Paradise Divide stage race and one during the Pearl Pass tour. In one the rider suffered serious facial injuries and will have to pay his own medical expenses. In the other the rider broke her wrist, but will pay only the first \$100 on a \$100 deductible policy (up to \$5000 medical expenses). The difference is that one is a NORBA member and one isn't, and the events were covered by NORBA's insurance policy.

We love to print race results, but... it's hard to get them! All you race promoters out there should send us the info, including such items as rider's name, team, age, type of bike, special category prizes (one-speed, over 75), riding category (novice, expert), and so on.



THE ADVENTURES OF MUDPUP by KEVIN COFFEY

MUDPUP IS PLAYING CARDS WITH EDIE AND A FEW OF THE REGULARS IN HER ATTRACTIVE HILLSIDE NORTHERN CALIFORNIA COASTLINE HOME.

RAISE YA TWO

GO FISH

SUDDENLY

KABOOM

THE HOUSE IS SLIDING OFF THE FOUNDATIONS! WE'LL BE ADRIET AT SEA!

QUICK, TOSS ME THAT ROPE!

MUDPUP - WHAT ARE YOU DOING?

SOMEONE HAS TO GO FOR HELP BEFORE WE'RE ADRIET FOREVER!

THERE GOES THE BRAVEST PUP I'VE EVER SEEN

THESE FLASH FLOODS ARE WINDY - GOOD THING I'VE GOT MY POLY-GRIP TREAD-O-MATIC RAIN TIRES

THERE THEY ARE!

MUDPUP, YOU'VE SHOWN GREAT COURAGE - THIS COULD BE THE BEGINNING OF A WHOLE NEW CAREER FOR YOU....

OH YEAH? HMMM...

2 WEEKS LATER...

HEY, IT'S A BIG!

LADIES AND GENTLEMEN

# ***Fat Tire Flyer***™

**BOX 757 FAIRFAX, CA. 94930**

*The FAT TIRE FLYER  
understands your  
concern regarding Fat  
Tire riding because  
it comes from people  
who ride Fat Tire bikes.  
We are timely,  
informative and aware  
of the things that  
you need to know to  
keep you on top of  
off-road riding, racing,  
touring, commuting;  
all aspects of Fat Tires  
and all applications.*



BULK RATE  
US POSTAGE  
PAID  
Fulton, MO  
Permit #38