

168 SIZES.

Perfect fit means improved performance.

New Balance athletic shoes are the only quality hand crafted shoes that offer perfect fit (available in sizes 4½-13, AA-EEE). Orthopedically designed styles available for men and women for racing, training or jogging.

All models feature lightweight seamless leather uppers and genuine Ripple® soles which give you natural foot action and help prevent foot and leg problems. Exclusive saddle design offers longitudinal support.





RUNNER'S WORLD



COVER:

A family that runs together—the Cunneens of San Francisco—typify the growing number of families sharing the sport. They belong to the Pamakid Club—pa, ma and kids. (Beinhorn)

Volume - Eight May, 1973 Number - Five

RUNNER'S WORLD

Mailing: Post Office Box 366
Mountain View, Calif. 94040

Office: 931 Industrial, Palo Alto

Phone: (415) 328-2911

PRESIDENT & PUBLISHER

Bob Anderson

EDITOR

Joe Henderson

ASSISTANT EDITOR

George Beinhorn

BUSINESS MANAGER

Jeff Loughridge

SUBSCRIPTION MANAGER

Rhonda Swan

SHIPPING CLERK

Lyman Dickson

SENIOR CONTRIBUTORS: Hal Higdon; Janet Newman; Wilf Richards (England); Martin Rudow; George Sheehan; Tom Sturak; Pat Tarnawsky.

SPECIAL CONTRIBUTORS: Richard Amery (Australia); Orville Atkins; Walter Boehm; Peter Burkhart; Bob Carman; Percy Cerutty (Australia); Nat Cirulnick; Ted Corbitt; Nick Costes; David Costill; Elliott Denman; Tom Derderian; Jim Dunne; Geoff Fenwick (England); Jack Foster (New Zealand); Fred Grace; Frank Greenberg; Roger Gynn (England); Mick Hamlin (England); William Indek; Carolyn King; Pat Lanin; Jerome McFadden; Gabe Mirkin; Des O'Neill; Tom Osler; Dave Prokop (Canada); Natalie Rocha; John Romero; Skip Stolley; Hugh Sweeny; Ken Young.

PHOTOGRAPHERS—Don Chadez; Rich Clarkson; Tony Duffy (England); Donald Duke; Bill Herriot (Canada); Jeff Kroot; E.D. Lacey (England); Rick Levy; Jay McNally; Steve Murdock; Stan Pantovic; Mark Shearman (England); Paul Sutton; Steve Sutton; Walt Westerholm.

Second-class postage paid at Mountain View Calif. Postmaster please send form 3579.

PUBLISHED MONTHLY. Printed by Hatcher Trade Press, San Carlos, Calif.

SUBSCRIPTION RATES—One year \$7.00; two years \$13.00 (same for US and foreign). Add \$5.50 per year for first class mailing; \$6.00 per year for air mail in US. Foreign air mail rates on request. Single copies and back issues 75 cents each.

CONTENTS

- 8 RUNNING IN THE FAMILY—It can be equalizing, frustrating, or just plain beautiful.
- 20 GIVING THE PROS A CHANCE—The ITA's first meets and what they revealed about this new kind of running.
- 22 THE ROOT OF ALL TRAINING—Hans Selye's theories on stress tell deep truths about the human, and runner's, body.
- **26 STANDING IN THE BLOCKS**—Sprinters are cutting their times by using a start once discarded as unscientific.

Editorial	3	Walking the Southwest	36
Interview: Tracy Smith	6	Medical Advice	42
Full of Surprises	16	Classifieds	43
Who is Paivarinta?	18	Profiles	44
Don't Stop for Divots!	28	Running Shorts	46
Exercising of Opposites	30	Coming Events	47
The Post-Olympic Winter	31	Racing Highlights	48
Running is for the Birds	32	Marathon Supplement	50
Los Angeles Runner's Guide	34	Readers' Comments	55

FROM THE PUBLISHER

"Come back next year if you want to see a good meet," Marty Liquori said before the start of the pro meet in San Francisco. Now, what a way to get started. That is like saying that we don't have anything to offer now but we are glad you came anyway to watch nothing. It is true that something like this will improve as it goes along but why not do the best you can right from the beginning?

In watching the meet, I was really glad we were given press passes because it surely wasn't worth paying money to see. In fact, I was about as bored as I ever have been. Nothing really exciting happened, and to top it off none of the athletes really seemed excited.

Maybe in time they'll get it all together and have good meets but right at the moment I wouldn't waste my money watching them.

Running really is a family thing. It is something a family can do together and have fun doing it. But so many guys who run don't look at it in this way. They spend almost every free minute running, leaving their wife and children to do something else. The family starts falling apart. Our cover feature covers family running in detail.

World Publications continues to grow. Mark Shearman is one of our photographers and just recently he has opened our European office of Runner's World. The address is P. O. Box 247, Croydon, Surrey CR9 8AQ England. He has a complete stock of booklets and all subscriptions and renewals from England and on the continent now can be sent to him. Articles and personal letters should still be sent to our address in Mountain View.

We'll be starting three new publications this year. Aquatic World in July, Nordic World in September and Soccer World in December. With these new publications and Bike World, we'll be able to do a better job all around since we can specialize in certain areas now.

TWO NEW BOOKLETS

BOOKLET TWENTY-TWO IN OUR BOOKLET SERIES



RACE PROMOTION

36 pages \$1.00

HOW TO HANDLE THE CROWDS

The race is the core. Without races—good, smoothly-running races—there is no competitive sport.

Unfortunately, the sport of running and the number of runners are growing far faster than the machinery that handles them.

There are better—and easier—ways to organize races, and the sport demands that they be employed. In simple, condensed style, this booklet outlines the latest techniques. They apply to everyone who ever works on the other side of the stopwatch from the runners.

Race promoters are chronically short on three things: (1) time, (2) help, and (3) money. There are tips here on how to work best within these limits.

A point-by-point "Director's Checklist" runs through 12 main areas any promoter must consider: from first planning to the last bit of post-race cleanup.

"Race Promotion" tells how to handle the crowds effectively with the least wasted effort, giving each runner an unobstructed run and an accurate result. That's the idea of racing.

Order yours now. 36 pages. \$1.00.

RACE PROMOTION

Please send me_copy(ies) of RACE PROMOTION \$1.00 per copy.

Name
Address
City/State/Zip

Calif. residents: add 5% sales tax.

BOOKLET TWENTY-THREE IN OUR BOOKLET SERIES

RUNNER'S TRAINING GUIDE

100 pages \$2.50



EXAMINING ALL THE ANGLES

At last! A training book that doesn't try to cram a single oversimplified system down the runner's throat. This book looks at all systems in the light of their physiological and psychological underpinnings. It gives a most solid basis for planning one's own program without saying, "This one way is best."

This guide gives each runner the tools with which to construct his own "best" program.

Chapters include:

- The "Whys" of Training—what it does for and to the runner.
- Evolution of Training—development and definition of methods.
- The Science of Training—summary of physiological research.
- Training by Event—requirements of the various races.
- Methods of the Masters—how the top coaches combine the ingredients.
 - Planning a Program—the personal touch. Don't miss it! 100 pages. \$2.50.

RUNNER'S TRAINING GUIDE

Please ser	nd me	_copy(ies)	of RU	NNER'S	STRAI	NING
GUIDE.	\$2.50 per 6	сору				

Name
Address
City/State/Zip

Calif. residents: add 5% sales tax.

RUNNER'S WORLD MAGAZINE, POST OFFICE BOX 366, MOUNTAIN VIEW, CALIF. 94040

WHY THE U.S. HAD NO TEAM

Robert E, DeCelle, chairman of the men's long distance running committee in the AAU, did all the hustling anyone could ask of him. But he came up against a bureaucracy that wouldn't bend for him. So the US had no men's cross-country team at the International race in Belgium.

DeCelle started almost a year ago trying to raise funds for the senior and junior teams. In December, his committee submitted a budget to AAU higher ups. The request was for \$12,000 in cross-country travel money. DeCelle was fairly certain it would be approved, and the two teams were tentatively selected.

Two months after the money was requested, and only a matter of weeks before the teams were due to leave for Belgium, DeCelle got the news: no money.

Chairman DeCelle continued to scramble. He tried to get private sponsorship of the runners involved. As late as a week before the International, he was still trying. But it was no use. It was too much money to raise on that short notice.

The AAU has money alright. But the structure of the organization is such that track and long distance running are autonomous arms. The track arm has all the power and funds, largely gathered from TV commercial kickbacks. The track people said sorry, we can't give you any of that-even though all the prospective cross-country team members are primarily trackmen.

The Olympic Committee has money, too. In fact, before the Olympic Games the USOC turned over \$30,000 to the AAU's officials, saying, here, use this for developing Olympians. The AAU reportedly ended up giving every penny of this back, unused.

But when Bob DeCelle (who wasn't responsible for this blunder) went to the USOC and asked for a piece of that again, he was told, too bad; you had your chance.

Okay, DeCelle said, so I lost. I could handle that if it weren't for one thing. The women's team had the same money problem. has blown hot and cold for longer than But when women's officials petitioned the AAU for funding, they received a chunk of the same TV money that had been denied the men. They got backing from the Olympic Committee, too.

The women didn't exactly travel in a style befitting "representatives of their country." They only had their plane tickets paid. They picked up their own hotel and food bills. But at least they got to go and run.

Frank Shorter, Jack Bacheler, John Lunn, Ken Misner, Paul Talkington, Tracy Smith, Tracy Elliott and 17-year old Craig Virgin-and possibly seven more juniorsdidn't make the trip they earned. That's disgraceful.

This is further evidence, if any more is needed, that the organizations in charge of running in the United States are deeply troubled.

The AAU is worried about the new professional organization. But through its over-reaction it may be driving athletes into the pro camp. Several new ITA pros have said so publicly. Buddy Williamson, a pole vaulter, said, "When you see the way the AAU is handling things, you just want to get out."

The AAU reportedly has even tried to lean on its unpaid officials. Sportswriter Darrell Wilson told of one case in the San Francisco Chronicle.

"(Ollan) Cassell (AAU track and field administrator) wrote to George Newton, head of the Northern California officials association, indicating that men who worked the (San Francisco) pro meet April 1 would not be chosen for choice 'national and international assignments.' Newton and starter Tom Moore, both businessmen, estimate that it costs each of them \$1000 a year, in expenses and time lost, to officiate. As far as they are concerned, Cassell can stuff his choice assignments in whatever convenient location he chooses. They plan to work the pro meet...."

Tom Moore, a former world-class hurdler, told Wilson, "I've never asked for any fee, not even expense money.... If Cassell wants to bar me from national meets after all I've done, he can keep them."

The AAU's counterpart, the NC-AA, is just as petty. It recently revived the war between the organizations that Vietnam. The NCAA told the college runners who had qualified for the American-Soviet dual that they couldn't run; the meet was "unsanctioned." If they competed, action would be taken not only against the concerned individuals but against their schools.

All but two of the athletes backed

down, understandably. The remaining two fought the giant and won-at least temporarily. Dennis Walker, a sprinter, and Fred Samara, a decathlete, got an injunction from a US District Court which restrained the NCAA from penalizing them and their teams.

Currently, Congressional committees in Washington are looking into the feud between the two big ruling bodies of running. Some legislators have threatened to force changes on the entire structure of amateur athleticsfrom the Olympic Committee downunless they shape up voluntarily.

The USOC, AAU and NCAA all have fair warning that they either heal themselves or someone's going to do it for them. And the cure could be worse than the disease. When the courts and Congress start acting, can political interference in sports be far behind?

Already the AAU has been "urged" not to allow athletes to run in South Africa. Five trackmen were scheduled to travel to that country in March. But at the last minute the AAU withdrew their travel permits. Two black Congressmen, ex-sprinter Ralph Metcalfe and Charles Diggs, had requested the action in strongly-worded telegrams. They wanted the athletes kept home for political reasons.

Before the government has time to impose a radical solution the athletic organizations had best think about correcting their own problems. Perhaps it's too much to hope that groups which have been fighting for a dozen years will suddenly kiss and make up, that each will surrender a little power, or that basic structural changes will take place.

But the ideal is an organization with officials who think more about serving the athletes and less about controlling them simply for the sake of control. The present organizations can do this, without interference from Washington, if they'll quit playing their power games and decide to act as a cooperative and comprehensive governing structure for the sport.

This starts with providing complete developmental programs for everyone who wants to run, and it ends with giving full support to the strongest possible international team. Neither area is adequate now.

NEWS AND VIEWS

RULING CHANGES

Agitation is increasing, as noted in the editorial this month, for change in the ruling structure of the sport. Proposals have come from a number of different areas.

• Congressman Peter Peyser has introduced a bill in the House of Representatives calling for a new amateur and scholastic sports commission to oversee athletics nationwide. Among the supporters of the bill are Bob Mathias and Ralph Metcalfe, both Olympic gold medalists serving in the House. Mathias, decathalon champion in '48 and '52, says he favors the new commission because it may be the only way to end the divisive feud between the AAU and NCAA.

"This kind of bickering," Mathias says, "not only hurts our world prestige in athletics, but it also discourages our young people from entering amateur sports."

• A national long distance running group, the Road Runners Club of America, favors a different approach entirely. RRC President Vince Chiappetta of New York says distance runners are already submerged in an organization—the AAU—that is too big to see to their needs effectively.

Chiappetta favors a complete break from AAU control, with the RRC assuming rule-making and race-sanctioning responsibilities as well as the right to pick teams for international competition. (If this proposal goes through, which is unlikely under the present power structure, the RRC would also gain the "right" to pay the runners' travel expenses.)

"The AAU just isn't aware of the special problems that exist," Chiappetta claims. "None of the current governing bodies is. Long distance running and road racing is a completely different sport (from track and field)."

• John Pagliano, a southern California distance runner and club leader, has come to the same conclusion as Chiapetti: separation.

Pagliano, writing in the Golden West Reporter (his club's newsletter), says he feels "that the long distance runners should split from the AAU and form our own independent organization. This could be accomplished successfully and free us from the financial and

other ties with a group that has no special interest in us."

Pagliano's suggestion was prompted by a local AAU proposal to take one-third of the income from race entry fees to help in the all-sports development program.

"We all now pay a \$2 yearly due," he adds, "and clubs must pay a yearly \$22.50 registration fee. This seems to be a large flow of money away from our sport."

Pagliano says there are nearly 1500 registered long distance runners in the Southern Pacific AAU district, plus a large number of clubs. He thinks the "substantial sum" of money they generate should be used strictly for developing the local assistance program and for sending deserving athletes to national races.

"It is clear," he concludes, "that we must take our own sport in our hands and run it from a local level where we can promote programs that dwell in our own interests and benefit our own athletes."

U.S. SPRINTS AILING?

Just because the Americans didn't win all the sprints at the Olympics for a change, the idea has circulated that sprinting in the United States has suddenly taken ill. Alphonse Juilland says so at great length in his recent RW article ("Are US Sprints Ailing?" Feb. 73).

Dr. Juilland certainly makes good points in some of what he says. But when he claims that there is an erosion at the "base of the pyramid" in the US—meaning that the coaching of the masses is weak—I disagree strongly.

"If we stay at the top of the iceberg," he writes, "we appear to be doing okay. But we don't realize the progressive erosion that is taking place farther down. Something is wrong, and there are plenty of criteria to indicate it. Whatever the experts say, the others (European sprinters) are catching up with US sprinters."

Specifically, Juilland quotes the world lists for the past several years. He says those lists are being invaded increasingly by non-Americans.

When I read this, it hit a sour note with me, so I did some checking of my own. I reviewed the world sprint lists (100, 200 and 400 meters with yard times converted) for the period 1962-1972. I wanted to see just how much ground the US really was losing in these areas—if any.

Here, in summary, is what I found:

• 100 meters—Both the United States and Europe improved in times at

roughly the same rates. The only noticeable change on the lists was a slightly higher percentage of Europeans at the very top levels. There were no differences at the lower levels. The US maintained a steady 50-60% of the top hundred runners per year, with Europe at 20-30%.

- 200 meters—US representation on the world list increased moderately while the European percentage declined moderately. It was 45%-34% at the start of the decade, and 53%-26% at the end. Again, the Europeans improved at the top while the US picked up depth.
- 400 meters—The trend was the opposite of the short sprints. Here, the US increased its superiority at the top, while Europe closed the gap at lower levels. Relative percentages at the beginning of the test period were 52-30, and at the end 46-36.

These statistics, especially in the two shortest sprints, seem to indicate that Dr. Juilland's theory is reversed. The US may have lost some ground at the top, but it is as strong as ever in its ability to produce the very top sprinters in abundance.

This perhaps relates to the US coaching system which Alphonse criticizes. In the US, coaching is decentralized. The best coaching is centered in the local high schools and colleges. In perhaps no other country are so many young runners exposed to the intense kind of training and competition that the Americans receive. The competitive system demands it.

This systems demands, too, that coaches on the lowest levels educate themselves and use the latest available information. These coaches are more sophisticated than their critics assume. Otherwise they wouldn't be producing the quantity of young talent that fills the world lists.

In Europe, however, the selection and coaching of top runners is more centralized. Witness the case of Valeriy Borzov, who has a half-dozen coaches (see "Scientific Sprinting," Jan. 73). Top sprinters in Europe aren't as plentiful as in the US. The ones the Soviets, for instance, identify as potential champions are trained to the peak by national coaches.

Nothing like this happens in the US, which may explain why Europeans apparently are closing in at the top. The last bit of polish provided by specialist coaches allows them to squeeze an extra tenth or two from their times.

But I'll argue that no sprinters in the world get better coaching at the developing levels than the Americans. This shows up year after year in the world lists.

There are obvious strengths in a country that has only a third of Europe's population but consistently puts twice as many sprinters up with the world's best. Certainly the US system can be improved, but improvement can only make its sprinters even more dominant than they are now.

-RICH NEHRING

TRUE CHAMPIONSHIPS

I assume the goals of the AAU cross-country championships for the open and junior division are basically twofold: to determine the national individual and team championships, and to determine the makeup of the teams for international competition.

With these goals in mind, consider the date of the national junior (under 20) championship-the second weekend in November, which this year is Nov. 11. The date is too early to select a legitimate national champion or a truly national team, mainly because most colleges, junior colleges and high schools have not yet finished their seasons. And nearly all the top juniors are on school teams. An athlete who feels he can do well in the AAU junior meet has to give up competing for his school at the crucial time of year. No athlete should be put in the position of making such a choice.

The only way to get a true junior national meet (and open as well) is to rearrange the schedule slightly. Have regional qualifying meets first, and send the top seven from those meets to the national. From there, the top runners would be sent to the international.

This would mean putting the national meets a week or two after the regionals. The regionals, in turn, would be after the college, junior college and high school championships have been completed.

Any person who is a junior could be given alternate routes to the national meet. For instance, if he placed among the top seven juniors in the NCAA or NAIA, he would qualify without going through the regionals.

This plan would not lengthen the present season by more than two weeks. The national AAU cross-country championships presently end the US season on the fourth weekend of November. But there is nothing to say that the season couldn't be lengthened to the first or even second weekend in December. Instead of having the national AAU championships at the end of November, have

the regional races that weekend. And then have the nationals a week later.

An obvious criticism of this plan is the amount of financing it would take to send regional teams to the national championships—especially if both an open and a junior team were sent (and remember, the masters have a national meet, too). Priorities could be set, the first of these being to qualify and send top individuals to higher meets. Once a sound funding program has been achieved, then each region can work toward sending full teams.

If selecting the best runners in the country as national champions and sending the best teams to international meets are considered worthwhile, then a plan like this is essential.

-GUY RENFRO

THE TRIVIA BAG

The successful life, it has often been observed, is the harmonious blending of opposites. This is certainly true of the runner. To become a poet he must use the prosaic; to live impractically he must possess the trivial, and to continue in a land of fantasy he needs help from down-to-earth reality. This prosaic, practical and trivial reality which is his salvation is his ditty bag.

You will understand this once you realize that the runner often is a one-man track team. This ambivalent, indecisive, absent-minded, manually inept day-dreamer is not merely a runner. He is also his own coach, manager and trainer—positions which he is incapable of handling. He is never quite sure what type of practice he should do, is liable to show up at a race a day late and is always lacking some essential piece of equipment.

The man you see running down the road is in a world of his own. He might at that very moment be taking a victory lap after winning the 1976 Olympic marathon at Montreal. With such an exciting inner world, is it any wonder the runner forgets such things as shirts and shorts and starting times and first aid supplies? And the only remedy for this dream-like state is the ditty bag.

Into the bag goes everything a runner might ever need, no matter what the emergency. Its supplies should be allweather, all-seasons.

All this may seem ridiculous to you. What, you may ask, could a runner need besides the minimum he wears while running through town? Until you've been through a season of running you could never guess how many things a runner needs and how these needs multiply.

Take shoelaces, for instance. Breaking a shoelace shortly before race-time can

cause a panic state equalled only by lining up your first deer. Paralysis, hope, despair, a sense of the time accelerating, makes for a moment you will never want to relive.

Tape is another item, for blisters and the blister-prone areas. If there is anything worse than running the last six miles of a marathon, it is running those last six miles with a blister. For this problem ordinary tape won't do. It is too stiff. And bandaids tend to slide, which is worse. So Zona tape is the tape to use.

Next is the vaseline, to coat you when the wind-chill factor is in the 20's, and for the chafed areas.

Then come the gloves and ski mask. There are days you just won't finish if you have to run without them.

And for the summer there's a handkerchief. By using knots in the four corners you can fashion a cap for the head and cut down on solar radiation. If you keep it wet during the race, it dissipates the heat in those August run days.

And don't forget the nail clipper and the felt pads to use as heel and arch supports. And the pins for the number. And an extra buck for the entry fee. And the nasal spray, the antacid tablets and the APC's. Remember also the ballpoint pen and the pad to record your place and time, extra turtleneck sweater (in case it turns cold), cellophane wrapper that comes on clothes from the cleaners (in case it rains), entry blank with the date and starting time, sugar cubes and a can of soda for after the race.

Finally, don't do what I have done on occasion-forget to take the bag.

 $-GEORGE\ SHEEHAN$



TRACY SMITH

There is something about a comeback which catches the imagination—perhaps because so few who try actually succeed.

Three years ago it looked as if an uncompliant achilles tendon had brought Tracy Smith's athletic career to a premature close. He was unable to run a step for almost two years. Yet in February Tracy Smith ran 13:07.2 for a world indoor three-mile record. One might say, without fear of exaggeration, that Tracy Smith has "come back."

What he has come back to reclaim is a well-deserved reputation as a strong, steady runner—with an uncanny ability to come through for the big ones. He has won five national titles, set the world three-mile record three times and was a member of the 1968 Olympic team at 10,000 meters.

Tracy credits religion for much of his new success. He is a dedicated Christian and a member of the Athletes in Action track team. Psalm 19:5 could well have been written with Tracy Smith in mind. He "rejoiceth as a strong man to run a race."

And "strong" is just the adjective to describe Tracy Smith. At 28 years of age, he is 5'11" and 153 lbs. He says, "I know that I'm stronger than most distance runners. Because of that, I think that I have an ability to break away in the middle of a race and really go."

Tracy, an intelligent and congenial senior in physical education at Cal State Long Beach, hopes to teach and coach when he graduates this year. He's pointing for the Montreal Olympics, and pro track isn't included in his plans.

RW: Before we talk about running, I'd like to ask you a question about what it means NOT to run. What was it like to be injured and out of action for two years?

Smith: It was something that I don't ever want to go through again. Before my injury, I hadn't missed a morning of running for about 1½ years. When suddenly I found I couldn't run, I became really depressed. I felt as if I wanted to stay in bed all day and sleep. When I did get up, my hands would be shaking from the physical withdrawal of not running.

I think that perhaps I had been running in order to make up for other areas

of my life which may have been lacking. I was still searching for a vocation. When suddenly I couldn't run, it seemed as if my whole world had crashed in around me. The experience wasn't without value though. It taught me that running has to end someday and that when it does, I have to be able to handle it. Although I know that I'll never enjoy the idea of not being able to run, I know now that I can overcome the depression and cope with it.

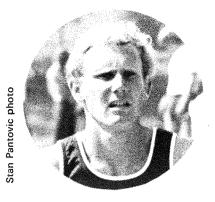
RW: You made a rather rapid comeback for being unable to run for two years. What sort of things were you able to do to keep in shape during that layoff?

Smith: As soon as I got injured, I immediately began searching around for anything that I could do that was close to running, that would keep me in shape without hurting my leg. Basically, I would swim in the morning and lift weights in the afternoon. I did a great deal of underwater swimming and really worked at it. When I started running again, I felt that my cardio-vascular conditioning was still pretty good. I even felt stronger in my upper body than I had before the injury. If I would have known what I know now, I think that I would have taken up crosscountry skiing as a way to keep in shape during my injury.

All in all, I can't really say that my stamina was particularly lacking when I began to run again. Of course, different muscles were being used, but I think that I made the transition fairly easily. I don't want to risk injury again and I have a fear of becoming too dependent on running. That's why I chose now to run only once a day and 70 miles a week instead of devoting my whole life to it.

RW: How do you feel about the running you did last year? You seem to have performed rather well in light of the relatively small amount of training that you were able to do.

Smith: Yes, I ran fairly well, but only occasionally. I ran my best 1500-and 5000-meter times. It was still discouraging, though. Every time I ran a race I was out for two weeks—not from injuries, I just couldn't run. My calves would get all knotted up and my whole body felt drained. When I ran 13:39 for 5000 at Bakersfield last year, I'm not kidding, I was out for 2½ weeks after the



race. This year I've purposely been running races two nights in a row in order to get my body to recover better.

Although I finished fifth in the Olympic Trials, I can't really say that I was was satisfied with the race. I had the third best time going into the Trials, and if I could have run that I would have made the team. Trouble was, I just hadn't reached the point yet where I was recovering adequately between races. The way the Trials were set up, you had to qualify to get into the final, which meant that there was only three days between two hard races. As it was, the first race took so much out of me that I was in no condition to run my best in the final.

RW: Is there ever still a temptation to go out and train very hard just to see what you might be capable of doing?

Smith: No, I decided that I wasn't going to let running interfere with anything else in my life. Perhaps at first I ran only a few miles out of necessity. Now, though, it's a matter of choice. I want to be able to enjoy myself with other things, to go cross-country skiing and backpacking and not worry about how it's affecting my running.

For example, just recently I went to a meet in San Francisco and camped out along the way. Several years ago I would have never thought of driving all that distance and camping out in the cold. I did it as an experiment to see if I could have a normal life and still run. When I got up there I ran 8:44, which considering everything, I thought was pretty good.

Another thing I never used to do before was to go any place to train that didn't have a track and a nice grassy infield area. After the meet at San Francisco, I went over to Lake Tahoe. I knew that it would be snowing there, but I wanted to prove to myself that I could run in conditions that were less than ideal. I just went out for 1½ hours or so and ran "efforts," which is like I used to do under (Coach Mihaly) Igloi. Igloi used to base

everything on efforts. I picked out trees. I'd say that looks like about an 880, and then I'd run it.

I came back from Tahoe and ran my best two-mile. I went 8:31 and really felt strong. I'd say that I'm eager to run now because I don't kill myself off in workouts. I run hard one day, and then an easy day. I actually look forward to working out.

RW: You mentioned Igloi. What type of influence do you think he's had on your running?

Smith: Quite a lot. In fact, I don't think that I could have come back the way I did without having done those three hard years of training with Igloi. I really believe in the way he has his athletes run. You can always tell an Igloi runner by his style. Anyone who's been with him a while is very quick and rhythmic. I believe that a lot of the secret to good distance running is in developing rhythm. I know that I've beaten a lot of guys by having better rhythm—even though they may have been in superior shape internally.

I think it's because I've done so many 220s. Working with Igloi I learned how to run efficiently. He started me running straight up and down, with a shorter stride, using my arms more and keeping them closer to my body. I think that 220s and other short distances is where you can learn to develop a good style. You get in those long slow runs and you just tend to become sloppy, you lose your quickness. I may go out for 15 miles, but I'll always do 220s during it. It all depends on how I feel. Sometimes I'll just jog and run 220s, but other times, if I really feel good, I'll run the whole way at a pretty good pace, under six minutes (per mile), mixing it up with fast stuff.

RW: Can you tell me a little more about your training under Igloi?

Smith: Sure, but you have to remember that I was kind of an unusual case. When I first started training with him, I was living out in Arcadia (Calif.) and he had his group of runners in Santa Monica. I was the first guy, or at least this is what they tell me, who he let train without having to be there so he could watch. I'd have to come two days a week, on Saturday and Sunday. He'd write out these workouts for me on a sheet of paper and then insisted that I bring that paper back each week. He'd always ask me where I was training and if any people were around watching. He was scared to death that someone was going to see his pattern and find out something. Everything was very top secret. One of his favorite expressions was, "Must tell no one." RW: Do you ever feel that your injuries may have been caused by that type of high intensity, speed-oriented, training?

Smith: No, I don't. I didn't even get injured until after I left Igloi. In fact, it happened soon after I came back from Japan. I simply didn't use my head. I was training fairly hard when I began to notice little spasms in my calf, down near my tendon. I took two days off and thought I was being very patient. It kept hurting, though, and it took me longer and longer to warm it up to where I could run. Finally, after about three weeks, it happened. I couldn't run at all. It was over 1½ years before I could even jog again.

RW: But one could hardly say now that you are merely jogging. It must be very gratifying to hold the world record again.

Smith: Yes, the most satisfying thing about having it back is not merely because it's something I had before, but rather that it's proved to me that I have come back. At one time I had my doubts. In fact, during cross-country season, I thought of retiring because I wasn't certain whether I could ever get back into the kind of shape I was prior to when I got injured. Even though I've now run faster than I ever have in my life, I don't feel that I'm nearly in as good shape as I was in 1969—but I'm getting there. It's really satisfying to know that I'm getting there.

I think that a significant factor in my comeback would have to be my affiliation with Athletes in Action. I think that AIA deserves a lot of credit for how I'm running right now.

RW: I take it that you plan to be affiliated with AIA for quite some time.

Smith: Yes, even when I become a coach, wherever that may be, I plan to help out AIA in whatever way I can. I like helping AIA because it stands for something good and something which I think will uplift the country. What this country needs, along with the whole world



1976 Games

There are already 167 people signed up for the Tour to Montreal. The limit is 225, so send a \$50 deposit now, or write for information.

RW, Box 366, Mt. View, Ca. 94040

for that matter, is to get into the Bible and see what this man Jesus was really like. There'd be more happy people who'd who'd be treating their neighbors better.

RW: Is one of the principles behind AIA the suggestion that accepting Jesus Christ and living a pure life will make a person a better athlete?

Smith: Yes, but not necessarily. Whatever you do—first, second, third, or last—is all for the glory of Jesus. I may pray before I run, but I don't think that a lot of prayers will make up for improper training or inadequate preparation.

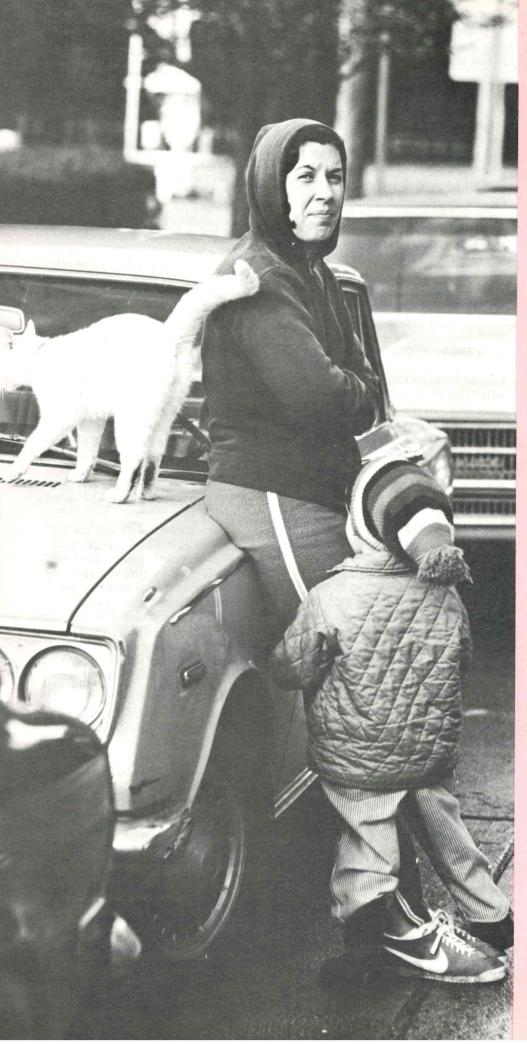
One way that I can say that my relationship with Christ has helped my running is by teaching me the value of patience and perseverance. I think that patience is one of the biggest factors in successful distance running. You have to have patience to know that sometimes it's going to be months and months before you will reap the results of the hard training that you're doing now.

And also with injuries, you have to be patient and wait. I wasn't patient a few years ago when I only rested two days when I should have waited two weeks before running. I think that it's the whole process, the months and months of patient training and the attitude you have which contributes more than any pre-race prayer.

For instance, before I set the record in New York, I started to get this confidence. It so reminded me of how I used to feel when I was getting the records before. I started thinking about it, even though things didn't point towards it. And I think that this confidence was something within me spiritually. I just had a feeling that something was going to happen, and I think that my relationship with Christ, through AIA, helped it to happen.

RW: A person always runs the risk of being so confident that he can't get adequately psyched up for a race. Ever had that problem?

Smith: No, I can't say I have. I don't think that being confident necessarily implies being calm. Sometimes I think that I'm more emotionally ready than physically. I really key on the big ones. I particularly can get psyched up for indoor track. I like the atmosphere and the closeness of the crowd. I sometimes think that I overcome a certain lack of talent by my ability to get so emotionally high before a race. In fact, I get so high sometimes that I hardly know what's going on. I came home from one race just recently and found that I had put the milk in the cupboard and the cereal in the refrigerator.



The sport can put either strength or strain in the domestic scene.

RUNNING IN THE FAMILY

Running's effects go beyond the personal. They touch those closest to him—his family, particularly the members who stand and wait (as in George Beinhorn's photo, left).

Discussing all aspects of family running in this special section are Tom Coyne, Ann Brown, Christine McLean and Grace Butcher.
All of them relate the subject to their own experiences.

WHAT IT DOES TO A FAMILY

"If you want to be successful as a runner, really successful," a man we'll call Harvey Davis said, "you have to be one of two things—unemployed or unmarried. Preferably both."

Harvey was serious. The runner, who is in his mid-30s and is quite successful as a marathoner considering he's only been running a few years, was recently divorced. He has a job allowing him more than enough training and travel time.

"You can't take running seriously if you're too tied down with other responsibilities," Harvey said.

Running is a self-centered sport with high demands on time, energy and attention. When it gets to be like a second job or a mistress, family stresses often show up. There undoubtedly is truth in what Harvey says about marriage and mileage not mixing well.

With every one of her husband's evenings taken up by training and every weekend taken up by racing, a wife gets annoyed. If she doesn't run, she can't understand this strange preoccupation of his. If he started running after they were together, she may be justified in saying, "He's no longer the man I married." The changes in his personality, appearance and interests may have been dramatic.

One runner's wife wrote to RW pleading that we do an article on him. "It seems to me," she said, "that since I have to put up with his daily training schedule, his picture-taking instructions at races, his careful diet and his running magazines scattered hither and thither, I should get to read about the bastard in one of those magazines. How about it?"

She was semi-joking. But what has happened to a number of former Olympians isn't so funny. Three women runners from the '72 team—all middle distance runners who had been married—were separated from their husbands. Two Olympic distance men from 1968 have seen their marriages flounder.

Of course we're not saying that running alone caused the breakups. At best, marriage in the 1970s is a risky proposition for anyone. But it is safe to assume too that the stresses of high-level competition contributed to these divorces.

If running can pull families apart, though, it can also bring them toge-

ther. It can relieve some of the pressures that send marriages to the rocks.

The Cunneens on the cover of the issue belong to a unique club in the San Francisco area: the "Pamakids." Pa, ma and the kids all run and race together. The club has dozens of family members.

One woman in the club said, "I got tired of going to those races all the time and standing around bored. I didn't see much point in running then, but I was curious why my husband was so addicted. So I decided to try it myself. Now I'm as involved as he is."

Increasing numbers of family men have started running for fitness and then graduated to the harder stuff. As barriers against women and children runners have come down, they've joined papa. When they're equally committed, the running-related conflicts subside. The family that runs together doesn't necessarily stay together, but it has a much-needed common tie.

Whether running fits comfortably into any family's routine depends on which comes first—the family or the running.

THE PRICE OF BEING ALONE

Runners are "self-battling, inward-looking loners," says Dr. Bruce Ogilvie, who should know. The Institute for the Study of Athletic Motivation, which he operates along with Dr. Thomas Tutko, has probed the personalities of thousands of athletes.

Three traits show up strongest in runners—particularly distance runners—Ogilvie says: aggression, autonomy and introversion. Runners like to be alone, and they prefer turning their aggressive feelings on themselves instead of others.

To some extent, this is a learned reaction. Another psychologist, A. H. Ismail of Purdue University, recently conducted tests on middle-aged men. None had exercised in years. Ismail and L. E. Trachtman put the men on a program stressing running, and found that the subjects' outlooks changed dramatically as they got fit

At first they were fearful. "We noticed," Dr. Ismail wrote in *Psychology Today*, "that some men started cautiously and some were afraid they would get heart attacks. After a while, their fears subsided and several turned into mildly sadistic types, and took great pleasure in defeating others in foot races.... At the same

time, they all seemed to become more confident...."

Ismail said changes continued as the experiment progressed. "We thought we perceived a third, masochistic stage. Instead of getting his greatest satisfaction from beating others, a man would try to better his own performance by driving himself hard and subjecting himself to great stress."

As the new runners got hooked, they turned inward. Personal rewards became the ones that mattered, not impressing or beating others. These men learned to like suffering alone for the real or imagined rewards. In short, they became quite self-centered.

This happens, Dr. Ogilvie says, not only to men but often women runners too.

"Outstanding women competitors," the San Jose State University psychologist noted in the booklet *Practical Running Psychology*, "show a greater tendency toward introversion, greater autonomy needs, and a combination of qualities suggesting that they are more creative than their male counterparts. They show less need for sensitive and understanding involvement with others. Women competitors are more reserved and cool, more experimental, more independent than male..."

Ogilvie attributes this in part to "cultural repression of women. To succeed in any field, a woman has to be able to stand up and spit in the eye of those in charge."

Women, and men to a smaller degree, seem to be more interested in their running than in how outsiders view it. It is a self-imposed loneliness, and they glory in it. They are saying, "This is mine. I'm doing it on my own, my way. I don't care what you think of it. Just don't interfere."

In general, runners want to be apart, not together; to escape, not join; to feel unique, not alike; to find self, not company.

All this is honorable and innocent enough as long as everyone involved accepts these premises. If both partners in the marriage are runners, chances are they'll understand each other. But what happens when a wife, for instance, has little use for her husband's obsession?

"There's a camaraderie and general acceptance among the competitors themselves," Bruce Ogilvie says, "because they are identifying with the same things. But it's the girl friend or the wife in the life of the (runner) who often has to suffer. A man who loves to run has to have a very special wife or girl friend to understand and accept his running, which may be a competitor to her."

No woman can love her man's running if it shuts her out, if the sport is his

mistress and more attention goes to the mistress than to the Mrs. A non-running wife can't share in it because it's too personal to be shared. If she hasn't accepted running as one of her mate's "vices," and the man isn't willing to tone down his running passion for her sake, a serious conflict is set up.

Running can be beautiful for him, but a bore and an irritant to her. She can think of far better ways to spend her Sunday mornings than standing with other running widows on strange street corners watching runners disappear and wait for them to drag their exhausted bodies back.

It's no better when they finish. Runners stand and jabber about each bump in the road, talking to themselves if no one else will listen. Meanwhile, the widows hang unnoticed in the background. One of the ladies could strip and dash through the crowd! of runners, and they'd go right on talking.

Most wives eventually shake their heads and give up. "You can tell how long a guy has been married," one runner says, "by whether or not his wife goes to races. All the girl friends and fiances go. Some of the newlyweds are there. But you know the honeymoon is over when runners are alone again."

IN PRAISE OF WOMEN

BY TOM COYNE

In the paeans of praise written for, about and by distance runners, just about everything under the sun gets a share of the credit for whatever successes, small or large, we achieve. From shoes to salt pills, fartlek to LSD, runners tick off the factors that are helping them run a bit faster or a bit farther.

With no intent to out-lib Women's Lib, I submit that in so doing a serious injustice has been done the non-running females in our lives. These are the wives, girl friends, mothers, et al., who suffer the inconveniences of adjusting their schedules to our workouts; who wait patiently with complete strangers while we're out trying to win another trophy, which in all likelihood they will have to keep polished; who wash sweaty gear; come up with the sympathetic concern that must be shown after we've had a bum race, and in general, endure the unfair competition for the interest of their men against so formidable a mistress as the distance running lure.

My own acquaintanceships with

the ladies behind the runners is limited, but of sufficient quantity and quality to appreciate their outstanding features. Heather Wallingford certainly has made Ron's running career a lot easier. I can't count the number of times at University of Chicago Track Club meets that I would notice her cheerful presence after having driven most of the way from Canada so Ron could sleep on the trip down.

You may or may not agree with Hal Higdon's viewpoints, but I don't know anyone who doesn't appreciate Rose Higdon unless, of course, it is the guy she chewed out a couple of years ago for having someone read him lap times in a prediction mile run. That unfair assistance, except for Rose's intervention, almost cost some youngster a trophy for which he had run hard and fairly earned. Rose has been a gracious hostess to God knows how many runners, not to mention coping with the idiosyncrasies of her own running man.

This article right now is being typed



Betty Wake, a mother and nearthree-hour marathoner. (Chadez)

by my secretary, Seija Bax, who in a relatively brief amount of time has done more hard work in helping to compile a nationwide schedule of distance runs than any of us has a right to expect from a non-runner, feminine type.

As for myself, my Monique has endured for years the disruption of the family routine while yours truly was out vainly attempting to turn back the years. Her patience in adjusting to an addiction she neither understands, nor I suspect cares to, and her assurances to our four sons that they do have a father, are above and beyond the usual marriage yows.

While I by no means wish to dwell on the economics of the sport, it might be well for those of us with closets of worn-out shoes to note one can buy a helluva nice-looking dress for the price of a pair of Adidas Olympiads.

The frustrations of adjusting to the vagaries of distance running must, at times, make our women more than a little exasperated. The fact almost all of us have built our lives around a workout schedule certainly doesn't do a great deal for traditional family life. In addition, there seems little doubt that while a man is better off pounding out 100-plus miles per week instead of sitting in some bar, this provides scant comfort for that spouse who, in either case, is sitting home with only the kids and/or the family dog as conversational partners.

Obviously, these brief comments and limited examples only scratch the surface. It would be a rare runner, indeed, who could not immediately bring to mind a woman or girl of his acquaintance whose extra efforts and forbearance in the face of varying degrees of dedication to the sport have made running a more meaningful, enjoyable and easy thing for us to do.

So, gentlemen, on that next occasion when we join together over a congenial glass of good cheer and prepare to swap lies about our triumphs, downfalls and general physical condition, let us pause a brief moment in our self-esteem and raise our glasses in a heartfelt toast to...The ladies—God bless 'em.

EXPERIENCE OF AN EX-WIDOW

BY ANN BROWN

My husband Bob has been running off and on for most of our 20-year married life. Until four years ago, it was mostly seasonal with workouts in the spring and

fall but little in the summer or winter. This was long before the physical fitness craze. He just seemed to enjoy a workout in old tennis shoes and worn-out clothes.

When we arrived in Lincoln, Nebr., everything changed. With the availability of an indoor track and a host of companions, running became a daily activity. I began to hear about Tigers and Adidas-not a jungle menagerie, I discovered, but kinds of running shoes. Then the daily record began to include times, with seven-minute, six-minute and 5:30 miles making up part of the supper table conversation-and I not knowing what it all meant. After about a year, I started to hear more about noon-time distances. I would also get a report on the exploits of Charley, Jim, Roy, John, Neal and Phil. I truly did not think there were that many other souls who had caught the fever.

This turned out to be just the start. Soon there was talk of marathons. A Runner's World magazine began to arrive and was devoured more quickly than Play boy. Weekend mornings were not spent on lawn work, but on long runs in the country. The laundry bag bulged with running paraphernalia. I was proud, even though my husband was known in the neighborhood as the "nut who jogs." I could see he was enjoying himself and was in excellent shape. But I did not really understand what it was all about. Instead, I just nodded my head when the times, distances and tales were told.

Then it happened.

Bob never really suggested that I start running. The hints were rather apparent, but never explicit.

"Say, there were a couple of girls out running today."

I resisted all such hints. Running never appealed to me. I saw no fun in going around in circles or in traversing hills and dales. Then one winter a couple of years ago, Bob picked up a used exerbike with speedometer and tension control. He wanted it for weekends and vacations when snow and cold kept him inside. I decided to try it.

From the exerbike to runs around the block to the track and to those hills and dales were my progressive steps to becoming an addict. Strangely enough, untill Bob acquired his hip ailment we seldom ran together. I am more of a morning person and would often get in a mile or two before breakfast while Bob would roll over and get more sleep. Bob offered advice and encouragement, though, and I needed that.

No miracles occurred. It was some time before I lost any weight. But when I discovered I was two dress sizes smaller,

I was hooked. Now I run about 30 miles a week. I can't say I really love it. I still get upset when neighbors or friends think I am strange. But I suspect that more are really envious underneath, and I should feel more pity than wrath.

Running isn't for every woman. Some do not consider it feminine. Some find it embarrassing. I do wonder what my friends think of me running around the block or over hills, but I am beginning to think myself less a freak and more a wifely companion.

I have been a pretty active runner for going on two years now. I found it helps me in many ways. I won't say that it helps our married life for sure. But I will say that Bob and I go to bed earlier now, even though runners need less sleep.

WE'RE ALL IN THIS TOGETHER

Running had already made vast changes in the lives of the Epsteins of Brooklyn. Irving and his wife, Marion, and their children, Ed and Laraine, had been running for several years.

"To us," Irving said, "running has ceased to be a sport. It is a way of



"Running this way lets children act grown up and lets parents act more like kids." (Beinhorn)

life." The family raced on the roads in and around New York because, the father explained, "the fun is mostly in seeing and running with people who enjoy life as we do."

Then Laraine, who was 24 and had marathon ambitions, traveled to England last summer for hard training. She didn't realize then that family running was going to take another nice turn for her.

Two days after she arrived, Laraine met David Holt. Dave was getting ready to run the British Olympic marathon trials. (He missed in that event, but made the team later in the 10,000.)

"David and I started running together," Laraine said, "and we decided if we could live through that experience together we could live through anything."

They announced their engagement at Munich. In December, they were married. They planned to come to the US in April for a big family reunion at the Boston marathon. They all would run it.

"Perhaps it's selfish or sentimental," Irving Epstein said before the race. "Mama and I want to run with our children." Run with them in the spiritual sense, not side by side.

"It would be nice to run together," said Dave, whose twin brother Bob also is one of Britain's leading distance men, but a bit of a wasted trip for me I'm afraid. I know I'm capable of a 2:12 marathon, and I'd like to think I could do it at Boston."

That's the healthy paradox in family running. The group shares the experience while running as individuals. They're in it together, yet they're on their own. Regardless of ages or abilities, the family members are equal when it comes to running. Each one has to do his own work. He can't shove it onto daddy or brother. But each one gets to collect his own prize too.

Running this way lets children act a little more grown up than they normally can and it lets parents act a little more like kids. Traditional parent-child, husband-wife roles temporarily break down, perhaps letting each one understand the other somewhat better. Even if it doesn't go that deep, they at least get to do together something they all enjoy.

"I could go on and on about running and the joy it has brought us individually and collectively," John Butterfield wrote in the booklet Beginning Running. His wife and three children all run with him. "As a family, we have something we can share, and that we enjoy sharing."

THE MYTHS ABOUT SEX

As if Dave Wottle didn't have enough problems already with an Olympic race to run on gimpy legs, he had to watch his honeymoon be made a matter of public record back home.

Dave got married shortly before leaving for Europe last summer. His bride went with him, but once in Munich he was cloistered in Olympic Village and she had to sleep outside.

"I can't concentrate on track very well," Dave told the press, "when I know my wife is almost an hour away from the Village, must eat all of her meals alone, and can't speak a word of German."

Dave, along with other athletes, began sneaking his wife into the compound. Many of them set up housekeeping there during the games. And Bill Bowerman, the US men's coach, wasn't at all happy with this arrangement.

"Dave Wottle is having a nice honeymoon," Bowerman told Blaine Newnham of the Eugene Register-Guard before the Games, "but he'll be lucky to get past the first round in the 800 meters."

Wottle of course did advance past the first round. But the coach remained set against the rooming-in situation that existed.

"I don't want anybody to get the idea that I'm a prude," Bowerman said, "I'm as interested in sex as anybody. But the most important thing we're doing here is competing in the Olympic Games. We should remember that."

He used the Bible and horse-sense to bolster his arguments. "There is evidence to support my contention in the Old Testament," Bowerman noted. "It tells us that a warrior should not go to battle shortly after he is married, and that his neighbors should help him with his farm work so he can adjust to matrimony."

The Olympic coach added that "until after Man O' War ran his last race, he didn't know there were two sexes of horses."

In saying all this to Wottle and his teammates, Bowerman was echoing the prevailing athletic attitude that running and sex don't mix, and that if you're serious about your race you must abstain from pre-meet sex.

This comes partly from confusing moral with purely physical considerations, and justifying the moral question on physical grounds. Yet in the "strength-

sapping" sense, there's little solid evidence on the side of the abstainers.

Dr. George Sheehan, father of 12, writes, "Statistics on sexual activity suggest that actual energy expenditure is in the order of a 50-yard sprint. I cannot see how this would affect anyone's competitive efforts. Any problem then would be psychological. Perhaps the lowering of tension and loss of competitive drive would be a problem. However, there are some coaches and psychologists who think that such relaxation can be beneficial.

"My personal experience has convinced me that peak performances in middle and long distance runs are possible within hours of sexual activity."

Dr. Craig Sharp, Britain's chief medical advisor at the 1972 Olympics, goes along with Sheehan. He has been researching this question for some time, "mainly because of the bad advice that people have been getting." Dr. Sharp said some athletes "upset their personal lives on non-physiological advice given either for puritanical reasons or through old wives' tales."

The doctor has written: "I can find no factual evidence either in scientific literature or in discussion with many athletes and sportsmen of world class that sexual activity in moderation up to and including the night before a match has any detrimental effect on the sport in question."

Without mentioning names, Sharp cited the cases of an Olympic middle-distance runner who set a world record an hour after making love, and of a British miler who broke four minutes shortly after sex.

Sharp said married runners do face problems when they're competing, but only because they need to be with their wives rather than separated from them.

"It would be a good idea," he advised, "for wives to have accompanied their husbands to the Olympic Games. The sex would only have been about 10%; 90% would be sheer morale."

Perhaps Casey Stengle's earthy observation is most pertinent here:

"It isn't sex that wrecks these guys, it's staying up all night looking for it."

RUNNING AND MOTHERHOOD

Paola Cacchi's and Joyce Smith's one-two finish in the latest International cross-country championships was a victory for motherhood.

Cacchi, of Italy, won the race. Defending champion Smith, of England, finished second this time. They are 28 and 35 years old respectively and both have had their running careers interrupted by childbearing. Both came out of the experience faster than ever. (And both, incidentally, are coached by their husbands.)

Paoli Cacchi missed two crucial years during and after her pregnancy. She ran little and raced less during 1970 and 1971. Yet with only a year's intensive work she finished third in the Olympic 1500, breaking the old world record.

These cases emphasize the fact that pregnancy, a complication male runners don't have to deal with, doesn't have to be any more disruptive to a running career than any other kind of long layoff.

Madeline Manning, the 1968 Olympic 800 champion, retired to marriage and eventually motherhood after those Games. She returned to running last year and tied the world half-mile record.

Judy Ikenberry was one of the early women marathoners in the US. She quit running seven years ago, and since then has given birth to two children. Judy is back in long distance running now, and recently came within five seconds of a three-hour marathon—far faster than her previous best.

Nina Kuscsik, the first women's winner in the Boston marathon, was a mother of three before she took up racing.

It's obvious that women can come back from childbirth and run as well as before, if not better. With their doctor's okay, they may even continue running during early pregnancy—thereby reducing the total time away from training.

"According to Dr. Evelyn Gendel, director of the Kansas Division of Maternal and Child Health," George Sheehan wrote in Medical Advice, "there is no reason for women not to continue in athletics during pregnancy, if they are continuing what is customary for them. Assuming a normally implanted pregnancy, physical activity is not only permissible, but desirable. It not only increases the joy of living; it also maintains cardio-pulmonary efficiency and muscle tone and prevents back problems."

Difficult deliveries of course are harder to overcome. Israeli writer Abraham Green tells of the case of Hanna Chezifi, who won the 800 meters at the last two Asian Games—before and after having a child.

"Hanna's achievements in reaching top form again were by no means easy," Green says. "This small woman, slim and narrow-hipped, had a very difficult and painful delivery. Her child was too big, relatively, at eight pounds. It was pressing



on her heart. The delivery of the child had to be made through Caesarean operation.

"All her troubles prior to delivery and afterwards left Hanna weak and exhausted. Notwithstanding her physical condition, the moment the stitches were removed, she began to exercise very lightly. Against doctors' warnings, she began a month after the delivery by jogging 300 yards. Normally her heart beat would be around 42. Now it was 80-90. She was almost 20 pounds overweight, and even the 300-yard jog exhausted her.

"Less than a year later, however, 27-year old Hanna set Asian Games and Israeli records in the 800 with 2:06.5 and the 500 with 4:25.1"

Judy Pollock set the world halfmile record several years ago. She was a favorite for the gold medal at 800 meters in Mexico City. Then she learned she was pregnant. She decided to retire.

"I was sure that was the end of my running career," the Australian said later. "I had no thoughts of ever coming back. I settled down to being an ordinary housewife."

In the space of three years, Judy

had three children. None of the deliveries was easy. The first child was the easiest. The next one died at birth. The third, born in 1971, was delivered by Caesarian.

Three months after having the last child, Pollock began thinking of re-entering running—and possibly competing at Munich a little over a year from then.

"Most of all," she said, "I had to build up my confidence after what I had been through. It took a while."

Once she had that, 31-year old Judy came back quickly. Before Munich, she ran 800 meters in 2:01.5—about equal to her best of five years earlier. However, a leg injury knocked her out of the running before the Games.

Pollock finds the logistical problem of combining running and motherhood to be tougher than the physical ones. She once marked out a 400-meter strip of road in front of her house and practiced there, popping in every few minutes to make sure the dinner was not burning or to see that the children were asleep.

She says, though, that "having a family isn't a handicap; it's a help. Everybody rallies around to help, and I enjoy having

The Cunneen family: (1-r) Connie, Garrett, Kelly, Pat Jr., Pat Sr. and Betty. (G. Beinhorn)

plenty to do. You have to be well-organized to live the crowded life I do, and I am a fairly well-organized person."

During peak training, Pollock organizes herself this way: "My husband comes home from work with the car at about four o'clock, and I leave to drive up to one of the tracks in Melbourne. On the way, I leave the baby with Mum, who gives her an evening meal. I usually take my son with me to the track and he has a picnic tea while he watches us train. He thinks it's great fun. Then we drive home, picking up the baby on the way, and I put them to bed before we have dinner."

"I'm lucky to have an understanding husband. I couldn't do it unless he approved. He isn't the kind who stands around grumbling when I come home at eight o'clock from training to get dinner ready. He is used to the demands running makes. But it is difficult for the children—and their needs always come first."

LET CHILDREN PLAY AND GROW

No part of running is growing faster than the age-group area. It still does not rival Little League baseball and age-group swimming in participation, but track and cross-country for the pre-high schooler are booming. There now are national championships for boys and girls as young as six and seven. The booklet Age Records lists marks for children as young as one, if you can believe that.

The values of age-group running are mixed, and those values are being examined both by supporters and critics of kids' competitions—mostly parents.

The examining mostly centers on physical effects of hard running on young bodies. In some ways, growing children are delicate. They are subject to injury in events that don't suit them.

Research in the Soviet Union indicates that pre-puberty youngsters don't have the strength required to compete well and safely in explosive power events. These are the sprints through 300 meters, and all field events. They're clumsy in these activities.

However, Dr. A. Viru concludes, young children are natural distance runners if the stress is moderate. Viru writes, "Children appear to have excellent endurance for extended workloads, especially when there is sufficient variation in the intensity of the load and they are truly motivated. In these cases, they are virtually capable of non-stop running for hours."

If this is true, it looks as if we may have our progression of events backwards. Children typically start with the short distances and work up to the long runs with age. Yet endurance is highest, relatively speaking, when they're young. Explosive power—needed for speed—grows as they do. (A complete summary of Viru's research will appear in the June booklet, The Young Runner.)

It's often a parent's job to advise the child on what and how to run. This doesn't simply involve physical questions. If the young runner's physical health is delicate at this age, his psyche is much more so. His parents walk a thin line between supporting him enough and pushing him too hard.

One fear in this area is that too much emphasis will go to organization and to excellence.

Hal Higdon, who has three young children, wrote some time ago in Runner's World, "I know that age-group track and field is in the embryo stage of development in the United States. Quite frankly, I fear it. I fear my sport will be-

come subject to the same abuses as have Little League baseball, with its accompanying tensions, excessive organization and parental domination....

"I recall a conversation about a long distance runner whose children were in the process of establishing several age-group records. This father apparently had plans to coach his children to become world champions by their mid-teens. Good grief, I thought, an example of creeping Little League parentism."

Higdon said it disgusts him to see mothers and fathers screaming at their children when they make mistakes in sports. "As a parent," Hal wrote, "I certainly want my children to succeed in what they do. But I feel I can survive if they never win an Olympic medal, just as I survived my own inability to do the same."

Higdon gets backing from sports psychologist Thomas Tutko, who says we should give more attention to breeding new generations of "strivers" than to raising winners.

"We need to learn how to lose as well (as win)," Tutko says. "Losing is part of growth, just as important as winning. But if we say losing is like dying, no sane kid is going to want to compete.

"I don't believe this shift in emphasis would remove competitiveness, because we are just naturally competitive. Life is competitive. You have to compete to survive."

Tutko urges putting the emphasis "where it should be—on the striver rather than the star."

In other words, let children play and experiment at sports, and grow up at their own speed.

SUPPORTING A YOUNG RUNNER

BY CHRISTINE MC LEAN

My son is a distance runner, now in his freshman year of college. I have been an avid running fan through four years of high school and one season of college, and could be called a "cross-country and track mother." There are responsibilities and rewards that go with this title.

Cross-country wasn't a popular sport at his high school. The first couple of races I went to, I was almost alone as a spectator. Since all races were on weekday afternoons, few fathers could

attend. I started calling other mothers and inviting them to drive there with me. Some refused, saying that their sons didn't want them there. But when the boys saw other mothers watching, there were no further objections.

This was not a formal organization. We were a group of people united through our interests in our sons' running activities. We learned how to score. I bought a stop watch so that we could keep track of times. Then (with Blue Chip stamps) I purchased two, two-gallon Thermos jugs for serving juice to the boys following each race.

Before the beginning of my son's second season, I asked the coach if he would like me to have a barbecue picnic in our backyard, inviting all runners and their parents. He accepted, and our picnic-meeting was highly successful. At this meeting the coach explained the sport of cross-country: scoring, who opponents would be, dates of races and chances of winning the league.

This gave added impetus to attendance at races because we had a chance to get better acquainted with the other parents. We discussed our mutual problems such as the care and feeding of a distance runner. Our concern about the dangers of heart damage by overexertion, overemphasis on running to the detriment of scholastic grades, transportation to meets, etc.

One problem which I have never seen discussed is the altered meal schedule for families of runners. As chief cook, it does put an added burden on mother. After all others in the family have been fed, dishes washed, kitchen tidied up, she has to start all over again to serve the runner who has had a late workout in the evening, or serve breakfast to the runner with an early workout in the morning. It would be like asking the office worker who has cleared his desk and mind of the day's work to pull out his typewriter and start again for a brief period before finishing the day.

Of course, your runner can get his own meals, serve himself and clean up. However, he is usually very tired and, particularly for the beginning runner, this can be a discouraging factor. You can make it easier on yourself and him by not complaining of such inconveniences (he is well aware of them); organizing your dinner hour later, if possbile; sitting down with him while he is eating so he isn't eating alone; or setting up a table in the living room where the family may be watching TV or reading. To one who is not a housewife the above may seem unimportant, but judging from the number of discussions of this

subject among mothers of new runners, it is an important concern.

Cross-country and track mothers, I have concluded, can be a great asset to both sports. At our school we followed certain ground rules which are valid for any sport, such as no public disagreements with the coach or runner. My greatest reward came to me on the day that our high school cross-country team won the southern California championship. My son was a senior and captain of this team. I believe that the support and encouragement by the parents contributed greatly to this victory.

EVERY VETTER RUNS BETTER

BY GRACE BUTCHER

Some years ago I was running one of my endless trainings along the Right-of-Way, a stretch of narrow dirt road that used to be a railroad line through the woods not far from my home in Chardon, Ohio. As I came out of the woods where the road ran along the edge of Bass Lake, I saw three dark-haired little girls about eight to nine years old playing alongside the road.

They jumped up when they saw me and asked, "Why are you running?" Always willing to talk to kids who seem interested in running, I stopped for a minute and explained to them that I ran races against other girls, and I had to practice so I could run well.

"Can we run with you?" they asked. "Sure," I said, and started up again. To my surprise (and somewhat to my dismay, I must admit) they stayed with me and stayed with me at what I thought was a pretty fair two-mile tempo.

Finally I said, "You'd better go back now; your folks won't know where you are." They turned around and galloped easily back. "Wow," I thought, "they sure can run!"

Who would have guessed that years later we'd all end up on the same track team; they were younger than my own children. We're teammates now on the Blue Ribbon Track Club, coached by Herb Stockman.

There are six children in the Vetter family: Greg, Diane, Debbie, Janis, Mark and Juanita, five of whom run. (Mark plays baseball and wrestles.) The three little girls were Diane and Debbie, twins now 16, and Janis, 15. Their younger sister, Juanita, is 10; Greg is the oldest at 17. And these kids must have one of the most amazing athletic records of any family in the country.

Greg ran fourth or fifth man this

past year on the first state championship team Chardon High School has ever had in any sport—cross-country. Coach Roger Sweet says of Greg, "There's something about him. He does things the right way and is a tremendous addition to the team. He's obviously in love with running; he works out four to five miles in the morning before he comes to school. He's really dedicated and never makes excuses."

Let's jump down to little Juanita. In 1971 she won the Ohio state cross-country title for 9-and-under, and in 1972 was third in the 10-11 group. She was also third in the Central USA champion-this past year. She has marks of 72 (440), 2:48 (880), and 5:35 (1500), all of which put her among the top age-groupers in the country.

Most of the records and titles in the family are held by the three older girls, now moving into their fourth year of competition. Janis set a Canadian record in the 12-13 group in her first year of running with a 58.5 440, a time she has since lowered to 56.5. She also has a 25.9 220, and coach Stockman will probably have her try the 880 this year.

As for the twins, Diane has 440, 880 and mile marks of 59, 2:20.1 and 5:16, while Debbie has run 58.8, 2:14, and 5:07.

Janis, Debbie, and Diane, in that order, finished 1-2-3 in the Ohio cross-country championship in 1971. (Debbie was fifth in the nationals the same year in the 14-17 age group, and fourth in the '72 AAU 880.) In the state cross-country meet last year, Debbie, Diane, and Janis took first, second and fourth. Debbie also won the junior national meet, with Janis fourth and Diane sixth. Wherever these girls are competing, the awards ceremony sounds like a broken record: "Vetter...Vetter...Vetter!"

THIRD ANNUAL DENVER MILE HIGH MARATHON

Memorial Day Weekend Race Sunday May 27, 7:30 p.m.

- Certified course. AAU sanctioned, supervised, 26 mi., 385 yards.
- Sponsored by: Southern Denver Javcees
- Comfort Stations—Escorts—Dressing rooms—Refreshments at end—First Aid—Two-way Radios.
- T-Shirts, 50 awards.
- Three Age Groups

Information: Alan Cunniff, 424 S. Clarkson, Denver, Co. 80209

The girls usually divide their seasons between high school and AAU competition. Cindy Thayer, the girls' physical education teacher at Chardon High has nothing but praise for these girls: "Debbie, Diane, and Janis are a real pleasure to have on the team. They encourage the other girls and supply much leadership. Their skill and endurance are a pleasure to watch."

Blue Ribbon coach Herb Stockman, who formerly trained under Mihaly Igloi, is totally responsible for the girls' training program and also works with Greg during the summer. He feels that the girls have an exciting future ahead of them.

"They're easy to coach," he says. "They enjoy running. I don't have to look around to see if they're doing what they're supposed to. I think Janis will be one of the best 440-880 runners in the country. Debbie could be a top miler and two-miler. And Diane has potential from the 440 on up that she hasn't even tapped yet. I don't push. I want to bring these girls along gradually."

The father of this remarkable family, John Vetter, has been raising his children alone since his wife died about four years ago. He bought a van mainly for traveling to meets all over Ohio, adjoining states and Canada. Once a fine football, baseball and basketball player himself, Mr. Vetter now devotes nearly all his free time to driving the girls to and from training (about a half-hour trip, one way on the freeway) when they work out with their coach, picking up Greg and the four girls at the high school after other trainings, and driving them all to meets.

It goes without saying that he's very proud of his kids. "Oh, I don't mind the driving," he says, smiling. "I don't have anything else I'd rather spend my time at than getting them to training and to meets. As long as they want to run, I'll do whatever I can to help them."

And I'm proud, too, to be a teammate of these fantastic girls. Since the Blue Ribbon Club is going co-ed this year, Greg may also be running with us. They all have amazing natural ability, but on top of that they train very hard, as all top runners must these days. All five of them train year-round, even in our deep snow, without any prodding—evidence of their love of the sport. They all plan to "run forever," they say. And Mr. Vetter? Well, he just keeps driving.

The biggest problem they ever have is when they all have a meet on the same day. Can you imagine butterflies from five stomachs all flying around the same house? And the misery of whoever has to shower last, with whatever hot water's left?



FULL OF SURPRISES

Yet another Finn and the uninvited Irish upset the International cross-country race in Belgium.

by Jerome McFadden

The "International" started in 1903 as a British idea. It now has 60 years of race history, skipping off and on for a few years because of wars, depressions and other worldly intrusions. It was, up until this year, a private sort of European cross-country club. The few outsiders, non-Europeans, that did run in it were Africans from the European colonies, or an occasional touring American who came across to be humiliated by the tough European cross-country runners.

It was organized and run up until last year by the International Cross-Country Union (ICCU), an organization that eventually went to sleep on its own feet. The IAAF stepped in to save the race this year, turning it into a race open to all countries.

With the new organization and control, the International is on the way to becoming the world championship of cross-country. It isn't there yet, but it will be shortly, making it the only annual world championship of running. It may be the seed from which a yearly world track and field meet grows.

Jerome McFadden, an American living in Pairs, reports on the first "open" International, held in Belgium in March.

It will be a shame if the 1973 International cross-country is remembered more for its "Irish Interference" than for the brilliant, exciting race that it was. The race has not been that close, nor that breathtaking, since 1965 when a French-

man named Jean Fayolle lunged from obscurity to win by inches. Pekka Paivarinta of Finland was equally obscure and lunged equally well.

It was an open race in every sense of the word. There were no pre-race favorites and it was the biggest field ever to line up at the start. For the first time, under IAAF sponsorship, the meet was open to any nation that was interested. Twenty-two national teams responded. The US sent a women's team, which salvaged an honorable third place, but declined to pay the way for the men's team. They really weren't missed, as US crosscountry (except for Frank Shorter) enjoys a very low reputation among the European runners.

Those few people who had dominated the European cross-country sea-

LEFT: Early leaders in the International: (l-r) Neil Cusack, Willy Polleunis, Rod Dixon, Mariano Haro, Roger Clark. Eventual winner Pekka Paivarinta is out of the picture. (Mark Shearman photo)

son all winter withdrew at the last minute because of injuries (Ian Stewart and Dave Bedford) or to concentrate on other races (Emiel Puttemans). Gaston Roelants had lost only once this season but had suddenly come down with a serious cold and an ear infection, and had to drop out of his own national championships only two weeks before. He was defending champion at the International.

The team picture was equally confused. Belgium wanted to win very badly, as they were the home team. But without Puttemans and a reduced Roelants, it was dubious. New Zealand? Rod Dixon had surprised everyone by winning the English cross-country championships only the week earlier. And the Russians were coming. No one had ever seen them run cross-country in Europe, but their individual track times were fast and they obviously weren't coming this far just to look at the Flemish countryside. And the Moroccans. They had taken second last year.

The day was fresh but windless, with the sun thinly veiled through a light overcast. The course was flat and formal, winding through the infield of a horse racing hippodrome, with only two kneehigh hurdles and one artificial four-foot hump to climb over on each lap. The ground was soft but dry.

The first two races were good but routine. Jim Brawn of Scotland ran away with the men's junior division, as did Paola Pigni-Cacchi in the women's race. (Brawn covered the 7.0 kilometers in 20:25.8; while Pigni-Cacchi took the 3.9 kilometers in 13:45.0.) The US women got caught in a poor start and had a difficult time working their way up through the crush of elbows and knees and non-gentle pushing. Doris Brown finished 15th for their highest place, with Francie Larrieu straggling in right behind her, with shoe and and foot ripped open from a vicious spike wound.

The men's race started brutally fast. A group of 10 immediately broke off from the others. Mariano Haro of Spain, Neil Cusack of Ireland and Paivarinta of Finland were the main motivators.

The Irish Interference came at the end of the first lap, at the three kilometer mark. Five men jumped on the course

wearing the Northern Ireland uniform. For the next 500 yards there was an amazing display of running, boxing, wrestling and tackling. A surprised and hapless Cusack was knocked down, as were several others. Neil was running strong and relaxed at this point, looking as if he were on his way to playing a vital part of this race. A couple of the demonstrators picked on the wrong people and got flattened by Paivarinta and Rod Dixon, neither of whom broke stride in defending themselves.

The front group quickly reformed and went back to concentrating on how to outrun each other. Haro and Paivarinta took a slight lead with a group of nine a few yards back. At 10 kilometers Haro surged to a strong lead. The last two kilo-

A hundred meters from the finish, steeplechaser Paivarinta (43) closes in on Haro. (Shearman)

meters it was Paivarinta chasing Haro, and Dixon chasing Paivarinta, and everyone else chasing Dixon.

Then on the home straight Paivarinta launched into a long-legged, groundeating sprint, scrambled madly over the four-foot hump, and caught Haro only strides from the tape, lunging forward to Finland's first victory in this International cross-country championship.

So Finland has a new hero: Pekka Paivarinta (see accompanying story). And Belgium has a whole group of heroes. They beat Russia for the team championship by 10 points. New Zealand was third.

After his surprising victory in 1965, Jean Fayolle returned to the obscurity from which he came, never surfacing again at the world level. It will be interesting to see if Paivarinta continues his leap from obscurity, and adds to this victory. Even if he doesn't, it looks like there will be other Finns ready to take up the baton. And the Belgians will be right behind them, waiting for the fumble.





WHO IS PAIVARINTA?

Pekka Paivarinta is 23 years old and comes from Turku, Finland. He has the same slim build as Lasse Viren and shares the same quiet good manners and joy of winning. He also shares the same coach as Pekka Vasala (Kari Sinkonnen).

In spite of these similarities with the Finnish Olympic champions, no one expected Paivarinta to win or even to place particularly high in the '73 International. His credentials were good, but not any better than a lot of the others starting in the race. The high point of his career until now had been an eighth place in the steeplechase at Munich. That could be the performance of someone on the way up, or someone at his highest achievement.

His best times are impressive at the short distances but not particularly outstanding in the longer races: 1500m-3:39.3; 3000m-7:52.0; steeple-8:25.4; 5000m-13:44.4; 10,000m-28:56.4; marathon-2:19:42.8.

During the last two kilometers of the International race looked as if he were going to be a certain second, trailing comfortably in behind Mariano Haro of Spain. But Pekka said he was certain he would catch Haro. "I felt I was going to be able to come back on him right at the little hill. He never really got away from me Pekka Paivarinta, latest in the new wave of Finnish distance champions. (Mark Shearman)

for more than 15-20 meters. At 400 metters out, I had worked it back to five meters and I thought, with my long legs, that I could swallow that little hill better than he could."

Was he bothered by the disruptions during the race? "That was the first time something like that ever happened to me, you know. There were exactly five of them. I saw them coming suddenly from behind the hill and I realized right away that something was going to happen. They pushed against us, Haro and I, and Haro slipped. I had to use my fist not to be stopped by one of them. I sent him a good one right in the stomach, and he was stopped a little further on by a policeman along the course."

How does Paivarinta train? "I'm doing about 30 kilometers per day, in two sessions. In the mornings I run along the highway leading out of Turku. In the evenings, most often, I run in the city streets."

What are his running plans now? "I've been hesitating for two years on which way to go, between the steeplechase and the 1500 meters. I think next year, for the European championships, I'll go for the 1500. For Montreal, I'm aiming at the 5000 and 10,000 meters."

Did he really think from the start that he was going to win the International this year? "Yes. In fact, I believed very strongly that I was going to win, in spite of Haro, Roelants and Polleunis.... During my first International I finished 11th. Last year, sixth. The logical progression was leading me to first place."

He has helped tighten Finland's grip on the world's distance running titles. The renaissance in Finland continues!

-JEROME McFADDEN

FINNISH RUNNING SECRETS

The first full explanation of the men and the methods that brought the Finns back into world leadership in distance running.

Coming in October as part of the booklet series. 68 pages. \$1.95.

Runner's World, Box 366, Mt. View, Calif. 94040.

DRUGS AREN'T THE ANSWER

by Gabe Mirkin, M.D.

"Primum non nocere" (first of all, don't make it worse) is the first rule of the medical profession. Dr. Mirkin, who has taught at both Harvard and Johns Hopkins Medical Schools, feels that cortisone injections and butazolidine not only do not offer any real therapy but also can cause harm. Yet these are standard treatments for athletic injuries.

George Sheehan says that all muscle and joint problems are due to some imbalance in the body. Yet most physicians treat tendon, joint and muscle conditions with cortisone injections or drugs. How can you treat an imbalance with an injection or a drug?

A good example of the misuse of injections and drugs is in achilles tendinitis, a persistent pain in the tendon running from the heel to the calf. It usually hurts most when one gets up in the morning and at the start of a workout. The tenderness improves slowly as one gets into the workout.

Most physicians inject the tendon with cortisone or give you one of two drugs: butazolidine or indocin.

Cortisone injections only take down the swelling for a few days and never correct the problem. Two or three injections into the same tendon can result in the tendon pulling away from the bone or muscle. That could end running forever.

Butazolidine and indocin take down the inflammation only as long as you take the drug. As soon as you stop the pills, the pain returns. Both of these drugs can cause ulcers, anemia and decreased white blood cell counts in susceptible individuals, and should not be used haphazardly.

If you don't trust doctors, you go to the trainer who gives you massages and whirlpools which do not get to the problem. When I think of the wintergreen and the massages and all the hours I spent in a whirlpool, I can only be impressed with my ignorance. I can hon-

New evidence shows that injections only mask the pain of injuries, and may delay healing.

estly say that none of these things ever helped me. Benjamin Franklin really understood what happens when he said, "God heals and the doctor sends the bill."

Now that you trust neither the doctor nor the trainer, where do you go? You go to the experienced runner who has had your injury at some time or other. Runners get the same injuries over and over. I don't believe that I have seen over 20 different injuries among the hundreds of injuries I have treated.

George Sheehan and I are both physicians, but most of what we know we have learned from running. Being physicians, we have additional background and data to help us analyze problems. But my advice is, if you have a problem go to an experienced runner. He probably knows more about track injuries than the average physician. I know I've learned more from Tom Osler than from any medical book. (The phy-

siologists are just starting to catch up with Osler on hot weather running and overwork problems.)

Dr. Sheehan has learned that all injuries come from an imbalance. Achilles tendon trouble comes from a poor heel plant, a shoe with a fitting too loose around the heel so that the heel wobbles when planted, a too high arch, or repeated fast intervals in susceptible individuals.

The treatment for achilles tendinitis may be to get a shoe with a more narrow heel than foot (for example, a 10B shoe with a double AA heel (this will have to be custom made), or a good arch support custom made for your foot, or a custom heel pad, or you may have to stop fast intervals. The same approach applies to knee pains, muscle pulls and strains, and stress fractures.

There is never any indication for cortisone injections, but a zolidine, or indocin in the treatment of a runner's injury.

FURTHER PROOF

Within weeks after Dr. Mirkin wrote his article, supporting evidence appeared in the *Medical World News* (March 2, 1973 issue). Recent test results indicate, the publication said, that injections of steriod drugs appear to mask symptoms of tendon damage and "that the price of this symptomatic relief may be eventual disability from complete tendon rupture."

Two Ohio State University orthopedic surgeons, Louis J. Unverferth and Melvin L. Olix, first began to suspect this reaction to steroid injections while examining athletes.

The doctors noted in five new cases of tendon rupture that all the individuals had received repeated injections as treatment for tendinitis. When they operated, the surgeons found that each athlete had deposits of steroid near the rupture site.

Drs. Unverferth and Olix then conducted laboratory experiments on 18 white rabbits. They divided the animals into three groups. The first received no injections. The other rabbits were given four shots of the drug prednisolone (a

steroid) in the right achilles tendon area and saline into the left. Group II was injected at 48-hour intervals; Group III every seven days.

The tests were designed to measure relative strength and elasticity of the rabbits' tendons. As this drops, a tendon is more susceptible to injury.

"As expected," Dr. Unverferth said, "there was little difference between the right and left tendons in the same rabbits in Group I (which received no injections). Group II (injections every other day), the average difference was 35%... Group III (injections once a week) demonstrated an average difference of 18.1%.

The researchers noted tendon destruction and deposits of the drug in the injected legs, but only minor bleeding and swelling in the legs shot with saline solution.

Dr. Unverferth concluded, "It is not surprising that locally injected steroids will frequently improve the symptoms (of tendinitis) temporarily. However, our study demonstrates that steroid-injected tendons will rupture at lower loads than will saline-injected tendons."

He said he has decided to quit using such injections on athletes with damaged tendons because the "cure" may be no solution after all.

GIVING THE PROS A CHANCE

"Let's go!"

The voice that on other nights baits referees and umpires and visiting players echoes across the banks of empty seats. The meet is already 10 minutes late in starting, but the arena that is always filled for amateur meets is two-thirds empty for the pros.

Mike O'Hara, director of the International Track Association (see March RW), is prowling the corridors outside, anxiously checking the flow of ticketholders. Not many are standing in line.

So O'Hara goes back to the floor and signals for the show to begin.

The house lights dim, and the spot focuses on a skinny, pale figure at center floor. Marty Liquori looks smaller and more vulnerable in his black tux and ruffled blue shirt than in his running clothes.

Marty starts with a welcome and an apology. He says, "Sorry we're a little late. San Francisco meets customarily start later, and we were giving fan some extra time to arrive."

Then Marty turns the mike over to O'Hara, who also has a disclaimer: "If you want to see a polished, professional show, come back next year. We're still learning."

My teacher in my first-year speech class once warned, "Never begin with an apology. You lose the audience's respect at the start, and make them all the more aware of mistakes."

This is a skeptical, show-me-whatyou-have-to-offer audience to begin with. Many people have come expressly to pick out inadequacies in the ITA format.

But you have to admire the pro group's honesty in admitting it isn't operating at full speed yet. The program has a full-page critique sheet of the meet. The ITA says it's trying to learn as it goes and wants feed-back.

It has a lot of learning to do, if you believe what the popular press is saying. Reporters hover like vultures, waiting to pounce on the slightest mistake and blow it into a headline. They took sadistic delight at panning the meet in Los Angeles—the official opening night—in late March. Much was made of confusion over rules, lap-counting and schedule problems.

This already had planted negative ideas in the minds of the ticket-buyers the ITA needs to survive. "I'm curious to see

a pro meet," a super-fan told me the afternoon of the San Francisco meet, "but I'm not curious enough to pay to see it."

This is a Sunday night, a night when people normally stay home to watch TV and recover for Monday. Only 6000 spectators—2000 below the ITA's stated breakeven level—come here to watch and judge.

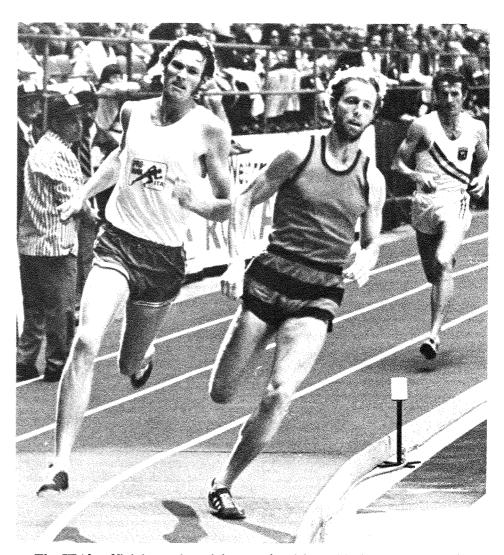
In fact, the early meets have been judged far too severely—often by entirely different standards than used to measure comparable "amateur" meets, and by people with the none-too-secret wish of an early ITA death.

It's still far too soon to judge whe-

ther or not the pros will last. This is only the fourth meet.

Peter Diamond, a student at Yale, flew to Los Angeles to see the ITA opening. "I was quite excited at first. When the lights dimmed and the spotlight focused on Marty Liquori," he said, "I felt like I was attending the first night of a Broadway play."

But Diamond said he got increasingly bored and upset as the program went on. He'd come across country to see a track meet "and I was getting too much show-biz. After watching a race with bra-



The ITA's official opening night wasn't without hitches. But a good crowd saw races like this one with Kerry Ellison (1), Tom Von Ruden and Chris Fisher (trailing). (Stan Pantovic photo)

less stewardesses, I asked myself, 'Where has the dignity of track gone? I'm not against professional track by any means. I think the best athletes deserve to be paid. But I want the meets to have dignity. I think fans will pay to see straight track and field... but maybe I'm wrong."

Much of the schmaltz has already gone out of the meet by San Francisco. There are no stewardesses bouncing down the center straightaway. The closest thing to a novelty race is the 30-yard dash befemale sprinter Lacey O'Neal and shotputter Brian Oldfield.

This is the best meet so far, with Oldfield setting a world indoor shot record and Australian Chris Fisher running one of the fastest thousands of the year. Overall, the performances are the best yet. There is an excusable minimum of mistakes. And the crowd is the smallest of the young tour.

The operations manual spells out athletes' responsibilities to their public:

"During introductions, it is important for the athletes to realize that the spectators paid money to come and see them, and the more responsive they can be the better. Wave during introductions, smile, turn to all sides of the arena and acknowledge the applause. Many USA athletes act glum, as if they are about to be shot the next minute."

After the event, the manual says, winners "should be prepared to take a victory lap if requested and wave during that time. Let them know you hear the applause and appreciate it. Act happy that you won. Don't be embarrassed. There is a bit of ham in all of us."

The players are new in this role. The pre-race smiling and waving wouldn't land any choice acting jobs. It is strained

and stereotyped. The first winner, Leon Coleman from the hurdles, dances through a victory lap to minimal applause.

The ITA has designed uniforms for its performers, but apparently doesn't require them to wear these. About half of the athletes wear one of the two types. One is a florescent two-tone outfit with the individual's name on the back of the shirt and horizontal stripes around the shorts. These come in all combinations of colors. The other uniform is as conservative as the US Olympic dress last year—black shorts and white shirts with "Pro-Keds—ITA" printed on them.

Pro-Keds are shoes made by the Uniroyal company. According to the Wall Street Journal, Mike O'Hara "has persuaded Uniroyal Inc. to enter the German- and Japanese-dominated track shoe market sooner than it had planned. He designated Uniroyal's yet-to-be-marketed product the official shoe of the ITA, which means that all the ITA athletes will wear it."

This helps satisfy another of O'Hara's three money-raising goals—sponsorship (the other two are crowds and regular television coverage). But it may cut athletes out of potentially lucrative endorsement opportunities with the Germans and the Japanese.

Endorsements are one of the places where athletes are supposed to be able to earn a bundle—more in some cases, O'Hara said in the March RW story, than they can collect in prize money. There's a catch there that wasn't reported here earlier. The Wall Street Journal listed details of the ITA contract:

"The ITA will take a 25-50% cut from any product-endorsement fees its athletes earn, compared with the 10-15% that most professionals pay their agents."

The contract limits athletes' meal-

money to \$15 a day, and it allows them only one complementary ticket per meet. As amateurs they were free to bargain for higher per-diem payments, and for enough tickets to bring all the family and neighbors.

There is no provision in the contract for insurance or compensation for injured athletes.

But perhaps they've heard what a tennis player said several years ago, when the now-rich pro tour was just starting in that sport: "The only difference between playing as an amateur and a pro is that I took a cut in pay when I signed my contract." Billie Jean King reportedly made two-thirds of a million dollars last year.

The new pros are looking to a future that they have to make now.

Autograph-signing is part of the professional obligation now.

Liquori announces, "The athletes will be available as long as you need them after their events to sign autographs. But please don't interfere with them before they compete. Let them warm up properly." The kids don't know who has run and who hasn't, or don't care.

Jim Ryun has more at stake in the ITA operation than anyone besides Mike O'Hara himself. Jim has a reputation to salvage and a newly-enlarged family to feed. (Unlike many of the other pros, Ryun is working strictly as a runner now. He has no weekday job.)

Jim is out in a nearly deserted stretch of hallway, warming up for his mile—the meet's last event—against Kipchoge Keino.

"There's Ryun," a young autographseeker shouts. "It's Jim Ryun!"

Jim is striding through his final spurts before going into the arena. He's concentrating on the race and doesn't see the boy running toward him with a pencil and scrap of paper outstretched. Ryun sees him too late. As he twists to avoid the kid, a hip muscle rips.

Liquori tells the news as Ryun stands beside the high jump pit hanging his head. There are groans and "not agains" and boos.

Ryun waves feebly to the crowd, then hobbles across the track toward a gate as the mile starts without him. A boy runs up to him asking Jim to sign. Ryun shakes his head no. But two steps later, he calls the kid back and carries out his part of the hero ritual.

Kip Keino has only the pacing lights to race in the mile. He makes an honest effort, but electronics wins—4:04.0 to 4:04.4.

Liquori says, "If you really want to a first-class show, come back next year."



1873 - HOLYOKE, MASS. - 1973 CENTENNIAL

SUNDAY, JUNE 10, 1973 • TIME: 1 P.M.

- World Marathon Runners Association National Championship
- New England AAU Marathon Championship
- Certified figure-eight course

Write to: Walter H. Childs, P.O. Box 1484, Springfield, Mass. 01103 (413) 566-3145

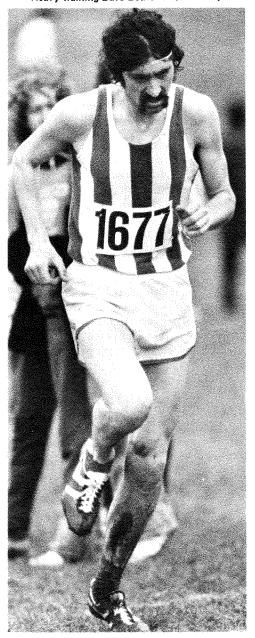
THE ROOT OF ALL TRAINING

by Ian Jackson

Ian Jackson, a graduate student in philosophy at the University of California in Berkeley, has a special interest in what he calls "natural running" and "natural diet." He wrote the opening chapter for the booklet, The Runner's Diet.

Since the prospect of turning into a middle-aged flat slob revolted me, I decided, many years after my undistinguished track career, that I'd better take up running again. Not knowing any better, I resumed the kind of training that I had been so fruitlessly coached in: hard intervals. I was so thoroughly indoctrinated with

Heavy-training Dave Bedford. (Ed Lacey)



the "pain is gain" dogma that hard interval training was the only form of running that I considered real running. The slow dawdlers that I was repeatedly streaking past were doing something entirely different.

If pain were really gain, then I should have gained enormously during that misguided period. I seemed to be in pain all the time. I was in pain while running the intervals; I was in pain for the rest of the day; I was even in pain through the weekends, when I vainly tried to recuperate. The only reason I tolerated all this pain was that the fear of turning into a fat slob was even more painful.

Luckily, when compound injuries, aches and soreness had me seriously weighing which of the two evils was the lesser, I was saved by some sensible guidance. I read a quotation from Arthur Newton, one of the greatest ultra-marathoners of his day. Newton wrote:

"Every man-jack of us, like every other animal, is born with all the speed he is likely to require. It has been built up through all the countless centuries of our evolution. Just consider wild animals, which on the whole are certainly much healthier than the average modern man. They run plenty, but never at any time for all they are worth unless obliged to by absolute fear. Even then it is only being scared stiff that will make them extend to their utmost.

"So if you take this lesson to heart, you will know that sheer racing should be kept within distinctly restricted limits. Set about running, then, to run in an easy and serene manner, knowing that once learned—and even during the learning—you can thoroughly enjoy every bit of the exercise."

When I analyzed my training in Newton's terms, I saw that it consisted entirely of "running for all I was worth," and artificially induced "fear" which came at the end of each recovery jog and always lasted for exactly one lap. There was no doubt in my mind: I was going to make an immediate changeover to this attractive new method.

What a relief! What a change! The easy running became a new pleasure in

my life, a wonderful recreation, an eagerly anticipated part of every day. My injuries evaporated, and I soon found myself covering enormous distances in complete comfort. A few months later, just for fun, I entered a marathon, which I managed to finish in 3:14.

I was hooked. I had found a sport that would keep me in top condition and was enjoyable too. When I found out that the Marathon Handbook publishes the name of every marathoner under three hours, I began to entertain myself with the fond dream of taking 14 minutes off my time. Getting my name in a running book, even as a 2:59 marathoner, would mean recognized membership in the distance running fraternity and a symbol of triumph over "fat slob-dom." I didn't think there was any real possibility of my realizing the dream. And yet, after nine more months of easy training, I ran 2:33-a hard effort but comfortable.

Since I knew, from personal experience, the power of "natural training," I was eager to extend my experiment to "natural foods." I knew nothing at all about the subject, so I read everything I could find. The first few books I read seemed to be a lot of faddist nonsense. But I soon came across some well-written, well-documented material, from which I learned that the natural diet is based on solid physiological foundations.

Once I was assured that natural foods and fasting are both soundly based, I did some experimentation. Although I had great success with fasting, my trial of natural foods was faltering badly until I discovered the Waerland diet. (I described how all this came about in the booklet The Runner's Diet.)

It took me several weeks to make the complete transition to the Waerland diet, but the results when I began to feel them were electric. Many months of natural training had produced such a high level of fitness that it seemed unrealistic to expect anything more than marginal improvement. Yet I soon found that my concept of fitness would need to be considerably expanded. I slowly developed what can best be described as a natural high, a steady wave of exuberance and

Dr. Hans Selye's theories on stress are vital to every runner's understanding of himself.

vitality that buoyed me up both psychologically and physically.

I noticed the difference particularly on marathon-distance runs. When I was on a conventional diet, I would be quite tired when I finished them—not exhausted by any means, but definitely tired. After a few weeks on the natural diet, I was finishing the same distance at the same pace with plenty of energy to spare, far more than could be explained by the training effect alone.

I was functioning at such a high level in all ways that I had to laugh when I remembered my casual daydreams about breaking three hours. Now, with a solid 2:33 under my belt, and my recent surge of energy, I could get serious and work for some worthwhile goal—like a sub-2:30.

At about this time I learned a little of Hans Selye's stress theories, and I used them to explain my increased energy and to justify my expectations of further improvement.

Briefly, Dr. Selye believes that every disease is a symptom, in part at least, of too much stress. If we are burdened beyond our stress tolerance we become ill, or we develop emotional problems, or we run into the physical breakdowns that hard-working athletes are prone to. Apparently, there are several danger signs by which we can tell that our stress burden is becoming excessive. Tom Osler has worked out a brief but useful list of these signs (see the *Encyclopedia of Athletic Medicine*):

- 1. Mild leg soreness.
- 2. Lowered general resistance (evidenced by sniffles, headaches, fever blisters, etc.).
- 3. Washed-out feeling and I-don't-care attitude.
- 4. Poor coordination (evidenced by general clumsiness, tripping, stubbing one's feet, poor auto driving, etc.).
 - 5. Hangover from previous run.

I had been free of everything on this list since switching to natural training. The stress theory explained the additional energy from the new diet in two ways: first, superior nutrition had increased my general stress tolerance; second, the elimination of foods containing unphysiological chemical additives and insecticide residues had decreased my overall stress burden. With these two factors in my favor, I decided that I could take on greater training stress without having to worry about physical breakdown.

When I began this program, I had a period of exhilarating success, and my faith in catering to the body's natural physiologic needs grew even stronger. Everything responded beautifully to the increased mileage and the faster pace. My energies seemed to be part of a mounting wave of organic power.

Unfortunately, the wave broke—not with the abrupt collapse of a wave on the shore, but with the slow crumbling erosion of a wave far out at sea. There's no need for me to go into details about it, because I've described already the whole pattern. Just glance back at Osler's list. I developed every single one of the problems he mentions.

Looking back now, I still find it hard to understand how I let it happen to me. I knew the signs of overstress. Why didn't I ease up when they first appeared? How could I have been so foolish? What is it in ambition that can blind us to the obvious?

I know I'm not alone in my foolishness. Since going through the traumatic experience, I have become aware of far too many runners making exactly the same kinds of mistakes. I realize now that it does no good merely to know the danger signs of overstress. We must also have the clear vision to recognize them in ourselves. I suspect that this clear vision is only possible if we can maintain a steady sense of proportion about our lives. We must be both well-informed and wise.

I was fortunate. I was made to see what I was doing to myself before I suffered serious damage. I shall be eternally thankful to the great man who brushed the the scales from my eyes, because he did so much more than re-order my running. He brought about a profound revolution in my entire way of life. It was not easy for him. I was blinded by self-congratulation about natural training; and by self-congratulation over combining natural training with natural diet; and by ambition. Yet at one stroke he brushed away all my illusions and set me free from their limitations.

It happened when, on a chance impulse, I read Hans Selye's book, *The Stress of Life*. Suddenly I realized how absurdly superficial my understanding of his ideas had been, and I was ashamed at the way I had trivialized them. My only excuse is that I had no conception of the tremendous significance of his work.

When I first met Selye, he was just an unfamiliar name in Joe Henderson's LSD book—a "scientific authority" whose theories were said to support the practice of endurance training. My wide readings in the field of diet had shown me, often in amusing ways, that a "scientific authority" can be dug up to support virtually any belief. For all I knew, Selye could have been a backwater crackpot with no

standing whatsoever in medical science. Even later, when I was using his ideas to justify a heavier training load, I had no idea of his stature.

Now I know that he is one of the key figures in the field. Medical authorities routinely class him with such brilliant innovators as Claud Bernard, Louis Pasteur, Paul Ehrlich, Walter Cannon and Sigmund Freud.

I met Selye recently, during a visit he made to the University of California, at Berkeley. I was deeply impressed by Selye's personality. You'd never guess that he is 66 years old. He is warm, witty and enthusiastic. Far from being a typically sterile academic, he is one of those rare men who radiates love of life, of his work, and of other people.

During the informal discussion,

9-year-old Mary Etta Boitano. (Beinhorn)



which focused on the relationship between stress and longevity, Selye showed that he combines the qualities of both the sage and the scientist. He is at the forefront of the search for knowledge, but he also possesses the sage's intuitive wisdom about the practical application of knowledge. It occurred to me that I was basking in the presence of a master, that we were like a small group of disciples, learning the path of enlightenment at the feet of our guru.

I bring up this sage/guru identity not casually, but because it is an important element in the way I see Selye's book. I believe that the intelligent runner will take it as a kind of modern Bible, based not on divine revelation but on the insights of modern science. Selye would probably be shocked by this suggestion, because he obviously has deep respect for scripture and genuine humility about his own work. Nevertheless, he does acknowledge a relationship.

He writes: "In an age so largely governed by intellect as ours, it is gratifying to learn that what religions and philosophies have taught as doctrines to guide our conduct is based on scientifically understandable biologic truths."

The Stress of Life is divided into five parts, the first four of which describe what has been discovered about stress and how it was discovered, and the last a brilliant and inspiring illustration of how we can use these discoveries to guide us.

As Selye points out at the beginning of the last part, "When we finished our laborious analysis of its nature, stress turned turned out to be something quite simple to understand. It is essentially the wear and tear in the body caused by life at any one time." This simple understanding is all that is necessary to follow his suggestions on finding "the natural solution of many problems presented by everyday life."

Selye does not use the expression "natural solution" by chance. The word "natural" occurs throughout the discussion, and unifies it and gives it power. For instance, he talks of "our natural craving for variety in everyday life. We must not forget that the more we vary our actions the less any one part suffers from attrition."

If you find yourself becoming obsessed with running in the same self-destructive way that I did, you might try putting this suggestion into practice. It will help you regain a sense of proportion and you'll probably find yourself training less, enjoying it more, and—in the long run—racing faster. A life dominated by a racing obsession can be highly stressful. A varied and balanced range of activities, based on a holistic view of all that life has to offer, is much to be preferred.

Perhaps this will be more meaningful once the relationship between stress and aging is made clear. It's common knowledge that our lives are shortened by the burden of the wear and tear we experience every day, but few people have more than a vague idea of how the body's adaptive mechanisms handle this problem.

Apparently, each of us inherits a limited amount of adaptation energy from our parents. This adaptation energy, or vitality, is like "a special kind of bank account which you can use up by withdrawals but cannot increase by deposits."



HANS SELYE

Adaptation energy is stored in two forms: "the superficial kind, which is ready to use; and the deeper kind, which which acts as a sort of frozen reserve. When superficial adaptation energy is exhausted through exertion, it can slowly be restored from a deeper store during rest. This gives certain plasticity to our resistance. It also protects us from wasting adaptation energy too lavishly in certain foolish moments, because acute fatigue automatically stops us."

The implications of this idea stopped me cold. I had always thought that rest was a complete restorative, even from the exhaustion of a hard marathon. A week or so of easy recovery jogs and the fatigue and soreness would evaporate. I assumed that the race hadn't really taken anything out of me; rather, that it was wholly beneficial, an insurance against cardiovascular problems. I didn't like the idea that with every hard race I had lost irreplaceable adaptation energy from my limited reserves. I wanted to go on believing that rest really does restore. But Selye wouldn't let me dodge the issue.

"This is false," he writes. "Experiments on animals have clearly shown that each exposure (to excess stress) leaves an indelible scar, in that it uses up reserves of adaptability which cannot be replaced." He continues: "It is the restoration of superficial adaptation energy from the deep reserves that tricks us into believing

that the loss has been made good. Actually, it has only been covered from reserves—and at the cost of depleting reserves. We might compare this feeling of having suffered no loss to the careless optimism of a spendthrift who keeps forgetting that whenever he restores the vanishing supply of dollars in his wallet by withdrawing from the invisible stocks of his bank account, the loss has not really been made good. There was merely a transfer of money from a less accessible to a more accessible form."

Reading this, I saw clearly why Selye's theories were used in support of the practice of natural endurance training. I knew why Tom Osler insisted that, contrary to popular belief, "running can indeed cause physical harm when done to excess and without common sense," and that each runner "must learn not to train when the body is really tired."

Acute exhaustion is the body's warning that its stress tolerance has been exceeded. The symptoms in Osler's list are more subtle, but they too are the body's warning of overstress. We should never forget that we are wasting irreplaceable adaptive reserves whenever we allow ourselves to become really fatigued, and whenever we stubbornly continue with the same training load that produced the less obvious warning signs.

This doesn't mean that we should swear off all hard racing and training, but we should definitely observe common sense and moderation. What moderation will mean for you depends on personal factors entirely. Remember, you are "an experiment of one."

If Selye's book converts you from training with "the careless optimism of a spendthrift" to a more natural form of training and a thriftier attitude, then I'm sure you'll be convinced that reading it was one of the best favors you ever did for yourself. Even if you apply the book only to the question of training methods, it will prove itself well worth your while.

But it would be a pity if you limited yourself to adopting natural training, or even to adopting a combination of natural training and natural diet. Selye has so much more to offer. Like a sage or a guru, he can convert you to natural living—to a powerful exciting vision of the breathtaking richness of experience.

Decades of intense research has convinced him that we can "enormously lengthen the average human life-span by living in better harmony with natural laws." And he has sound physiological grounds for believing that this harmonious kind of living must be for each individual, full of variety and guided by high purpose.

Selye believes that, in the final analysis, "gratitude and revenge are the most important factors governing our actions in everyday life." These two factors, "more than any other," account for "the absence or presence of stress in human relations." They are both the rewards of our actions—gratitude for good actions and revenge for bad. Obviously, our lives will be far more harmonious and far less burdened with needless stress, if we consciously work for the reward of gratitude rather than revenge.

Selye identifies "fights, frustrations, and insecurities" as "among the most important stressors"—these three and one more, perhaps the most vitally important stressor: the sense of aimlessness. Unless we have an ultimate aim in our lives, we will be burdened, each and every day, with the stress of meaninglessness. Most of us search for meaning in our lives, but few of us find it. Most people "just give

up and drift from day to day, trying to divert their attention from the future by some such sedative as compulsive promiscuity, frantic work, or simply alcohol." (For my own case, maybe for yours too, I could add "or by an obsession with some sport, such as long distance running.")

Selye believes man's ultimate aim should be "to express himself fully, according to his own lights." This formulation should help to correct a common mistake: the tendency to interpret the stress theory as an excuse for avoiding stress at all costs, for becoming a kind of hypochondriac about stress.

"The goal is certainly not to avoid stress," says Selye. "Stress is a part of

Runners hoping to make a big splash in racing must observe the basic rules of stress, according to Hans Selye. (Mark Shearman) life. It is a natural by-product of all our activities. There is no more justification for avoiding stress than for shunning food, exercise, or love. But in order to express yourself fully, you must first find your optimum stress level, and then use your adaptation energy at a rate and in a direction adjusted to the innate structure of your mind and body. It is not easy.... It takes much practice and almost constant self-analysis."

I am still but a beginner in this path. Yet I have already discovered the truth of this last remark. I agree; it is not easy. However, I have found the rewards of the effort to be inconceivably abundant. I feel as if, after spending all my years wobbling and falling, I have finally learned to ride the bicycle of life. Now I can devote myself to perfecting that skill.

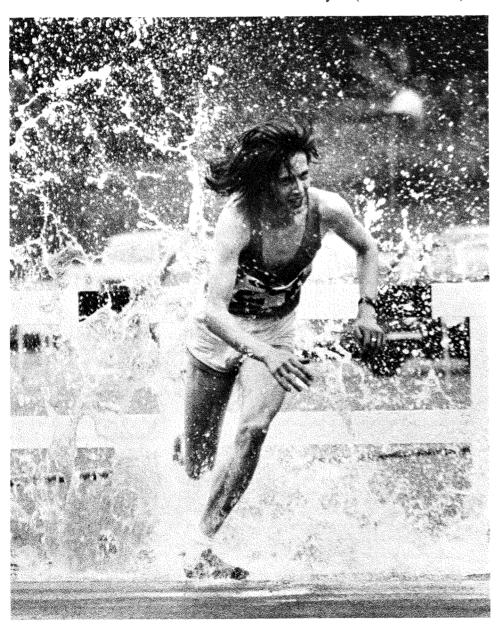
I can hear voices of resistance saying, "Tell us what's happened to your running. We've had more than our fill of philosophy." Well, my running, too, has become far more rewarding on my terms at least. I'm sure some will consider my new pattern a simple case of gutless dropping out.

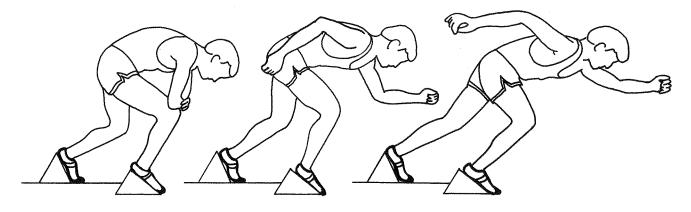
The primary change is that I have returned to the kind of training (if you can call it "training") that I was enjoying while dreaming casually about breaking three hours in the marathon. I no longer take running seriously. Once again it is my most pleasurable form of recreation. Once again I have an overabundance of robust energy.

This time, however, I'm not wasting my surplus on the racing obsession. I'm devoting it to honing my skills on the bicycle of natural life. I no longer see natural training and natural diet as mere tools for fast racing. They are components of the health and vitality I need in order to express myself as fully as possible according to my own lights.

But don't count me out of racing. Right now I want to assure complete recuperation from my extended bout of overtraining. And when I do begin racing again, I'm going to be conservative about it. I'd like to break 2:30 for the marathon some time. But I'm dreaming casually about it, the same way I did about breaking three hours. The seriousness and obsession are gone.

Something tells me, though, that if casual dreaming and casual running can produce a 2:33, then someday, some race, they'll produce something better. If not, no matter. But if so, especially if I run a lot faster, then I'll probably be in a dangerous state of temptation again, and I'm going to reread this article and Selye's *The Stress of Life* to keep a firm hold on my sense of proportion.





STANDING IN THE BLOCKS

The upright sprint start went out in the early 1900s. Should it come back?

The start of a distance run is a formality. The real racing doesn't start until the runners start hurting, and that tends to be in the last half of the race. Up to that point, they have the luxury of time—time to experiment and to correct mistakes.

It isn't that way in sprinting. Alex Pappas, a veteran sprinter from Los Angeles, says, "Unlike the distance runners with time and space to analyze, change and adjust their stride, pace, breathing, etc., the sprinter finds himself in a world that is shrunken not only into seconds but into tenths and even hundredths of one second. He runs in a corridor of time where there is no wiping off of perspiration, no sip of Gatorade, no turning of the head...."

On your marks.... Set.... Bang! Already the race if half over for the sprinter. The race may be won or lost, the personal record made or blown before the run is one yard old.

Distance runners haphazardly fall forward at the gun and run casually until the real racing begins midway through the race. But sprinters are tense and preoccupied with techniques at the start, concentrating on not ending their hopes right there. They are as concerned with saving time at the start as distance runners are with saving effort at that point. They look for better ways of starting, the same as their long-running counterparts look for better training and pacing methods. They never stop looking for ways to cheat time.

When organized sprint racing was young, everyone started standing up—hanging down the arms and contemplat-

ing their toes the way only distance runners do now.

Then in 1888, a sprinter from Yale named Charles Sherrill took what appeared to be a step backwards in evolution. He started his races from his hands and knees. His style hardly started a revolution, though, for only one of the 100-meter finalists at the 1896 Olympics used the Sherrill crouch.

Yet the crouch eventually was accepted as a superior method of starting, and by the early 1900s nearly every sprinter was using it. At first, starting lines were pocked with holes that sprinters dug for footholds. Starting blocks weren't allowed in the Olympics until after World War II.

With blocks, the crouch start appeared even more effective. They cut down slippage, increased driving power and seemed to satisfy the goal of any sprint start: to get the runner to maximum speed and optimum running angle in minimum time.

But athletes and coaches are never satisfied. A few suggested that sprinters take another major step backwards, to the standing start. After re-examining it and combining it with starting blocks, they think it may be the best method after all.

There hasn't been a lot of standing up yet, any more than sprinters rushed to adopt Charles Sherrill's radical departure from tradition 75 years ago. But an isolated few runners are trying the stand with good results.

It's startling to see the standee. You look across a symmetrical line of bowed heads with bodies propped on finger tips.

They you see a set of knees. It looks as if the runner either has a cramp in his left leg, or can't decide whether or not he wants to go through with this race.

But recent experiences with the standing start are encouraging. A South African coach, Major John Short, is credited with reviving interest in it. He made a discovery by accident.

"Time trials were being done by sprinter," Short writes in *Track Technique*. "Various methods of the crouch start were used. While experimenting, I suggested that one of the athletes use a standing start. Initially we used a standard short (in height) block supporting only the front foot. The particular athlete immediately beat the field and ran the fastest time of the morning, beating his best by two-tenths of a second (at 50 meters)."

Intrigued by this, and wondering if it were simply a fluke, the coach ran 30 more sprinters over the same course. He reports that 26 of them "immediatley improved by no less than two- to threetenths of a second over 50 meters."

Short found that standard starting blocks didn't work well for the standing start. The angle was faulty, and the block wasn't high enough to prevent foot slippage. He designed a new block with footpads about 10 inches in length and with adjustable angles. He drilled holes in the blocks so the back spikes would cause no obstruction.

In his experiments, the coach found that the front block works best when it is at about a 45-degree angle and is placed two inches from the starting line. The rear block goes 2-4 inches to the side and 20-24 inches behind the front one. Its angle is about 80 degees.

The sprinter settles into the blocks with knees bent and hands resting on the front knee. At the "set" command, he puts his arms in a opposite arm-leg position—left arm back and right leg forward, or vice versa—being careful to stand perfectly still. At the gun, the initial drive comes from the rear heel. See that there is no backward rocking motion. (The diagrams at left show the positions.)

South Africa's top dashman, Paul Nash, former co-holder of the world 100-meter record at 10-flat, tested the standing start in competition. In his first attempt, he came within a tenth-second of his best time.

Nash had a slight leg injury then and he claimed the new start allowed him to do more starting practice with less strain on the bad leg. He could do no more than five practice starts with the crouch. From the stand, according to Short, he could do "15-20 at a time with no ill effects."

Other sprinters using the stand for the first time said they were "more comfortable" than in the crouch, and that they felt they could hit top speed much sooner.

If it is true, that standing starters hit top speed quicker, this of course is the major advantage of the method. But its proponents also say it means less total running distance since it puts runners a step closer to the starting line.

This, Short claims, is of more benefit to hurdlers than sprinters since they can get to the first hurdle with one less stride, and with more speed and balance. The hurdlers he tested reached the first barrier two- to three-tenths faster with a standing start than with a crouch.

But not even the experimenter himself is ready to say that this is the ideal

A sprinter who grabs a one-step lead at the blocks has an advantage that's hard to overcome. A standing start may give that precious step. (George Beinhorn) starting style. "We don't consider anything as conclusive other than the popularity of this form of standing amongst the athletes themselves," he says.

An American technical expert, Tom Ecker, wrote in a recent issue of Athletic Journal that the best style is probably somewhere between the crouch and the stand. The optimum trunk position for quickest acceleration, he says, "is actually higher than that assumed in the set position of the crouch start and lower than the set position of the standing start." He says the crouchers have to rise and the standers have to dip when they take off, and that "optimum trunk position can never be attained instantly."

The real question then, according to Ecker, is, "Can the standing starter lower his upper body and achieve the optimum trunk position more quickly than the crouch starter can raise his."

That, he says, is yet to be answered. But the fact that there is even a question is significant in itself, because crouched starts have been accepted as best for so long.





by John Romero

John Romero, 43, is a marathoner who is interested in the offbeat side of running. He authored an RW story on the sex life of distance runners, sponsors a group of 60- and 70-year-old marathoners who run from Los Angeles to Las Vegas every year, and once ran a race wearing Superman costume. He is the director of the Sahara Invitational golf tournament in Las Vegas.

Last October, Lee Trevino walked out of the Sahara Invitational golf tournament in Las Vegas. I mean, he just walked out. Putted out on the ninth hole, picked up his clubs, walked into the parking lot, got in a car and drove away.

The slow play of his fellow professionals, Trevino later admitted, was the reason. They clocked one pro in the tournament and it took him a minute and 20 seconds to hit a drive after he teed up the ball. Maybe that's the kind of thing Trevino meant.

Anyway, Trevino's walk gave me an idea. How fast could a round of golf be played? The Guinness Book of World World Records listed an hour and 31

minutes by a British pro named Ken Bousfield—who shot a 69.

I figured a runner could destroy that record, provided he could play a little golf, so I sat down with a couple of golfer friends and worked out a timetable. We figured it would take 25 minutes of running time, 10 minutes of just striking the ball, and we threw in another 10 minutes for "unforeseen difficulties." That made 45 minutes at the outside.

All I needed now was the runner, I mean the golfer.

Right away I thought of Jim O'Neil, a lean senior runner out of Sacramento

who plays to an 18 handicap and can run the legs off a moose. Jim is 47 but he can do five miles in 26 minutes and change. Golf courses go right around four miles from tee to green.

Jim said yes. How many times do you get to go for a world record? Then I enlisted three more seniors—Pax Beale, 43, Flory Rodd, 48, and Bill Kirchmeier, 41—plus myself. I figured that O'Neil would do nothing but strike the ball and run to the next shot. That meant two guys to carry clubs and two more to be continually out in front of the player, spotting the ball so he could run right to it.

Nelson Cullenward, the golf writer for the San Francisco Examiner, arranged for us to play the Olympic Club lake course just outside San Francisco. This was a tough layout—6669 yards and trees thick enough to hide the ball forever. Two US Opens and the US Amateur had been played here. I think every hole had a hill in it.

So the five of us gathered at the Olympic Club at 8 a.m. on Nov. 3, 1972, ready to sign autographs and things like that. Right away we knew we were in trouble. In the first place it was raining so hard I thought the clubhouse was going to float away. Visibility was about as far as you could throw a caddie. And the professional, Lou Eiguren, was looking at us like he might call the cops any minute.

There were about 20 guys, all huddled in the clubhouse trying to keep warm and hoping the rain would stop. The five of us were standing around in T-shirts and shorts with our skinny legs sticking out, trying to look casual. A lot of guys were mumbling to each other and pointing their fingers at us.

The rain kept coming but the fog lifted a little and we decided to go for it anyway. Eiguren, Cullenward and a beautiful young thing named Robin climbed into a covered jeep to act as our official observers and timers. I took a look at them, all dry and warm, and wondered why I had suggested the whole thing.

Anyway, O'Neil socked his drive off the first tee, Robin started the stopwatches, and away we went. Beale and Rodd were carrying the clubs—a four wood, five iron, seven iron, wedge and putter. Kirchmeier and I were out in front, spotting the shots. We were carrying extra tees and balls.

O'Neil hit a good drive, right down the middle. Then he dropped his club and began to run. Beale picked up the wood and he and Rodd took off after O'Neil. The guys in the clubhouse looked out the window, shook their heads and made circles around their ears with their index fingers.

Kirchmeier sprinted to the ball and waved his arms like a wildman so O'Neil could run right to him in a straight line. Rodd beat Jim to the ball and handed him a seven iron. Jim stood over the ball for a second, wiggling his fanny the way golfers do when they're trying to impress people, then he blasted it. Everybody started running again.

Jim finally pitched up and twoputted for a six. There was so much water on the green he might as well have been putting in the Bay.

When his putt dropped Cullenward let out a yell. Jim had played the 525-yard first hole in two minutes 45 seconds. Even Eiguren was starting to come around now.

"Hey," he shouted to no one in particular, "this guy can play!"

While O'Neil was running to the second tee Kirchmeier was teeing up the ball. Jim whacked it and we sprinted off toward the second hole. It kept going like that.

Jim putted out on the ninth hole exactly 22 minutes 53 seconds after he started the round. He had a 46 against a par of 35, playing every hole except the second in exactly one over par.

Half the time he was on his head. I mean, have you ever tried to run on wet grass in racing flats? O'Neil fell down five times by my count and I was watching the ball most of the way. Scrambling for the tee on the fourth hole O'Neil, Rodd and Beale all fell down a hill. It looked like a Three Stooges comedy.

"Get up, you bums," I shrieked at them. "You're costing us time!"

And you know how the touring pros demand absolute silence when they're hitting a shot or putting? We yelled encouragement in O'Neil's ear on every shot. What's more, he was yelling back at us.

O'Neil parred the 380-yard 12th hole on the backside of the course and was so elated he stopped to replace a divot.

"For God's sake," somebody shouted, "forget that and keep going!"

There were really some monster holes on the back nine of that course. I couldn't believe the 16th. It was 600 yards long from the championship tees and the fairway looked like a cross-country course all by itself. Jim hit a 200-yard drive and the club slipped out of his hands and went another 50 yarder. When he stood on the green to putt his feet

were under water, so help me. He was lucky to get a seven.

The 18th was tough. O'Neil had a good shot off the tee but his second shot went behind a tree. So did his third. He pitched up twice and three-putted in another flood. When he last putt dropped for an 18-hole total of 99 everybody let go with a cheer.

Robin had two watches going. One caught us in 47:18, the other in 47:16, so we compromised on 47:17. O'Neil had his world record, Cullenward had his story and Eiguren had some great publicity for his golf club.

I did okay, too. I married Robin the next day.

Later, looking back at the record, O'Neil was pensive. "I could play a lot faster in better conditions," he said, "but this record is going to be tough to break anyway. How often do you find a runner who is a serious golfer. There probably aren't many guys like that around."

About this same time in Fresno, Calif., a couple of hundred miles away, another senior named Bobby Fries was flapping his ears. Fries is 42, can run the mile in 4:43 and plays to a three handicap. A three handicap! Can you believe that? The guy is almost a pro.

What's more, Bobby had done a round of golf back in 1971 in 52 minutes carrying his own clubs!

When Fries heard about O'Neil's record his competitive juices immediately began to race wildly in his dome. He was encouraged by Pat Ogle, a sportscaster from KMJ-TV in Fresno, who offered to go along and film an attempt to break the O'Neil mark.

"I really didn't know how fast I could play a round," said Fries. "So I went out and played nine holes in 22 minutes and shot a 40. Then I called Pat and told him I was ready to take a crack at the record."

Fries decided to make his attempt on his home club, the Fort Wasington Golf and Country Club in Fresno. It was slightly shorter than the Olympic Club (6550 yards), but had some hills and required accurate drives.

Fries showed up on the morning of Dec. 4, 1972, almost a month to the day after O'Neil's record. His caddie squad included Greg Hall, Scott Fertig and Harry Nicholas and the eager Ogle, hefting a camera. It was cold, about 38 degrees.

Bobby decided to use a driver, three-wood, Nos. 2, 4, 6 and 8 irons, a wedge and putter. It had rained the night before and early that morning and the ground was soggy. But Fries, like O'Neil, was wearing racing flats.

"I decided to concentrate on each shot, just like I always played," said Fries, who knew the course well. He had shot as low as 68 on the Fort Washington layout and had a personal best round of 65.

Bobby started with a par five on the 480-yard first hole, picked up a birdie three on the 395-yard second hole and was on his way. He shot 42 against a par of 36 on the front nine including a penalty for an out of bounds shot.

Fries really warmed up on the back nine with a 39 including a par five on the 500-yard 12th hole and finished with an 18-hole total of 81.

Ogle timed him in an incredible 38 minutes 12 seconds! Bobby had taken 18 shots less than O'Neil and had beaten the record by 9:05.

To tell you the truth I don't know where this is going to stop. As far as I'm concerned this is the way golf should be played—but I have that peculiar feeling the PGA would never recognize it.

EXERCISING OF OPPOSITES

BY GEORGE SHEEHAN

When David Pain was busted on the San Diego public golf course, we finally had heard from the last minority. The distance runners—the runniks.

Pain makes his bread practicing law, but this is only a cover for his actual vocation—running. Pain is a runnik, and he was busted for running.

Lawyer Pain's legal beef was discrimination. The public links operating on taxpayers' money—some of it his—was open only to golfers and closed to runners. Pain put his feet where his mouth was and the local police promptly gave him a summons to add to his other running trophies.

Looked at superficially, this is simply one more case of a private citizen bucking the system, reacting against government and bureaucratic pressure. But the issue goes deeper. The system, says Yale professor Charles Reich, is out of control. No one is to blame, and everyone is to blame. What we have to do is change our consciousness, change our awareness. Pain's foray against law and order may do just that for golfer and runner, classical pair of opposites.

The golfer is the prototype of the "haves" in our society. He has it made. And the phrase "country club set" still has the ring that can stir revolutionaries,

regardless of age. The golfers have now taken to riding in expensive cars in costumes exuding glamor and affluence.. They ease over well-tended fairways and play to manicured greens. Their home turf, says Robert Crombie of the *Chicago Tribune*, is a "suburban Eden, extraordinarily sensual, beautifully green with open sky and trees. The first tee says the world is still new and the world will be all right."

And in this new world, this Eden, lives the new gentry. The golf courses complement these beautiful people in their tailored, expensive clothes and equipment. They arrive and depart in Detroit's finest. And the 19th hole is everything that success and leisure has promised to a young American, with the necessary physical and psychological skills. Physically golfers are among our finest athletes-gone to seed a little perhaps, a little heavy in the hips, but still showing flashes of their old high school and college skills. Relaxed smoothness and strength; that's the golfer. Fighting weight is their only problem.

And who is better suited to lead America psychologically? Golfers are aggressive, action-oriented people who

LYDIARD ROAD-RUNNER



THE SHOE THAT FEATURES:

- Extra-soft, extra-smooth inner surface for maximum comfort
- Multi-layer sole and heel cushioning to minimize road shock
- Cupped heel, adequate arch support to protect the foot
- Balancing features to insure stability.
- Weather-resistant suede upper.
- Light yet durable non-slip sole

Sizes 6-8 (no 8½s), 9-12½ – \$19.95 a pair plus \$1.00 postage from Runner's World, Box 366, Mt. View, Calif. 94040.

love to hit. Golf spelled backwards is "Flog" and hitting is the name of the game. Hitting, in fact, is the American Game. Plus golfers are a sociable, gregarious lot who respond to a crisis not only with action but with a need for community.

And who have we opposing these paragons? Who are the losers challenging these winners? Who and what are Pain's protestors?

"Typically small, short-legged, narrow-shouldered and relatively light of
muscle," is Dr. Donald Slocum's description of the long distance runner. He is
society's "have-not." His natural habitat is the shoulder of a macadam road
where he is set upon by dogs, jeered by
adolescent motorists and endangered by
women drivers. His home course is noisy,
sprinkled with debris and enveloped in
exhaust fumes and carbon monoxide.

Attire for this modern day highwayman is a T-shirt, nylon shorts and a pair of discount Japanese shoes. Linear, delicate, sensitive, he has never been an athlete. But weight is no problem and will never be as long as he runs.

Psychologically, the runniks are problems to others, if not to themselves. In a world calling for community they react to a crisis by seeking solitude. The worst job for an active person is social director of a running club—there is just nothing social to direct. On the other hand they are unlikely to start breaking furniture when they hear their official time at the end of a race. And if you give a war they are unlikely to show up.

The problem then is not runner-lawyer Pain vs. the City of San Diego (which was settled, incidentally, by allowing runners on the course, with a permit of course, from dusk to 8 a.m.), but golfer vs. runner, have vs. have-not, community vs. the loner, fight vs. flight, order vs. anarchy. You can go on and on with all the traditional opposites.

In the arena of sports, golfer and runner should be ready to accept the rules of play, something unlikely with citizens of the real world. "Play proceeds," writes Huizinga, "according to rules freely accepted and outside the sphere of necessity or material utility. A feeling of exaltation and tension accompanies the action; mirth and relaxation follow."

That, not courts of law, is what players—golfers and runners alike—have in common. When they elevate their consciousness beyond necessity and utility then exaltation and mirth shall reign and the San Diego public golf course will become a suburban Eden for everyone.

THE POST-OLYMPIC WINTER

It wasn't a good winter for Kathy Hammond. But the winter-after seldom is for Olympians who've been as successful as she was at Munich. Kathy lost most of her races during the indoor season. But a few months earlier, she'd been one of the three fastest 400-meter runners in the world. She had set an American record of 51.6 while finishing third at the Games. Her 50.2 anchor leg on the 1600-meter relay was the seond fastest in history.

Now Kathy complains that she's nine pounds overweight. She has shot all the way up to 129.

She is out of school now and works a full day for the State Chamber of Commerce in Sacramento, her hometown. The job pushes her training into the later afternoon.

Kathy, now 21, has finished two years at American River College, a JC near Sacramento. She'll go back to school this fall at the State University in Sacramento.

She's only 21, but she has been through a long, sometimes brilliant, sometimes troubled career as a runner. She hesitates to think about 1976. It gets harder to come back each year, Kathy says. But she still is thinking about racing in Europe this summer.

Kathy lives and trains with another runner, Nancy Mullen. They run for the Sacramento Road Runners. The club is rather odd because at one time they were the only two members, and neither of them ran on the roads.

"I got tired of running against boys all the time," Kathy says. "I was always meeting Nancy in competition, and I knew she had the same problem. So I persuaded her to enter American River so we could work out together."

They train each day on the track at Mira Loma High School under coach Steve Lehenhardt. It was Steve who developed Hammond to world class. They once were engaged, but the romance is over now. They still get along fine, but it's a coach-athlete relationship.

Kathy was quite young when she realized her innate speed. While playing cops and robbers and tag with the neighborhood boys, she found they could never catch her. She could even outrun her older brother. She comes from a family of runners. Her father, Wilbur,



Kathy Hammond finishing the second-fastest 400-meter relay leg in history at Munich. (Shearman)

encouraged her to run competitively. Her mother, Marilyn, is a devout jogger. And her 14-year-old sister, Pam, is developing into an outstanding sprinter herself.

Kathy was 13 when she joined the Will's Spikettes, a well-known girls track club. Few runners in US history have competed internationally as early as she did. She was only 14 when she was rushed in as substitute 400-meter runner for the 1966 US-Poland meet in Berkeley. The little pig-tailed girl shocked the crowd by racing in second. But an injury in 1968 cost her a spot on the Olympic team.

By 1969, she was breaking American records. She ran the 400 that year in 52.1. The next year, however, the

Jim Scott is a free-lance writer on all sports, living in Berkeley, Calif.

AAU slapped her with a one-year suspension for missing a curfew during a European tour. It looked for a time as if that long interruption at a crucial point in her career would end her running.

When she came back, she first thought the 800 meters might be her better event at Munich. But her coach persuaded her to stick with the 400.

She still can't fully explain her breakthrough at Munich, where she ran the relay in 50.2 on the last day—after a wearing series of five races before that. "I simply felt full of run that last day," she said.

When I asked her recently if the sacrifices of all those years are beginning to get to her, she looked puzzled. "I don't give up anything," she said. "I don't know anything I'd rather do than travel. And do you know something else? I don't even mind the practice. I just love to run, rain or shine. It makes me feel so good."

"So will you compete in the 1976 Olympics. You'll only be 24 then?"

"I don't know now," replied the blue-eyed blonde with the sensitive, haunting face. "But I rather doubt it. By then my young sister, Pam, probably will be beating me. She's 14 years old now. And she's larger and faster than I was at that age."

It has been a long time since 14-year-old Kathy ran against the Poles in Berkeley.

RUNNER'S WORLD EXTRAS

- A complete list of the *RW* and booklet contents from 1972, alphabetized for easy reference. Free! Just send a self-addressed stamped envelope to us.
- Planning to visit the San Francisco Bay area? Why not join us for a Fun-Run?
 Every Sunday morning, 10:30, at Foothill College in Los Altos Hills—40 miles south of San Francisco on Highway 280.
 Distances one-half to six miles. No entry fees. Time certificates for everyone.
 Write us for a schedule.

RW, Box 366, Mt. View, Calif. 94040.

RUNNING IS FOR THE BIRDS



I really wasn't kidding when I wrote in my column a while back (May '72) that my husband and I feed wild swans while running.

The sport has led us to a passionate interest in birds. In fact, we run and bird at the same time (otherwise known as killing two you-know-whats with one stone).

In a way, it was inevitable. We have these 2000 acres of county park and watershed wilderness near our house in New York suburbia. Running gets us out where the birds are, rain or shine, winter or summer. And if we don't see them, we hear them. We figure we might as well know what they are.

I can even pinpoint the day we got this mania. It was on a winter morning three years ago, and we were two miles into a 16-mile run with Boston in mind. Passing a dead tree, I heard an electrifying noise from above. It sounded like the entire drum corps of the Scots Guards. So I did something that I had never done during a workout before. I stopped dead and looked up.

My husband, who was ahead, came pelting back. "What for chrissake are you looking at? You shouldn't stop like that."

"It is," I reverently said, "a pileated woodpecker."

George looked up too, and was immediately converted.

For the benefit of California readers, the pileated woodpecker is a rare and startling Eastern bird. He is not one of those rinky-dink little woodpeckers who bore little holes. He is the avian Paul Bunyan. He is big as a hawk, has a flaming red crest, and hews away whole slabs of tree with ax-like blows of his great yellow bill.

Come to think, it was odd that I knew what he was. My wildlife interests had always tended toward mammals. But

it happened that I had just been condensing a book about Maine woodsmen in the *Reader's Digest* office where I work, and the author went on and on about the pileated woodpecker, which the Mainiacs call "cock o' the woods."

Well, after that, our workouts included scanning the woods constantly with our eyes, to see what new feathered wonders they might produce. More than once, I was watching a bird when I should have been watching where I was going, and I nearly broke a leg.

It got so the time of year and running were intimately linked with birds and their calls. In spring we loped through the naked woods and heard the cry of the phoebe—a sound as fresh and frail as the first leaves. In summer, it was the smell of wild roses, and the xylophone tune of the veery.

In fall, it was leaves crunching under our running shoes, and the "hrrronk!" of Canada geese flying up off the watershed lakes. In winter, it was snow that crunched, and the cheerful "peedle-peedle-peedle" of the tufted titmouse as we passed his cedar tree.

We also learned that we'd hear the same birds at the same spot along our work-out route. Birds are territorial and return to the same patch of trees year after year. Thus, at one bend in the road, we always heard the same phoebe. A quarter-mile farther, we always heard what sounded like a whole commune of veeries.

Our glimpses of them taught us things about their behavior too. They weren't always flying off in terror when we saw them. Often they were bold and curious about us. Or they simply went about their business. The brown thrasher rummaged noisily in the leaves for food. The black-and-white nuthatch did his upside-down trapeze act on a tree limb looking for insects. The robin chased another robin off his territory. They were busy surviving. That was okay—we were surviving too.

I won't say running is the best way to see birds. To be professional, you have to go out walking (and we often do) with binoculars. It's the only way to see the birds that haunt the tallest treetops. Also, it's difficult to carry Roger Tory Peterson's field guide in your sweatsuit. And when you're running, you're not quiet enough to suit the shy species.

On the other hand, if you're a nature freak (and many runners are), birds are the only wildlife that you'll see a lot of on any typical run. I can count on my fingers the mammals I've seen while running in the woods. But we've added some choice items to our bird list that way.

For instance, the one and only Eastern bluebird we ever saw was on the outbound leg of a 12-mile run. He flew past us into an abandoned orchard, his red breast unmistakable. Bluebirds are almost extinct here, thanks to destruction of their nesting places by man.

Sometimes, because we are stoned out of our minds on oxygen, the beauty of a certain bird and a certain spot hits us with an almost mystical force.

One warm day in early spring I was running alone along the lake. The water was still. A flit in the lakeside bushes stopped me. It was a flock of palm warblers, the first I'd ever seen. Of course I stopped. The tiny yellow-breasted birds showed no fear of me, though I was only a few feet away. The afternoon sun was hitting the shore and the bare bushes straight on, and they were luxuriating in the warmth. They were flitting softly back and forth and warbling to themselves. Now and then they skimmed out over the lake, their reflections chasing them across the glassy water. But they always veered back to that sheltered shore, to look at me, and sing.

I confess without shame that I stood there a good 20 minutes, having a Zen-like moment of peace and illumination. then I came to and realized I was getting a chill.

Running along water, in fact, is the only way to see a lot of species. One day we flushed several blue herons from our lake. Another time we stopped openmouthed to watch a lone loon steaming down the middle of the lake. Loons are not rare, but a loon in midsummer in New York suburbia is.

My husband had a comical encounter with a bird that, he says, "doesn't exist."

One noon hour he was running in the woods near the suburban research lab where he worked. With him was another engineer-marathoner, Marshall Childs, so he has a witness. "It was the size and shape of a wild turkey," says George, "only it didn't look like any wild turkey you ever saw. It was dove grey with a white breast. And it didn't have any tail."

The bird ran ahead of George for about 400 meters, screaming for help, before finally it got smart and ducked into the bushes. After a few minutes, Marshall came along and scared the poor thing again.

We checked the bird books. Noth-

ing in the way of native North American gallinaceous birds matched George's description. So either the two runners were hallucinating, or they saw an imported escapee from somebody's zoo.

For other runners who might like to blend fitness and feathers, I don't have too much advice.

The important thing is to train your eyes, ears and memory to make accurate observations fast. This is because both you and the bird might be moving. Look for what the experts call "field marks"—say, a distinctive crest or patch of color. Then when you get home and shower, you can get out your bird book or put on your birdsong record, and idenitfy it. (I have been known to check my book before showering.)

It also helps to do some homework before you pull on your running shoes. Browse through a well-illustrated book, and get the basic families in mind. All finches have conical bills, and so forth. That way, when you're out there creaming along at a six-minute pace and you happen to see a lazuli bunting, you'll have the fun of knowing it right away instead of waiting till after your shower.

No matter what kind of terrain you run in, there are small winged athletes to

see and hear. If you're in the desert, you see the emblem of the Road Runners Club, alive and well with a lizard in his beak. If you like to train on the beach, a whole world of sea-birds waits for you.

Suburban roads and streets are a rich hunting ground—many species eschew the solitary woods and like living cheekby-jowl with humans. I never cease to be amazed that, just running up the street by our house, I can see such beauties as purple finches and rose-breasted grosbeaks. And if you're that rara avis, an urban runner—well, the Audubon Society insists that the running trails through Central Park have far more than pigeons to offer.

A purist will probably say that stopping in a workout to look at birds leads to sloppy training habits. He might predict that anybody who does this will never make the Olympic team.

My answer is: since most of us aren't going to make the Olympic team no matter how hard we train, we might as well pack as much varied experience into workouts as possible. After all, even distance runners only live once.

We keep saying that running gets us back to nature. We might as well be literal about it.



George Stewart (left) and Phil Camp sample a near-ideal road racing setting—the California coast near Monterey. Stewart won this 30-kilometer event. (John Marconi photo)

LOS ANGELES RUNNER'S GUIDE

Orville Atkins, whose profile was in the April issue, has lived and run in all parts of Los Angeles for the last decade.

There is no city in the world like Los Angeles. This doesn't mean that LA is necessarily better than other cities of the world. It just means that LA is definitely different.

Surrounded by the San Gabriel Mountains on the north and east and the Pacific Ocean on the west, a vast sprawling collection of suburbs and towns make up the Los Angeles area.

Recently, there was a program on TV titled "You Can't Get There From Here." This applies to LA if you don't have a car. Los Angeles is so vast, the taxi service so pitiful and the rapid transit system so inadequate that personal wheels are a necessity.

Naturally, one could still run without a car, but he wouldn't see much of the basin even if it is smog-free. Things are just too spread out. Since running on the freeways is *verboten* and impossible anyhow, you are severely limited without a car.

The downtown Los Angeles area is not conducive to running. One can do much better. Most golf courses are also out of the question. They do not welcome runners.

The parks, beaches and college campuses, however, provide all the running room anyone could ever need. The biggest park, Griffith Park not far from downtown, is always full of runners. It has beautiful scenery, miles of hilly roads and 40 miles of bridle trails (but look out for snakes).

Southern California has a multitude of smaller parks with varying beauty and a mile or more of running room on grass. A few that I have used: La Mirada, Centinela in Inglewood, Alondra in Lawndale and McArthur Park.

In addition to Griffith Park, a visitor can run into other runners anywhere along the coast on the sandy beaches (best running is at low tide on the hard-packed sand) or San Vincente Boulevard.

Recently I ran with a group of 12 runners along the sidewalks overlooking Redondo Beach. We met 10 or 12 others during our 15-miler.

Last month's RW cover shows five runners on San Vincente Boulevard. This grassy stretch is six miles long one-way,



On San Vincente Boulevard, Los Angeles' choice running strip. (Doug Schwab photo)

If the runner also takes in the park along the ocean. It's a beautiful run and there always are runners on it going to the sea and back.

Many of the colleges in the basin provide running facilities for everyone. Grass fields, good tracks and road running room may be found at the University of California's Irvine campus, Long Beach State, Pierce College, UCLA and Mt. San Antonio College. El Camino College fits into this group also. Next door is Alondra Park, and in-between is a two-story parking structure that offers an eight-tenths of a mile dry course in the event of rain. In the early morning, evening and on weekends, there are no cars. Ron Larrieu and I have run there five or six times in the last three months. It does rain in LA-occasionally.

To make contact with runners, one also need only show up at Santa Monica City College (close to San Vincente Blvd., the beach and UCLA), where Joe Douglas and Peter Mundle coach the Santa Monica Track Club. They can fill a visitor in regarding road races and track meets.

All-comers track meets are held on many weekends. During the last half of June and all of July, there is at least one open meet each weekday evening. The Los Angeles city school system should be able to supply information as to times and places.

Road races are held weekly in the area. The Southern Pacific AAU has a schedule (phone AC 213 877-0256). Naturally, the AAU office will also know about track races.

The Palos Verdes "breakfast group" meets early each Sunday morning, goes for a scenic 15-mile run taking two hours, drinks beer for an hour and then has a gourmet breakfast prepared by the host's wife. Out-of-town visitors are welcome to run along and chat.

One additional way for a visitor in the area to make contact with people in the sport is by calling "Secretaries of Sports." This organization publishes a Southern California Sports Directory each year (phone AC 213 645-4761 or 747-7111).

This little space doesn't do justice to the enormous LA basin. If you come here, you can be sure of having endless opportunities for running. I've lived here for 10 years and haven't explored it all yet.

Train in the colorful Colorado Rockies at CAMP CROCKETT 1973

OFFERING: Outstanding coaches who train with you! Rustic, but modern facilities. Plenty of good food. Reasonable rates.

LEADERSHIP: Ron Daws, 1968 Olympic Marathon Team. Gary Bjorklund, 1971 Pan American Team (27:30 6-mile and 13:09 3-mile). Larry Pickering, Coach, Colorado state high school cross-country champions. Joe Ehlers, Coach, Arizona state high school cross-country champions.

DATES: July 29 to August 4 August 5 to August 11

FEES: \$60 per session, or \$100 total if you register

for both sessions in advance.

Send \$10 deposit to Camp Director, Pueblo YMCA, Box 214, Pueblo, Colo. 81002. Please print clearly.

U.S. Masters International Track Team

TO RACE IN SOUTH PACIFIC



U.S. Masters invites you to join its 1973 Christmas Jet Tour and Competitions in Fiji, Australia, New Zealand, and Hawaii. Tour the sunny Southern Hemisphere during the holidays, December 13, 1973 to January 1, 1974. Compete in all Australian Vets Track and Field Championships; age group and long distance racing in each country. A perfect family vacation with full complement of travel and

sightseeing. Enjoy people-to-people communication through athletics at group discount rates. Contact David or Helen Pain, 1160 Via Espana, La Jolla, California 92037 (714) 459-6362.

FLY AIR NEW ZEALAND LUXURY DC-10 Jets

ROAD KING SHOES



Road King A running and workout shoe designed by and for runners. Has a blister resistant feature, plus a special light cell cushion sole and padded tongue. \$15.90

FRIBERG ENTERPRISES 9433 Alto Drive La Mesa, California 92041 (714) 466-8659

Free catalog Dealerships available



Suede King Sand colored suede leather. Sizes 4-13½. \$17.90

Ladies Suedettes
Butterscotch or rust suede.
Sizes 4-10. \$17.90



Add \$1.00 per order for mailing. Calif. residents add 5% tax.

SPECIALTY SPORTS

80 PAGE 1973 COLOR CATALOG

FREE FOR THE ASKING

TRACK . CROSS COUNTRY ORIENTEERING ROAD RACING



Quality Products for better performance . . .everything but the desire to win

SPECIALTY SPORTS BOX 574 NEW CANEY, TEXAS 77357

He dreamed of crossing the continent in record time. Heat, hunger, boredom and injury intruded.

Tom Knatt, a 2:30s marathoner and race walker of Olympic Trials caliber, set out last year to run and walk across the United States. The guitar-maker from West Concord, Mass., encountered the harsh realities of being on the road alone in the Southwestern states.

Last March and April I was walking through the American Southwest with one main object in mind: to break the record for the US crossing on foot. California, Arizona and New Mexico form about one-third of the journey-the most difficult part because this area is open and weather-beaten. Much has high altitude and little vegetation. I started out in high spirits and ended up injured and dejected. The Southwest had beaten me for the moment. It's always exciting to read a saga of success in spite of adversity. This is not such a story. I'm asked, "When did you sleep, eat? How did you feel? What was each day like?" All this is very simple because life was reduced to its simplest terms. I ate, I slept, I walked and I tried to run whenever I was capable. I had one goal: to go as quickly as possible, as far as possible, without completely exhausting myself on any given day. A good marathon runner can run 26 miles lickety-split one afternoon. But don't ask him to do the same the following morning. Yet this is what I had to do to break the record. A marathon every morning, and another in the afternoon, ever day for two months. Of course I had all day to do them!

Descriptions of where I ate and slept each day would convey unnecessarily one of the basic feelings I had during the trip: boredom. It was much more boring than I anticipated, although I, like most runners, enjoy solitude. Yet, for all the sameness, each day was unique. I can remember large portions of almost every day as I look back at my notebook.

Day 1: "Left 9:00 a.m. from Los Angeles City Hall. Don Johnson and Bob Wilson took pictures. Bob ran with me to San Gabriel mission. Then he and his wife Jackie bid me adieu and I started on my own. Bit of a blister on right foot inside of ball. Girl in an Orange Julius stand talked of going back to Alberta, Canada. No smog. At least you see the mountains. Here it is hot! Eighty-four in shade outside lunch stand. Smog bad in afternoon; slightly sick to stomach. Blisters! In Hotel Casablanca that night



WALKING THE SOUTHWEST

by Tom Knatt

someone in the lobby asked me if I had a joint."

Fatigue, heat, and blisters extracted their price over the first three days. I foolishly let my tiredness get the better of me on the second night and found an old car to sleep in, instead of a motel. Had I gone ahead I would most likely discovered one that wasn't full. I had bad leg cramps all night as a result. At the end of the third day I started to get shin splints in my right leg. It happened because I had a large blister on the ball of my right foot and was unconsciously lifting my toes upward to avoid coming down full force on my blister. This tensed the shin and made it injury-prone. By the end of the third day it really hurt.

Day 4: "It's all uphill from Indio to the rest area 15 miles outside of town. Shin splints are awful! Desert is cool now with a following wind. No need to carry so much water. I dumped some of it."

For the next several days across the desert in California and into Arizona, I learned how to carry just as much food and water as I needed by sometimes cursing the weight on my back and in my canteen, and other times going hungry because I didn't want to carry too much.

Running in the desert is psychologically wearing because you can see 20-30 miles ahead and progress seems infinitesi-

mal. Imagine starting a marathon and being able to see the finish line! The stretch of the Desert Center was the most discouraging of the trip. The shin splints were the worst, and there was a constant wind blowing sand into my eyes, ears, clothing, everything. I crouched in the open seat of a caterpillar tractor in a wash under the roadway to eat peanut butter sandwiches for lunch. I thought about starting over again after my shin splints healed.

I gave myself until Day 10 to make a decision: Go back, heal and try again, or continue.

Day 10: "Easter Sunday in Arizona. Don Tate, Don Stewart and Steve Stephenson came out about 11 a.m. to run with me. The first bright spot of the trip really. It's good to see runners again, and people whom I can really talk to. Shin splints seem better, so it looks like all systems go."

From here to New Mexico occurred some of the most memorable experiences. After feeling good on Day 10 but having to march through wretched heat in the afternoon, I made the following entry:

Day 11: "10 miles. Sick as hell."

Ah yes! That was a day. I didn't want to get out of bed, but thought, "Maybe if I walk I'll feel better and shake it off...." I didn't. It was a terrible ordeal.

After that I slept around the clock. The next day I awoke feeling much better. It was cooler and there were brooks running along the roadside. There was green grass to look at. I felt I could make good time.

According to the map, Wilhoit was about 25 miles along and seemed a good place to stop for lunch. When I got there my heart sank.

The one gas station was closed and the sign said "Wilhoit—Pop. 2." The two people seemed to live in a rather prosperous looking brick house and were, oddly enough, selling real estate. Across a cattle guard from the real estate office was a bar.

"We don't have any food here, only liquor," said Mrs. Jack.

"Oh no," I said. "Where can I get something to eat?"

"There is nothing between here and Prescott and that's 17 miles away."

"Rats! I'm trying to walk across the United States and can't carry much food. If I had known you didn't have any, I would have eaten before now. Are you one of the two people in Wilhoit?"

"We're in the government land. When

you came across that cattle guard, you left Wilhoit. This place has got only my husband and I. He's a prospector and I run the bar, leastways when I'm healthy. My husband is in Prescott now getting food. You know what we had for Easter Sunday dinner? Fried potatoes." She lit up a cigarette. I sat fascinated but with stomach grumbling.

"Is this all the food you have, this beef jerky and pickled pigs knuckles on the counter here? Don't you have any bread and peanut butter even? I can pay you okay. I just can't walk 17 miles to Prescott on nothing."

I didn't want just jerky and pigs knuckles, but I was willing to make do. She seemed to soften a bit, probably because she decided that I was someone worth talking to, and that was better than sitting alone. Also, by now I was feeling and probably looking very forlorn.

"Oh yes, we do have some peanut butter. I'll go and fix you a sandwich."

She returned quickly with a very welcome sandwich even it it was on white bread. As I ate, she talked.

"Yes, we lived in the Midwest before we moved West; came here in the 1940s. We farmed for a while. My husband got into mining, though. First it was gold, now it's platinum. He thinks they've got a new way to work the low grade ore here to make it profitable. I don't know though; every time he tries to talk about it, it makes no sense to me."

"How come you've decided to stay here?" I asked.

"My husband likes the mining. It's the only place he can do it," she answered. "We've been offered \$100,000 for the bar; the licenses are restricted you knowno new ones are being issued. Next year we may decide to sell it and go to Colorado someplace."

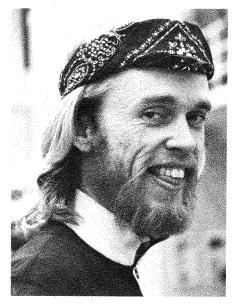
I had to leave. I had spent over an hour on the bar stool, and had to be off to Prescott. I said as I was leaving:

"Give me your address so I can send you a post card about how I made out."

"Just send it to Mrs. Jack, Nowhere, Arizona. Where is 17 miles south of Prescott? bread and something for a sandwich?" I Nowhere, that's where. We've got that on our check stubs and everything. We'll get it."

All the way to Prescott I mused about Mrs. Jack. Fried potatoes for Easter Sunday dinner, the \$100,000 offer on the bar, a heart condition, maybe soon we'll move out of Nowhere, contradictions....

It is 20 miles, at least 10 of it uphill, from Granite Dells to the top of Mingus Mountain. I was somewhat relieved to find an inn at the summit with



Long-distance walker Tom Knatt. (Tom Derderian photo)

water outfront. A country store was closed though. I rapped on the front door.

"What do you want?" a youngish man asked.

"I'm trying to walk across the USA. Perhaps you saw my picture in the Arizona Republic a couple of days ago. Right now, I've walked up here from Granite Dells and haven't had any food since early morning. I've got money all right. Do you have any food that I can buy?"

"Sorry we only have steak here," he said.

"Don't you have any bread and something for a sandwich? I'll be glad to pay you," I pleaded.

"Well, we might have some burnt bread out back. Somebody left it in the oven by mistake."

Oh well, any port in the storm, I mused, and followed him through the plush dining room into the kitchen. He handed me three loaves of very hard, charred bread. I surveyed the room and saw fresh loaves of bread.

"Couldn't I get some of that good

"No," he said sharply.

"How would you feel if you had just walked up Mingus Mountain and I was at the top and told you that you couldn't have any food?" I said, somewhat annoyed.

With that he drew up his fists and made like he very well might punch me in the mouth. I shied away quickly and he tried to grab the bread away from me. I held onto one loaf.

"I was just telling you how I felt," I said.

"If you don't like it, you know what you can do," he retorted.

We both walked toward the door, and I kept a good distance ahead of him. I went around the back and talked to the people who worked for the man I had just encountered as I ate my burnt bread. They had few good words to say about him.

Late that afternoon I ran with Tom Cooka, Alan Schauffler and Alan's daughter. I was having diarrhea somewhat but Tom Cooka filled me with dinner-corn mush that was the Indian remedy for my current malady-and stories of Indians who could go for miles across the desert from water hole to water hole with only a bag of this corn mush tied to loin cloth. I envied those Indians!

I set out the next morning in my freshly laundered long pants and longsleeved shirt. To avoid sunburn and injury from getting too cold, I wore this as my only outfit. My hands and nose, despite the suntan oil, etc., had gotten badly burned in the desert, so I was glad for the protection.

I was making fairly good progress for a change-over 40 miles per day-and I knew I had a chance, if not for the fastest crossing, at least for the fastest solo run without an accompanying vehicle.

Nat White and Trevor Stanley ran with me most of the next day. Trevor did about 30 miles and Nat did 40. With their help, I did 51 miles that day, one of the two longest days on the trip. I forged ahead alone for another two days, still doing over 40 miles each day. I found the same tune running through my head in the heat of the day-"Frosty the Snowman." Then trouble...

Day 18: "Started to get the damn shin splints at the end of the day. Had stopped wearing the ankle supporter at Holbrook, a mistake I guess, "

I limped into Stateline, Ariz., hoping to find a place to rest and sleep. No motels, but a truck advertised "roomettes." I walked up to a surly-looking Indian (I should add the only unfriendly Indian I encountered on my trip) and asked if I could get a roomette.

"They're only for truckers," he snapped.

"Where can I stay then?" I asked.1. He made a vague gesture with his hands and said, "Up there in the hills."

I didn't press the issue further with him but set out to find the manager, who turned out to live in a trailer in the back, against the hills. I was standing on his doorstep, starting to tell him about my journey and pulling my clipping and picture from my pocket.

"I don't care who you are. Get out of here or I'll have you arrested for trespassing. If you're walking across the USA get going."

With that, he attempted to push me off the steps backwards. It seemed useless to argue. I began to walk slowly across the parking lot when his dachshund came nipping at my heels. I did what every runner who ever encountered a nasty dog wants to do: I let go with my toe and caught the dog in the chops.

Shortly, the little man came out again and let loose with a long stream of profanity and epithets. I left, disgusted, and caught a ride to Gallup, N.M.

Day 19: "Started out at 6:55. Took the bus back to Stateline. Seemed so ridiculous to go back to a place I didn't like, to walk back to where I had come from."

The next day I did 50 miles and went over the Continental Divide. It's all downhill from there!

Day 21: "Sandstorm. Very depressing."

At one point I attempted to walk into the wind and was unable to walk forward. Even though my head was covered by the hood from my windbreaker, as I turned slightly my sunglasses flew off and went bounding across the road into 100 pieces. I went back, found a motel, ate, watched TV and went to bed, thoroughly discouraged.

A short time later, on the way into Albuquerque, I walked up a steep fourmile grade and reinjured my leg. I limped out of town wondering if I should quit the jaunt. My journal tells my mood.

Day 27: "Made Santa Rosa by 10:00 a.m., felt pretty good. Then things got progressively worse. No replacement heels for my shoes at the P.O. Lousy second breakfast, both eggs broken. Left Santa Rosa at noon, to Frontierland. where lady told me not to loaf around in front of the place after I had bought sandwiches, etc., from her. There were old cars parked in front of the place to make it look busy,"

I had decided to stop at the Texas border if my current bout with shin splints was not over. One basic factor was that I could see I was not going to be near peak form for the Olympic Trials in July. Another was that I wasn't going to break anyone's record at the rate I was going (about 36 miles per day). A third was that fatigue and lack of companionship were beginning to get to me.

After 29 days 24 hours (between 1015 and 1030 miles) from Los Angeles, my mind was made up. When I came to Glenrio, Tex., I went into a restaurant and had a good lunch. Then I walked down to a good shady spot to stand and I stuck out my thumb.

Was it good training? Clearly, walking and running on an injury is not good training. I was quite tired when I stopped and took about three weeks with practically no running to recuperate. I did, however, walk the Olympic Trials qualifying time of 1:45 hours for 20 kilometers at the end of May and the five hours for 50 kilometers a week later, a little over one month after I stopped the trek. But I did not feel completely rested for the Olympic Trials themselves in July.

Would I try it again? I would consider it, but would change several things. I would have a support team. I would probably go from east to west starting in the fall so that the harsh weather and high altitude would hit me after I was used to a day-to-day routine. It requires so much much physical and mental energy as well as money that I would think seriously of doing it to make money from the trip also. I would do as much as possible to eliminate the boredom and the times when the fatigue became almost unbearable.

Am I soured on this kind of longdistance on-foot journeying? Not at all. In fact, six months after stopping at the Texas state line I walked from New York to Boston-225 miles. There is a fascination and a satisfaction in being able to travel from place to distant place without the help of a motor vehicle.

New Swimming Magazine by World Publications.

AQUATIC WORLD

Are you interested in swimming? Maybe you swim as a supplement to running? Well anyway, I think you would be interested in our new publication on swimming called Aquatic World. We will cover swimming, diving and water polo in the same way as we cover running in R.W.

Aquatic World

Post Office Box 366, Mountain View, Ca. 94040

Please sign me up for a subscription:

__\$3.50 per year (6 issues) ____\$6.00 two years

NAME _____

CITY/STATE/ZIP_____



DON'T MISS OUR FIRST ISSUE - JULY, 1973

- Interview with Shane Gould by Dave Prokop.
- Teaching Your Baby To Swim
- Swimming In The San Francisco Bay
- Teaching Juniors To Dive
- The Basics Of Water Polo
- Plus Highlights, Profiles, Coming Events
- And much much more.

Subscribe today — only \$3.50 per year.

T-SHIRTS

NEW TRACK T-SHIRTS DESIGNED AND PRODUCED SPECIALLY FOR TRACK & FIELD NEWS READERS! RED OR RED AND BLUE TRACK DESIGNS ON HEAVYWEIGHT WHITE FULL-CUT 100% COTTON SHIRTS. MACHINE WASHABLE.

SIZES: S (34-36), M (38-40), L (42-44), XL (46), (T-shirts are manufactured one size larger to allow for shrinkage.)

T-shirts come in WHITE only.











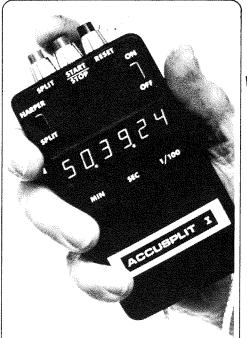
Please indicate shirt size.



Α.	RUN (red and blue design)	\$3.50
В.	Comic Jogger (red)	\$2.95
C.	Montreal 76 (red)	\$2.95
D.	Run Run Run (red)	\$2.95
E.	USA (red and blue)	\$3.50

Add 50¢ per order for postage and handling. California residents add 5% sales tax.





TOMORROW'S STOPWATCH TODAY!

THE ACCUSPLIT I

The "dream" stopwatch

- 6-digit, easy to read display. No red/black confusions, no 10th hand interpretations.
- Far greater accuracy than the best mechanical watch.
- Read it in the dark and bright sunlight! Times to 99.59.99.
- Conventional split and new Harper split function for immediate timing of laps and relay legs without subtract-back.
- Small, compact, snuggles into the palm of your hand.
- Virtually unbreakable case. Few moving parts, Repair-free.

It's the No. 1 stopwatch, digital or mechanical, available today. Quartz crystal control provides unchangeable frequency and lifetime reliability. Four inexpensive alkaline batteries power the Accusplit for 100 hrs. of actual use.

Allow 3 wks. for delivery. Bankamericard and Master Charge acceptable on Accusplit orders.

Lists at **\$200.00** From T&FN, **\$175.00**



Handsome new track posters

Full color, 23 x 34", \$2.50 each:

- A. Dave Wottle
- B. Steve Prefontaine
- C. Jim Ryun/Kip Keino
- D. Frank Shorter

Black & white, 23 x 34", \$1.50 each:

- E. Steve Smith
- F. Al Feuerbach
- G. Lasse Viren
- H. Randy Williams

Add 50¢ per order for postage and handling.

Track & Field News carries a complete line of track books, Olympic films, stop watches, and training aids, as well as arranging tours to the Olympics and other international meets. Write for our free complete catalog.

TRACK & FIELD NEWS, DEPT. 95, P.O. BOX 296, LOS ALTOS, CA. 94022

TIGER SHOE PRICES HAVE BEEN INCREASED. BUT UNTIL JUNE 1ST YOU CAN BUY AT THE OLD PRICES FROM SLS.

The price of Tiger Shoes from our distributor was increased on March 1st. They came out with new suggested retail prices at that time. But we bought a large inventory of shoes before the increase and can still sell Tiger Shoes at the old prices until June 1st when we will be forced to raise our prices too. So order today and save as much as \$4.00 per pair.

)R[DER FOR	
Qty.	Size	Model	Price
			4
		Postage and handling Sales Tax (Calif. only)	
		Total amount enclosed	

-TIGER SHOE PRICES-

Shoe Model	Old	New
Tiger (G-9) Marathon	\$12.95	\$14.95
Tiger (T-26) Boston	\$15.95	\$17.95
Tiger (T-24) Cortez	\$17.95	\$20.95
Tiger (T-21) Bangkok	\$15.95	\$18.95
Tiger (T-6) Vickka II	\$19.95	\$22.95

(Sizes 3-13 are available.)

-ORDERING INFORMATION-

- Postage: add \$1.00 per pair for your first, add .75 per pair for your next six pairs and add .50 per pair for seven or more.
- Payment: payment must accompany order or an official school purchase order. C.O.D. or orders without payment will NOT be processed.
- Tax: California residents must add 5% sales tax.

Starting Line Sports, 1142 Chestnut, Menlo Park, Ca. 94025

What is E.R.G.?

E.R.G. is a specially formulated drink developed for runners to replace water, electrolytes and vitamin C lost during competition and in training. E.R.G. is isotonic for rapid absorption, has no aftertaste and contains no artificial sweeteners.

Bill Gookin "invented" the drink and he tells his story: "I drank my customary half-glass of E.R.G. at the start of the Santa Barbara marathon. Every 3-5 miles I continued taking the drink. The first 10 miles was slightly under an hour (2:36 pace). My pace for the next 10 miles was five minutes faster. At 20 miles, I was still several minutes behind the leaders. I was still getting my regular cupful of E.R.G. from a squeeze bottle and was feeling good. The pace stayed strong, despite the heat.

"Coming up a long hill three miles from the finish, I caught the younger leaders. When I came up on them, I noticed they were both covered with dried

sweat. I wasn't. I was perspiring freely. I gained a half-mile on the others from that point and finished in 2:29:33."

E.R.G. replaces roughly the same things that normally would be lost for the rest of the run through sweating. The advantage of the drink over other drinks on the market is that it was developed exclusively for distance runners, even though other athletes too have found good use for it.

All drinks are made to replace water, essential minerals and sugar, but the balance of them is the crucial factor. E.R.G. has that balance. Give E.R.G. a try today.

Are you interested in selling E.R.G.? We have a good dealer program set-up, write to details.



Exclusively Distributed by Starting Line Sports.

Sample Packet:	3 (½-gallon packages)	\$1.85	nlus 60 nostage	= \$2.45	
•	10 (½-gallon packages)				
- · · · · · · · · · · · · · · · · · · ·	24 (½-gallon packages)				Please include
	72 (1/2-gallon packages)				payment.

by George Sheehan M.D.

MEDICAL ADVICE

WEAR AND TEAR

Q: I started running about five years ago at age 44. I ran regularly and continuously during that period, both in training and dozens of road races. Recently both of my knees got sore. My doctor says x-rays show excessive knee joint wear for my age, and he referred to them as "use" knees, which had probably been caused by running. He explained that my knee joints appeared to have the wear that one would expect to find in a man 60-65 years old. I worry that further running might cause irreparable damage. (E. K., Hartford, Conn.)

A: I doubt that distance running in the absence of some other factor can cause "wear-and-tear" type of arthritis. At least I have never seen it. I would consider other factors in the production of these findings: gout or some biomechanical problem in your feet which is stressing your knees.

Some English researchers reported increased osteoarthritis in the hip of men who had run cross-country. However, no study was done of their feet.

I would suggest that you start with an examination of your feet by a sportsoriented podiatrist.

HEART

Q: After over 25 years of enjoyable distance running, I was recently informed that an at-rest electrocardiogram indicated I have, at some time between early childhood and not too recently, had a "silent myocardial infection of the left ventricle"-a heart attack. Poised at the beginning of my masters career, this came as a most ironic and traumatic bit of news. After the tests, the doctor said he was not a bit concerned. But I'd like to find out what the complete story might be so as to at least set my mind at rest, if not to revise my training program and goals. Have you ever heard of a comparable case? (D. F., Monroe, Wash.)

A: I'm encouraged by your physician's approach to your difficulty. It suggests that your overall examination is excellent. That leaves us with explain-

ing and dealing with the EKG. Several possibilities come to mind:

First, you may have an "abnormal normal EKG." Last summer I did EKGs on an entire professional football squad and saw readings that could easily be read as heart attacks. Further examination, however, indicated that there was no damage or threat of trouble.

Second, you may have had some inflammation of the heart when younger which left you with some EKG abnormality of no clinical significance.

Finally, it is remotely possible that you had a coronary. But I doubt it. In any case, I guess an exercise test would clear the air and ease your mind.

SMOKING

Q: My problem is smoking. I was smoking two packs a day when I decided to start running. Even though I am now in good enough condition to race, I can't stop smoking. I still smoke about 12-15 cigarettes daily. I actually quit for eight entire days once, but my wife said I became unbearable. (L. W., Ohio)

A: I do not believe that, of itself, smoking cigarettes is quite as destructive as the medical profession claims.

I would advise you to accept your present level of smoking. You are obviously a new man since you resumed running, but I doubt that the running can contribute much more to the psychological and physiological needs the 15 cigarettes supply.

True, there are methods to use: hypnosis, transcendental meditation, "smoke-enders." But you may substitute some other habit or addiction. Further, 15 cigarettes a day has little poten-



NOW AVAILABLE ON THE EAST COAST

Marathon (G-9) \$12.95 Cortez (T-24) \$17.95 Boston (T-26) \$15.95

Order now from:

Connecticut Sporting Goods 9 Old Cochester Quaker Hill, Conn. 06375 tial for present or future harm. It does decrease your running performance. But balance that against the person you are when you stop smoking. These changes are real and immediate. Weight gain, irritability and nervous tension don't seem worth being able to say you have licked smoking.

Smoking at the two-pack level definitely increases your chances of lung cancer. But at your present consumption, neither lung nor cardiac probelms become statistically more numerous

I personally approach smoking as a symptom and regard the cause of the smoking as potentially dangerous to your health and happiness, not the smoking itself.

A new look at yourself, a look at where you are and where you are going is what you need. It may not be possible to rid yourself of your problems, but identifying them is an important first step.

"PUSHING"

Q: Each morning I run about 1.75 miles. The running takes about 13-15 minutes, which puts me into Cooper's "good" category. I would like to get into the "excellent" category, which requires covering the distance in 12 minutes or less. Should I force myself to run harder? (D. F., Fair Haven, N.J.)

A: Improvement in aerobic endurance comes with increasing the distance rather than speed. You could improve your performance by gradually increasing your running time to 30 or possibly 45 minutes three times a week, keeping alternate days at your present level.

The real question is whether this is necessary. The first benefit from exercise is a feeling of well-being, and it seems to me you have reached that particular plateau. Further extending time and effort seems worthwhile only if you want to run competitively or you aren't satisfied with your present level.

WITHDRAWAL

Q: I keep hearing that people who regularly run for years will have to "taper off" slowly if they ever decide to quit. Is there any truth in this? (R. B., San Antonio, Tex.)

A: All that happens to a runner who stops is that in four to six weeks he becomes deconditioned. At that point he is little different in most respects from his neighbor of the same age and body build. He has simply lost certain endurance ability. He does not suffer from any other problems, except perhaps psychological in sleep loss and nervousness due to withdrawal.

CLASSIFIED NOTICES

Reach over 12,000 subscribers with your advertisement in Runner's World.

Rates: meet/race notices 15 cents per word; general notices 20 cents/word.

Deadline for June issue was May 7; July deadline is June 5.

NATIONAL AAU MARATHON. June 17, 8:30 a.m., San Mateo, Calif. Flat, certified course; post-race banquet; souvenir program. Write: West Valley Track Club, P. O. Box 1551, San Mateo, CA 94401.

2nd ANNUAL GRIFFISS CHAMPI-ONSHIP RUNS. 5 km & 15 km. 11 a.m., June 10th, Rome, New York. For information contact: Lt. Col. Lee Kortz, RADC/XP, Griffiss AFB, New York, NY 13441.

STALLION SPRINGS 15-MILE RUN. May 20, 1973. Free barbeque. Many awards. \$1.00 entry fee. Wayne Van Dellum, 37149 Rd. 192, Woodlake, CA 93286.

ALL-AMERICAN CHAMPIONSHIPS. June 9, 1973, Drake University, Des Moines, Iowa, sponsored by Olympia Sports Village in cooperation with Sears and designated as the U.S.T.F.F. National Junior Championships. This meet is for both men and women. Write for free brochure to All-American Championships, Department of Athletics, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin 53201. Phone: (414) 963-5151 or 963-5669.

ALL-AMERICAN MARATHON. Sunday, June 10, 1973, 8:00 a.m., Milwaukee, Wisc. The U.S.T.F.F. Junior National Championships, sponsored by the Mayfair Associates and the University of Wisconsin-Milwaukee Track Club. Write for free brochure to Roger Bodart, Exec. Director, Gimbels Mayfair, 2500 North Mayfair Road, Wauwatosa, Wisc. 53226. Ph. (414) 453-6026.

PAAVO NURMI MARATHON. Saturday, Aug. 11, 1973 at 8:00 a.m., Hurley, Wisc. Sponsored by the Hurley Chamber of Commerce in cooperation with Olympia Sport Village. For more information write to Hurley Chamber of Commerce, Silver Street, Hurley, Wisc. 54565.

BLUE RIDGE TRAILS '73. Distance training camp in the Blue Ridge Mountains of North Carolina. August 13-26. \$50.00 per week. National caliber club and collegiate distance runners as staff. For application write: Coach Bill Keesling, Furman University, Greenville, SC 29613.

MASTERS NATIONAL AAU 15,000-METER CHAMPIONSHIP. Rochester, Minn. June 10, 2 p.m. Age group awards plus unique award to first 100 finishers. Dwight Pierson, 2704 5th Ave., NW, Rochester, Minn. 55901.

NEED ENDURANCE? Try this combo. 100 tablets 400 I.U. water-soluble vitamin E (natural), 250 tablets high protein - liver extract, 100 tablets RNA complex, with metabolically associated B vitamins, minerals, and amino acids. A \$16.00 value for only \$13.50 post paid. Vitality Co., 1122 Spruce St., Berkeley, CA 94704.

SECOND ANNUAL MACKINAW TRAILS MARATHON. June 9, 1973, 6:30 a.m., 198 runners in 1972. Male and female. 500 awards offered. 26, 13, 6½ mile races. Write to: The Saginaw Track Club, 2790 Ashton Dr., Saginaw, Mich. 48603.

2ND ANNUAL MASTERS CLASSIC. May 20th, Monmouth College, N.J. Events for sub-masters (30-39) to Masters III (60+) as follows: 100, 220, 440, 880, mile, mile relay, 2-mile relay, shot put, long jump, high jump, javelin and pole vault. Contact: Masters Sports Association, 11 Park Place, Room 1400, New York, NY. 10007. Information also available on other meets throughout the season.

SOCCER WORLD

Watch for our new bi-monthly publication coming out in December 1973. \$3.50 per year. P. O. Box 366, Mountain View, CA 94040.

MID-MICH. TRACK CLUB ANNUAL. MEMORIAL DAY RUN. Holt (adjacent to Lansing) High School, Saturday, May 26, 10 a.m., 5-mile and 10-mile road races. Age groups. Trophies to 1/3 field; showers/dressing available. Early entry \$1.00. Day of entry \$1.50. Contact: Gordon Schafter, 4378 W. Holt Rd., Holt, Mich. 48842.

SIXTH ANNUAL MOUNTAIN MARATHON. Boone to Grandfather Mountain, NC. July 14, 1973. Scenic devastating course finishes at colorful Scottish Highlands Games Track Meet. Contact: George Phillips, 3100 Briarcliffe Rd., Winston-Salem, NC. 27106.

IF YOU EVER RAN THE BOSTON MARATHON when you were 50 years or over, under 5 hours and are still active in the sport as an official or participant, you are eligible to join. No dues. Contact: Ed Granowitz, Founder & Editor of The Bulletin, 2953 Avenue W., Brooklyn, NY 11229.

FIRST ANNUAL SPOKANE EXPO MARATHON. May 27, 1973. 11 a.m. at the Washington Water Power Co. parking lot. Course is certified and is flat out and back on asphalt road with dirt shoulders. It skirts the Spokane River for most of the way with some residential areas. Picknicking and camping are available on some parts of the river on the course. Temp. 65-75 degrees. World Marathon Association rules will be observed. Suitable awards to college. high school, open, age groups, and women 1st thru 3rd. Come and establish a meet record as well as a personal record to be broken on your return visit to the 1974 Spokane Expo World's Fair.

NIKE-TIGER SPORT SHOES. The largest supply of Nike's and Tiger's in the Midwest at the lowest prices available anywhere. Call or write: Nike-Tiger Sport Shoes, Phil Nabil, 1645 Franklin Ave., Kent, Ohio 44240, (216) 673-3431.

TIGER SHOES—Blue nylon Boston, \$13,95, 6-12; Blue suede Tahoe, \$13.95, 7½-11½. Cortez, \$16.95. NIKE—Blue nylon Obori, \$14.95, 6-12; Leather Cortez, \$16.95, 6-12. Add \$1.00 pr. postage. Write: The Jog Shop, James Morris, 1203 E. Warren, Brownfield, Tex. 79316.

PROFILES



ROBIN CAMPBELL

Post-Olympic seasons are always exciting for the new runners they bring up to the front. None has been as surprising as young Robin Campbell.

It's just as well that Robin wasn't running this fast last year when the Olympic team was being picked. She wasn't eligible to run in Munich, or even in the Trials. She was too young. Robin just turned 14 in January.

Up until a week after her birthday, she'd been known primarily as a cross-country runner. She'd won three national championships for 12-13-year olds last fall: AAU, AAU Junior and Road Runners Club.

Then in February she set an American indoor record for 1000 yards at Toronto but said, "I don't feel that pleased with myself because I wasn't tired and wasn't running all-out. In that meet I didn't feel like I was running any faster than I did in the age-groups."

At the AAU indoor two weeks later, Robin finished only a tenth-second behind Cheryl Toussaint—an Olympian. Then at Richmond the 14-year old beat the Soviets in both the half-mile and the medley relay.

Even her coach, Brooks Johnson, was amazed. He said in *Sports Illustrated*, "When you go from age-group track, you (normally) start all over at the bottom of the ladder. But she's just continued to move right on up. She doesn't scare. She's very tough-minded...."

Robin has to be to stay ahead of her own sisters. Donna, 11, is the best in

the country in her age-group, and Kim, 9, is one of the fastest in hers. Johnson says, "As the girls drop down in age, they get better."

Robin Theresa Campbell: Washington, D.C. (Sports International Track Club). 14 years old (born Jan. 25, 1959, at Washington, D. C.). 5'5", 108 pounds. Junior high school student. Coached by Brooks Johnson. Began racing in 1969 at age 9.

Racing: 100-11.7 (1972); 220-25.5 (72); 440-57.5 (72); 880-2:08.9 (73); 1000-2:30;7; mile-5:02 (73).

Training: 4-5 days a week, 9-10 months a year; about 20 miles a week. "I try to run a little over half-speed if we jog for our workout. When I run by myself I try my best to run as fast as I can because then when I run against competition I'm going almost that same pace. Then it won't be too hard to keep up with everyone. When I train by myself, I think of people who I have run against and think of them behind me. Then I'll run even faster."



JOHN CRAMER

"You too can be an American record holder." That could be the theme of the runs Ken Young promotes in Chicago. Ken can't really be called an opportunist. He simply noticed a lot of blank spaces past 10,000 meters in the AAU record book and thought they should be filled.

Ken himself set more than a dozen indoor marks, including a 2:35 marathon. But he never tried to keep these races secret. They were advertised well in advance and open to anyone.

John Cramer of Minnesota decided this winter that he wanted to be an American record holder, too. This appealed to a runner who'd never broken 4:20 for a mile or 9:20 for a two-mile. By the time he'd finished his 20-kilometer run in 1:05, John held four marks—15 and 20k, 10 miles and one-hour.

"There were two main problems," he said of the 100-lap race. "First, the left leg is put under a lot of strain because it is always being planted, and then twisted while running on the curves. After three miles, my left foot started to throb. The second problem is the mental strain of running in circles. I relieved that by concentrating on running each lap in 40 seconds. If I didn't hit a lap in 40, I would try to pick up the pace. I knew that if I let up during the race at any time, I would have fallen apart."

He says he'll try an indoor marathon in '74.

John Martin Cramer: St. Paul, Minn. (Mankato State College). 21 years old (born Aug. 23, 1951, at St. Paul). 5'7", 125 pounds. College student. Single. Coached by Bud Myers. Began racing in 1967 at age 15.

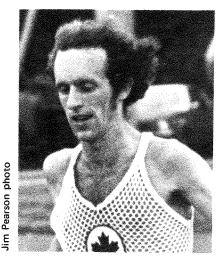
Racing: 440-57.0 (1969); 880-2:04 (72); mile-4:22 (72); 2 miles-9:24 (72); 3 miles-14:47 (72); 6 miles-31:19 (72);15 kilometers-49:04 (73); 10 miles-52:38 (73); hour-11m 700y (73); 20 kilometers-1:05:30 (73); marathon-2:45:10 (71).

Training: twice a day, 7 days a week, year round; 90-100 miles a week. "I'm not very fast, so I have tried to develop my endurance to compensate for my speed. I'm running 100 miles a week because I'm training for races six miles and longer. I hate running speed or interval training, but enjoy running lots of miles at six-minute pace or slower.

"Mornings I run 5-7 miles at 7-8 minute pace, except on days of an important race. Afternoons: Between seasons I run overdistance at a relaxed pace every day on the roads. I train through most summer road and track races. The workout varies from 7-13 miles, depending on the way I feel, at 6-7 minute pace.

"During the cross-country season, I usually race twice a week. I run a 'ladder' workout once a week: 440, 880, three-fourths mile, mile, three-fourths, 880, 440, with a jog interval of half the distance. The other four days are spent running easy overdistance of 10-13 miles at 6:00-6:30 pace.

"During the track season, interval workouts are run on Mondays and Wednesdays: 12 x 440 in 64 with a 440 jog recovery, or 4 x 880 in 2:16 with a 440 jog recovery. On Saturdays I usually race, and the other four days I run easy overdistance of 10-15 miles at 6:00-6:30 pace (extended to 20 miles at six-minute pace once every other week to help my endurance for the six-mile and marathon)."



JERRY TIGHE

BY JANET NEWMAN

Four days before he ran and won his first marathon in 2:20:11, Jerry Tighe felt lightheaded and tired, even while walking from class to class on the University of Oregon campus.

"I had only 200 yards to walk in 10 minutes to get to my next class," he said. "I was still late!"

The next day Jerry switched his diet drastically, all according to plan. He was following a strict carbohydrate and protein diet in hopes of storing up an extra supply of glycogen for the Trail's End marathon.

The 27-year old runner was pleased with his race and recommends the diet, but only "because the layman can grasp it by reading the literature."

Jerry followed the diet closely, sticking to an 80/20 ratio of protein to carbohydrates for three days, then reversing to a 10/90 ratio. The next time he prepares for a marathon, he plans to be a bit more lenient with the diet.

He emphasizes reading the literature and warns against improper use of the diet. "I really can't say whether it helped me or not since I've never used it before and have never run another marathon."

The wiry little Canadian had successfully raced most track distances, as well as a half-marathon on the road in 1:06:50.

"Two or three years ago I ran 18-20 miles on long runs," he said, "but since last September I ran nothing further than 15 miles at a time."

Now, after his first marathon venture, Jerry has hopes of running both the 10,000 and the marathon in major competition.

"I'd like to do what Frank Shorter did-but you have to be realistic."

Jerry's favorite event is the 10,000, but "if I try more marathons it might be that. And I love an occasional mile. They're so violent!"

Jerry discovered some problems adjusting to the longer race. During the first 10 miles at Seaside, he was 300 yards behind the leader—and worried. "On the track, if someone's got 300 yards on you, you worry!"

So when the early leader made a pit stop at 10 miles, Jerry made his move and led the rest of the race. "I went out controlled and didn't have any idea what would happen. I wanted to hold 5:20 pace." (Jerry speaks of eventually being able to go out at 5:00 pace and maintaining the tempo.)

At 24 miles he felt heavy legs and "residual fatigue" but remained in control of the race, finishing over four min-

utes ahead of second place Phil Camp and a field of nearly 500.

Jerry speaks with the accent and expletives of an Englishman and lays the blame on his British teammates in the Vancouver Olympic Club. "You can't fight it, especially in the pubs."

Jerry is at the University of Oregon now as a graduate student in health education. An \$1800 stipend from the Canadian government helps him have the time to concentrate on studies and running. He competed on Canadian national teams in 1969, '70 and '71, and hopes to make his national team again for next year's British Commonwealth Games and for the Pacific Conference Games this June.

Edward Gerald Tighe: Vancouver, British Columbia. Currently in grad school at the University of Oregon, Eugene. 27 years old (born Aug. 27, 1945). 5'7", 125 pounds. Married. Self-coached. Began racing in 1960 at age 14.

Racing: Mile-4:05.2 (71); 3 miles-13:45 (71); 6 miles-28:30 (72); marathon-2:20:16 (73); hour-11 miles 1560 yards (72); 20 kilometers (track)-1:02:38 (72).

Training: Twice a day, seven days a week. Five to seven miles in the morning, Monday, Wednesday and Friday, with 5-11 miles at 6:30 pace in the afternoon. Tuesday and Thursday: five miles in the morning with flexible evening sessions of intervals. ("I haven't run the same thing since September.") Another interval session Saturday morning with a light run in the evening. Sunday: 15 miles in the morning, 5 miles in the late afternoon. ("I generally run about 90 miles a week. The most I ever ran in one week was 138.")



RUNNING SHORTS

- Jessie Castaneda of Albuquerque is claiming a world record, and who's going to deny him that privilege after he walked for more than four days without stopping to eat or sleep? Castaneda, a high school teacher, walked to raise funds for a paralyzed athlete in his home town. Jesse walked 302 miles in 102 hours 59 minutes—averaging a little less than three miles an hour. The longest previous nonstop walk on record was 300 miles.
- The high school runners in Brookings, Ore., wanted to dramatize the need for a new track. The one they had was 439 yards, 3% lanes and dirt. And in Oregon in the springtime, dirt becomes a swamp. The area has 90-plus inches of rain a year, much of it concentrated in the track season.

Coach Harland Yriarte, a former NAIA discus All-American, organized what he called a "mulligan relay"—24 hours on the track, with an ulimited number of runners. "We wanted to get people out to see what the runners were using," he said. In all, 203 townspeople ran in the relay. They ranged in age from four to 55, and they did 219½s, 439s, 878s and an occasional near-mile on the funky track.

For once, Yriarte didn't mind when two inches of rain and hail fell during the relay. It made participants all the more aware of what his runners face all the time. Many of them will vote yes later this year when a proposal for an eight-lane rubberized track appears on the ballot.

The Brookings runners went 254 miles and, of course, claimed a "world record for the mulligan relay."

- The Shore Athletic Club of New Jersey set a record of sorts, too. This was in the 100-man (actually 99 men and one woman) 100-mile relay. Each runner went one mile. The team ran 8:09:42.0, which averages out to slightly less than 4:54 per mile. Shore AC set the old "record" of 8:18:46.8 last year.
- In comparison to these events, the standard 24-hour relay is tame and traditional. Competition is now on—in fact, it's always on, but usually is heaviest in the summer—in the Runner's World 24-hour relay. More than 250 teams ran

the all-day relay in 1972, when the event included an Olympic fund-raising drive.

This relay involved teams of up to 10 runners, each one going a mile on the track in a set of rotation. We keep records for teams of two to 10, as well as marks for special categories such as high school, women, masters, etc.

RW's own relay at San Jose, Calif., had nearly 50 teams last year. This event will be at the San Jose State track again this July 13-14. For those who aren't interested in going the full route, there'll be a 50-mile individual track run and one or two short Fun-Runs held in conjunction.

- Add these marathon dates to the Marathon Handbook: Juneau, Alaska—June 16 and Aug. 25, both at 7 a.m. (contact Floyd Strain, R.R. 4, Box 4670-5, Juneau, Alaska 99801); Canadian Championship, St. Johns, Newfoundland—Sept. 15 (Dave Thomas, P. O. Box 102, Buchans, Newfoundland, Canada); Motor City—Oct. 28 (Ernest B. Smith, 39500-242 Warren Rd., Plymouth, Mich. 48170).
- March "Running Shorts" mentioned the Athletic Safety Bill sponsored by Congressman Ron Dellums. A group called Sports for People (formerly the Committee of Concerned Athletes) is working with Dellums, gathering information. Following a survey of more than 100 persons closely involved in all facets of athletics, Sports for People concluded, "What we face as a society engulfed in sports is a crisis in terms of our priorities and values—specifically whether we want athletics to be for athletes, to be safe and fun, or whether we wish to perpetuate a system which is characterized by high

ALL AMERICAN MAYFAIR MARATHON

Sunday, June 10, 8:00 a.m. Mayfair Shopping Center Milwaukee, Wisconsin

- 26-Mile Marathon (2 laps)
- 13-Mile Mini-Marathon

USTFF JUNIOR NATIONAL CHAMPIONSHIP, OPEN TO ALL CLASSES, INCLUDING MASTERS AND WOMEN.

Aid Stations—Split Times—Awards—Certificates Upon Completion.

Contact: All American Mayfair Marathon, Mayfair Associates, Inc., 2500 N. Mayfair Road, Milwaukee, Wisc. 53226.

pressure, commercialism, high injury rate, competitive abuses and a philosophy of winning at any cost."

Dellums and Sports for People set out to look specifically at high injury rates in sports and what to do about them. They found, however, that injuries were only a symptom of other, bigger problems. In fact, participants in the survey ranked injuries only ninth of 12 issues facing sports.

The top five were drug abuse (listed by 75% of those questioned), the contradictory pressures of education and athletics (68%), coaching procedures (65%), the "high-pressure system" (60%) and poor equipment (57%).

• Payton Jordan, coach of the 1968 men's Olympic track team, says there should be an Olympics every year. Track and field would still be held every four years under his plan. But the Games would be divided into four sports blocks—one held each year; track and swimming together; boating sports; combative and skill events such as boxing, wrestling, riding and gymnastics; team sports.

"The present size (of the Games) and numbers of participants are much too large and cumbersome for feasible, efficient operation," Jordan said in a recent issue of *Letterman* magazine."

• Response to the questionnaire in the March issue has been extraordinary. By early April, we'd already received 2000 completed forms, and they were still coming in. Thanks to all of you.

Information will be used a number of places. First of all, it helps us to know what you want in the way of RW stories. Nearly 200 people have said they'd like to write for the magazine, and many have listed specific topics. We've written to each of them, and you'll be seeing the results of this for a long time to come.

The answers to other questions are being tabulated, and they are being used immediately for our booklet on training (now available), the June special feature on nutrition and the July booklet on shoes.

• Chuck Smead, a high school marathon sensation of several years ago (2:23 on a slightly short course), went running in the southern California mountains one weekend this winter. He got lost as darkness set in. Chuck's family spent an anxious night worrying about what had happened to the lightly-dressed runner. The temperature in the mountains was below freezing. But the next morning Smead jogged out of the woods, suffering nothing worse than frostbite.

JUNE COMING EVENTS

This section includes all known national, regional and AAU district championships—at all distances—plus selected other major races. Please let us know your schedules at least two months before the event.

These are the June meets. Exact dates for the Golden West High School meet in Sacramento and the Rose Festival in Portland aren't known.

Information includes date, name and site of meet, starting place and time, entry limitations, name and address of director). Since details often change without notice, write ahead for information before traveling long distances.

Send schedules to RW, Box 366, Mountain View, Calif. 94040.

NORTHEAST

- National AAU age-group mile, Ft. Meade, Md. (ages 15-under; Gabe Mirkin, 9900 Georgia Ave., Silver Spring, Md. 20902).
- 6 Pro indoor, New York, N.Y. (Madison Square Garden; ITA pros only)
- 10 Race of Champions marathon, Holyoke, Mass. (1 p.m.; open; Walter Childs, P.O. Box 1484, Springfield, Mass. 01100)

SOUTHEAST

- Pro indoor, Louisville, Ky. (Freedom Hall; ITA pros only)
- 2 Pro indoor, Richmond, Va. (Coliseum; ITA pros only)
- 2 Atlanta Track Club Classic track (Lakewood Stadium; invitational; Atlanta Track Classic, P.O. Box 12345, Atlanta, Ga. 30305)
- National AAU age-group mile, Gainesville, Fla. (ages 15-under; Ken Burnsed, Apt. 252R, Flavet 3, Gainesville, Fla. 32601)
- 5-9 NCAA track championships, Baton Rouge, La. (Louisiana State University; qualified collegians)
- 22-3 National AAU Junior track, Gainesville, Fla. (University of Florida; athletes born in 1954 or later)

MIDWEST

- 1-2 NCAA College Division track, Crawfordsville, Ind. (Wabash College)
- 1-2 USTFF championships, Wichita, Kans. (Wichita State University; invitational; Herm Wilson, Track Coach, Wichita State University, Wichita, Kans. 67208)
- 2 USTFF marathon, Wichita, Kans. (Wichita State University, 7 a.m.; open; Herm Wilson, Track Coach, Wichita State Univ., Wichita, Kans. 67208)
- National AAU age-group mile, Saginaw, Mich. (ages 15-under; Roger Hanson, 3865 Hospital Rd., Saginaw, Mich. 48603)
- 9 Mackinaw Trails marathon, Saginaw, Mich. (6:30 a.m.; open; Mackinaw Trails marathon, 2790 Ashton Dr., Saginaw, Mich. 48603)
- 9 International Prep Invitational track, Mt. Prospect, III. (invitational for high school seniors; Joe Newton, York High School, Elmhurst, III. 60126)
- 9 USTFF Junior National track, Des Moines, Iowa (Drake University; invitational for high school runners; Russ Coley, UWM Athletic Dept., University of Wisconsin/Milwaukee, Milwaukee, Wisc. 53201)
- National AAU Masters 15-kilometer, Rochester, Minn. (2 p.m.; ages 40-up; Dwight Pearson, 2704 5th Ave. N.W., Rochester, Minn. 55901)
- 10 Lake Erie AAU 20-kilometer, Independence, Ohio (Independence High School, 10 a.m.; open; Bill Bredenbeck, 5916 Longano Dr., Independence, Ohio 44131)
- All-American Mayfair marathon, Milwaukee, Wisc. (Mayfair Shopping Center, 8 a.m.; open; G. Roger Bodart, Mayfair Associates, Inc., 2500 North Mayfair Rd., Milwaukee, Wisc. 53226)
- Missouri Valley AAU one-hour track, Columbia, Mo. (Hickman High School, 7:30 p.m.; open; Joe Duncan, 4004 Defoe Dr., Columbia, Mo. 65201)
- 17 Longest Day marathon, Brookings, S.D. (7a.m., open; Jay Dirksen, Track Office, SDSU, Brookings, S.D. 57006)
- 23 Marathon marathon, Terre Haute, Ind. (open; William M. Welch, 2126 Dahlen St., Terre Haute, Ind. 47805)
- 23 Lake Erie AAU one-hour track, Akron, Ohiol (Akron University, 6:30 p.m.; open; Jim Klett, 1211 Collinwood Ave., Akron, Ohio 44310)
- 23 National AAU Masters 20-kilometer, Terre Haute, Ind. (ages 40-up)
- 23-4 Carmel Classic track, Carmel, Ind. (open-invitational; Jerry York, East Smoky Row Rd., Carmel, Ind.)

SOUTHWEST & ROCKIES

- National AAU age-group mile, Denver, Colo. (ages 15-under; Dick Haggerty, 5905 Estes, Arvada, Colo. 80002)
- 30 National AAU Junior 20-kilometer, Aurora, Colo. (ages 19-under; Joe Arrazola, 12336 E. Kentucky Ave., Aurora, Colo. 80010).

WEST

- Kennedy Games track, Berkeley, Calif. (invitational; University of California)
- National AAU age-group mile, Bakersfield, Calif. (ages 15-under; Dale Knox, 714 Sixth St., Wasco, Calif. 93280)
- 9 Palos Verdes marathon, Palos Verdes Estates, Calif. (8 a.m.; open; Terry Wallace, P.O. Box 153, Palos Verdes Estates, Calif. 90274)
- 9 Pacific AAU track, San Francisco area (open; Bob DeCelle, Box 1606, Alameda, Calif. 94501)
- 14-6 National AAU men's track championships, Bakersfield, Calif. (invitational; Gil Bishop, P.O. Box 1526, Bakersfield, Calif.)
- Oregon AAU 20-kilometer, Portland, Ore. (Western Forestry Center, 9:30 a.m.; Richard Raymond, 2575 N.W. Lovejoy, Portland, Ore.)
- Juneau marathon, Juneau, Alaska (7 a.m.; open; Floyd Strain, R.R. 4, Box 4670-5, Juneau, Alaska 99801)
- 16-24 National AAU women's track championships, Irvine, Calif. (invitational)
- 17 National AAU marathon, Burlingame, Calif. (Burlingame High School, 8:30 a.m.; open; Jack Leydig, P.O. Box 1551, San Mateo, Calif. 94401)
- 17 Senior Olympics marathon, Culver City, Calif. (8 a.m.; ages 25-up; Warren Blaney, Senior Sports International Inc., Mutual of Omaha Building Suite 302, 5225 Wilshire Blvd., Los Angeles, Calif. 90036)
- 22-3 National AAU decathlon, Porterville, Calif. (invitational)
- 23-4 Senior Olympics track, Los Angeles, Calif. (UCLA; ages 25-up; Senior Sports International Inc., Mutual of Omaha Building Suite 302, 5225 Wilshire Blvd., Los Angeles, Calif. 90036)

CANADA

28-9 Pacific Conference Games, Toronto, Ontario (US, Canada and Pacific countries)

INTERNATIONAL

- Comrades marathon (54 miles), Pietermaritzburg, South Africa (open; The Comrades Marathon, P.O. Box 843, Pietermaritzburg, South Africa)
- 8-9 100-kilometer, Biel, Switzerland (open; Organisation 100-km. lauf von Biel, Postfach 437/2501, Biel, Switzerland)

RACE WALKING

- 3 National AAU 25-kilometer, Taunton, Mass. (open; Fred Brown, 157 Walsh St., Medford, Mass. 02155)
- Pacific AAU 5-kilometer, San Francisco, Calif. (San Francisco State University; open; Steve Lund, 402 Via Hidalgo, Greenbrae, Calif. 94904)
- National AAU 15-kilometer, Brighton,
 Colo. (Adams County Fairgrounds,
 8 a.m.; open; Floyd Godwin, 935
 Ash St., Broomfield, Colo. 80020)

RACING HIGHLIGHTS

The recent records:

- 60 meters—Alexandr Korneliuk (Soviet Union), 6.4 twice at Moscow, March 1, tying world indoor record.
- 60 meters—Herb Washington, 6.5 at Genoa, Italy, Feb. 28, tying American indoor record.
- 100 meters—Robert Taylor, 10.7 at Moscow, March 2, tying American indoor record.
- 600 meters—Andras Zsinka (Hungary), 1:17.7 at Budapest, Feb. 7, tying world indoor record.
- Women's 800 meters—Stefka Yordanova (Bulgaria), 2:02.7 at Rotterdam, Holland, March 11, breaking world indoor record.
- 6 miles—Steve Prefontaine, 27:09.4 at Bakersfield, Calif., March 24, breaking American outdoor record.
- Women's 400-meter hurdles— Judy Vernon (Great Britain), 1:00.2 at London, March 21, breaking world outdoor record.
- 4-mile relay—Eastern Michigan University, 16:44.8 at Ypsilanti, Mich., March 17, unofficially breaking world and American indoor records (not allowed because of mixed nationalities of team members).

Another top mark on the track during the early outdoor season was Steve Prefontaine's 5:06.2 for 2000 meters. Only one American has ever run faster.

March's top meet was the Internanational cross-country championships, reported in detail earlier in this issue.

Frank Shorter had two big wins—a 2:12:03 marathon in Japan, and an international cross-country race in Italy a week later.

Teri Anderson ran a 2:53:40 marathon, second-fastest ever by a woman.

The results here are mainly from the long distance races that otherwise wouldn't be covered by nationwide publications. We include highlights of all marathons, all national and AAU association championships, and selected other races at standard distances. It is impossible for us to cover track meets

in detail. Instead, we summarize the results in statistical-list form, as well as listing all records broken.

The magazine goes to the printer the 10th of each month—April 10 in this case. Most results are from March.

NORTHEAST

- Middletown, Conn., March 4—Connecticut AAU marathon: 1, John Foran (17, Conn) 2:31:57; 2. Tim Smith (Conn) 2:39:23; 3. Mike Baxter (Mass) 2:40:13; 4. Robert Thomas (Conn) 2:40:39; 5. Lou Markunas (Conn) 2:40.53; 6. John Kelley (41, Conn/1st vet)...51. Bill Tribou (50+, Conn) 3:13:32...69. Kathy Lynch (Conn/1st woman) 3:22:30. (97 finished, 30 under 3:00, 75 under 3:30, 90 under 4:00).
- Albany, N.Y., March 4–15-mile (actually 14.93): 1. Rich Langford 1:21:04; 2. Carlo Cherubino 1:21:24; 3. Don Brown 1:23:54...32. Cathy Shrader 1:44:14. (51 finished, 10 under 1:30, 32 under 1:45).
- Long Branch, N.J., March 11–20-kilometers: 1. Sheldon Karlin (Md) 1:02:44; 2. Bob Bazley (NJ) 1:06:40. (40 runners, 6 under 1:10, 15 under 1:20; from Elliott Denman).
- New Bedford, Mass., March 11—New England AAU 30-kilometer (apparently a short couse): 1. Rick Bayko (Mass) 1:34:13; 2. Bill Rodgers (Mass) 1:34:20; 3. Larry Olsen (Mass) 1:35:12; 4. Ken Mueller (Mass) 1:36:04; 5. Marshall Jones 1:36:23...10. Walter Renaud (40+, Mass) 1:40:18... Charlotte Derderian (Mass) 1:54:55. (218 finished; from Fred Brown).
- Sandy Spring, Md., March 11—Halfmarathon: 1. Jack Mahurin (NC) 1:11:49; 2. David Webster 1:13:45; 3. Jeff Rundell 1:15:07. (57 finished, 9 under 1:20, 34 under 1:30; from Bob Thurston).
- Rockville, Md., March 17—National RRC postal 10-mile track: 1. David Webster 53:13; 2. Gar Williams (40, Va) 53:17; 3. Jack Coffey 53:22; 4. Ken Umbarger 53:22 . . . 18. Bob Horman (55) 1:02:53. . . 26. Jill Haworth (11) 1:07:10. (47 finished, 12 under 1:00, 22 under 1:05; from Bob Thurston).
- Westbury, N.Y., March 18-Earth Day marathon: 1. Larry Fredrick (22, NY) 2:30:25.6; 2. Ralph Thomas (37, Me) 2:31:58; 3. Pat Bastick (37, NY) 2:33:27; 4. Mike Butynes (20, NY) 2:33:27; 5. Ed Bowes (29. NY) 2:37:26; 6. Edward Forte (20, NJ) 2:38:09; 7. Brian Farley (21, NY) 2:39:04: 8. Howard Herrington (20, NY) 2:39:43; 9. Steve Fiamengo (18, NY) 2:40:59; 10. Bill O'Brien (19, NY) 2:41:24... 24. Joe Burns (43, NJ) 2:49:10...50. Ted Corbitt (52, NY) 2:55:45... 85. Nina Kuscsik (32, NY) 3:09:52. . . 142. Kathy Switzer (26, NY) 3:22:10. (287 finished, 54 under 3:00, 178 under 3:30, 259 under 4:00; cold and snowy weather).
- Boston, Mass., March 18–15 kilometers: 1. Amby Burfoot (Conn) 45:58; 2. William Durette (Mass) 46:09; 3. Dan Moyni-

- han (Mass) 46:58; 4. Rick Bayko (Mass) 47:25; 5. Will Van Dyke (Mass) 47:42... 34. Tony Sapienza (40+) 53:31... Sara Mae Berman (Mass) 1:02:10. (218 finished; from Fred Brown).
- Ithaca, N.Y., March 25—Boston Qualifier marathon: 1. Bob Congdon (27, NY) & Keith Hartman (30, NY) 2:38:48; 3. Ron Redfield-Lyon (21, NY) 2:47:35...9. Tob de Boer (42, NY) 3:04:50. (25 finished, 6 under 3:00, 21 under 3:30, all under 4:00; from Jim Hartshorne).
- Scarsdale, N.Y., April 1—Metropolitan AAU 15-kilometer: 1. Giles Kemp (22, NY) 48:01; 2. Bill Bragg (NJ) 48:40; 3. Howie Ryan (27, NY) 48:56; 4. Elliot Rogers (25, NY) 49:15; 5. Frank McCann (22, NY) 49:17...40. Walt McConnell (41, NJ) 54:02...77. Ted Corbitt (53, NY) 58:07...100. Carole Fridley (24, N/) 1:00:43. (197 finished, 8 under 50:00, 43 under 55:00, 91 under 1:00; from Joe Kleinerman).

SOUTHEAST

- New Orleans, La., March 3—Southern AAU 15-kilometer: 1. Taylor Aultman 48:41; 2. Jose Cortez (Cal) 50:37; 3. Larry Fuselier (38) 55:25. (37 finished, from Cy Quinn).
- Ft. Myers, Fla., March 3—Florida marathon: 1. Ronald Chase (24, Fla) 2:51:33. (4 finished, 1 under 3:00, 2 under 3:30 & 4:00; from Lou Cappi).
- Gainesville, Fla., March 12—Halfmarathon: 1. Ken Adams (Fla) 1:08:53.6; 2. Dennis Bayham (Fla) 1:09:17.8; 3. Terry McQuade (Fla) 1:11:04.2... Margaret Tolbert (Fla) 1:29:10. (14 under 1:30; from Roy Benson).
- Knoxville, Tenn., March 18–35 kilometers: 1. Alden Gardner (30, Tenn) 2:20:30; 2. Keith Kahl (42, Tenn) 2:24:01. (4 finished; from Hal Canfield).

MIDWEST

- Columbia, Mo., March 3—Missouri Valley AAU 30-kilometer: 1. Loren Moes (23) 1:46:39; 2. Bob Creighton (39, Kans) 1:59:09. (9 finished, 2 under 2:00, 7 under 2:20; from Joe Duncan).
- Athens, Ohio, March 4—Athens marathon: 1. Carl Hatfield (WV) 2:20:41.8; 2. Don Slusser (Pa) 2:27:14; 3. William Scholl (Ohio) & Wendell Skelley (Ohio) 2:32:00; 5. Roger Rouiller (WV) 2:32:28; 6. James Reid (Ohio) 2:35:36; 7. Philip Ford (Ohio) 2:36:03; 8. Harvey Fahl (Ohio) 2:39:19. . . 18. Wendall Sullivan (48, Ohio) 2:49:32. (73 finished, 28 under 3:00, 49 under 3:30, 64 under 4:00).
- St. Louis, Mo., March 4— Third Olympiad Memorial marathon: 1. Robert Fitts (30, Mo) 2:27:25; 2. Rob Leutwiler (22, Mo) 2:33:08; 3. Barney Hance (22, III) 2:34:30; 4. Tim Lamb (22, Ia) 2:38:42; 5. Charles Korte (18, Mo) 2:39:35... Teri Anderson (19, Kans) 2:53:40 (second-fastest ever run by a woman)... Steve Stephenson (42, Ariz) 2:55:10. (88 finished, 30 under

3:00, 62 under 3:30, 84 under 4:00; from Jerry Adams).

- Detroit, Mich., March 10—Detroit
 News marathon: 1. Norm Patenaude (28, Ont) 2:24:04.6; 2. Duane Spitz (24, Mich) 2:24:18.6; 3. Dave Landriault (21, Ont) 2:27:08; 4. George Khouri (19, Mich) 2:29:42; 5. Sidney Sink (24, Ohio) 2:29:53; 6. Peter Hallop (25, Mich) 2:32:02; 7. Bruce Dewsberry (18, Mich) 2:32:51; 8. Gary Pierson (36, III) 2:33:51; 9. Glenn Groom (28, Ont) 2:35:18... 31. Doug Wolf (42, Ont) 2:35:18... 31. Doug Wolf (42, Ont) 2:50:07... 44. Paul Hansen (51, Mich) 3:04:47. (81 finished, 39 under 3:00, 70 under 3:30, 77 under 4:00; from Ed Kozloff)
- Des Moines, Ia., March 18—Iowa AAU 30-kilometer: 1. Martin Smith (Ia) 1:42:03.8; 2. Loren Moes (Ia) 1:43:26.6; 3. Jim McFadden (Ia) 1:46:51.6...8. Karl Larson (50+) 2:02:56. (15 finished, 7 under 2:00; from Mike Sullivan).
- Toledo, Ohio, March 25—Heart-Watcher's marathon: 1. John Schauble (33, Minn) 2:45:29; 2. Jimmie Edwards (38, Ohio) 2:47:26 & Lou Wagner (29, Ohio) 2:47:26... Jack Schendel (40, Ohio) 3:02:56... Richard King (52, III) 3:25:55. (from Sy Mah).
- Monroe, Ohio, March 25—Ohio AAU 30-kilometer: 1. Charles Koeppen 1:40:38; 2. Terry Donovan 1:41:25; 3. Floyd Stroud 1:46:05. (30 finished, 14 under 2:00; from Wayne Yarcho).
- Cleveland, Ohio, March 25—Lake
 Erie AAU 30-kilometer: 1. Paul Talkington
 (Ohio) 1:38:46; 2. Dan Shook (Ohio)
 1:41:16; 3. Bill Scholl (Ohio) 1:45:42; 4.
 Greg Klipan 1:45:45; 5. Carl Kule (WV)
 1:46:37...Jim Comyns (40+) 2:03:54.
 (15 under 2:00; from John O'Neil).

SOUTHWEST

- Denton, Tex., Jan. 27—North Texas marathon: 1. Tom Hess (22, Tex) 2:20:43.8; 2. Paul Hoffmann (20, Tex) 2:29:15.6; 3. Glenn Cole (Tex) 2:32:22.8...10. Robert Coffey (40+, Tex) 2:49:52. (27 finished, 13 under 3:00, 18 under 3:30, 26 under 4:00).
- Portales, N.M., February—Portales marathon: 1. Larry Blancett (NM) 2:23:28; 2. Charles Harris (NM) 2:24:42; 3. Gary Roybal (NM) 2:26:22; 4. L. Ortega 2:31:34; 5. George Chavez (NM) 2:31:49. (50 finished, 19 under 3:00, 34 under 3:30, 43 under 4:00; from Bill Silverberg).
- Dallas, Tex., March 3—White Rock marathon: 1. Wayne Comer (31, Tex) 2:37:45; 2. Ronnie Hess (20, Tex) 2:43:55; 3. Brian Harrington (26, Tex) 2:44:03; 4. Clyde Villemez Jr. (26, Tex) 2:45:30; 5. Robert Coffey (41, Tex) 2:52:35...44. Jim Bole (65, Cal) 3:39:08...90. Patricia Price (36, Tex) 4:27:45. (107 finished, 14 under 3:00, 33 under 3:30, 69 under 4:00; from Talmage Morrison).

- Denton, Tex., March 24–15 miles track: 1. Tom Hess (Tex) 1:19:09.8.
- Tulsa, Okla., March 24—Oil Capital marathon: 1. Terry Ziegler (22, Okla) 2:26:48; 2. Roger Vann (18, Ark) 2:36:53; 3. Hank Brame (20, Ark) 2:39:02; 4. Rodger Low (21, Ark) 2:40:36; 5. Terry Lewis (21, Okla) 2:41:40...12. Norm Alsobrook (42, Tex) 2:58:00...28. Bob Martin (52, Okla) 3:16:24...44. Geri Storer (11, Mo) 4:17:34. (45 finished, 14 under 3:00, 33 under 3:30, 43 under 4:00; from Larry Aduddell).

WEST

- Los Angeles, Calif., March 3—City of Los Angeles marathon (actually 27.9 miles due to wrong turn): 1. Doug Schmenk (Cal) 2:28:48; 2. Dave White (Cal) 2:32:30; 3. Bill Scobey (Cal) 2:36:06; 4. Ron Kurrle (Cal) 2:41:06; 5. Bill Anderson (Cal) 2:45:45... 6. Carlos Alfaro (Cal) 2:46:16; 7. Owen Narikawa (Cal) 2:47:28...15. T. A. de Lusignan (40+) 3:04:41...31. John Lafferty (50+, Cal) 3:25:58...63. Alan Flanagan (60+, Cal) 3:46:57...114. Gloria Bassler (Cal) 4:32:31. (148 finished, 10 under 3:00, 37 under 3:30, 82 under 4:00).
- El Cajon, Calif., March 11—Half-marathon: 1. Peter Fredriksson (26, Cal/Sweden) 1:05:16; 2. Tom Lux (20, Cal) 1:07:15; 3. Bill Gookin (40, Cal) 1:09:10; 4. Tully Mann (24, Cal) 1:09:41; 5. D. Mills (18, Cal) 1:03:06. . . 18. Nadia Garcia (19, Cal) 1:21:33. (57 finished, 12 under 1:20, 35 under 1:30).
- e Central Point, Ore., March 17—Oregon AAU 25-kilometer: 1. Ron Wayne (Ore) 1.21:46; 2. Bob Smith (Ore) 1:25:10; 3. Bill Carley 1:26:30; 4. Robin Lee 1:27:01... Mary Barker 1:58:41. (36 runners; from Jerry Swartsley).
- Pacific Grove, Calif., March 18—Pacific AAU 30-kilometer: 1. George Stewart (Cal) 1:40:04; 2. Phil Camp (Cal) 1:40:25; 3. Daryl Zapata (Cal) 1:44:03; 4. John Butterfield (Cal) 1:45:09; 5. William Johnson (Cal) 1:47:08...7. Ross Smith (45, Nev) 1:49:21... 50. Catherine Smith (39, Nev) 2:43:53. (57 finished, 15 under 2:00, 41 under 2:20; from Chuck Day).
- San Martin, Calif., March 24— Marathon of the Lakes: 1. John Butterfield (35, Cal) 2:39:30.2; 2. T. A. de Lusignan (42, Cal) 2:48:39; 3. Rich Peterson (35, Cal) 2:48:50... 17. Al Flanagan (61, Cal) 3:45:37. (27 finished, 6 under 3:00, 15 under 3:30, 21 under 4:00; from Bill Flodberg).

INTERNATIONAL

• Waregem, Belgium, March 18—International cross-country: Men's 12 kilometers—1. Pekka Paivarinta (Finland) 35:46.4; 2. Mariano Haro (Spain) 35:46.6; 3. Rod Dixon (New Zealand) 36:00; 4. Tapio Kantanen (Finland) 36:05; 5. Willy Polleunis (Belgium) 36:05; 6. Roger Clark (England) 36:08; 7. A. Hidalgo (Spain) 36:12; 8. Gaston Roelants (Belgium) 36:13; 9. Nikolai Sviridov (Soviet Union) 36:19; 10. Noel Tijou (France) 36:21.

Women's 4 kilometers—1. Paola Cacchi (Italy) 13:45; 2. Joyce Smith (England) 13:58; 3. Josee Van Santberghe (Belgium) 14:01; 4. Rita Ridley (England) 14:02; 5. Sinikka Tyynela (Finland) 14:09; 6. Jean Lochhead (Wales) 14:12; 7. M. Moser (Switzerland) 14:13; 8. I. Pettinen (Finland) 14:14; 9. A. Garrett (New Zealand) 14:15; 10. N. Holmen (Finland 14:16. . . 15. Doris Brown (US) 14:24; 16. Francie Larrieu (US) 14:29. . . 29. Vicki Foltz (US) no time; 30. Caroline Walker (US) nt. . . 32. Valerie Eberly (US) nt. (US women third with 90 points behind England, 40, and Finland, 73).

- Otsu City, Japan, March 18—Mainichi marathon: 1. Frank Shorter (US) 2:12:03; 2. Yoshinoru Kitayama (Japan) 2:13:24; 3. Yoshiaki Unetani (Japan) 2:15:53; 4. John Vitale (US) 2:16:15.
- San Vittore, Italy, March 25—6-mile cross-country: 1. Frank Shorter (US) 31:00.8; 2. Brendan Foster (England) 31:05.8; 3. Tapio Kantanen (Finland) 31:30.2...7. Dave Bedford (England) 31:46.2...29. Lasse Viren (Finland) 33:36.2...53. John Akii-Bua (Uganda) 40:13.8.

CANADA

• Toronto, Ontario, March 4-20 kilometers: 1. Dan Shaughnessy (Ont) 1:04:33; 2. Bob Moore (Ont) 1:05:09; 3. Peter Lever (Ont) 1:07:26; 4. Bob Legge (Ont) 1:07:49; 5. Bill Allen (40+, Ont) 1:08:04.6. (37 finished, 6 under 1:10, 10 under 1:15; from Norm Patenaude).

RACE WALKS

- Reno, Nev., March 3—National AAU Junior one-hour: 1. Jim Bentley (17, Nev) 7 miles 136 yards; 2. Bryan Snazelle (17, Nev) 7m 11y; 3. Bob Rosencrantz (17, Wash) 6m 1599y; 4. Brad Bentley (16, Nev) 6m 1098y; 5. Pete Forman (16, Nev) 5m 1477y; 6. Casey Kozlowsky (14, Nev) 5m 335y. (from Jim Bentley Sr.)
- Lawrenceville, N.J., March 18—Eastern Regional AAU 25-kilometer: 1. John Knifton (NY) 2:00:15; 2. Ray Somers 2:01:13; 3. Walter Sgardello (Italy) 2:03:53; 4. Mario Taddeo (Italy) 2:04:05; 5. Pier Georgio Andreotti (Italy) 2:08:06; 6. Bruno Secchi (Italy) 2:12:31; 7. Bob Mimm (Pa) 2:19:47; 8. Gary Westerfield (NY) 2:21:16; 9. Steve Hayden (NY) 2:21:16; 10. Roy Yarbrough 2:25:20. (from Jack Mortland).
- Des Moines, Ia., March 18—Iowa AAU 30-kilometer: 1. Dave Eidahl (Ia) 2:47:18; 2. Stan Smith (Ia) 2:49:50. (from Mike Sullivan).
- Reno, Nev., March 31—National AAU 30-kilometer: 1. Jerry Brown (Colo) 46:19; 2. Ron Laird (Cal) 46:42; 3. Bill Ranney (Cal) 46:51; 4. Bill Weigle (Cal) 47:16; 5. Bob Kitchen (Cal) 47:19; 6. Floyd Godwin (Colo) 47:31; 7. Bob Henderson (Cal) 49:18; 8. Pete Van Arsdale (Colo) 49:43; 9. Steve Lund (Cal) 49:57; 10. Jim Bean (Cal) 50:20. (20 finished).

MARATHON HANDBOOK SUPPLEMENT

The intention was to include detailed information on both the "in-between" distances (over the track range but less than the marathon) and the ultra-marathons in the latest edition of Marathon Handbook. We ran out of room there, and the entire chapter had to be cut.

Here are fragments from that: the schedule of national champion-ships at these distances, and all known ultra-marathons; also short lists of the best times in these distances during 1972. There are two main problems in time listings like these: accuracy (courses don't tend to be measured as precisely here as in marathons), and completeness (correspondents don't contribute other results as religiously as they do marathons).

These are the best marks we have on courses thought to be accurate. "Juniors" are runners 19 and under. "Masters" are 40-up.

AAU CHAMPIONSHIPS

- 15 kilometers, Littleton, Colo., Aug. 4— Joe Arrazola, 12336 E. Kentucky Ave., Aurora, Colo. 80010.
- Junior 15 kilometers, Michigan City, Ind., Aug. 4—Hal Higdon, 2815 Lake Shore Dr., Michigan City, Ind. 46360.
- Masters 15 kilometers, Rochester, Minn., June 10—Dwight Pearson, 2704 5th Ave. N.W., Rochester, Minn. 55901.
- 20 kilometers, Gloucester, Mass., Sept. 30— Bob Campbell, 39 Linnett St., West Roxbury, Mass. 02132.
- Junior 20 kilometers, Aurora, Colo., June 30—Joe Arrazola, 12336 E. Kentucky Ave., Aurora, Colo. 80010.
- Masters 20 kilometers, Terre Haute, Ind.,
 June 23—Carl Carey, 406 Murphy Lane, Brownsburg, Ind. 46112.
- 25 kilometers, Kansas City, Mo. (including Junior and masters), held April 7.
- 30 kilometers (including junior and mas-

1972 DISTANCE LIST

15 KILO	METERS	
45:42	Karl Weiser (29, Wash)	Masters
46:37	Steve Savage (23, Ore)	1:30:55 Hal Higdon (40, Ind)
47:07	Mike Gregorio (27, Cal)	Women
47:12	Leonard Hill (19, Ore)	1:45:19 Kathy Lynch (Conn)
Juniors		30 KILOMETERS
47:12	Leonard Hill (19, Ore)	1:35:04 Paul Talkington (25, Ohio)
Masters 49:25	M-1 Ba 1/40 AA)	1:35:17 John Vitale (24, Conn) 1:36:10 Wayne Badgley (27, Cal)
Women	Walter Renaud (40, Mass)	1:37:09 Chuck Smead (20, Cal)
59:40	Nina Kuscsik (33, NY)	1:37:11 Gareth Hayes (23, NC)
10 MILES		Juniors
49:19	Dave White (20, Cal)	1:45:23 Rick Sayre (19, Ohio)
49:33	John Casso (Cal)	Masters
49:39	Dave Baberacki (Cal)	1:53:36 Roland Anspach (45, Ohio)
49:43	Phil Camp (28, Cal)	Women 2:09:16 Fran Conley (31, Cal)
49:54	Wayne Badgley (27, Cal)	2:09:16 Fran Conley (31, Cal)
Juniors		20 MILES
50:45	Mark Kushner (19, Cal)	1:43:06 Jon Anderson (22, Cal)
Masters	0 1 0 0 0 0 0	1:46:08 Tom Fleming (20, NJ)
52:28 Waman	Graham Parnell (44, Cal)	1:48:25 Adelino Silva (Cal)
Women 1:00:30	Branda Wahh (17 Ohio)	1:48:58 Tom Hoffman (24, Wisc)
	Brenda Webb (17, Ohio)	1:49:40 Eric Sigmont (Tex)
ONE HO		Juniors
11m 1463	, , , , , , , , , , , , , , , , , , , ,	1:53:01 Bill O'Brien (18, NY) Masters
11m 1416		1:55:13 Ross Smith (45, Nev)
11m 1320	, , , , , , , , , , , , , , , , , , , ,	Women
11m 1179		2:14:18 Nina Kuscsik (33, NY)
Juniors	mark (kasimer (19, Car)	TWO HOURS
11m 1277	y Terry Williams (17, Cal)	21m 108y Bob Scharf (35, DC)
Masters		21m 81y Phil Davis (26, III)
11m 270y	/ Hal Higdon (40, Ind)	20m 1401y Bob Thurston (31, DC)
Women		20m 411y Ken Young (30, III)
9m 1625y	/ Brenda Webb (17, Ohio)	20m 170y Steve Goldberg (30, III)
20 KILON	METERS	Women
1:01:40	Jon Anderson (22, Cal)	14m 792y Barbara Livingston (31)
1:02:00	John Vitale (24, Conn)	30 MILES
1:02:36	Greg Brock (24, Cal)	3:01:54 Ken Young (30, III)
1:02:39	Tom Fleming (21, NJ)	50 KILOMETERS
1:03:00	Tom Hoffman (24, Wisc)	3:07:17 Jeff Arnold (17, Cal)
Juniors 1:04:38	Pinhard Ellin (10 NV)	
Masters	Richard Ellis (19, NY)	40 MILES
	Jerry Smartt (40, Cal)	4:08:28 Ken Young (30, III)
Women	, , , , , , , , , , , , , , , , , , , ,	50 MILES
1:18:20	Jackie Dixon (17, Cal)	5:56:58 Park Barner (Pa)
15 MILES		6:01:45 Ross Smith (44, Nev)
	Sheldon Karlin (Md)	6:10:03 Darryl Beardall (35, Cal)
	Mike Sabino (Md)	6:16:14 John Garlepp (34, NY)
	Tom Hoffman (24, Wisc)	6:17:40 Peter Kuchinski (Mass)
	John Vitale (23, Conn)	6:19:45 Al Kimball (Mass) 6:20:14 Frank Krebs (29, Cal)
1:20:57	Larry Swanson (III)	6:26:12 David Cortez (14, Cal)
Juniors		6:27:22 Clayton Bristol (Conn)
1:22:47	Richard Parsons (15, Tenn)	6:34:19 Bob Bruner (31, Cal)
Masters	Malton Panaud (40, Mass)	Juniors
1:22:30 Women	Walter Renaud (40, Mass)	6:26:12 David Cortez (14, Cal)
1:43:58	Leah Ferris (Hawaii)	Masters
		6:01:45 Ross Smith (44, Nev)
25 KILON		Women
	John Vitale (23, Conn) Glenn Appell (18, NY)	8:07:10 Eileen Waters (26, Cal)
	Chuck Ceronsky (24, Minn)	100 MILES
	Tom Derderian (22, Mass)	14:14:39 Ken Young (30, III)
	Bruce Mortenson (28, Minn)	15:38:38 Darryl Beardall (35, Cal)
Juniors	,	16:42:58 Ralph Paffenbarger (49)
1:21:32	Glenn Appell (18, NY)	17:15:34 Paul Reese (54, Cal)

ters), Chicago, III., Sept. 23-Richard King, 5600 S. Drexel, Chicago, III. 60606.

- One-hour (including junior and masters), conducted on a "postal" basis; races run at numerous sites around the country on or before July 28-John Brennand, 4476 Meadowlark Lane, Santa Barbara, Calif. 93105.
- 50 kilometers (including junior and masters), Yonkers, N.Y., Sept. 2-Aldo Scandurra, 22 Monet Pl., Greenlawn, N.Y. 11740.
- 50 miles (including junior and masters), New York, N.Y., Nov. 3-Aldo Scandurra, 22 Monet Pl., Greenlawn, N.Y. 11740.

OTHER ULTRA-MARATHONS

• 50 kilometers, Sacramento, Calif., Nov. 11-

Walt Betschart, 4120 A St., Sacramento, Calif. 95819.

- International Two-Bridges 36-mile, Alexandria, Va., Oct. 21-Robert Crane, 511 Kramer Dr., Vienna, Va. 22180.
- 37-mile, Baltimore, Md., September-Les Kinion, 1363 Halstead Rd., Baltimore, Md. 21234.
- Midwest Road Runners Club 50-mile (track), Chicago, III., May 13 (tentative)-Ken Young, c/o Ted Haydon, Track Coach, University of Chicago, Chicago, III. 60632.
- John F. Kennedy 50-mile, Boonsboro to Hagerstown, Md., held March 31-William "Buzz" Sawyer, 149 N. Potomac, Hagerstown, Md. 21740.
- Iowa AAU 50-mile, Des Moines, Iowa,

September-Butch Hammer, R.R. 1, Carlisle, la. 50047.

- 50 miles, Cambridge, Mass., November-Bob Campbell, 39 Linnet St., West Roxbury, Mass. 02132.
- 50 miles, Rocklin, Calif., Oct. 14-Bob De-Celle, Box 1606, Alameda, Calif. 94501.
- 50 miles (track), San Jose, Calif., July 13 or 14-Runner's World, Box 366, Mountain View, Calif. 94040.
- Camellia 3-Day 100-mile, Sacramento, Calif., held March 9-11-Paul Reese, 2789 17th St., Sacramento, Calif. 95818.
- Camellia Capital Century (one-day 100mile), Rocklin, Calif., held March 10-John Hill, 604 Flint Way, Sacramento, Calif.

2:54:08* Gary Fredrickson

2:56:13 "Ivan Boggis (Cal)

2:57:12 Tom Gardner

2:58:48* Sam Giordano

Harry Berkowitz (32, NY)

Barry Buob (Cal)

Jerry Williams (Pa)

Robert Remaley

Ernie Rivas (NY)

Ambrose Salmini

Tony Garcia (Cal)

Fred Kenvon (Cal)

Frank Handelman (NY)

Gene Robinson (Cal)

David Stevenson (Pa)

Fran Conley (32, Cal)

Paul Reese (55, Cal)

John Long (Mass)

Wendall Seablom (Cal)

Frank Wick (Pa)

Ben Ewers (DC)

2:59:02 Bert Pschunder (jr, NJ)

Mike Hadway

Bill Peck (Cal)

Guy Artherholt (Cal)

2:54:33

2:55:00

2:55:01

2:56:09

2:56:19

2:56:49

2:57:00

2:57:08*

2:57:37*

2:58:09

2:58:34

2:58:44

2:59:17

2:59:24

2:59:47

2:59:48

2:59:58

2:59:59

WOMEN

3:20:29

2:58:30

1972 MARATHON **ADDITIONS**

Finally, the last of the major marathon results from 1972 arrived. Since we promised all sub-three-hour runners a listing, and the Marathon Handbook was published months ago, here are the additional runners. They ran at the Seattle, Philadelphia, Odessa (Tex.) and Pacific AAU (Petaluma, Calif.) races. Ages and states are noted when known; *=uncertified course.

SUB-2:30

2:27:29 Rick Bayko (25, Mass) 2:27:38* Denny Meyer (Wash)

2:30 - 2:39

2:32:34* Ken Voss (Wash) 2:32:43 Mike Buzbee (Cal)

2:33:29* Bryan Geisler

2:34:35 John Sheehan (19, Cal) 2:36:20 Pat Bastick (NY)

2:36:21 Pat Buzbee (Cal)

2:36:22* Earl Ellis (Wash)

2:36:41 John Butterfield (35, Cal) 2:37:16* Howard Miller (46, Wash)

2:37:39* Mike Pinocci (18, Tex)

2:38:35* Al Herbert 2:39:36 John Hargraves (Pa)

2:39:54* Evan Shull (29, Wash)

2:40-2:49

2:40:15* Jim Speer (22, Wash)

2:40:41* Roy Prior (Wash)

2:40:42 Bill Posedel (Cal) 2:41:23 Rick Warren (MD)

2:41:57* Dick Arkley (Wash)

2:43:34 Neil Weygandt (26, Pa)

2:44:01 Nick Vogt (Cal)

2:44:17 Clark Rosen (Cal) 2:44:34*

Dana Blankenship (Wash) 2:44:46 John Delsorado (17, Pa)

2:45:01 Dave Anderson (Pa)

2:45:48 Jim Bowles (23, Cal)

2:45:56 Jim Isenberg (NJ)

2:45:57* Willis Bell

2:46:16* John Hardtla (Wash)

2:46:39 George Bateman (Pa)

2:47:17 Doug McCreary (Pa)

2:47:36* Howard Reed

Dave Stevenson (44, Cal) 2:47:37

2:48:11 Ted Corbitt (52, NY)

2:48:25* Mike Albert (19, Tex)

2:48:29 Dan Grace (35, Conn)

2:48:08 Jeff Greve (NJ) 2:49:25 Bill King (43, Pa)

2:49:33 Joe Wood (Cal)

2:49:44 Park Barner (Pa)

2:50-2:59

2:50:02 Andrew Zucaro (15, NJ)

2:50:09 Jeff Freed (Pa)

2:50:11 Al Wick (Pa)

2:50:16* Wayne Brewer 2:50:27*

Guy Levey (19, Tex) 2:50:32 Bob Mickalites (Pa)

2:50:37* Tim Murry

2:50:47 Dave Faherty (NJ)

2:51:06 Doug Gates (Cal)

2:51:06 Les Kinion (Md)

2:51:07* Sam Clarke (40+, Wash)

2:51:19 Ed Dodd (Pa)

2:51:50 Walter Propert (NJ)

2:52:12 Ernie Jeong (Cal)

2:52:16* Mike Christensen

2:52:32 Jeff Halterman (Pa)

2:52:43 Ed Jerome (Va)

Randy Buob (ir. Cal)

2:52:44 2:52:49

Donato Balsamo (NY) 2:53:00* Rich Tucker

2:53:37

2:53:43 Tom Mann (Cal)

2:53:52 John Geer (Cal)

2:53:55* Jay Johnson

2:53:59* Gorden Hebron

2:54:00* Joe Vance (Wash)

Gary Chilton (Cal)

3:26:43 Elaine Pedersen (35, Cal)

3:33:51 Irene Rudolph (Cal)

4:43:48* Nancy Adams (26, Tex)

CANADA

2:25:55* Wolf Schamberger (BC)

SPECIAL ANNOUNCEMENT

The 1st Annual Del Webb's Sahara Tahoe Marathon scheduled for Stateline, Nevada on July 15, 1973 has been CAN-CELLED.

We thank you for advance interest shown and we hope this event might take place at some other time.

5TH ANNUAL

FREEDOM MARATHON

Champaign, Illinois • Sunday, July 1, 6:00 a.m.

Beautiful course through tree-shaded, trafficfree Allerton Park, a magnificent country estate.

Low-cost pre-race dinner, breakfast and lodging available in Allerton House for runners and their families

Trophies to first 30; also in womens', veterans' divisions.

Contact: Steve Goldberg, College of Law, University of III., Champaign, III. 61820.

May, 1973

Don't miss another big year of our "Booklet of the Month" series.

Third Year Booklets

Think of it—over 800 pages of superb running reading for just a dollar a month (or even less if you subscribe for two or more years to the series).

The third year's booklets are planned and are being written. This is the lineup for 1973-74:

- 25. SHOES FOR RUNNERS—July 1973. A complete revision of the "All About Distance Running Shoes" booklet. The new booklet features ALL types of running shoes, and objective commentary on them from the wearers themselves. Also detailed information on foot care. 84 pages. Single copy price \$1.95. (Available July 1, 1973)
- 26. GUIDE TO SPRINTING—August 1973. Centering on the races of a quarter-mile and less, and on the racers who go all-out all the way. Practical advice on training, technique, starting, etc. 36 pages. \$1.25. (Available Aug. 1, 1973)
- 27. THE RUNNING BODY—September 1973. The physiology of running, Precise yet non-technical explanations on how the body in action works, and how to make it work more efficiently and effectively. 52 pages. \$1.50. (Available Sept. 1, 1973)
- 28. FINNISH RUNNING SECRETS—October 1973. The first full examination of the men and the methods that brought the Finns back into world leadership in distance running. Featuring Lasse Viren and Pekka Vasala. 68 pages. \$1.95. (Available Oct. 1, 1973)
- 29. EXERCISES FOR RUNNERS—November 1973. Strength and flexibility can't be ignored, even by runners concerned primarily with speed and stami-

- na. This booklet spells out how to increase power with strength work and reduce injuries with stretching. 84 pages. \$1.95. (Available Nov. 1, 1973)
- **30.** BIOGRAPHY—December 1973. An in-depth interview and personality story with a leading figure in the sport. 52 pages. \$1.50. (Available Dec. 1, 1973)
- 31. 1974 MARATHON HANDBOOK—January 1974. Must reading for every road racer. This fifth volume includes not only current marathon lists and schedules, but many valuable and timeless technical and personality articles. 116 pages. \$1.95. (Available Jan. 15, 1974)
- 32. RUNNER'S WORLD PICTORIAL—February 1974. Showing the artistic side of the sport with the top running photos from 1973. 52 large 8½ x 11 pages. \$2.00. (Available Feb. 1, 1974)
- 33. 1974 RUNNER'S ALMANAC—March 1974. The all-new source for answers to every running question. Sections on rules, records, club, colleges, distances, doctors, publications, people. 100 pages. \$1.95. (Available March 1, 1974)
- **34.** THE FEMALE RUNNER—April 1974. Looking at the special needs and problems of women runners, from sprinters through ultra-marathoners. 36 pages. \$1.25. (Available April 1, 1974)
- 35. RUNNING WITH THE ELEMENTS—May 1974. Heat, cold, wind, rain, snow, altitude, air pollution, traffic, dogs. Runners deal with all these elements which are beyond their control. This booklet tells how to adapt. 100 pages. \$2.75. (Available May 1, 1974)
- **36.** CLUB RUNNING—June 1974. The club's role. How to organize clubs and keep them going. Strengthening the US club program. 36 pages. \$1.25. (Available June 1, 1974)

The First 24

All booklets can be ordered individually. But by subscribing to the series you save at least \$9.00 on the series (more on a two-year sub).

All back issues are still available, and can be included with your subscription if you specify.

- 1. All About Distance Running Shoes-52 pp., \$1.00.
- 2. The Varied World of Cross-Country-52pp., \$1.25.
- 3. Coaching Distance Runners-52pp., \$1.25.
- 4. New Views of Speed Training-52pp., \$1.25.
- 5. Running After Forty-40pp., \$1.00.
- 6. Gerry Lindgren Story-36pp., \$1.00.
- 7. 1972 Marathon Handbook 100pp., \$1.95.
- 8. Runner's World Pictorial-52pp., \$1.50.
- 9. 1972 Runner's Almanac-148pp., \$2.50.

- 10. The Boston Marathon-52pp., \$1.00.
- 11. Practical Running Psychology-52pp., \$1.50;
- 12. Encyclopedia of Athletic Medicine-84pp., \$1.95.
- 13. Racing Techniques-52pp., \$1.50.
- 14. The Runner's Diet-84pp., \$1.95.
- 15. Beginning Running-36pp., \$1.00.
- 16. Interval Training-84pp., \$1.95.
- 17. 1972 Olympic Games-116pp., \$1.95.
- 18. Frank Shorter Story-52pp., \$1.00.
- 19. 1973 Marathon Handbook-100pp., \$1.95.
- 20. Runner's World Pictorial-52pp., \$1.75.
- 21. 1973 Runner's World Almanac-116pp., \$2.50
- 22. Race Promotion-36pp., \$1.00.
- 23. Runner's Training Guide-100pp., \$2.50.
- 24. The Young Runner-36pp., \$1.00.



And it still isn't too late to buy all our booklets plus the third year for only \$30.00. When subscribing, just mention that you want your subscription to start with B.O.M. no.1.

Booklet of the Month Order Form

Booklet Of The Month, Post Office Box 366, Mountain View, California 94040

SUBSCRIBE TODAY!

I am interested in subscribing to Booklet of the Month. Start my subscription with booklet number . (Please Note: All booklets are still available. And when subscribing you must take the booklets in order. You can NOT just select 12 booklets at random.) One Year \$12.00 (12 booklets)

Two Years \$20.00

Three Years \$30.00

Please let us know what booklet you want your subscription to begin with. Otherwise, we'll start it with the current issue.

I am NOT interested in subscribing but I do want to purchase the bookets I have checked at right. I have enclosed full payment inthe amount of

—Booklet number and cost—

	DOOKICE Harriber and cost	
1 - \$1.50	13 - \$1.50	25 — \$1.95
2 - \$1.25		26 - \$1.25
3 - \$1.25		27 — \$1.50
4 - \$1.25	16 — \$1.95	28 — \$1.95
5 - \$1.00	17 — \$1.95	29 — \$1.95
6 - \$1.00	18 - \$1.00	30 — \$1.50
7 - \$1.95	19 — \$1.95	31 — \$1.95
8 - \$1.50	20 — \$1.75	32 - \$2.00
9 - \$2.50	21 - \$2.50	33 — \$1.95
10 - \$1.00	022 - \$1.00	34 - \$1.25
11 - \$1.50	023 - \$2.50	35 — \$2.75
12 - \$1.9	5 24 - \$1.00	36 — \$1.25

Name Address

City/State/Zip



Still the best and funniest book ever written on long distance running. If you liked Higdon's recent articles on "Pointing" and "Peaking," you'll love his book. Even if you hate Higdon, you'll like "On The Run From Dogs And People."

Order an autographed copy by sending \$5.95 to:

Hal Higdon 2815 Lake Shore Drive Michigan City, Indiana 46360





"BOSTON" Marathon 2232

Now available in the U.S.A. for '73, the "BOSTON" Marathon weighs only 18 oz./pair. It has a flat rubber spiked sole with a wedge heel. It was worn by several medal winners at Munich as well as by the winner of the '72 Boston Marathon.

Karhu also has the "Trampas" for jogging or comfortable leisure wear, (Write for brochure #2400) and, for the serious runner, we have a full line of training shoes, (Write for brochure #2300).

THE SPORTGROUP INC



HARREL STREET

MORRISVILLE, VT. 05661

ORDERING INFORMATION

- Remittance required with all individual orders. Purchase orders required with all institutional
- Add \$1.00 delivery charge on orders of less than 10 pair.
- Please include street shoe size.

THE SPORTGROUP, INC. or more pairs. Quantity discounts available on orders of 10

-- A Real Money-Saving Boon-For Runners, Joggers, Walkers!



Just Spread It On Like Butter

Runners - here's your money-saving dream come true. Instead of throwing away old, worn shoes, or having expensive repair bills, use SOLE SAVER on soles and heels. It's so simple. SOLE SAVER is a black, paste-like material that spreads on like butter and is water, fire and skid resistant. It prolongs life of new shoes as well as rebuilds soles and heels of old shoes. Try it. You will be amazed at how it can save money for you, too. ½ Pint can \$2.25, Pint — \$3.95, Quart — \$5.95, Gallon — \$16.90 Order today, you'll be glad you did.

SOLE-SAVER also re-coats bicycle tires. Worn tires last up to 6 times longer than new tires. More can be added anytime. Makes for extreme close turning radius without sliding.

> Add 55c for postage & handling.

Carpet Products Co.,	Dept. RW-14
P.O.Box"5", Central 5	quare, New York 1303
Enclosed is \$	_ for which please send
me SOLE SAVER as c	hecked below:

☐-1/2 Pint Can -Pint Can

-Quart Can Gallon Can

BIKE WORLD

"My day always brightens when I receive my copy of Bike World. I like the 'no nonsense' approach-tightly written articles by people who know what's happening." - H. Allen, Boulder, Colo.

Bike World covers bicycling from the Tour de France to the cyclist's insides. Whether you tool around the block to the corner store or ride 300 miles a week, you'll find Bike World expertly written and just good reading.

At just \$3.00 per year, why not subscribe and get the latest in:

- Touring
- Highlights & Coming Events
- Racing
- Training, new ideas, etc.
- Technical Topics

BIKE WORLD, Box 366, Mountain View, Ca. 94040
\$3.00 per year (6 issues)\$5.00 two years
Name
Address
City/State/Zip

Please include payment with order, please.

READERS' COMMENTS

STRESS TESTS

The death of a 46-year-old man who recently collapsed at the finish of a six-mile Fun-Run ("Let This Be a Warning," April 73) emphasizes the need to re-examine the question of the medical safety of jogging or "fun-running" for the preservation of cardiovascular health.

An exercise stress test can be performed in those people whom a physician considers to have either obvious or latent problems involving the heart. A stress test carefully monitors the electrical activity of the heart during a period of near-maximal exercise. Characteristic change in this electrical activity can indicate involvement of the heart from a relative lack of blood perfusing the heart muscle. The blood supply comes of the heart comes from the coronary arteries, and narrowing or complete occlusion of these vessels will cause a decrease in blood supply to the heart muscle.

Although a stress test is a sensitive index of involvement of the coronary arteries, there is a small percentage of people in whom it fails to show any abnormality, and yet there is underlying disease in the heart—a so-called "false-negative" stress test.

Fortunately, these "false-negative" tests are rare, and the stress test generally identifies those individuals who should not jog, or who should exercise only in a rehabilitation program under direct surveillance.

If a positive stress test is present, further investigation may be indicated, and the cardiologist would then decide on the relative merits of the particular problem and what else should be done for diagnosis and treatment.

In our opinion the potential benefits of a leisure-time exercise greatly outweigh the small possible risks involved, provided medical evaluation is obtained before entering the program, and abnormal conditions are treated.

D. John Coltart M.D. & Donald C. Harrison M.D. Stanford, Calif.

AMATEURS AND PROS

I was offended by Walter Boehm's article and revolted by George Sheehan's in the March issue (U.S. Track Goes Pro).

On the grounds that running is an art, says Boehm, runners are artists and ought therefore to be paid large sums. Boehm's insensitivity to art leads to this historical inaccuracy: "Of critical importance in art forms...has been the question, 'Will it sell?' " Indeed running is an art form, though Mr. Boehm's defense is feeble. Traditionally, art has not been produced to supply a mass market; rather, great art happened because individuals have felt a compelling psychic need to create. Scarcity, not superfluity, has more often characterized the life of the artist. Only in modern times has the businessman encouraged the artist to pursue the purse rather than the garland.

On to Mr. Sheehan's pompous condescension. There is, he says, "no place in life for the amateur...missing is (his) element of caring...(one must) put up with his incompetence." Incompetence! Such nonsense is inexcusable. Amateurism is not a fraudulent thing. There are in this nation thousands of amateur athletes who will remain so regardless of the present controversy. They are dedicated and selfsacrificing participants who will disregard (Sheehan's) phony and perplexingly categorical condemnation. Yet Sheehan praises the vulgar "pro," the distincly modern man-child and sometime prostitute who does it all for money.

The inevitable disintegration of amateurism represents an important loss in sports. The consequence is the similarly inevitable vulgarization of sport.

Paul D. Adams
West Redding, Conn.

TECHNIQUE

Running is in large part an emotional, personal and individual experience. I enjoy (RW) articles on the esthetics and psychology of running more than the technical ones.

Another side of the issue is this. In a sense, RW is not capable of presenting technical subjects well. I mean this as no slight to you, but articles are not long enough, and seem to be directed to a layman's level, and are rarely referenced. I often get the feeling that I get to taste the food but not swallow it.

A case in point was Gabe Mirkin's article ("Too Many Carbohydrates?"

NEXT ISSUE: New nutritional findings related to running are being uncovered all the time. A great deal of significant research has taken place since RW published "The Runner's Diet" last year. The June issue cover story will summarize this.

March 73) where he concludes, "Excess calories can clog the arteries of the heart." What, praytell, does he mean by clog? If he means obstruct, does he mean the calories lead to high triglycerides, resulting in atherosclerosis or what?

I think the space would be better filled by subjective material.

Dick Meyer Eureka, Calif.

JINXED

After writing the article "Beating Man's Best Friend" (July 71) in which I described how to control attacking dogs, I was overcome by a pack of three canines on my favorite course. The attack continued daily, and I was finally forced to abandon the course.

Next my article, "Avoiding All Injuries" (Encyclopedia of Athletic Medicine), described how I remained injury-free for eight years. A few months later I suffered a serious injury of my left heel. I have not been able to race on it seriously for almost a year.

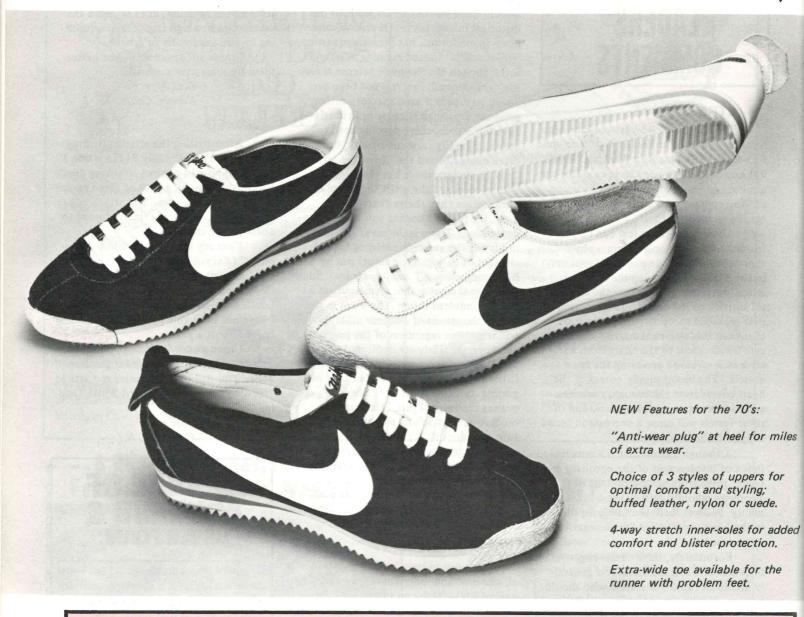
I have avoided mailing you my manuscript, "Marital Harmony for the Runner." You will shortly receive my article, "How to Avoid Being Raped While Training."

Tom Osler Glassboro, N.J.

CHANGE OF ADDRESS & ORDER FORM

If you're moving, please let us know						
three weeks before changing your ad-						
dress. And please mention all the pub-						
lications of ours you subscribe to.						
(Check one) Please change my address. Please enter my subscription to the following publications:						
Runner's World (\$7.00/year)						
Booklet of Month (\$12.00/year)						
Bike World (\$3.00/year)						
You must include OLD address, too!!						
NAME						
ADDRESS						
CITY						
STATÉ ZIP						
RW, Box 366, Mountain View, Ca. 94040						

NIKE CORTEZ-a dream becomes reality



THE CORTEZ STORY:

Originally designed in the mid-sixties by Bill Bowerman, the 1972 U.S. Olympic Coach, the "Cortez" was conceived as the supreme training shoe for the long distance runner. The Cortez combined a thick long-wearing outer sole with a full-length sponge mid-sole cushion to absorb road shock and reduce leg fatigue, simultaneously elevating the heel to reduce Achilles tendon strain. The Cortez was a new concept in distance training shoes. With the experience of the 60's as a base, Bill Bowerman and NIKE have evolved the Cortez into a line to meet the varying needs of all runners.



Available from:

The Athletic Dept.

1207 Jericho Turnpike New Hyde Park, L.I. New York 11040 (516) 488-1577 4733 S.E. Hawthorne Blvd. Portland, Oregon 97215 (503) 234-0342

855 Olive Street Eugene, Oregon 97401 (503) 343-5010

2114 Addison Street Berkeley, California 94704 (415) 843-7767 363 Bloomfield Avenue Montclair, New Jersey 07042 (201) 744-5406

26 Summer Street Natick, Massachusetts 01760 (617) 655-6078

10113 Washington Blvd. Culver City, California 90230 (213) 836-4848 1246 East 4th St. Long Beach, Ca. 90802 (213) 432-3536

13101 "A" Harbor Blvd. Garden Grove, Ca. 92704 (714) 636-3291

3522 North Rosemead Blvd. Rosemead, Ca. 91770 (213) 573-5880

NOW THE NEWEST FROM NIKE

US DEBUT

This month, The Running Shop presents the first national offering of the newest shoe from NIKE, the Kenya Red. Destined to be one of our biggest sellers, the Kenya is an exceptionally well-built and versatile model. To paraphrase an old cliche, "You can please some of the people all of the time, or you can please all of the people some of the time, but you can't please all of the people all of the time." This is undoubtedly the case, but we're certain the Kenya Red will please more people more of the time than anything we've ever offered.

ON THE ROAD

For support and protection against dangerous stress injuries (shin splints, tendinitis, etc.), the **Kenya** has few peers. Beneath the stretch neoprene innersole there are two layers of deep foam cushioning that will keep you safe from pounding or bruising on even the hardest surfaces. A special tendon cup has been built into the shoe to secure and cushion this vital area from injury. If you plan on increasing your mileage with the arrival of better weather, the **Kenya** will serve you well.

ON THE TRACK

In spite of the great support this model offers, it is an amazingly light shoe. The upper is made of reinforced nylon with a smooth inner-lining to prevent chafing and blisters. This sole is made of a light and flexible compound that will give many miles of great traction and wear. The **Kenya** is the perfect shoe for road racing, fast training, or even track workouts!

A GREAT BARGAIN

In addition to all of the above, this model is available in red or blue nylon and is completely washable so your feet and the shoes stay clean and germ-free. The price: only \$14.95! And that's a great buy when you consider some of the astronomical leaps our competitors' prices have taken lately. So don't delay, purchase the finest of the new shoes on the market now, only from The Running Shop.

THE RUNN	ING SHOP, BOX 506, L	ARKSPUR, CA	ALIF. 94939
Item	Quantity	Size	Price
Kenya (Red	or Blue)		\$14.95
NAME			Shipping
ADDRESS			Sales Tax
			Enclosed
CITY	STATE	ZIP	 Add \$1 for shipping.
Money back	k guarantee. If not satisf	fied return for I	refund. 2. Calif.: Add 5% tax. 3. Include check/order.
	E 1000		
th	e runr	nnn	chan
		11114	SHOP



Write to one of the following distributors near you for the TIGER stores in your area.

Curley-Bates Co.

860 Stanton Rd. Burlingame, Calif. 94010 Phone: (415) 697-6420

Washington, Oregon, California, Montana, Idaho, Nevada, Wyoming, Utah, Colorado, Arizona, New Mexico, Alaska,

Hawaii & El Paso.

Davis, Inc., George A. 7205 Hibbs Lane

Levittown, Pa. 19057 Phone: (215) 943-3300

Pennsylvania, New York, New Jersey, Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Maryland, Delaware, Rhode Island, Washington D.C., Arlington & Alexandria

Olympic Sports

2607 National Circle Garland, Texas 75041 Phone: (214) 271-2628

Kansas, Oklahoma, Texas, Arkansas & Louisiana

Demco (Dana E. Morrison, Jr. Co.)

5121 N. Ravenswood Ave., Chicago, Ill. 60640 Phone: (312) 561-0861

Ohio, Indiana, Illinois, Missouri, Wisconsin, Iowa, North & South Dakota & Nebraska Minn, & Michigan

Buckley & Co., Pete.

440 Armour Place N.E. Box 13875, Atlanta, Ga. 30324 Phone: (404) 873-4828

Florida, Alabama, Georgia, Tennessee, Kentucky, Virginia, North and South Carolina & Mississippi & West Virginia

Universal Resilite

43 Polk Avenue Hempstead, N.Y. 11550 Phone: (516) 483-3700

Covering all States, Wrestling shoes only.



