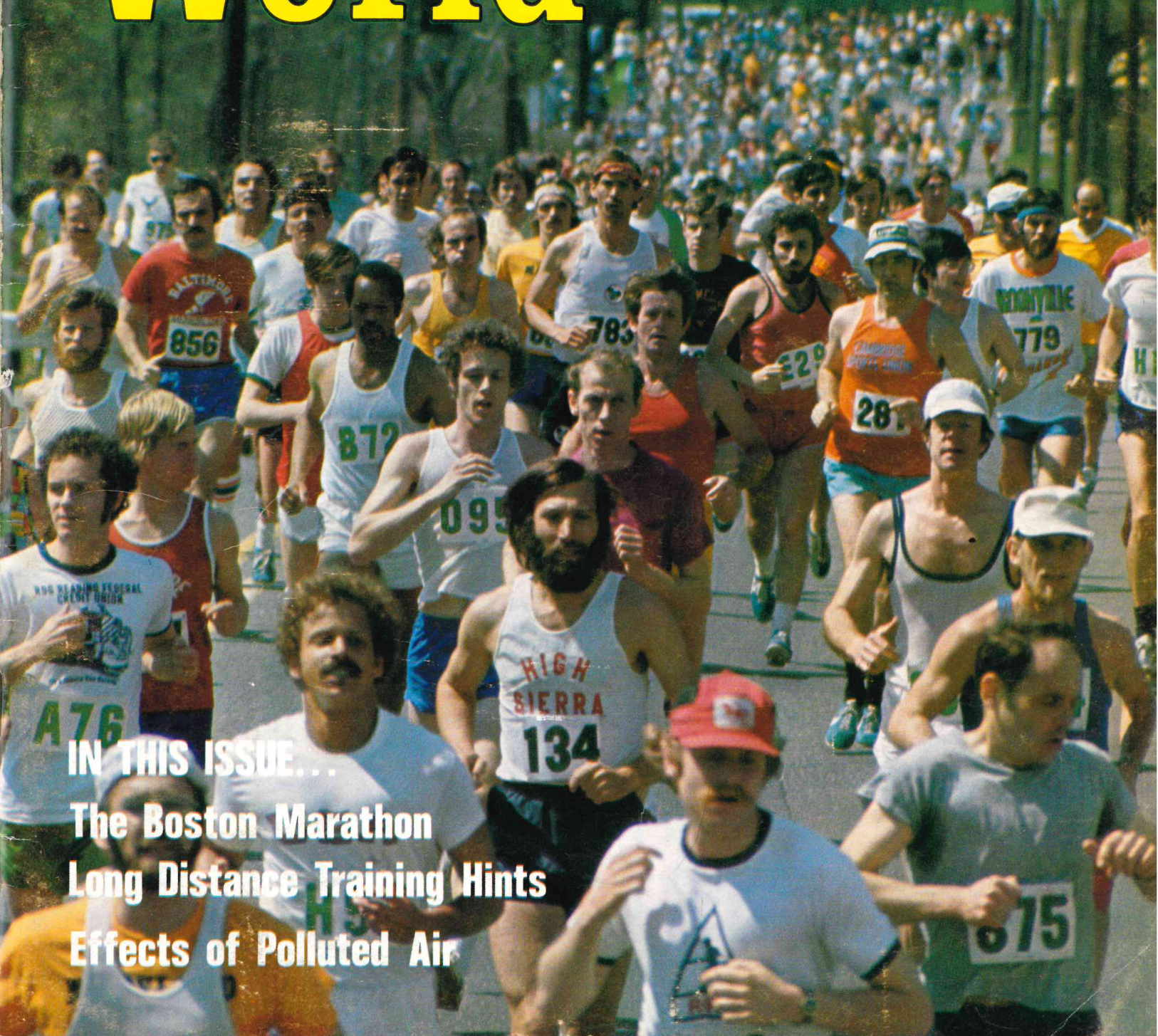


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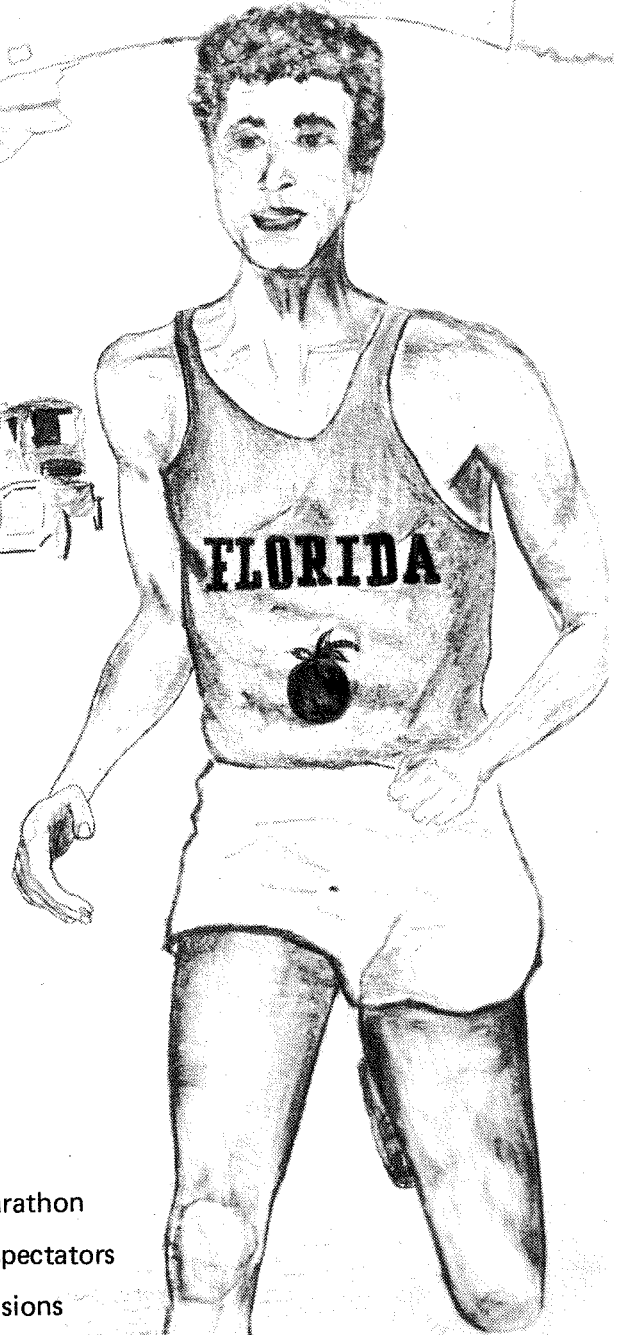
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Volume Nine — June, 1974 —

Six



COVER:

The record Boston marathon field of 1705 stretches back toward the horizon. It wasn't just the biggest race ever—it was the fastest en masse. (Jeff Johnson photo)

EDITORIAL STAFF

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Editorial Assistant: Hugh Bowen

Medical Editor: George Sheehan

Staff Photographers: Stan Pantovic & George Beinhorn

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Office Manager: Lyman Dickson

Shipping Clerk: Terry Dickson

CONTRIBUTING EDITORS

Marc Bloom

Hal Higdon

Jim Ferstle

Hugh Sweeney

Janet Heinonen

Garrett Tomczak

SPECIAL CONTRIBUTORS

Alastair Aitken (Eng.) Gabe Mirkin M.D.

Orville Atkins Brian Mitchell (England)

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Ted Corbitt Richard Raymond

Jack Daniels Wilf Richards (England)

Jeff Darman Rick Riley

Elliott Denman John Romero

Tom Derderian Martin Rudow

E.C. Frederick M. Steffny (W. Ger.)

Sid Gendin Tom Sturak

Roger Gynn (England) David Theall

Matti Hannus (Finland) J. Ulliyot M.D.

J. McFadden (France) Patricia Warren

Ken Young

CONTRIBUTING PHOTOGRAPHERS

M.J. Baum

Rick Levy

Tony Duffy (England)

Jay McNally

Bill Herriot (Canada)

Doug Schwab

Jeff Johnson

Steve Sutton

E.D. Lacey

Paul Sutton

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CONTENTS

- 10 **INTERVIEW: ROD MILBURN** —The fastest man in the world in the high hurdles.
- 14 **BIGGEST AND BEST BOSTON** — Cusack, Fleming, Gorman, and many, many more.
- 21 **MAKING OF A 2:20 MARATHONER** — The right combination of talent and training.

- | | | | |
|----|------------------------------|----|--------------------------------|
| 5 | Editorial: Boston Size | 32 | New Zealand's Latest Sensation |
| 6 | News and Views | 34 | Alan Pascoe's Rise and Fall |
| 23 | Are Long Runs Needed? | 41 | Runner's Guide to Baltimore |
| 24 | Hitch Yourself to a Star | 42 | Medical Advice |
| 26 | The Dirty Air We Breathe | 43 | July Coming Events |
| 28 | Views of a Track "Walk-On" | 44 | Racing Highlights |
| 30 | America's Young Race Walkers | 47 | Readers' Comments |

FROM THE PUBLISHER

Many people have told me that they are not interested in racing because they just run for physical fitness and don't like competition. I can certainly appreciate their viewpoint.

However, I really think a lot of people may be missing a very important part of running if they never even try a race. Actually, I am talking more about the "fun-run" type of race other than an AAU type but only because the former is less of a hassle to participate in.

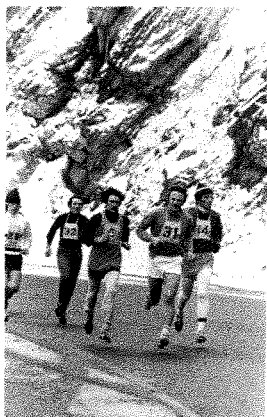
To me, if you do nothing but train it would be like writing a book and then never looking for a publisher. You may not find a publisher, but unless you try, the manuscript just sits at home. You probably won't enjoy the actual writing any more, but the fact of sharing your thoughts with others certainly must be a turn-on.

It is a climax that may inspire you to try again. It takes time to write a book as it takes time to get into good physical shape. And why shouldn't you seek out a climax? A reason to keep running every day. A reason to improve. A reason to tell your wife why you are doing it. A reason to share your hours of training with others. A reason to have fun.

Now, some people say they don't need to race to enjoy running. All types of competition turns them off. And then when they try a race, they already know in advance they aren't going to enjoy it. My gosh, you don't even enjoy sex as much the first time around as you do later. And so much of the enjoyment is because you want to enjoy it.

I know that people who are competitors of life will enjoy racing. You might only race once or twice a year, but you'll enjoy it. It will be that climax you need. It will give you a reason to keep training for years and maybe forever.

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The school system is fine for the runners who can use it. But what about the growing number who are shut out—the age-groupers, most females, fun- and fitness-runners, road racers? Where do they go?

They go to clubs—if any are available. The sad fact is, in many if not most parts of the country there are none. And runners are left on their own. They are loners by nature, but only to a point. They sometimes need support—coaching, competition, communication, cash—which only an organized group can give.

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CUTTING BOSTON DOWN TO SIZE

The time limit at this Boston was the tightest ever: a marathon under 3½ hours in the past year. Yet the field was more than 300 larger than ever before. It totaled 1705.

Boston Athletic Association officials have made it clear they want the field cut back to manageable size. Something under 1000 would be a good figure, says Jock Semple, the club's first line of defense against the flood of calls and letters that continues all year and results in a crush of people on race day.

The Boston hasn't had fewer than 1000 starters since 1967. It won't have that few again unless the time limit is tightened even more. And it's likely to be tightened next year, dropping to as low as three hours.

This has to happen. The race is too big now. A Boston open to everyone was once a fine, democratic idea. But now it would be chaos. The race is verging on that as is.

A three-hour qualifying time is inevitable. But it hardly would make the BAA marathon an exclusive club. Some 2000 US runners broke three hours last year, plus hundreds of Canadians and almost anyone from overseas who would want to fly in. Those numbers will be higher this year and next.

The three-hour standard would do what officials want. It would more than cut the field in half—the official field—anyway. Some 600 runners got under three at Boston this year—a most impressive total, to be sure, but well within acceptable limits.

But isn't this a bit of a cold-blooded way to cut it? A hard and fast sub-three standard would be okay for men in their 20s and 30s. But it would eliminate many men in their 40s, and almost all of the 50s, 60s and women of all ages. This isn't right.

So while we accept three hours as necessary, we ask that the BAA people give some thought to the differences in ability that go with sex and age. Notice, for instance, that the American best for women is 28% slower than for men, that the over-40 mark is 14% slower than Frank Shorter's US record, that the over-

50 best is 21% slower and the over-60 best is 33% slower.

Based on these differences which aren't likely to change much, we recommend that Boston officials consider a series of standards:

Under 40 (men)	3:00
Ages 40-49 (men)	3:30
Ages 50-59 (men)	3:45
Ages 60-up (men)	4:00
Women (all ages)	4:00

The standards, once set, should be strictly and uniformly enforced. In other words, no exceptions.

Jack Leydig, who'd done 2:25 at Boston two years ago and had competed in the Olympic Trials, mailed his entry blank in March. It was returned with the comment that he wasn't qualified. Leydig hadn't run a marathon since last April. Fine, this was the rule and Jack didn't meet the requirement.

On the other hand, the winner of the race had not run a marathon since his first one in 1971. Nothing apparently was said about Neil Cusack not being qualified to run. We aren't taking anything away from Neil's magnificent victory, but are only pointing out that a double standard was working there.

It was working, too, in the case of Dan Moynihan, who ran 2:19 here but had never raced a marathon before.

Lili Ledbetter, 12-years-old, ran 3:08 last fall. She did it to qualify for Boston, she said. Then she learned that she couldn't go. She was far too young to meet the 19-year age requirement.

Lori Watkins was too young as well. She's 15. But on her entry blank she simply listed her age as 19 and had no problems getting in.

The entire "Hunky Bunch" was either too young (the six children) or too slow (the parents) to run officially. But the H. H. Chun family of eight was allowed to run as part of the special American Medical Joggers Association section.

Ledbetter had bettered the qualifying time by almost a half-hour. Watkins had met the requirement, too, and ran even faster at Boston. Five of the six Chun children broke 3½ hours here (14-year-old June would have placed

seventh among the women with 3:08).

The point here is that if time limits are on the race, age limits are unnecessary. If youngsters are fast enough to qualify, they're fit enough to race at Boston and should have that chance.

After setting up an equitable set of standards and enforcing them vigorously but fairly, BAA officials should immediately do away with the minimum age barrier. The entrant would be hard enough to screen without this additional worry.

Curiously, the stricter the Boston is about who it lets in, the more headaches Will Cloney, Jock Semple and their assistants will have. They'll have to deal with a growing number of liars, cheats and gate-crashers.

One way to keep unqualified runners from entering would be to insist that they send along the official results of the race in which their qualifying time was made. No results, no number. No exceptions.

There's no way to keep unqualified runners off the course on Patriots' Day. All officials can do is plead with the interlopers not to cross the finish line and screw up everyone else's results. One possible solution would be an alternate finish line where unnumbered runners could funnel (with some help from a well-muscled traffic director, perhaps) to get an approximate time from a running watch.

One woman runner, Valerie Rogo-sheske, complained to another at the 1973 Boston marathon about the tightening entrance requirements. The other woman shrugged and said, "It's their race. They can do what they want."

That's true, but only partly so. The Boston is *the* marathon in the United States. It is the men's and women's national championship, no matter what any other race might call itself. It belongs to the country's runners as much as to the Boston Athletic Association.

Entrants owe it to the BAA to abide by the rules. But the BAA also must remain open to suggestions from runners interested in maintaining the special character and dignity of this race. Otherwise, it will be overrun by its own popularity.

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NEWS AND VIEWS

Packing It In

Have you been reluctant to take a backpacking vacation prior to an important competition? If your trip is planned for a high altitude area or will involve rather heavy exertion, fear not of losing your condition. Go, and have a great time!

Following the AAU Masters championships two years ago, I had 45 days until departure on the US Masters tour to Europe. I decided to throw caution to the winds and take a break from serious training with a 10-day backpack trip into California's High Sierra. For several years, I had been reluctant to do this on the premise "I would lose too much of my hard-earned condition." It was time to conduct an experiment to determine whether or not this fear was groundless.

The day before the trip, my training schedule called for a two-mile time trial. I decided to really run it hard, then to run another hard two-mile trial the day after my return. By running them both at full effort, I felt I could accurately analyze just what took place on those 10 days of hiking, fishing and running at elevations ranging from 8000 to 12,095 feet.

The first time trial went well. I clocked 11:09 for the two miles on my accurately measured sidewalk loop. We spent the next two days hiking and fishing in the mountains. I did no running.

This third day's walk was all downhill and rather easy. After selecting our campsite, I changed to my running shorts and Tiger Marathons, and proceeded to run back up the trail for a couple of miles. I felt I was getting work akin to LSD in the hiking under load, so it appeared I needed speed work. This did create a problem as speed work on rough, twisting, steep and rocky mountain trails was difficult and not very fast. However, a reasonably hard effort brought on a maximum pulse rate. A form of geared-down fartlek was in order, with anything resembling speed reserved for infrequent relatively straight stretches of trail.

Running the streets has earned me

many a remark: "You're insane!" "Let's beat him up!" "Hup, two, three, four!" "Hustle! Hustle!" "You're gonna kill yourself." Apple cores fly by me, cars swerve toward me. But running at high altitude made it all worthwhile, for there I was able to accomplish things not possible for even a well-conditioned backpacker. Running past a backpacker straining up a hill with his pulse racing and legs rubbery, absorbing his incredulous look as you consciously quiet your breathing and bid him a nonchalant "Hi!" does wonders for your disposition. Back in the city you think of that look and treasure it and it makes the miles much easier.

Days four through nine were spent traveling the John Muir Trail and exploring side basins with their many lakes. I had two more sessions of fartlek. The last day, we cleared a 11,400-foot pass and walked down the steep trail to the Owens Valley floor and our second car. That week, I had run approximately nine miles.

Early the next morning, I ran two miles of 220 fast/110 jog, then seven miles on the country roads. At home the following morning, 11 days after the first time trial, I pushed through another two-mile solo effort on the same course and clocked 11:07, two seconds faster than the pre-backpack trial!

I realize that this is not exactly irrefutable scientific proof. But as a result of this experiment of one I will be able to enjoy the mountains without feeling as though I'm goofing off. You can guess where I'm heading as soon as the snow is down and the pass is open.

From Bill Stock

Bad Dream World

After reading publisher Bob Anderson's tales about constantly having to expand the office size of World Publications, and after reading about the constant expansion to new magazines, I began to realize how grateful we *Runner's World* readers should be that Anderson has promised not to forget us in the midst of this expansion process. In other words, he has promised to stay true to the reader without selling out the present high standards merely to gain more success.

I had a bad dream about the possibilities of publications that might have been, had World Publications been in different hands. There is a saying that the media reflects the wants and needs of the society. And although World Publications reflects a vigorous and physically fit America, it is also true that this is unfortunately just a partial reflection. The American that is reflected by the Madison Avenue people in television, newspapers and magazines would probably yield specialty magazines of quite different sorts. For example:

- Smoker's World*
- Alcohol World (or Drinker's World)*
- Insomnia World (or Sleepless World)*
- Neuritis and Neuralgia World (or Headache World)*
- Halitosis World (or Second-Wind World)*
- Constipation World*
- Diarrhea World (or Runner's World)*
- Body Odor World (or Distance World, as in keep your)*

Psoriasis, Seborrhea and Eczema World (or Heartbreak World)

Or suppose that World Publications sold out to other publishers. We might be horrified to find the following running magazines and their subsequent headlines:

True Runner's Confessions—featuring: a true story—"My Husband Runs Around"; a wife confesses—"LSD Ruined My Marriage"; a husband's secret is at long last revealed—"How I Made Time While Thousands Watched"; an exclusive interview with a very high government official entitled—"How to Drop 18½ Minutes of Time," and a follow-up called—"How to Break the Tape Before the Finish."

Runner's Enquirer—in this issue: "Teenaged Girl Runs Off With Over 300 Men"; and a true to life testimonial entitled—"Life With a Fast Woman."

Runner's Gazette—read these gory running stories: "Husband Beats Wife While Thousands Cheer"; "Speedster Destroys Field"; "Some Say It Was Hit and Run"; "Crowd Engages in Race Riot (the story of the crowd's reactions at a marathon race)."

I imagine that if Hugh Hefner was in charge of World Publications, all of the Road Runner's Clubs would inevitably come under his power, and all RRC members would be required to wear cottontails in any club-sponsored meets. We would have to sign in as Bunny So-and-so, and I presume that this alone would make many of the Bunny's hopping mad. A Bunny would be the RRC symbol and would exemplify rapidity rather than

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the *Playboy* fecundity, and imagine the possibilities for centerfolds. But what runner could possibly benefit from being folded and stapled, and probably even spindled and mutilated?

After this terrible nightmare, I can only say "thanks" to Bob Anderson for promising to stay true to the runners and all of the other athletes his magazines represent. The last thing anyone in this country needs is another "slick" magazine.

From David Corbin

A Boston Affair

It would appear my husband has another woman. At 5:30 a.m., he dresses and creeps out the door. At 7:30, I hear the shower. And as we eat breakfast, I suspiciously note his flushed cheeks and bright eyes. If that were not enough, when I return from work at the end of the day, he has already left for another rendezvous.

Who is this demanding female? What does she have that I don't? She must be an Amazon, for in the evening my husband gets out the heat rub, medicinal ointment, ankle tapes, ace bandage,

Dr. Scholl's moleskin and heating pad. and goes to work on his suffering limbs. Surely he will tire of this she-cat and return to a normal nine to five monogamous routine. But no, the next morning I hear him leave once more for another morning of sado-masochistic pleasure.

Alarmed and perplexed, I devise a solution. We need a trip, a second honeymoon to rekindle the fires of our earlier romance. Boston, my husband suggests. Fine, I respond. Anywhere away from my competition. All goes well for the first three days. We take a beautiful room at the Sheraton overlooking Prudential Center and the Boston skyline. We tour the city, visit Haymarket, dine on lobster at Jimmy's and Anthony's Pier Four.

But early Monday morning, my husband has an urgent appointment. What can be urgent on a vacation 3000 miles from home? Can she have followed him here? He rushes out.

Toward noon, I leave the Sheraton and wander desolately toward the Charles River. I notice crowds forming along Commonwealth Avenue. There must be a parade. I pause, and wait with the crowd.

"Here they come," someone shouts. I strain to see. Police on motorcycles escort one lone man running. Where are the bands? Another man runs by, and

another. It must be a race. All the runners look dazed, exhausted and oblivious of the crowds.

Soon many runners pass. Some fall, some faint, some vomit. They must be mad. "How far have they run?" I ask a woman next to me. "Twenty-six miles. It's a marathon. Oh, here comes Henry. There's Daddy. Wave to Daddy," the woman says picking up her little girl. With bleeding feet, Daddy wearily limps up the last incline. Now there is a woman with a problem, I think, remembering my wayward husband. I guess things could be worse. I could have a runner for a husband.

But who is this heading toward me? I don't believe it. Ohhh, Nooo...

From Mary D. Benarroch

"Opportunist"

Competitive runners tend to look askance at those who do not compete. Some even refuse to acknowledge them as runners. And *RW* adds to the disparagement with emphasis on the fun-runner type. The reader gets a mental picture of an assortment of body shapes smiling and yakking it up like weekend picnickers as they

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prance around the park. No sweat.

But there is another breed of non-competitor who possibly outnumbers both the funsters and the racers. He is a serious devotee and he runs primarily to renew himself. To give him distinction but not a halo, let's label this runner as the "opportunist."

That intense hour or so fitted into an otherwise uneventful day offers the opportunistic runner dramatic pause for a cleansing of his person. During the run, lassitude is conquered, tensions wane, the mind clears, and certain body parts are coordinated and strengthened. The opportunistic runner goes forth, purged, once more.

Fun runners and competitors may argue that they experience the same benefits. They undoubtedly do, but not to the same degree. Their lesser gains result from placing other objectives above that of self-rejuvenation. When the principal purpose is to have fun, train or compete, the runner will not savor quite so delightfully the wonderful workings of the body proper.

Certainly the opportunistic runner also finds many moments of enjoyment on his runs, and occasionally times himself. But those are unimportant reasons for running to him. As a rule, he has his good times in much less strenuous ways than flogging himself along a course. And he looks not to the track but the battlefield of life to satisfy his competitive instinct.

From Jimmy Stoian

Blood-Doping

Dr. Per Olof Astrand, the noted Swedish physiologist, was in the United States not long ago to correct some ideas that are circulating about his so-called "blood-doping" procedure.

Rumors have circulated that Scandinavian Olympic champions followed this practice at Munich. Astrand denies this. "So far," he said, "we have used 15 subjects for our experiments. Some are long distance skiers, but all experiments were made on treadmills. To my knowledge, no athlete has had an infusion of his blood before competition."

The experiments resulted in an immediate 5-23% increase in endurance capacity, Astrand said. He warned, "It's still an experiment, though the results indicate dramatic possibilities. We don't know the limit of aerobic power, and we are quite unwilling to push it to the limit." He conceded, though, that other doctors may not be so hesitant to try it.

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ROD MILBURN

In early 1973, the Los Angeles Rams Football Company chose wide receiver Rodney Milburn in the 13th round of the NFL draft. It was not a ceremonious act; the 13th is not a ceremonious round. But Milburn knew from his football experience at Southern University that, given the chance, he could perform well in the pros.

He traveled to Los Angeles in the spring for a two-day rookie camp, where he learned that his moves and speed were as good as any of his fellow receiver-draftees. So it came as a surprise when he later found that the Rams were interested in paying him not much more than the minimum wage. Rather than entering a contract with Mister Magoo, he returned to high hurdling and completed his third year of total dominance over the event. He was defeated once, equalled his 120-yard world mark of 13.0, and climaxed his season with a world record 13.1 set in Zurich July 6. Meanwhile, in Los Angeles, the Rams were getting ready for their annual charity exhibition game with the Cleveland Browns.

"They ain't gonna tell me that jive like, 'Well you haven't played but one year of college,'" says Milburn of his brush with the Rams. "I know the game is a fakin' game, I can catch the ball, make my moves and like that. I couldn't afford to give up my college career for the little money they offered me. And I said, 'Hey, man, look at the credentials, look what I did. I'm not just an ordinary guy you drafted in the 13th round. Man, I've got a name.'"

In January of this year, Rod signed a contract with the International Track Association. If the Rams had trouble translating an Olympic gold medal and 13.0 into the language of fly patterns six-pointers, Mike O'Hara fairly chirped at the opportunity to annex the best hurdler in the history of the planet—for a \$15,000 bonus and substantial yearly guarantees.

The addition of Milburn, Ben Jipcho, Dave Wottle and other new quality



performers has lifted pro track's appeal from a somewhat inflated sideshow to a respectable series of competitions.

Now in Salt Lake City, awaiting one of ITA's early 1974 meets, dressed in the maroon and yogurt jersey of Richard Nixon's chosen football club and occasionally marveling at the snowy peaks which guard Brigham Young's annointed successors, Milburn was perfectly situated, perfectly equipped to reflect on the anomalous nature of his new profession. Herewith, the interview.

RW: When did you finalize your decision to turn pro, and what were the influences?

Milburn: I made the decision about a week prior to the time I ran my final amateur race (late January). Influences? Well, number one, I feel like I've accomplished everything I wanted to accomplish in the field of amateur track. I've done so many spectacular things over the hurdles, and of course I know the guys get tired of seeing me hangin' around there every time. They can't

get a chance to win. So it gives some other guy a chance to expose himself over the sticks, and it gives me another chance to move up, really.

RW: What are you doing now, besides competing professionally?

Milburn: I'm student-teaching physical education at McKinley High School in Baton Rouge. I'm working eight hours a day there, just as if I was certified as a teacher, going through the same routine. I'd like to be getting paid, but the only way that can happen is if I do substitute work, which is sometimes open to student teachers.

RW: What are your early impressions of the ITA tour, the way it's being conducted, the competition?

Milburn: Right now, I couldn't really make any predictions or statements on how the competition is at this point. It's very early in the season, just after the second meet. I have something like six or seven meets under my belt, and the other guys only have two each. So it shows there's a big margin,

you know, because of my winnings. Even these guys are just starting out. But I think things are going to be great, I'd say about midway through the season, far as the competition is concerned. You can't just overrate a guy because he's been so successful on the pro tour thus far. I've got meets under my belt.

RW: How have you been treated on the tour, by athletes, management and others?

Milburn: Well, you see there's a lot of things in the organization that I think should brighten up a little bit, as far as the athletes getting endorsements and getting sponsors for their events. A few events are sponsored by Post Cereals, Uniroyal and Personna. But they haven't got a sponsor for the hurdles as yet. Of course, I figure there shouldn't be any problems getting a sponsor, on account of what I've done over the sticks and the fact that the hurdles is one of the greatest challenges on the track.

When I joined, I understood that the Grand Prix idea was for the whole organization—the guy with the highest point total winning the Grand Prix no matter what event he's from, you know. But now I understand that the Grand Prix is held in different events. When I signed my contract, if I'd known that, I'd have looked at that personally.

RW: How does being a pro square with your teaching situation?

Milburn: Every week, I do promotional work down home—TV station, newspaper, whatever. And I know a lot of guys aren't even doing promotional work—Seagren and a few others. I mean, hell, these guys are gettin' the same thing we're gettin', and I don't think a guy should be robbed like that. There's just a deviation in the whole thing. Certain guys that should do promotional work, don't. And these are guys that don't have a whole lot of other obligations.

The promotional work before the first meets, I can understand that. Everybody was disorganized. I was ready to compete, and I gave up a couple of days I didn't have to. A lot of times, I didn't even think the work was worthwhile. You know, one newspaper a day, things like that. I had things to do at school, other obligations at home, the thing was throwing me off balance. The format, the communications were poor.

I figure if the tour isn't organized, there's no way in the world the athlete can get himself organized. The only way I can work is organize myself, setting my plan, to make my thing better. It was just a big hassle, a lot of it wasn't even worthwhile...guys coming up and telling you they

can't do this show today, because this and that came up, they're jacking me around. Hey, man, don't tell me that, I got things planned too.

RW: How do you see your value to the ITA as a gate attraction?

Milburn: I know that on the east coast, the kids especially had a big response for me. Practically everywhere I go, I get a big response from kids. It's just that way. We could put out a poll, and I would be one, two. No further down than three, as far as favorite athletes are concerned.

RW: How has the ITA schedule affected your training?

Milburn: I've been able to train the way I want to. I get back on Sunday and train Monday, Tuesday and Wednesday. Possibly leave Thursday. I mean, three days of good training is good for me. I can remember that I didn't have to train right before the Olympic Games. And a few meets midway through the season, I'd go from meet to meet without even training, just because of the endurance I had. Sometimes I could feel that my endurance was maybe falling, and I'd get right back out there and build it back up.

I mean, there's just no sense in a guy going out there every day, every day, every day and killin' himself. You're wearin' out the tissues, and you have to just let your muscles gain all their strength back, you know. You have to base your training according to how it's going to help

you, you see.

RW: What, specifically, do you do during that Monday, Tuesday, Wednesday period?

Milburn: Monday would be a light one, of course, trying to recuperate and let the tissues heal back and this type of thing. Work lightly, maybe weights, or jogging or whatever, then you go back and you hit it Tuesday. For two days, hit it real hard. Then you rest up.

RW: You mentioned that you needed little training just before the '72 Games. Can you recall any other thoughts you had during the Munich experience?

Milburn: The main thing I went to Germany for was to win that gold medal. There was nothing outside of that for me over there. Otherwise, I would have stayed home and got a job. So after I got the medal, there was nothing but to go back home. Supply and demand. I gave my supply, I won my demand.

After all the stuff that went on over there, it sort of blew me away. Then you start looking back on the history of the Games, things happening in '68, things happening in '64, things happening in '60. I mean, things is *always* happening at the Olympics. So that helped me put a little bit of it aside. But myself, I'd say I had about the most joyful time of my life. It's just one of those things that you only get to once in life.

A guy just interviewed me a couple of weeks ago and said, "certain people are saying that the Olympic race was

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only another race to you.”

The thing is, I had made a statement to one reporter who asked me beforehand how I felt about the race coming up. And I said, “Well, to me, it’s gonna be just like any other race.” Which is true. You got 10 hurdles, right? You’re going through the same thing you’ve done before. But he took what I said to mean that the *Olympic* race wasn’t that important to me. He took the wrong view of it, you see what I mean? I told him what I did because at that time, if I had looked at it differently, it would have thrown me off, see what I’m sayin’? Shouldn’t have been any question, that was the most important race of my life.

RW: You ran a perfect season last year, with the exception of the fifth at the AAU. Have you puzzled that out?

Milburn: The whole year I’d been running out there, you know, by myself. If somebody’d get close to me, I’d get sort of leery. I just can’t stand nobody gettin’ close to me when I run. It’s just a thing I’ve got in me. It’s just a feeling. When I feel somebody gettin’ close to me, I begin to accelerate and it’s just the way I’ve been operatin’ on the race.

So I don’t know whether it was the *shoes* I had on at the time, or what. In the semifinals, I ran good, good time. I eased up, I was just smooth. Came back in the finals, I got to about the fourth or fifth hurdle, and all of a sudden Hill comes up beside me. So I said, “What’s he doin’ up here?” and I panicked, I reacted, I just went to pieces and that was it. It was a breakdown in concentration, everything. I just wasn’t *me*. I was just tight, panicky, couldn’t relax, wasn’t even concentratin’.

RW: You went from there to the 13.0 in Eugene three days later. Can you account for the turnaround, recollect your approach following the AAU?

Milburn: I went to Eugene asking myself what had happened. I wanted to see whether the problem was in the training, but it turned out that that wasn’t it. I got to Eugene and I worked out a day or two, then came back the day of the race and blew through it with no competition. I think Charles Rich was second in 13.9. When I saw the 13.0, I said, “Well, it’s not the training.”

It was just one of those things. I suppose I could make a lot of statements like I heard someone suggest that the poor performance at AAU as an intentional thing. I said, “Well, I’ll be! How could they speak for me, what I’m doing?”

Anytime people start speaking for you, you know it’s time for you to stop talkin’, man, really, to stop makin’ your

own judgments. Maybe they figure I’m not human, you know, that’s the first thing to look at. I’m human. I can lose anytime. I can run 6.9 (for 60 yards) today and run 7.4 tomorrow. That AAU thing was just a time when I fell short.

RW: How do you focus your concentration prior to a race?

Milburn: Well, you see, like today, sometime around dinner I’ll get deep into my concentration. How I’m going to run the race, just like a lesson plan, how you’re going to teach. What I expect to get out of the race, and possible times that I’m looking at, what I want to do to get out of the blocks, how I want to take that first hurdle. Things I want to look for, from my training routine and exercising.

It’s just like one of these dragster drivers, thinking about what he’s going to do before he blows out of the pit. How he’s going to get his RPM’s up and all that. I go through my training procedures the same way. I get out there, warm up good, loosen up, exercise good, go through my routine over the hurdles, check my timing, check my quickness, see if I’m acceleratin’, there’s certain things you look for.

In other words, let’s say I’ve run 6.8, and I can think my way back to see what I did to run that 6.8. So I can pull that out of the file and bring it up to this meet, compare it with that one, the same way I might use this meet in the future.

As far as psyching goes, the psych breaks about five or 10 minutes prior to the race. After that, you’re into something, the psych is all over with. Now it’s just like you’ve got a formation, and you take it from here. You’ve done all the refreshing you want, gone over everything you’ve wanted to see from the blocks, over the hurdles, the whole routine. Of course, there can be a lot of little psychological things coming into your head, but as far as that sort of thing goes I’ve had a very successful level of concentration.

In early May, with three meets remaining on the ITA tour schedule, Rod’s record as a pro was 10 wins, no losses. Paul Gibson and Lance Babb were keeping him honest, but the improvement among the field, which he modestly predicted in Salt Lake, offered little threat to a clean sweep.

...and, ah yes, the Salt Lake meet, the deep concentration, the dragster driver, looking back into the file. Seems Rodney couldn’t find anything in the file that would match that particular night’s preparation. So he invented one: 6.7, a world indoor record for the 60 highs.

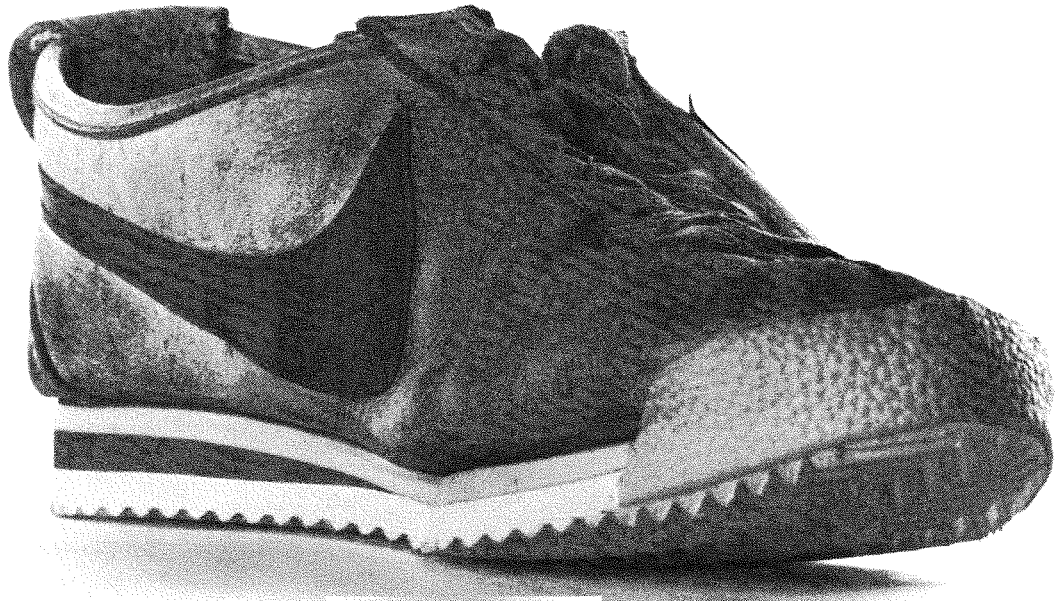
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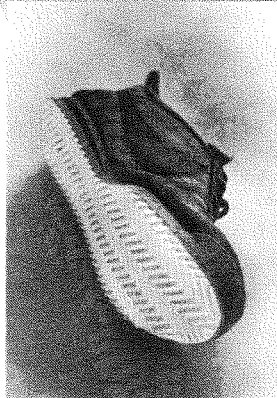
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*The wind was at the 1705 runners' backs,
and records were falling all over the place.*

BIGGEST AND BEST BOSTON

"The greatest experience I've ever had!"

"The race is a shambles. It's too big!"

Two 1974 Boston marathoners gave two entirely different appraisals of it. One obviously loved it. The other was less than thrilled with the oldest and most written-about race this side of the Olympics.

Any race that has nearly 2000 people in it is going to have problems, and it's going to be greeted with mixed emotions. No matter how big it gets, the emotions are based on personal experiences. But as for the race itself, there's still nothing like it anywhere.

It's the only marathon in the world which can put a 3½-hour-limit on entrants and still attract 1705 official ones (and several hundred non-qualifiers who travel there to compete anonymously).

On this one day in Boston, more people turned out to watch the runners than see every other North American race for the year *combined*. This year's crowd was estimated at three-quarters of a million.

The runners they watch are not only plentiful, they're very good from front to back. For all the criticism of the 3½-hour standard, it has raised the quality of running at Boston.

"The officials at Boston were right," George Sheehan wrote after finishing about 800th in 3:06 this year. "The 3:30 limit has made it an authentic marathon, run by authentic marathoners. It was an exceptional race. Only a handful of runners were reduced to walking, and a very few set an irrational pace.

"Some think everyone should be allowed to run at Boston. I think not. Allow the Boston to remain as a goal."

Short of an international championship like the Olympics, Boston is the highest goal an American marathoner can have. (And it rates highly in Europe, too. A planeload of Germans, French and others came to run the 78th Boston.) The hysteria created by the numbers of people running and watching carries marathoners to one extreme or the other. They either run the race of their lives or crash spectacularly from too ambitious a start. Boston is an all-or-nothing race.

Whether it's all or nothing depends a lot on the weather. The hotter it is, the higher the number of casualties. Cooler temperatures mean faster times.

This was a cool year—the first cloudy and relatively cool one since 1970. The times showed the effect. Last year, in sunny, high-70s conditions, only 17% of the starters came in under three hours. This time the temperature was in the 50s, a cloud cover formed midway through the race, and there was a tailwind. Thirty-five percent of the starters broke three hours—twice as many as last year and 8% more than in the previous peak year (1970).

About 600 runners were under three hours (including four women), 57 men broke 2:30, 15 broke 2:20. All those figures are records for a US race.

Neil Cusack didn't get a record while winning in 2:13:39, but he was close to Ron Hill's record pace for a majority of the distance. Cusack reached Wellesley, the halfway point, just two seconds slower than Hill had done in the rainy cold four years ago.

Though Irishman Cusack won by almost a minute, his victory wasn't a comfortable one. He shivered uncontrollably after the run and sucked oxygen from a tank as he lay on a cot. A Boston reporter wrote that Neil did set one record: "Longest time to rejoin the human race."

Neil later said, "You could say there was a gun to my head. That's why I came here. Qualifying for the Irish team in the European Games is being held on May 25, and I can't be there. I was told the only way I could qualify was to finish in the top three in this marathon."

Tom Fleming wanted only first, and he ran himself to a standstill trying to catch Cusack. An excited friend ran up to Tom afterwards and shouted, "You ran 2:14. You took almost three minutes off your best time. The average guy is lucky to take off 10 seconds."

Fleming, who also finished second last year, was in tears. "But I lost," he said. "I was so close, so really close. My ankle hurt with two miles to go—two lousy miles. I was moving on him, and I had to stop. I had to stop three times and do some exercises, but it didn't help. I lost anyway."

Miki Gorman wasn't in as much distress as she won the women's race in 2:47:11. But her first comment on hearing the time was, "Oh, is that all?"

Mixed feelings about the race aren't reserved for runners back among the masses.



THE CUSACK, FLEMING RACE

"That was he, the winner, Neil Cusack . . . The one in the corner. The one shivering under the blankets. The one who had just had the oxygen mask removed from his face. That was he, the winner of the 78th Boston marathon."

Leigh Montville,
Boston Globe

"All the brutal, ceaseless training, the hopes, the flawlessly-run first 24 miles would be for naught after all. (Tom Fleming) would lose — again — and the frustration and the pain and the exhaustion would well up inside and cause him to crack wide open. It was a rare glimpse of the peculiar kind of cruelty and agony that a marathon can inflict."

John Powers,
Boston Globe

The cruelty and agony of the marathon was evident in both of them. Neil Cusack lay exhausted, not able to comprehend what he had just accomplished. Tom Fleming sat on a cot not far away, sobbing.

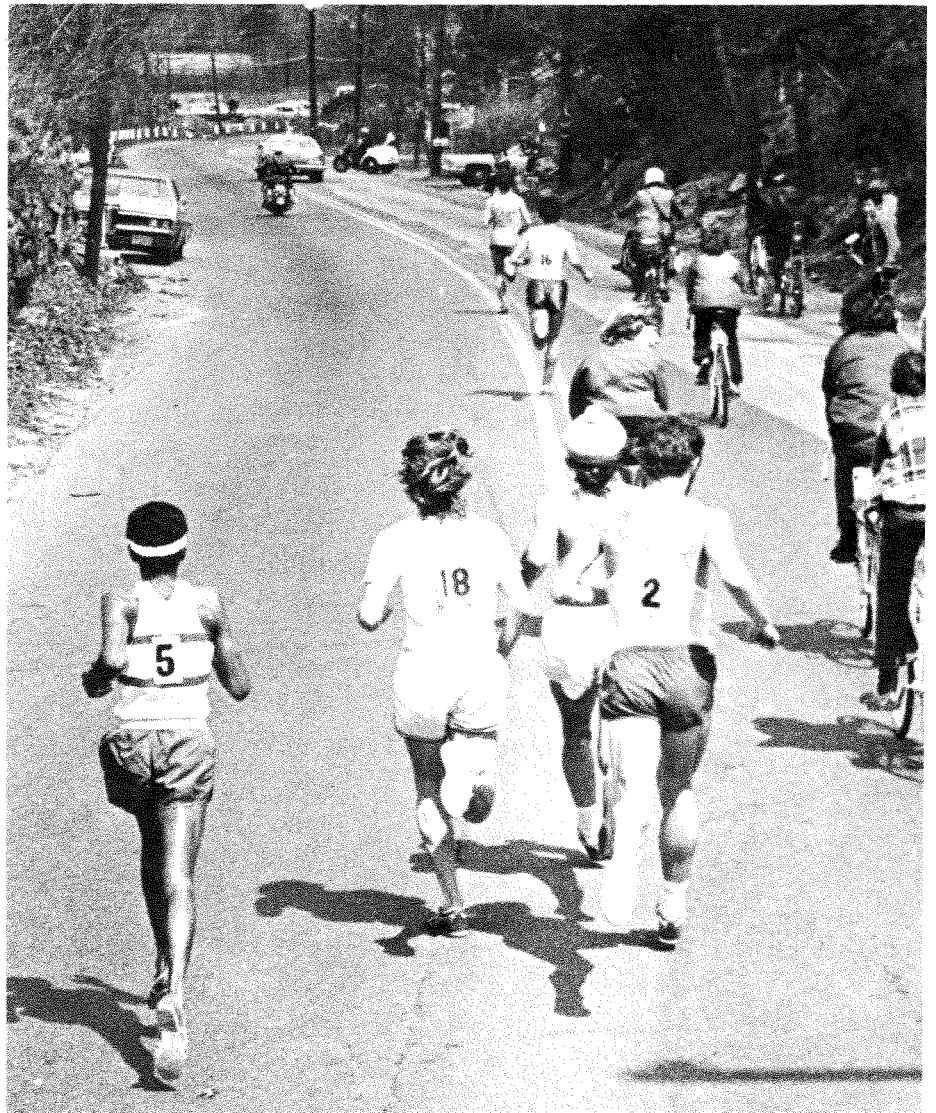
The race was over. Cusack had won. Fleming was second. The only difference between the two just then was that Cusack had held off exhaustion until his last step. Fleming had lost to pain two miles earlier, and with that had lost his chance to win.

The two runners had both improved their best times by about three minutes. They were alike in that regard, and in the fact that they were both 22 years old. They were alike in the suffering they had done to race as well as they had. But there weren't many other similarities between these two.

Cusack is from Ireland, Fleming from New Jersey. Neil has the typical build of a marathoner, 5'8" and 138 pounds. Tom, at 6'0" and 154, appears burly in the company of long distance runners.

They came at marathoning from different directions. Cusack is a track and cross-country man who had run only one previous 26-miler. Fleming, more the pure marathoner type, had run this distance dozens of times. Neil had speed. Tom had experience.

Cusack had never run at Boston, and said he only ran here to qualify for the European championships. Fleming had finished second here last year, and had spent a year thinking of moving up.



Early in the running, Neil Cusack (16) trails Bernie Allen. Once he passed Allen, Neil led the rest of the way. Tom Fleming (2) is part of the pursuing pack, which includes Lucian Rosa (5), William Rodgers (18) and an unidentified runner. Note the young bicyclists who frequently interfered with marathoners during the race, and finally had to be dispersed by police. (Jeff Johnson photo)

Neil started fast. At the early checkpoints, he was on record pace. Tom ran more cautiously. At one point, he was 500 yards back.

Cusack didn't know anyone was closing. He said later, "Way out at Heartbreak Hill (about 20 miles), I knew I had it won. It was just a question of

being able to hold the lead once I got it. If I had felt a bit stronger, I might have had a good try at the record. But for the last eight or nine miles, I just wanted to finish, and win. Who was second?"

A *Boston Globe* article said of Fleming, "He stayed within striking distance of Cusack throughout, narrowing the gap from 500 to 300 to 150 yards as they came off the hills. With the (finish) in sight, and nothing but flat pavement ahead, (Tom's) ankle began to twinge and throb, and then it nearly buckled. So he slowed to a trot, then stopped. He started and stopped twice more, while the caravan of buses and motorcycles surrounding Cusack swept further and further down Commonwealth Avenue."

Neil Cusack's first recorded comment at the end: "Thank God, it's all over!"

Tom Fleming: "I was so close, so really close!"

SECOND-BEST TRIES HARDER

BY HUGH SWEENEY

Times and races won are one way of analyzing running. But where some fans memorize statistics, others take an interest in the training methods of the men who make up the statistics.

I've been running marathons for years, and I'm one of those who has followed the training methods employed by leading distance runners. Like many running enthusiasts, I wonder what training it takes for a runner to develop into a Boston marathon contender.

Does it require inhuman 30-40-mile-per-day workouts? Does it require training which continues for years without a break? Does it require life without distractions, 100% dedication to running? How important is natural talent? And what part is played by a burning desire to become good, to excel, to become the best in the country or even the world?

My ideal marathon runner, the type of man who becomes good enough to win a big race like Boston, is a composite character who exhibits several or all of these traits.

I suppose I fantasize a bit when imagining what the leading runners do to acquire their ability. I think, "Maybe I could do it too, if . . ." But when I consider the problem realistically, I'm a bit less starry-eyed. I conclude that although the big boys train a bit harder than we do, there's really no sure way to tell who's going to run a 2:15 marathon. Ted Corbitt has run 1000 miles per month, but other men his age can beat him. Ian Thompson supposedly runs 110 or so per week, yet he did 2:09 in his second attempt.

I am completely confused, because I have Tom Fleming living nearby — constantly reaffirming my fantasy. He's the kind of runner I described earlier. He trains hard, he has done it for years, and he has no small amount of talent. Fleming has that great desire to be the best, and his living conditions permit him a high degree of attention to running.

While I suppose it is possible that others can do more than Tom does, it's hard to imagine that anyone *has* done more, for as long a period of time, without any significant interruption. Fleming started running 100 miles a week the summer after he finished high school in 1969, and he has been doing it ever since.

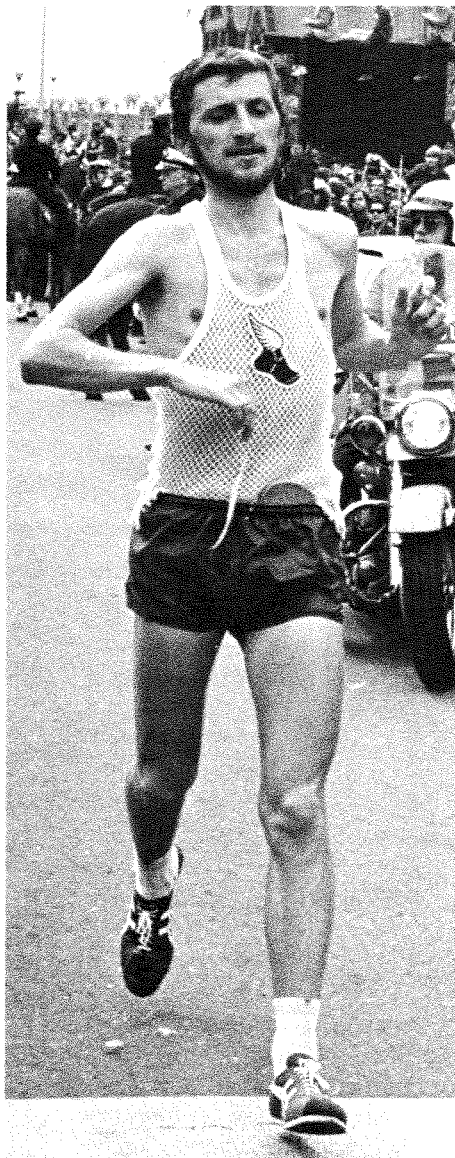
Tom figured that he ran 1900 miles in the first 12 weeks of 1974.

Since I only run with him about once a month now (my legs have to be pretty fresh to keep up with the sub-six-minute miles he runs), I recently asked Tom for a look at his training book.

I guess he's becoming secretive in his old age (he'll be 23 in July), because he said he'd rather not show me. "Look at my training from 1971," he said. "It's still the same: morning, 15 easy; afternoon, six hard; next day, 10 easy, eight moderate; next day, 10 and 10. It hasn't changed."

Maybe so. But a week before Boston, when he told me he was tapering off and hardly running at all, I did peek into his training log. I saw two recent days, and they were both 10 and 10. This is tapering off?

I had hoped to compile a list of "superman" workouts, but Tom didn't want to publicize them. Still, I do remember a couple of mind-bogglers. In



December, he told me that on a Thursday he'd run 25 miles at a pace that burned off a 2:25 marathoner. Friday morning, he ran 20 miles. That night, he ran a 9:04 two-mile at an indoor meet, then returned five minutes later and ran 9:33 in the slow heat.

Another big day came in February, when he raced 20 miles on a certified course in 1:40. That night, I was fresh but couldn't keep pace with Tom through a quick 10-miler.

But for the first time since I've known him, Tom was seriously questioning whether it is worthwhile to devote as much time as he does to running. After finishing fifth at the San Blas half-marathon in Puerto Rico this winter, despite 180-200 training miles a week, he wondered if the extra mileage is beneficial in proportion to the extra effort and time required to accumulate it. He decided that it wasn't, and he cut back to 120-130.

He told me, "I don't think I'll be running after Montreal." Yet the sign on his wall said, "You will win at Boston." The enthusiasm was still there. It has only been tempered a bit . . .

Tom Fleming was as good a choice as anyone to be the pre-race favorite at Boston. After all, no one in the race this year had beaten him last year. He ranked fourth among US marathoners in 1973, and none of those ahead of him (Frank Shorter, Doug Schmenk and Jon Anderson) were running at Boston.

The Thursday before the race, I went on a quick eight-miler with Tom. Near the end, he was running too close to the curb and twisted his left ankle. He hobbled home, put ice on it and worried a lot. By Monday, the ankle was a beautiful shade of black and blue. For the entire month of April Tom had been having trouble with infected teeth. He said this made him feel weak.

Yet with two miles to go at Boston, Tom was gaining significantly on leader Neil Cusack. Steve Liquori, Marty's younger brother, had accompanied Tom from Boston College on a bicycle and was telling him that Cusack was ready to be taken. And indeed he was.

But just when Liquori was most enthusiastic, Fleming felt a sharp pain in his left leg. He bent down to massage it, ran some more, and bent down again.

Tom Fleming thinks he would have run two minutes faster—in the 2:12s—if not for his leg troubles. (Jeff Johnson)

The cramp was severe, and it became difficult even to jog to the finish. Had he been able to maintain his normal pace, Tom feels he would have finished two minutes faster — in the 2:12s. He probably would have. Fleming doesn't exaggerate.

For two years in a row now, Fleming has finished second in races he feels he should have won. In a way, it's good that he lost, because I feel that a significant amount of his drive in training now stems from the desire to win Boston and other international events. The sign on his wall, "You will win at Boston," stays up for another year.

I saw Tom the Wednesday after the race. The rear of his left leg was brown because of shattered blood vessels in the calf. For one of the few times I can remember, Tom didn't want to run. The leg wasn't painful, he said. He just wanted to take a few days off.

That Saturday, he said, "I really don't know what I'm even training for anymore. This training seems meaningless. I don't think I'll even run at Yonkers (AAU race in early June). It just doesn't seem important to win the national championship."

He thought a bit, then added, "All I want is that trip to Fukuoka (Japan). I could have done 2:12 at Boston. I don't want to waste that 2:12 at Yonkers or anywhere else. If only I could go to Fukuoka. I've got that 2:12 in me now, just waiting to come out."

Even as we ran, five days after his disappointment at Boston, I could see the desire creeping back into Fleming — the desire which would push him through another year of hard training.

MARVELOUS MIKI GORMAN

BY TOM STURAK

Back from Boston, via Acapulco for a well-earned rest, Miki Gorman was honored with a party at the Los Angeles Athletic Club. Among friends and fellow runners on hand were Jacki Hansen, last year's Boston champion, and Laszlo Tabori, who looked pleased and justifiably proud of having coached back-to-back winners at the Big Apple of marathoning.

Someone played a tape of a Boston radio announcer reporting Miki's finish ("Is this our first lady!"—"already" implied in his inflection). After the formal presentation of congratulations and gifts, she talked about the "wonderful exper-



ience" of the Boston marathon.

Miki had felt very nervous and "so small" as she waited for the start, unable to see (at 5'1") over the heads of several rows of runners in front of her. Nearby, West German rival Christa Kofferschlagler stood and stared hard at her, "shaking her legs—she wear tights in a race!—saying nothing; she is very competitive."

Into the race, Miki remembers first passing Nina Kuscsik (1972 winner); then the four West Germans ("running all to-

Miki Gorman, 38 years old and weighing in the 80s, clipped more than 17 minutes from the Boston women's record. (Jeff Johnson photo)

gether"); and last of all, Kathrine Switzer ("running really fast"). Within two miles, she was clear of her competition and must have been running "really fast" herself. At about eight miles, someone told her that she was hitting a 6:02 per mile pace. John Pagliano says he didn't pass her before six miles and that he passed the 10.6-mile checkpoint at a 2:28 pace.

"Two-twenty-eight. What is that for one mile?" Miki asks.

"Under 5:40."

Her eyes widen and she giggles. "My very best time for one mile *only* is 5:35!"

Like many other Boston novices, Miki was seduced into a fast early pace over the slight downgrade out of Newton. Still, she finished a respectable 279th overall and decisively outran the fastest (four under three hours) field of women yet to try this most prestigious of marathons.

Though admittedly "very tired" over the final six miles, Miki emphasizes that, contrary to some reports, she finished in good shape. A much-published

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photograph shows her apparently collapsing. In actuality, she tripped in the blanket thrown about her shoulders by a policeman.

Given her innate charm, cosmopolitan background and remarkable accomplishments, Miki Gorman at age 38 may become the best-known American marathoner since Frank Shorter. The Boston triumph earned her an on-the-spot invitation to compete in the exclusive "Germany Cup" championship marathon for women this coming September. She has received much fan mail (including a letter from an old boyfriend) and even telephone calls from her native Japan. At the LAAC party, a crew of writers and photographers from the leading Japanese women's magazine attended her every move.

Born of Japanese parents in China, Miki Suwa immigrated to the United States in 1964, attended commercial college in Pennsylvania, moved to Los Angeles and became a secretary for a Japanese trading company (where she still works). In 1966, she married broker Michael Gorman, who has become her most avid supporter. ("Don't worry about cleaning the house," he tells me, when I have to train many miles a day.")

In 1969, Mike Gorman, an accomplished handball player, encouraged his wife to join the LAAC's general conditioning program. Inactive at any kind of sport since her schoolgirl days and suffering from encroaching middle-age "blahs," Miki hoped most that the exercise would help her to gain weight. (She has never weighed more than 90 pounds.) Warmup jogging, almost casually at first, eventually led her into exotic ultra-distance feats, culminating in an indoor record of 100.1 miles in 21:04 in October 1970 (see *RW*, May 71).

For a brief time earlier in 1970, she tried to train with Mihaly Igloi but found that she "couldn't take such hard work." Not until June 1973, encouraged and advised by ultra-marathoner Lu Dosti, did she attempt her first real race—a marathon, which she quit after about 10 miles. Two weeks later, she unofficially completed—after several forced stops—the hilly Palos Verdes marathon in 3:25.

In July, she and Dosti began to supplement their LSD runs with twice weekly interval training sessions under Laszlo Tabori. By October, Miki had progressed to 20 miles a day in preparation for her first serious marathon at Culver City this past December. The result was a new world-best mark of 2:46:36.

At first a bit disappointed with her time of 2:47:11 at Boston, Miki now feels that her weakness over the final miles was due to losing too much weight

during the first four (all protein) days of a preparatory carbohydrate-loading diet. She had dropped to 83 pounds, and was not much heavier the day of the race.

Always self-conscious when questioned about her weight, Miki confided

to her well-wishers at the LAAC that she was wrapped in a bath towel so as to fit into her long dress that had been brought before her trip east. But even the loss of precious pounds was worth the win at Boston, and she decidedly wants to run again next April.

As they say in show business, when it comes to marathoning, little Miki Gorman is definitely heavyweight.

Neil Cusack with fiance Susan Schlotterbach. (Jeff Johnson)



Looking At People At Boston

● **Norman Bright** ran one second under three hours at Boston. He placed 611th. Bright, of Seattle, was pleased with the time since it was the best he'd done since returning to running after his 60th birthday. He was shocked with the place. "That was just 30 seconds off my time of 1944," Bright says, "and I was 11th that year!"

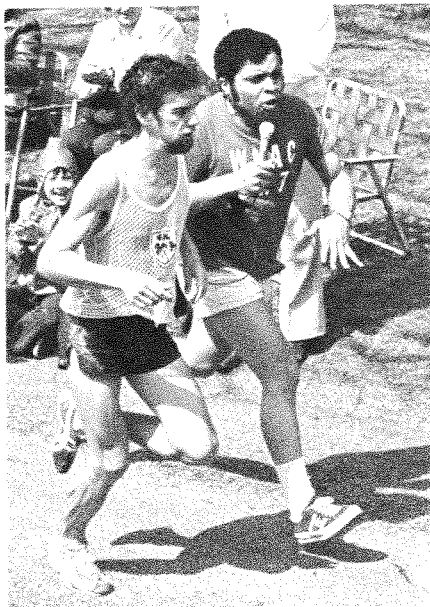
● **Sara Mae Berman**, one of the first women to run Boston (and the women's record holder at 3:05 until this year), helped organize and promote the women's section. She reports, "Forty-three women entered. At first, only 40 were listed. Then another European woman entered and two women discovered they were listed with the men. One of them was **Miki Gorman!**" Miki broke Sara's record by almost 18 minutes.

● **Kathrine Switzer** is running about an hour faster now than she did in 1967, when she was the first woman to enter the Boston race (albeit illegally). She did 3:01:37 this year. "Today," Kathrine said after the race, "I ran 20 minutes faster than I did last year, but I was only in fifth place among the women. What it proves is that marathon running has come into its own as a sport for women and that women have become tremendous competitive runners against other women."

● **Manfred Steffny**, editor of the West German publication *Condition*, was so impressed by the quality of the women's running at Boston that he now wants to organize an international invitational event for that sex in his country this fall. Steffny also wants to get the wheels in motion for an exhibition women's marathon at the Montreal Olympics.

● **Ron Daws**, now 36 and a perennial leader at Boston, ran 2:22:16 for his best time in many years. Then Daws told friends that he was "retiring from competition. I'm cutting down to 80 miles a week." Daws coaches **Steve Hoag**, who improved by nine minutes at Boston to 2:16:44.

● **The Hunky Bunch** of Hawaii, all eight of them, finished the race. It must be a single-family record at Boston. Two members of the family, nine-year-old **Daven Chun** and 14-year-old **June** weren't listed in the official results



Neil Cusack and interviewer

but ran better than the listed age records. Daven did 3:05, June 3:08.

Hunky Chun, their father, said, "It was a once-in-a-lifetime thing. Do you know what it cost to come here from Hawaii? If the kids don't get a wedding reception and we just give them a ladder, remember, we blew it on the Boston marathon."

● **Luanne Kralick**, 42, got back the women's over-40 record that she'd briefly held last year. Lou ran 3:18:25.

● **Walter Renaud** was the first over-40 finisher among the men, 65th in 2:31:18. One of two past winners, **John J. Kelley** was next, exactly one minute later. **John A. Kelley**, 66, the only other ex-Boston champion in the field, ran 3:24. "All I hoped for," he said, "was to come in under the 3½ hour cutoff in timing the finishers."

● **Frank Shorter** again didn't come to show that an Olympic champion could indeed win here (eight have failed). Shorter had told *Boston Globe* sports editor **Jerry Nason** at Munich, "Yes, I'm interested in Boston, but I won't hitchhike up there from Florida to run it."

When **Peter Fuller** of Boston heard this, he said, "That's ridiculous. Tell the BAA I will pick up travel and hotel expenses for Shorter and his wife for five days in Boston."

Will Cloney, director of the race, reported, "We've sent invitations to Short-

er the past two years. He was made aware that an 'angel' was available. I won't knock him. The race is here if he wants to run. It's been here for 78 years."

● **Bob Moore** of Canada wore number seven in the race, which was appropriate since he'd finished seventh twice before. And where did he finish this time? Seventh again, with his career best of 2:16:45.

● **Garry Armstrong**, a reporter for a Boston broadcasting station, should get the gold medal for thoughtlessness. As **Neil Cusack** charged up Heartbreak Hill, trying to move away from **Tom Fleming**, Armstrong ran alongside, stuck a microphone in Cusack's face and asked, "How do you feel?"

● **Jock Semple** again let his Scottish temper show as he became irritated with the flock of bicyclists who followed the race and threatened runners. Semple reportedly sent several cyclists sprawling across the pavement. Police later attempted to disperse the self-appointed honor guard that accompanied Cusack.

● **Kenneth Kruse**, a marathoner from California, was treated for minor lacerations and bruises at a Boston hospital after being struck by an auto during the race.

● **Calleen King** got to Boston because the folks back home in Portland, Ore., staged a "Run-Calleen-Out-Of-Town" campaign to raise money. Then a few days before the race, she was injured. She ran anyway, got lost near the end, and finished more than two hours slower than normal—the last runner to come across the line at the Prudential Center. "The bus with police kept asking me if I wanted to ride," she said, "but I told them I was going to finish."

Neil Cusack and interference





MAKING OF A 2:20 MARATONER

Size, plus speed, plus mileage.

by Dan Moore

Buddy Edelen was the first to do it, at Fukuoka, Japan, in December 1962. By 1965, only one other US citizen, Norm Higgins, had joined Edelen. At the end of 1970, there were still only nine runners in the group. Then the marathon boom hit the country. And just three years later 24 Americans had run 50 marathons faster than 2:20—which is generally considered to be “world class.”

Questionnaires were mailed to these 24 runners and to another group of 25 who ran marathons in the 2:25-2:30 range. The idea was to see what the really “super” runners do differently from the merely “great” ones. (Nine additional runners have broken 2:20 early this year, but their information isn’t included in this survey.)

Sixteen of the super runners re-

turned the questionnaire, while 22 of the merely greats responded. Physical characteristics and best times on all of the non-responding sub-2:20 marathoners were available so that at least this information could be used in comparing the two groups. All information applies to the time at which the athlete had his best marathon performance.

The questionnaire can be divided roughly into four sections: (1) physical characteristics; (2) description of best marathon; (3) best times; (4) training. A summary of the answers to the first section, which concerns the physical characteristics of the runners, is shown in Table I.

This table shows that although there

is considerable variation in these characteristics, the faster runners were, on the average, younger and lighter than the slower ones. Another interesting point is that the average age in the sub-2:20 group is now (at 25.4) almost a year younger than it was in 1972 (reported as 26.2 in the *1972 Marathon Handbook*). This is probably due to the disappearance of the myth that young runners can’t (or shouldn’t) run marathons.

The next section of questions dealt with characteristics of the best marathon performances. At the time of their personal best marathons, 12 of the super runners were students while four were teachers. In the great group, eight were students and four teachers. This reflects the fact that marathon running at better than 2:30 requires a job that

leaves enough time (and energy) for training.

The race temperatures (when reported) averaged about 60 degrees in both groups with a range of 32 (with snow and sleet!) to 80. The super runners tended to take fewer drinks en route, although this variable depended highly on the temperature. When it was hot, the runners drank more (these guys aren't stupid). About a third of the runners in each group reported "carbohydrate-loading" prior to the marathon. Only two runners in the super group reported high protein followed by high carbohydrate diets, while six in the 2:25-2:30 group used this diet.

The third section of the questionnaire concerned race performances (Table II). The best times at one, three and six miles are highly correlated with the best marathon time. As expected, the sub-2:20 marathoners were also considerably faster than the 2:25-2:30 marathoners at the shorter distances.

It is surprising to find that the sub-2:20 group had run fewer marathons than

the 2:25-2:30 group. In addition, the correlation between marathon time and number of previous marathons is positive, seeming to indicate that fewer prior marathons lead to *faster* times. This finding is not in agreement with Paul Slovic ("What Makes A Marathon," *RW*, Oct. 73) who studied runners of all abilities at the 1973 Trail's End Marathon.

The final section of the questionnaire centered on training. The response by the runners was poor for most of the questions in this section. There were also indications that the runners had difficulty in deciding whether the question concerning pace and distances run in training applied only to the eight weeks prior to the marathon or to all of their training.

Table III clearly shows that the super runners trained more than the merely great. They put in more miles (an average of 24 more per week) and take more long runs than those in the slower group. As for the responses to the other training questions, there were no differences between the two groups. All trained about 80% of the time at a slower than race pace and roughly 85% of the running was at a steady pace. The super runners averaged 11-12 workouts per week while the greats averaged 9-10 per week.

To summarize, then, the main dif-

ferences between the two groups were:

- **Age**—the sub-2:20 marathoners were younger (average age 25.4) than the 2:25-2:30 marathoners (average age 29.1).

- **Speed**—the super-marathoners were faster over shorter distances (one, three and six miles) than the great marathoners. For example, no 2:25-2:30 marathoner had broken 14 minutes for three miles, while only three sub-2:20 marathoners failed to do so.

- **Training**—The super runners trained a lot more than the merely great ones. Most required more than 100 miles per week in the eight weeks prior to the marathon in order to break 2:20.

Like most studies, this one leaves just as many questions unanswered as it set out to answer. To me, the biggest question is, "How much faster could those in the 2:25-2:30 marathons have run if they had trained 100 miles per week instead of only 85?" It is my belief that if they had trained more, they would have (1) lost a few more pounds of weight, (2) improved their one-, three- and six-mile times and (3) have had a good chance to break into that elite group of sub-2:20 marathoners. So please excuse me while I go put in a few more miles...

U.S. Sub-2:20 Men

Frank Shorter	2:10:30
Eamon O'Reilly	2:11:12
Kenny Moore	2:11:35
Tom Fleming	2:14:25
Bud Edelen	2:14:28
Amby Burfoot	2:14:28
Bill Scobey	2:15:21
Doug Schmenk	2:15:48
Norm Higgins	2:15:52
Jon Anderson	2:15:52
John Vitale	2:16:15
Mike Hazilla	2:16:20
Steve Hoag	2:16:45
Tom Laris	2:16:48
Ron Wayne	2:16:58
Carl Hatfield	2:17:36
Jack Bachelar	2:17:38
Lou Castagnola	2:17:48
Don Kardong	2:18:05
Tom Heinonen	2:18:29
Pete Span	2:18:49
Dan Moynihan	2:19:13
Reid Harter	2:19:15
Herb Lorenz	2:19:16
Terry Ziegler	2:19:18
Scott Bringham	2:19:24
Russ Pate	2:19:30
Dave White	2:19:31
Bill Rodgers	2:19:34
Jeff Galloway	2:19:34*
Ron Kurre	2:19:36*
Don Kennedy	2:19:58
Bruce Mortenson	2:19:59

*=uncertified course; 1974 times not included in Dan Moore's study.

TABLE I: Physical Characteristics

Group		Age	Height	Weight
Sub-2:20	Avg.	25.4	5'10½"	140.3
	Range	(20-35)	(5'3"-6'6")	(112-165)
2:25-2:30	Avg.	29.1	5'9¾"	140.6
	Range	(19-39)	(5'7"-6'4")	(125-162)

TABLE II: Race Performances

Group		1 mile	3 miles	6 miles	No. prior marathons
Sub 2:20	Avg.	4:11.3	13:44.2	28:37.1	4.55
	Range	(4:01-4:23)	(13:02-14:48)	(27:51-30:03)	(0-15)
2:25-2:30	Avg.	4:24.0	14:38.0	30:27.0	10.09
	Range	(4:11-4:46)	(14:05-15:20)	(29:33-32:31)	(0-25)

TABLE III: Training

Group		Total Miles 8 Weeks Prior	Maximum Week	No. Runs Over 20 Miles	Longest Run
Sub-2:20	Avg.	877	126	5.47	26.6
	Range	(440-1300)	(65-160)	(0-20)	(12-38)
2:25-2:30	Avg.	684	107	3.76	25.7
	Range	(461-900)	(67-173)	(0-10)	(13-50)

LONG RUNS: DO WE NEED THEM?

by Joe Henderson

If Ken Young hadn't already spelled out the "collapse-point theory" which now has a wide following, we could dismiss him as a crank when he attacks one of the sacred cows of long distance running.

Young thinks the long weekend run, the 20- to 30-miler on the roads which has been traditional for marathoners and even trackmen since the early 1960s, is just that—a tradition. It isn't a prerequisite to racing success. It isn't even a very efficient way to train, according to Ken.

He should know. He's gone the ultra-long route. He bashed out his share of 30- and 40-milers before realizing that he improved more at all distances by cutting back to shorter and faster runs. Young's total mileage stayed high. But he took it in smaller bites.

This, he says, is a further refinement of his "collapse-point" idea. The theory is spelled out in detail in the September 1973 *RW* ("Training to Compete") and in the 1974 *Marathon Handbook* ("Going Over The Wall"). Basically, his idea is that a certain minimum mileage is required to get through a distance race without running out of gas. Young says this minimum is an average of one-third of the racing distance per day for at least 6-8 weeks before the event. A 15-miler should average at least five miles, a marathoner nine, etc.

"Collapse" distance can be increased, Ken has written. And the best way to lengthen it is by adding mileage to the bottom rather than at the top. In other words, take more frequent short runs, don't stretch the long ones past the breaking point. It's easier and safer this way.

A marathoner can be adequately prepared for his race without running anywhere near that distance in practice, Young thinks. He recently tested the idea on himself. He wrote before Boston:

"My longest run in the last two months (since an early February mara-

ton) has been a 15-mile race. Previous to that, I had no runs longer than 16 miles since Dec. 1 (the day he ran his fastest marathon of 2:29). Thus, I go into Boston with only two runs—both races—of 20-plus miles in eight months. However, in that time I have had a 202-mile week and have averaged 106 miles per week since December.

"My theory is that repeat hard runs of 10-15 miles—say four such over a week-end—are superior to the same total distance in fewer, longer runs. On one recent weekend, I ran my 12.3-mile course four times—paces 6:05, 6:00, 6:14 and 5:43. Of course, Boston will provide the test of the theory, so we'll see."

Experience and observation have seemed to indicate that long runs, 20 miles or more on weekends for road runners, are vital.

Ken Young explains, "The reason for the observed correlation between long training runs and marathon performances is simply that: (1) Virtually all runners believe them to be necessary, and so the serious runners run long in training; very little evidence for the opposing viewpoint exists. (2) Doing long runs adds more mileage, which increases the collapse point; the more regularly long runs are made, the higher the average mileage per day becomes."

John Loeschhorn, who runs to work at the *RW* office and home each day but seldom goes longer than seven miles at a time, says, "I can't believe it. I've never taken so few long runs, but I'm in the best shape of my life." He proved it by winning an AAU regional marathon in April.

Loeschhorn thinks an article by Jack Mahurin in the May *RW* ("The Drain of Racing") gets at the physiology of this. Mahurin writes that a harmful enzyme "has been found to increase as the race distances become longer, which indicates the greater physiological stress in longer races. One researcher found significant increases existing for three weeks following a 50-mile run."

All of Mahurin's recommendations point to racing long distances less often because of the recovery time involved. The same thing may happen to some extent with long training runs. Fatigue products may accumulate to a level where they take days to disperse. A runner who tries to train through lingering fatigue can become chronically tired.

The high-mileage figures of the leading long distance runners are somewhat misleading. The weekly average for the sub-2:20 marathoners in Dan Moore's study is 110 miles. And yet, through twice-a-day workouts which are almost

universal, they bring their per-run average down below 10 miles.

Significantly, three runners with the lowest total mileage have the highest averages per workout. Scott Bringham did 87 miles a week, 14.5 per run. Amby Burfoot had 85 and 14.1, and Pete Span 65 and 13.0. All were once-a-day runners, and took one or more days off per week. They had to go as long as they did on each run to push above Ken Young's theoretical "collapse-point" and have a bit of distance in reserve.

Young wrote another long letter after Boston. "I think I have substantiated (at least to my satisfaction) the essential tenet of the collapse-point theory," he said. "It is *average* mileage which is important in determining the collapse distance. It is virtually immaterial whether one runs two 12-milers in one day or one 24-miler—at least in determining the collapse-point. This means a runner can concentrate on his speed (e.g., two hard 12-milers) rather than waste effort in longer, slower runs."

The reason Ken was so sure of his position was that he'd taken no runs longer than 15 miles in the two months before Boston. He improved his best time there by 3½ minutes—to 2:25:41. His collapse-point was 45 miles.

"My weekend training partner, Eric Groon, has been training similarly, but without any runs longer than 15 miles for the preceding four months, no marathons within two years. His calculated collapse-point was 32 miles. He ran 2:30:16, his best by 17 minutes."

Young added, "I doubt that most runners will accept this theory, and hence won't make use of it. The idea that long runs are necessary is too ingrained in their thinking. I used to do long runs (30-plus miles) monthly or so, but it took a lot of mental preparation/stamina. I think these runs actually made me *less* prepared mentally for long races.

"Now, doing my weekend running in 12½-mile bites, they are easier to face, easier to recover from, and I run them much faster than I would otherwise. How else could I get in a fairly concentrated two-day 50 miles at six-minute pace?"

He concluded, "I feel that the super-distance fad is a compensation for lack of understanding of basic training principles. 'Just pile on mileage and you too can be a super runner,' the thinking goes. Many runners cannot handle the mileage without breaking down physically.

"I doubt that I'll ever run more than 20 miles in a workout again. I'll save my mental stamina for races, where it counts."

HITCH YOURSELF TO A STAR

by Kaj Johanson M.D.

There are two kinds of distance runners, the *racers* and the *chasers*.

In the first group are the world-beaters, the stars, the magical figures striding effortlessly into the Olympic Stadium or across the finish line at the Prudential.

And there are the rest of us,

probably well over 90% of the readership of this magazine. Our highest aspiration is finishing with the pack at the next club race or getting under 2:30 at Boston. We play out our little competitive dramas, our petty triumphs and defeats, in solitude and obscurity. For some, this is all that is sought. After

all, there is joy in the crisp air, the camaraderie, the fitness. For many of us, however, there are other goals, cherished dreams of success that seem invariably to fade as the leaders stride smoothly off into the distance.

Because I am most assuredly a paid-up-in-full member of this latter brotherhood of dedicated plodders, it seems important that I pass along some of the unique experiences and inputs I've had that recently propelled me—in only my second marathon—to a 2:30:17 performance, with realistic expectation of significant improvement.

A 2:30 marathon, you say? I agree,



it's no big deal any more. More than a hundred US distance men bettered that time in 1973. What is unique is that so unconventional a distance runner turned the trick. I am a 6'5" physician who weighs more than 185 pounds. Though I've been involved with athletics and fitness for many years, I've been involved

in intensive distance training only since 1972. Most significantly, I am so singularly slow of foot that my fastest mile time is 5:01. It is said to be an instant source of confidence and rejuvenation for my running friends to train with me, for I seem to make the most lumbering oafs feel like Jeff Galloway.

The marathon is not a "talent" event, Kaj Johansen contends. Any runner with average ability who applies himself can run quite good times—possibly even the 2:30 accomplished by 5:01 miler Johansen. (John Marconi)

Though there are some definite advantages in my background—five years of the severe cardiovascular stresses of national-class collegiate and club rowing, a supportive if not always understanding wife, and a current research and academic schedule that permits my 110 miles a week—nevertheless, for me to have produced a 2:30 marathon does violence to a number of long-cherished principles of distance running. I warn the reader that what follows is not quite “Everyman’s guide to a fast marathon” or “If I can do it, *anybody* can,” for most will lack the inclination to put in the time or effort involved. Yet despite demurrers from highly-respected running comrades, I assert that to be a plodder is not necessarily to be a plodder *always*.

I should say here that this discussion is germane, I think, only to the marathon—or at least for races beyond 12 or 15 miles. These are events where one can still enjoy modest success without any leg speed whatsoever.

“I shall lift up mine eyes unto the hills, from whence cometh my hope,” said the Psalmist. The concentrated high-quality cardiovascular stress of hill running, plus the psychological strength one gains from overcoming one’s fatigue, pain and nausea in that last final burst over the crest, mean that the accomplished hill trainer will race well everywhere—whether in the hills or on the flat—while the flatlands devotee labors far harder and longer to achieve the same level of physiologic fitness (and may *never* enjoy the same level of psychological toughness).

Each of my workouts incorporates hills in one form or another, whether it’s the 22-miler through the canyons and dirt roads of back-country San Diego, the eight exhausting quarter-mile intervals up the abandoned road behind the university library or the 11-mile trot to work through the morning gloom.

Many embark on a distance running career, all fiery-eyed for a few months, until the inevitable physical and spiritual breakdowns start to occur. It’s vital to realize that an integral (and ultimately peculiarly rewarding) part of the distance athlete’s lot is the jangle of alarm in the dead of night, the slogging through the evening downpour, the sore muscles and the swollen ankles, the side-stitch and the blister, the crushing defeat. For me, these have been part of the price, painful and unpleasant... but how cheap the success without them. “All things come round to him who will but wait,” said Longfellow. There has never been any doubt that, sooner or

later, the brass ring would come my way.

The week starts with 22 miles on Sunday over a hilly, scenic course on which I proudly claim the course record. Tuesdays and Thursdays are the other “hard” days. We put in a brisk 15 miles in the heat of the afternoon. Mondays, Wednesdays and Fridays are the “easy” days. They include five in the morning with my dog, then an hour’s run over the mesas at noon—except on Wednesday, where noontime brings those fiendish hill intervals. Saturday is used for one-kilometer or the quarter-mile intervals in San Diego’s Balboa Park, usually in pretty relaxed fashion.

One has to classify most of my running as rather “low quality,” but it seems to me that if one is going to spend 15 hours a week at this madness, he should at least enjoy himself. I observe no dietary rituals (except for the pre-race carbohydrate manipulation) and replenish my fluid losses with significant amounts of beer. I know of no good evidence that this sort of fluid replacement is harmful to my training, and, considering some of the alternatives, it tastes far better. Because I am so heavy and so graceless in my running I have had ongoing arch problems, so that in most of my slower training runs I wear a heavy but effective set of orthotics in my shoes. The training schedule is the ideal, of course. Every two weeks or so, there’s a minor tendinitis, or an exam, or an overslept alarm.

None of this is unique. And were all this I had to offer, there would be precious little insight into what has accelerated my progress so remarkably. The key

is this: I run virtually all my workouts with other distance men, but other runners with a difference: *they are all faster than I am*. “Hitch your wagon to a star,” said Emerson, and though he wasn’t talking about distance training, that’s what I’ve done.

The San Diego area’s many good distance men (the San Diego TC qualified six men for the 1972 Olympic Trials in the marathon, and 2:19 Swedish marathoner Peter Fredriksson attends nearby US International University) found me taking advantage of their good nature and hanging on desperately during their training runs until, insidiously, I was eventually able to keep up. Initially it had to have been a rather pathetic sight, and they still can mostly outrun me. But turning what was for them a routine workout into what was for me an all-out sprint for as long as I could hold on has ultimately, of course, made me tough and tenacious far beyond my “apparent” potential. By interdigitating my ambitions with the training schedules of much faster runners tolerant enough to have me plodding along behind them, I have been able to pull myself up toward their level.

Interestingly, none of these mentors so central to my development as a runner finished the race in which my big breakthrough came, the 1974 Mission Bay marathon. Tom Bache has been out of running for more than a year with a chronic back injury that has forced him to look to cycling as a competitive outlet. Don Shanahan was suffering through the sixth month of an interminable muscle pull. Bill Gookin and Denny Kasischke ran into injuries or out of steam during the race. George Green was felled by a wrong-way cyclist the day before the race. And Peter Fredriksson, the veteran Swede who has taught me so much about training and racing, hobbled along on crutches, swinging a cast I had applied to his leg because of a severe tendinitis. Nevertheless, they were there to rejoice at the finish over the fat 14 minutes I’d taken off my only prior marathon time. In a very real sense, my triumph was theirs too. They had helped me perform the alchemist’s dream of transforming lead into gold.

This exceptionally slow but unusually ambitious distance runner has parlayed patience, an attraction to hill running and the tolerance of a group of fast fellow distance runners into a 2:30 marathon. None of us “chasers” will ever match Frank Shorter. We can, however, emulate the “racers” to the limits of our physical abilities. Because in so doing we gain self-respect and the respect of our peers, *res ipse loquitur*—the value is self-evident.

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THIS DIRTY AIR WE BREATHE

*Ah, taste that
sulfur dioxide in your throat.
Feel that carbon monoxide rushing through your bloodstream.*

by Bill Nicolai

Bill Nicolai, a company magazine editor in New York City, contributed this article originally to *The Winged Foot*, a publication of the New York Athletic Club. We reprint it with the NYAC's permission.

"Few people realize the tremendous impact of air pollution upon individuals who jog or bike ride," air resources commissioner Fred C. Hart said at a recent NYAC Joggers' Club monthly meeting.

"Studies made in Los Angeles show that milers running on days designated as 'unhealthy' ran 5-10 seconds slower than their usual time. But even more important, constant exposure to air filled with pollutants is dangerous to everyone's health."

"I don't know of any studies made of joggers in New York City," he said, "But we do have a great deal of information which proves that air pollution levels in the metropolitan area are considerably in excess of national, health-related air quality standards. We also know that a big percentage of this pollution is vehicle-generated."

Until recently, the 32-year-old commissioner—who runs "at least 20 miles a week"—had habitually run along the eastern edge of Manhattan's East River Drive. Occasionally, during this activity, he would "become dizzy and didn't know what was causing it." When his assistant advised him that the air he was breathing was filling his lungs with a possibly unhealthy dose of carbon monoxide and other pollutants, Hart shifted to an indoor track. And the problem was solved.

His principle enemy, while running along the highway, was carbon monoxide. Ordinarily, hemoglobin—a protein molecule in the red cells of the blood—combines with and delivers oxygen throughout the body. When exercising, the need for additional oxygen increases. Unfortunately, hemoglobin also readily combines with carbon monoxide—replacing space in the red cells that oxygen normally occupies. In an atmosphere with high levels of carbon monoxide, there is less oxygen, yet the body's demands are the same. More blood has to be circulated and the heart has to pump faster. Dizziness can occur when the oxygen supply falls below the necessary level.

"Joggers who run alongside heavily travelled roadways should stay 30-50 feet away from cars," Hart told the group. "We know that carbon monoxide leaves the exhaust pipe of an internal combustion gasoline engine at concentrations of tens of thousands of parts per million and is rapidly diluted as it travels from the vehicle. To be safe, both joggers and bike riders should utilize paths and roadways as far away from traffic as possible." Parks and indoor tracks were especially recommended to the group.

"Depending upon the health of an individual, unsafe levels of carbon monoxide in the blood are considered to range from 1½ to 5%," the commissioner related. "However, tests of persons working in midtown traffic revealed levels starting at 2.8% for non-smokers and 6% for smokers. The higher smoker percentage may be attributed to constant inhaling."

Carbon monoxide represents additional problems because, unlike oxygen, it doesn't eliminate itself from the hemo-

globin quickly. Generally, it takes between three and four hours. Thus, a person coming to work by car in the morning will carry a significant amount of the pollutant in his system until lunch. Central air conditioning in an office building will provide a good clean atmosphere during the working hours as long as the air intake system is on the roof. But if the worker leaves the building, another dose of air pollution may result. Again, three or four hours inside the building will help the body's circulatory system rid itself of pollutants. However, the return trip home recontaminates the individual."

Hart encouraged local runners to take heed of New York City's Air Pollution Index. "Excessive physical activity should be significantly decreased or completely avoided on days which are designated 'unhealthy,'" he advised.

The daily Air Pollution Index is a simplified description of pollution levels in the city during the 24-hour period preceding the report, along with a forecast of the coming day's air quality. It includes a one-word description of the overall level (i.e., good, acceptable, unsatisfactory and unhealthy) and is based upon the pollutant which reaches the poorest quality designation for the day. Carbon monoxide as well as sulfur dioxide, smokeshade, nitrogen dioxide, and oxidants have all been found by the Environmental Protection Agency to adversely affect public health.

Each of the four one-word index designations refers to a federal standard that should not be exceeded more than once a year. Therefore, the designation "good" means that the levels for that day were at or below the federal standard. "Acceptable" means that, although the federal standard is not met, the levels are not so high as to jeopardize meeting that standard over the course of the year. "Unsatisfactory" means that if the levels were to occur over a substantial number of days, the standard would not be met. "Unhealthy" refers to chronic, not short-term exposure.

"The effects of air pollution are not usually as obvious as dizziness," Hart concluded. "They tend to be erosive to the system... some showing up years later. But they affect us all.

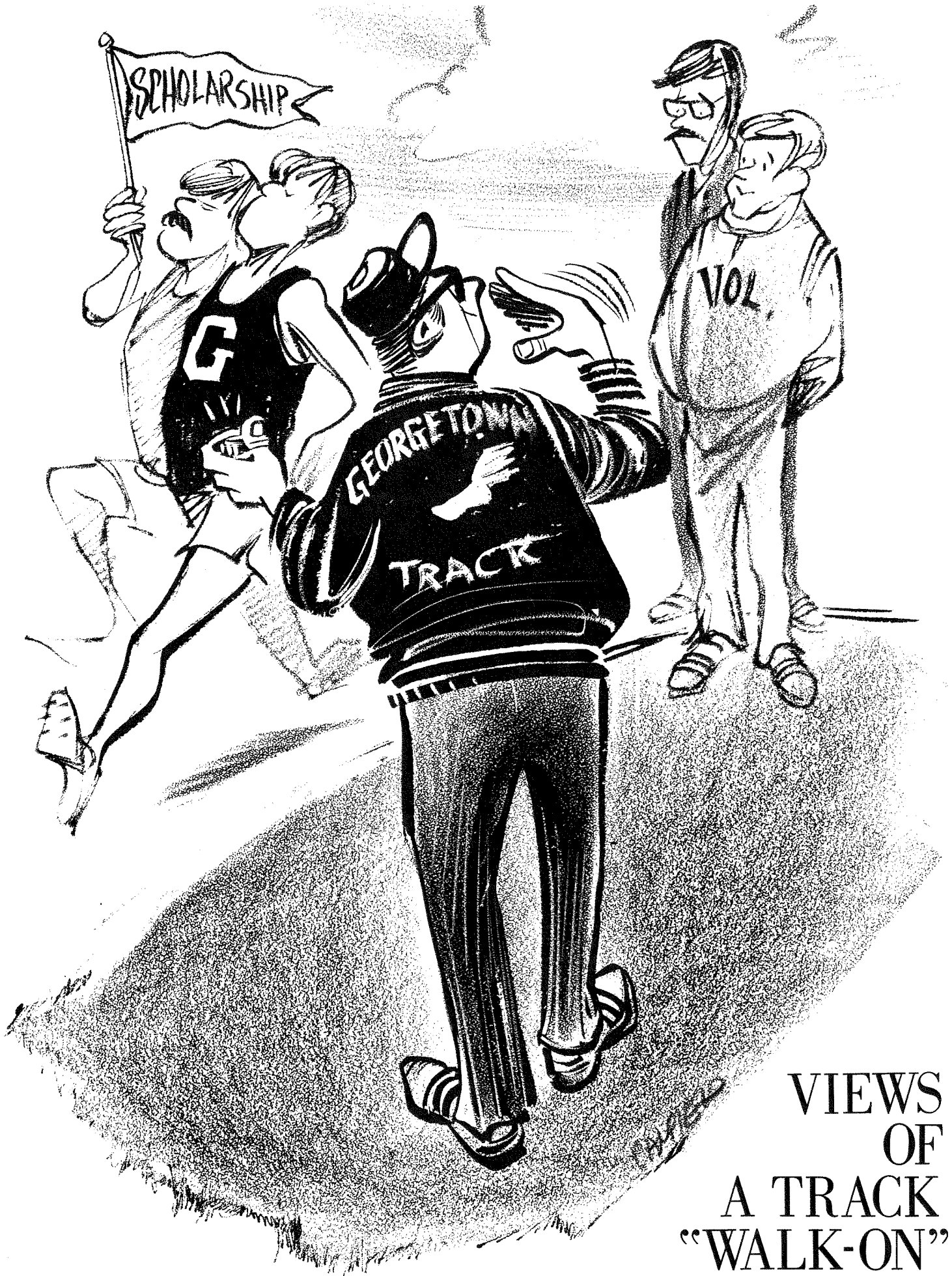
"We've developed a plan that will help make New York City a cleaner place to live, work and jog. We need everyone's help. It just won't happen. Election time isn't too far off. Find out how your local politicians feel about pollution. Get them to take a stand. And then get out and vote for those who support your views."

NEW YORK CITY AIR POLLUTION INDEX

Air Quality	Sulfur Dioxide (parts/million)	Smokeshade (units)	Carbon Monoxide (parts/million)	Oxidants (parts/million)
Good	0.00 to 0.03	0.0 to 0.3	0 to 10	0.00
Acceptable	0.04 to 0.06	0.4 to 0.6	11 to 15	0.01 to 0.02
Unsatisfactory	0.07 to 0.10	0.7 to 1.0	16 to 20	0.03 to 0.06
Unhealthy	0.11 to 0.40	1.1 to 5.0	21 to 60	0.07 to 0.15

above the upper figures is the "Danger Level"

Daily newspapers in most metropolitan areas carry air quality statistics similar to New York's. Of the pollutants, sulfur dioxide is an invisible irritant gas produced almost entirely by burning fuel to heat buildings and to generate electric power. Smokeshade consists of the fine particles suspended in the air that come almost equally from heating, incineration of refuse and a combination of power generation, industry and transportation. Nitrogen dioxide is an irritant gas formed from the nitrogen in the air during high temperature combustion process, its primary toxic effect being on the lungs. Oxidants are eye-irritating chemical compounds formed by the action of strong sunlight on nitrogen oxides and hydrocarbons (evaporated solvents and gasolines).



VIEWS
OF
A TRACK
"WALK-ON"

by Martin Martinelli

Sometime in the distant past, Georgetown University had itself quite a legion of track men. Ancient chronicles record the names of such greats as Charles Capozoli, Carl Joyce and Al Blozis as having been one-time warriors. More modern journals tell of the exploits of Bob Zieminski, Eamon O'Reilly, Ricardo Urbina and Steve Stageberg.

However, the Medieval Period came to a crashing halt in the fall of 1968 when (as legend has it), rebellion shook the ranks, the Hungarian leader, Stephen Benedek, was deposed and the army was left to wander on its own. The Golden Age of Georgetown track had ended.

Or, in more mundane terms, there was no track coach and there was no recruiting done for the 1969-70 school year.

Enter one Francis X. Rienzo. Hired to become the new track coach, he had just complete 13 years of coaching at Archbishop Molloy High School in New York City (see "Managing a Team of 280," March 73) as one of the most successful scholastic coaches in New York history. With the remnants of the Georgetown varsity, it seemed as if Rienzo would have a strong nucleus of good runners (especially middle-distance men) to begin his program.

However, Rienzo soon found that coaching college athletes was not quite the same as coaching high school athletes. Team discipline was far more lax and getting the runners out to practice was not as easy to do as it was in high school. He had problems reconciling what he considered to be necessary team discipline and decorum with the amount of discipline college runners expected to tolerate.

This "lack of discipline" (as Rienzo called it first) was further reinforced by the problem of the "good life." During the eight months between Benedek and Rienzo, many of the upperclassmen had discovered leisure time and were understandably reluctant to give it up. Morning workouts were sparsely attended at first, it being just too difficult for some to say goodbye to their beds so early.

But if Rienzo had problems with upperclass lethargy, it was nothing compared to the problem of somehow fielding a freshman team. Since no runners had been recruited because of the lack of a coach, they had to be gleaned from the incoming student body. Everyone who had so much as mentioned he had gone out for his high school team (and there were many, since every little extracurricular activity helps on a college application) had a letter waiting for him in his room the day he arrived, urging him to come

out for the track team and "give it a try." And give it a try was all a lot of runners did as a number of them paraded out to one or two practices and then disappeared, never to be seen or heard from again.

If the upperclassmen found it difficult to get back into the habit of running twice a day, the freshmen found it impossible to get into it at all. Ask any freshman tryout what his time for the mile was in high school (since most of them tended to claim they had been milers) and the answer would invariably be "around 4:25" or faster. Yet after their first practice, they would look like death resurrected. One runner in particular said that he had run 4:30 as a sophomore, only to quit because of a personality clash with his coach. He quit again in college after a week, this time because of not having enough time to study. However, a few weeks later, Rienzo accidentally mentioned that he had seen the freshman around several local bars on week nights and that he wondered how the guy had enough time to bar hop but not enough time to run.

In the end, six freshmen runners remained, including a couple of 1:57 half-milers, a 9:40 two-miler, a 53-second quarter-miler, one sub-midget long jumper and myself, whose high school times are too embarrassing to dwell on.

The first race of the 1969 cross-country season was against the perennial powerhouse, Villanova. The varsity lost, primarily because of a lack of conditioning. The freshmen were shut out (even more conditioning wouldn't have helped us). That was the story of the freshmen team for the rest of the season. Against Navy, NYU, Penn State and William & Mary the script was the same. We finally managed to attain some measure of poetic justice by shutting out Iona in the last meet of the season.

Indoors and out, individuals on the varsity continued their improvement in their various events. But for the freshmen, it was more lean times. By Christmas, the team had been whittled down to five "all-purpose" runners. Each week we would run a different race. Each week we would train for a different event. One Monday coming out and doing speed work for the 440, another Monday coming out and doing distance work for the mile. The suspense was always there and often the workout would begin with, "Well coach, what are we running this week?" Perhaps we didn't get a chance to develop our best event, but one thing was certain—if one didn't know his best event, there was every chance to find out what it was.

With the coming of the 1970-1971 season, the first of Frank Rienzo's re-

cruits arrived. Perhaps the biggest surprise was the overall quality of the new recruits. They were a lot better than one would normally expect a first-year recruiting job to net. But with the addition of high-class talent, running for Georgetown lost a lot of the fun and excitement that had characterized my first year. Gone was the uncertainty of who was running what event which week. With the 1970 cross-country season, organization came to the Georgetown track program.

Another dismaying aspect of the first recruiting year was the attrition of the number of upperclass runners. As the quality of running at Georgetown improved, many of the volunteers began to feel out of place. Although there was still a good amount of attention given to them in the new organization, the volunteers no longer felt as essential to the team as they had been a year before. Many of them quit to go their own way.

Gone, too, were the runners who had discovered that "good life" during their stay at Georgetown. By my final year there, I was the only senior left on the entire team. That, more than anything else, dramatized the change Georgetown track had undergone in such a short period of time.

There is always the problem of encouragement and finding enough meets for the non-scholarship runner to participate in while still catering to a big-time track program. Georgetown has done a pretty good job finding a solution for the latter problem. The scheduling is designed to give both the good and the so-so runners plenty of opportunity to race against good competition.

But encouragement of the volunteer is somewhat of a problem. Having now graduated, I left the track program at Georgetown with mixed emotions. Freshman year was a lot of fun and I ran some very good times (for me, anyway). But in the year after that, the attitude of both the coaches and runners changed. Things became much more serious and a lot of the good times went out of running. The amount of attention given by the coaches shifted undeniably toward the scholarship runners, often to the exclusion of the volunteers.

In the process of rebuilding a national track power, Georgetown seems to have lost a lot of that which made running seem enjoyable and, to a certain extent, lost the thing that made running for Georgetown so unique. But in most major collegiate track programs, the walk-on is excluded and ignored entirely. Perhaps the most unusual thing about the rebuilding of Georgetown as a track power is that the volunteer is still accepted and coached.



High school boys are competing nationally and internationally. Girls like Sue Brodock are setting US marks

SCHOOL BOYS

BY ELLIOTT DENMAN

There's little doubt about it. High school race walkers are among the most determined athletes in America. Think of the problems they face. Their sport is generally ignored on the interscholastic level. There's little glamour in it and never a grandstand full of cheering fans. It takes years of often lonely training to get ahead, and even then the rewards are sometimes slim.

But high school race walkers Mitch Patton of Phillipsburg, Kans., Jim and Brad Bentley of Reno, Nev., Jimmy Murchie of Port Washington, N.Y., Steve Herrman of LaCrosse, Kans., and Stella Palamarchuk of Cornwells Heights, Pa.—to name a few of the young US stars in the sport—won't buy any of those arguments.

They're all training hard for the big races of 1974, putting in the long practice mileage that's all-important to success in the heel-and-toe sport. Training for race walking generally follows the guidelines for long distance runners—but is more time-consuming.

Like their running cousins, race walkers mix up their distance work (on road or track) with interval sessions (on the track) to get the best blend of speed and stamina.

Mitch Patton is America's most traveled schoolboy race walker—and was the top US finisher in junior international 10-kilometer (6.2-mile) events for the 1973 touring AAU team in meets in Germany, Poland and the Soviet Union.

Mitch is also a star cross-country man as a senior at Phillipsburg High and says, "I sure wish race walking was a standard event in high school track. It's just as hard as running or anything else in track. In Europe, it's one of the most popular events."

Jim Bentley, a Reno High senior who represented the US in the 10-kilometer walk against the Soviet Union in Sacramento in 1972, says, "Our area of the country is very receptive to the sport and we have many high school race walk-

ers in Nevada and California. But it still hasn't been added to high school track as a point event. Hopefully, one day it will be added and that's when you'll see a big increase in high school walkers all over the country.

"Walking in the secondary schools in some countries of Europe has proven that we must start race walking in school, for the younger athletes, if we are going to get quality walkers in later years."

Jim's younger brother, Brad, a Reno High sophomore who has starred in AAU Junior Olympic competition, already is looking ahead to college and says, "By that time, I hope I can get a full-time race walking scholarship to a major university. By then, race walking should be approved as a standard event in track and field, college as well as high school. Let's hope the NCAA backs us up."

New Yorker Jimmy Murchie, a Schrieber High junior who won the National AAU Junior 20-kilometer walking title last summer, admits "race walking isn't as skillful as gymnastics, for example, but it sure does take a lot of hard work."

"Other track athletes respect race walkers and the training they put in," says Jimmy. "But still there are some students who ask dumb questions about it."

Herrman, a LaCrosse High senior, has run into the same problem. "Most high school students here are uninformed about race walking," he reports. "But as far as other athletes are concerned, they look at it just like any other track event."

Steve is the current National AAU Junior Olympic champion in the one-mile walk and regrets that "there are just too many coaches and officials who don't want to promote walking. I just can't see why."

Facing tougher obstacles than the boys is Pennsylvania's Stella Palamarchuk, a Bensalem High senior. Race walking, has been a standard event in AAU men's track and field since 1876, but unknown as a women's AAU event until the last few years. Stella personally helped nudge the AAU into recognizing women race walkers and now hopes to promote girls high school competition, too.

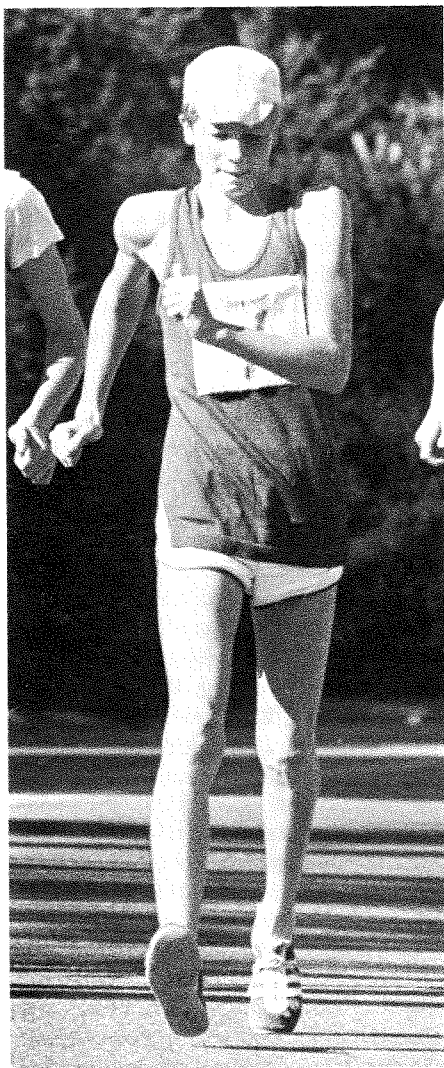
As far as Stella is concerned, "Race walking is a medium of expression. It's a sport that requires individual discipline as well as outstanding athletic ability.

AMERICA'S YOUNG RACE WALKERS

The March Runner's World carried the note (in "Age of the Athlete") that "the average age of US race walkers—almost 32—is more than five years older than any other group... It speaks of an unhealthy trend. The same men are leading year after year, and new walkers aren't coming up the way they do in other events."

The implication is that there are no young walkers. Not true, say the writers here. High school boys have never had so many good walkers in their ranks. High school girl Sue Brodock is the fastest women's miler ever.

Elliott Denman, a onetime Olympian in walking, was on the coaching staff of the US junior team which toured Europe last summer. Brice Hammerstein is a southern California women's club coach.



ABOVE: Promising high school race walker Brad Bentley of Nevada. (Stan Pantovic photo)

PAGE 30: Women's mile and 5000 record holder Sue Brodock of California. (Doug Schwab photo)

The sport also has its artistic qualities—which girls appreciate—and if you put all these ingredients together they make for an interesting combination. Race walkers are 'aware' people. They've got to be."

The rules of race walking are simple. Competitors must maintain constant contact with the ground, hence no running, hopping or skipping. The forward leg must be straightened at one point in the stride. Judges are present at all races to enforce the rules. Race walkers go two to three times faster than ordinary pedestrians and about two-thirds the speed of runners.

Most high school walkers put in 8-10 miles of training a day and don't recognize any "off-season." Many are

also distance runners in cross-country and track while others—like Jim Bentley—dabble in a variety of sports. Bentley, a former Junior Olympic high jump record holder, uses a weight program, swims and is involved in cross-country skiing.

Almost all of the high school walkers credit the AAU's Junior Olympic program for getting them involved in race walking. Local events at distances from 440 yards to six miles are held each year around the nation, and the top boys in the 16-17 age bracket gather each summer to have it out in the national championship meet.

In addition, the AAU each year stages junior national championship walks for boys 19 and under at distances up to 25 kilometers (15.5 miles), as well as girls walks at shorter distances.

While race walking still isn't part of NCAA track meets, it has been a scoring part of NAIA national college meets for three years and is a point event in several college conferences.

For America's young race walkers, the big 1974 dates are June 28-29, when the third annual US vs. Soviet Union junior dual meet takes place in Austin, Tex. A 10-kilometer walk is on the program.

Looking ahead to 1975, the US juniors are expected to take to the road again and stage their second European invasion.

America's senior race walkers—led by Larry Young—have starred in the last two Olympic Games. Those determined high school walkers are itching for their turn in the spotlight, too.

SUE BRODOCK

BY BRICE HAMMERSTEIN

"So quiet you wouldn't know she was there if you weren't looking at her," is the way race walker Sue Brodock was once described by her coach, Dave Japs.

To watch the 17-year-old Californian in a race, though, it would be impossible not to notice her. In a recent meet, Sue cut an amazing 29 seconds off the national women's record for the outdoor one-mile walk, cruising the distance in 7:15.2. Later, she walked 5000 meters in 26:00.2 for another American record.

To talk to the shy walker and to watch her race are two different experiences. Off the track, Sue is quiet and easy-going. On the track, she is relentless and strives for perfection. She says, "I really just concentrate on my form and try to do as well as possible. I don't

notice what is going on around me and probably wouldn't notice if someone was beating me."

What keeps Sue walking? "Well," she says, "since there aren't any walks for women in the Olympics and there aren't any national teams for women walkers, all I have to shoot for are records. Besides, I like to walk."

For a national record holder, Sue came to prominence in a strange way. She started competing as a distance runner for the Fontana (Calif.) Cinderbells at age 10. She ran with moderate success until she was 14, when she took up race walking because of an allergy. By the time she was 16, the Cinderbells had merged with the Rialto Road Runners where Sue was to train with one of the pioneering teams in women's walking.

The team included three other girls 16 or younger—Esther Marquez and the Gerth sisters, Sonia and Dayna. Esther is generally recognized as one of the early leaders in the women's race walking movement, with Kati McIntyre of California and Lynn Olsen of Michigan. Kati won the walk the first time it appeared in the national meet as an exhibition and Lynn walked a 7:39 mile indoors in '73.

In the 1973 outdoor national meet, Brodock and Marquez, dominated, with Esther winning the women's division (7:54.6) and Sue winning the 14-17 division (7:59.8). Brodock easily won the five-kilometer championships, walking 26:29.0.

Someone once said jokingly about distance runners, "the reason they run distance is because they can't do anything else." Sue once said about herself, "I'm not too good at anything else in track, but I like cross-country and the two-mile."

Coach Dave Japs says, "Sue trains basically as a distance runner. Once per week she will walk intervals of varying distances between 220 and 880 yards, and once per week she will go for a walk of an hour to an hour and a half. During the other days of the week and during the off season, Sue trains with the distance runners."

Susan Beth Brodock: Fontana, Calif. (Rialto Road Runners). 17 years old (born April 5, 1956 at Rome, NY). 5'6½", 110 lbs. Student at Fontana High School. Began running at age 10, race walking at age 14.

Racing: (Walks) Mile—7:15.2 (1974). 5000m—26:00.2 (74). 10,000m—56:47 (73). (Running events) Mile—5:32 (74). 2 miles—11:58 (74).



With his stunning 3:32.5 1500, unheralded John Walker suddenly became a superstar.

NEW ZEALAND'S LATEST SENSATION

by Dave Prokop

The news had just come from New Zealand that Tanzania's Filbert Bayi had run 3:32.2 for 1500 meters at the Commonwealth Games to break Jim Ryun's 6½-year-old world record. In the lobby of the Holiday Inn near San Francisco International Airport, Marty Liquori read the newspaper story of the race incredulously. Liquori, who had run the mile at the San Francisco Examiner Indoor Games the previous night, didn't seem as surprised by Bayi's performance as he was by that of the second-place finisher, John Walker of New Zealand, who had also gone under the old mark with his 3:32.5.

"That track has got to be short," Liquori said. "You heard what they ran in the 800 (three runners under 1:45, a first in track history). And now this!

Who's this guy John Walker? Did you ever hear of him?"

No one had. Liquori went back to reading the newspaper story, as if hoping to find some additional piece of information which would restore some logic to the situation.

The fact is that 22-year-old John Walker, a big, blond runner from the Auckland suburb of Manurewa, had come into the Commonwealth Games with immensely more impressive credentials than his international reputation — or lack of it — might have suggested. On a European tour last summer, he had run a 3:38 1500 and had reduced his 800 time from 1:48.2 to an impressive 1:46.3. He was also a member of New Zealand's 4 x 1500-meter relay team (with Tony Polhill, Rod Dixon, and Dick Quax) that set a world record.

Walker (483), with teammate Rod Dixon on his right, chases Filbert Bayi entering the homestraight of historic Commonwealth Games 1500. (Mark Shearman)

After returning from Europe, Walker rested for one week and then started three solid months of Lydiard-type training, averaging 80-100 miles per week, in preparation for the Commonwealth Games. Just before the Games, he ran 1:45.3 for 800 meters and 3:55.8 for the mile. It was a hint of things to come.

But 3:32.5 for 1500 meters! That's equal to a 3:49.5 mile! Walker himself couldn't believe it—even though his coach Arch Jelley had told him he would break the world record in the 1500 at the Games.

"I certainly wasn't expecting to run that fast," says Walker. "I thought I might be able to run 3:36. And the race didn't feel that fast. Running 3:32.5 didn't feel any faster than running, say, 3:39. Everybody was there, and you could just sit in and get carried along. And after the race I recovered very quickly."

New Zealand middle-distance runners have been remarkable in their ability to rise gloriously—and often unexpectedly—to the occasion in major games competition. Peter Snell's surprise 800-meter victory in the Rome Olympics in 1960 and Rod Dixon's bronze-medal performance in the Munich 1500 are two classic examples. John Walker, who's now added a classic example of his own, has an explanation for the phenomenon.

"I don't think it's a matter of confidence in the usual sense. In fact, it's not an over-confidence, I can assure you of that. It's a knowledge that we've done the work and I think this is the main factor. You think, 'Well, look, I've gone out and done all the work that I should have done, all the mileage and all the speed-work—okay, if I run bad I run bad, if I run well I run well.' And that's the only way I think you can look at it.

"Also, I think it's very fortunate that we are trained along the Lydiard method of a lot of stamina work because it enables us to come up not once for a big race but several times—especially in a games. Take the Olympic Games for Rod Dixon, for instance. He improved in every race he went through. And this happened to me in the Commonwealth Games. And I've seen it happen to Quax, same as the rest of them.

"This is why, in fact, my coach and I went all out to try to get me in the two events (800 and 1500). My coach was working on the principle that if I ran the 800 first and ran the heats, semis and

final, that because of the way I train—a lot of long endurance work—all the 800 races would enable me to sharpen up and race better in the 1500.”

The plan worked to perfection. In the 800 meters, Walker, the only New Zealand distance man to double in the Games, ran 1:47.8 in the heats, 1:46.2 in the semi-finals and finally 1:44.9 in the final to win the bronze medal behind Kenyans John Kipkurgat (1:43.9) and Mike Boit (1:44.4), and ahead of Filbert Bayi (1:45.3).

Walker qualified for the historic 1500 final by running 3:42.5. In the final, he started from the inside lane and was jostled two or three times as the field of 12 got underway. As a result, he was in back of the pack for the first 300 meters and had to work his way through while Bayi was stretching out in front through a 54.9 first 400.

By 800 meters, with Bayi about 25 meters ahead of the pack, Walker was able to tuck in behind his countryman Dixon, Ben Jipcho and Australia's Graham Crouch. His plan all along had been to key on Dixon, who he felt would be the man to beat in a fast finish, and make his own finishing effort in the final straight. Unfortunately, when there were only 200 meters remaining, he realized that neither Dixon nor Jipcho was going to catch Bayi.

Walker took off in pursuit himself, actually drawing to within 2½ yards of Bayi entering the finishing straight. But the 20-year-old Tanzanian had surprising energy left and was able to defend his lead. The times, from Bayi and Walker on down, were stupendous: Jipcho, 3:33.2 (only 0.1 off Ryun's old mark); Dixon, 3:33.9; Crouch, 3:34.2. England's Brendan Foster ran 3:37.6 (about 3:55 mile speed) and finished only seventh!

Walker, who had the fastest last lap in the race, 54.4 compared to 55.4 for Bayi, says if he had the race to run over again, he would key on Bayi. Nevertheless, he feels the best way to run against Bayi is not to try to match his early speed but concentrate instead on running your own race, pacing yourself to be within striking distance in the last lap.

“You have to run your own race,” he says, “because if you try matching him, I think he would go stupid in the first half mile and run about 1:50, which he has done a few times, and then you'd both blow up.”

John Walker, who is 6'1" and 163 pounds, has been racing on the track since age 17. Before that he had run cross-country for four or five years (training about 15-20 miles a week), but his main sport had been tennis—which, coincidental-

ly, had been Peter Snell's game before he took up running seriously. Tennis still rates high with Walker.

“I think if I hadn't improved over the last three years (in running) I would have given it all up and gone back to tennis, because I find tennis a lot easier and more enjoyable. I love to race, but I hate training. You can imagine when I'm sitting down at work sometime during lunchtime and it's pouring down with rain, which it does a lot in Auckland, and I've got to go out there and run for an hour, then go back to work, and in the evening go out again—and it's still pouring down with rain. This is what the majority of New Zealand runners have to face. And I do it seven days a week. When I started my Commonwealth Games training after I got back from Europe last year, I never missed one day up until the Games.”

Walker is a metal sales clerk for an Auckland construction and metal firm called Downer's. The firm operates a big quarry, which is where Walker works (“you see, we take this rock out of the quarry, and we sell it”). He works a long day—seven to five—fitting in his training at noon (he runs a 10-mile course from the quarry at six-minute mile pace or faster) and in the evening.

His coach used to have him doing mainly interval training, but in 1973 they switched to the Lydiard-style program. He now runs Lydiard's famous 22-mile Waitarua course each Sunday (sometimes with Quax and Polhill, who also live in Auckland). He used to do a great deal of hill springing also, but he's discontinued it since he's found it disagrees with his legs. He has been susceptible to little injuries from time to time—mostly knee trouble.

Walker's evening training in the early weeks of his preparation for the Commonwealth Games usually consisted of bulk interval workouts, such as 20 x 400 in 61 with a 400 recovery. But in the last month before the Games, he cut back to about three interval workouts a week, making them shorter but quicker—for example, 6 x 400 in 54-55, or 10 x 200 in 26. Throughout, he kept his weekly mileage in the 90s.

The Commonwealth Games 1500 was a clear indication that a new era of mile and 1500-meter running has arrived, with immensely talented young runners like Bayi, Walker, Dixon, and, of course, the new US sensation Tony Waldrop, at the forefront. Right after the Games, in fact, Kenya's Ben Jipcho flatly predicted a 3:48-3:49 mile soon.

John Walker feels there are two keys to the super-fast times that seem immi-

nent. Bayi is the first. “I think in order to get a very fast time you're going to need a Filbert Bayi in the race for a start because he's a natural leader. Then you're going to have to have a really high-class field that is going to sit back, say, 20 meters behind and hope to get dragged through onto him.

“You see, every time he runs he goes out very fast anyway, and most of the time the guys would just let him go. They thought, ‘Well, Christ, this guy's ludicrous! He's going to come back anyway.’ But then they found out he doesn't come back. So now they're getting a bit wiser and they're watching him closer, they're chasing and they're recording the fast times.”

The other key, he feels, will be the ability to run a very fast 800 meters—in fact, to emphasize the shorter distance both in training and competition (interestingly, Walker still considers himself an 800-meter runner first, although he admits the 1500 must be his best event).

“Filbert Bayi improved his 800 time in the Commonwealth Games (from 1:46.9 to 1:45.3). And I did exactly the same. And I think this is the true answer—to be able to run a fast 800 meters and to be able to sustain it. And this is more or less the principle we work on: if you can run a fast 800, you can run a fast ‘15’ because you can stay in at a much quicker pace. You see, (in the Commonwealth 1500) they went through the 1200-meter split in 2:50, which is very quick.”

Quick indeed! But apparently not as quick, in Walker's view, as it's going to become. “I think the new era of running now is going to be going through the first 1200 meters as fast as you can and just hang on. In the Commonwealth Games this wasn't the case because we still came home in the last 300 meters in 40 seconds and under 27 for the last 200. So we weren't hanging on, we were still kicking through, which was quite surprising.”

On his own potential, which seems nothing short of awesome, he is non-committal but hopeful. “If I said I was going to run faster or I was going to run slower, I just wouldn't know. I can only say I *hope* to run faster. And I hope that I can reach my peak about the time of the '76 Olympic Games. But you never know. You could get injured or anything could happen from now on. But I think that maybe I can run faster, or I would like to think I can. My coach has said I can go faster.”

The coach should know. He was amazingly accurate in predicting Walker's capability once before.

ALAN PASCOE'S RISE AND FALL

Rarely has a high hurdler made the transition to intermediate hurdling as successfully as 26-year-old Alan Pascoe has done. He took his 13.7 credentials into the 400-meter barrier event in 1973, and within that one season established himself as a world class competitor by winning the European Cup title race and defeating Olympic champion John Akii-Bua in Italy.

Alan's next target was to peak in time for the Commonwealth Games. These were held in Christchurch, New Zealand, at a time when British athletes were deep into strength-building winter training work (January). So Pascoe had to adapt himself to a change of climate and change of pace in order to be in top condition for the test.

Even his most optimistic fans were guarded about his chances as Alan lined up for the Games final against a field including Bill Koskei (Kenya), Bruce Field (Australia), high hurdles champion Fatwell Kamayio (Kenya) and fellow Englishman Bill Hartley. Lacking from the lineup were only Akii-Bua (who stayed home in Uganda nursing a sick wife) and defending champion John Sherwood (injured before the Games and scratched from the semis). Pascoe's form in the preliminary rounds had been less than impressive, but in the final we saw how closely and cleverly he had been keeping himself under wraps.

"This was the first time I've ever laid awake the night before a big race," Alan confided afterwards. "I was just petrified, worrying about that sixth hurdle, where I change leading legs." He need not have worried, for everything went off perfectly for him, even though Field (who had run 49.3 in the semis) led Pascoe all down the backstretch.

Alan was sticking to his adopted race strategy, which was to run 13 strides between the first five flights, 14 to hurdles six and seven, and then finish with 15 strides between the remaining hurdles. He caught Field by the eighth barrier, beat him with a smooth, controlled piece of power running to the ninth, and won going away in the fine time of 48.8.

Two things perhaps marred Pascoe's victory: 1. We will never know if Akii-Bua would have beaten him, but my guess is that the Ugandan would not have done so. Had Akii-Bua been in top con-

dition, I'm sure he would have raced in Christchurch. But as it was, after an indifferent European summer campaign, he had everything to lose and little to gain. Without longtime coach Malcom Arnold's expert guidance, and without realistic incentives to chase now, one wonders if we will ever see John Akii-Bua in his fantastic Munich form again.

2. Alan put on a victory display after the race that he'll never live down. Trying to clear two flights facing the "wrong" way (against the hurdle supports), he came crashing down onto the hard Chevron track both times! "I'd have put any of my boys in Dulwich (Pascoe is a schoolmaster there) in detention if I'd caught them doing what I tried to do," he confessed. "I've always wanted to make a fool of myself in front of 35,000 people in a crowded stadium... But I really can't even begin to describe the feeling of relief I felt after winning!"

What now? "Rome obviously," Alan says. "Winning the European 400 hurdles title will mean a lot to me, and that's what I'm working for now. The European Championships are at the right time of year for us (September), plus I like to compete in Italy. The hurdle races get tremendous support out there because of their great tradition in hurdling through men like Ottoz, Frinolli and Morale, etc.

"Rome is something I'm *really* looking forward to, in fact. The general depth of performance there will be far greater than in the Commonwealth Games, and all the competitors will be on equal footing in terms of preparation. I'm planning to take a master's degree when I leave Dulwich after the Easter term, which means I'll be studying at home. I will be able to plan things around my studies, and get some extra training sessions in as well."

Pascoe was certainly not a failure at high hurdling earlier in his career. But it was after doing disastrously in his specialty in the Munich Olympics (eliminated in the semifinals) that he finally decided to switch to the longer barrier event. Only the fact that he ran a fine 45.1 relay leg and helped the British team to silver medals in the 1600-meter relay there salvaged the Games for Alan.

He says, "I was very, very disappointed with my high hurdling in Munich.

It was the first time I really realized why people came to give up athletics through sheer frustration and disappointment... But then I felt I owed it to myself and all the hard work I'd done to make a real success out of hurdling."

Most people would say that winning the 1969 European indoor hurdles title and gaining European bronze (1969) and silver (1971) high hurdles medals is hardly a lack of success. But Alan is acutely aware of the immense gulf (Guy Durt apart) between top European and American high hurdlers. There was another reason for moving up too: steroids.

"One of the things that decided me to get out of the high hurdles was the number of opponents I noticed change from year to year. I would be lined up against a bloke one year, and then I was lined up against him a year later. It was obvious that the physical changes that had taken place in him within that year were so dramatic that they could just not be natural. There's just nothing more demoralizing and disheartening than this."

His first serious attempt at 400-meter hurdles came in September 1972 when he won at the Coca-Cola International Athletes Club Invitational in 50.9. By the middle of 1973, he was down to 49.5 and a year after taking up the event he was the Europa Cup winner.

Pascoe is realistic about the future, however, and looks beyond Rome 1974 to Montreal 1976. Reminded of the fearsome training Akii-Bua underwent in order to stun us all in Munich, Alan says, "Yeah. It scares me to death when I think of the training I'm going to have to do in the next two years for Montreal. It's going to be hard, hard grind and slog all the way. But then, when you think about it, no one ever won an Olympic title without working hard for it. Just ask David Hemery what he had to do prior to 1968."

What sort of time does he visualize winning in Montreal? "That's a tough one. I would like to run 47.4 or 47.5, which I think you'll need to win out there. Weather conditions permitting. Generally, though, it's wrong to think about times. The thing to do is think about winning races."

Alan Pascoe has proved he can both win and run fast times, even if he did fail at the 11th and 12th hurdles in Christchurch.



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BUFFALO TO NIAGARA 1st INTERNATIONAL MARATHON—Saturday, October 26th. Perfect course, beginning Delaware Park, Buffalo, crossing the famous Peace Bridge into Canada, continuing along the Niagara River on a gorgeous, tree-shaded winding road, ending at the magnificent Niagara Falls. For information, contact Alan Gross, 378 Elmwood Avenue, Buffalo, NY 14222 (716) 882-1363.

SIXTH ANNUAL FREEDOM MARATHON—June 29, 1974. If you haven't entered, better hurry. Entries close June 22. Complete information and entry blanks from Illinois Track Club, Box 2976 Station A, Champaign, Illinois 61820.

MARIST COLLEGE DISTANCE RUNNING CAMP—Two one-week sessions. August 10-16, 17-23. Best camp in country! Last year's featured guests: MARTY LIQUORI, BARRY BROWN, TOM FLEMING! This year: MARTY LIQUORI, BARRY BROWN, PLUS OTHER NEW INTERNATIONAL DISTANCE RUNNING STARS! Individualized instruction stations and different expert coaches each session. Limited enrollment to ensure personalized approach. Free brochure: Rich Stevens, Track Coach, Marist College Box 814, Poughkeepsie, New York 12601.

NIKE—Nylon Cortez \$18.90, Leather Cortez \$20.95. We pay postage. Free can of sole saver with each order. M & B Sports, 90 Manhattan, Los Alamos, NM 87544, (505) 662-4665.

The **Hayward Field Restoration Drive** needs your support. Donate \$15 and receive a handsome 18" x 11" wooden plaque made from the seats of the old West Stand. Help return the Olympic Trials to Eugene. Send donations to Hayward Field Restoration Fund, c/o The Athletic Department, 99 W. 10th Ave., Suite 104, Atrium Bldg., Eugene, Ore. 97401.

JOBS AVAILABLE AT RUNNER'S MECCA—Come and let us recondition your blood. Contact Rich Heywood, Director, Box 2186, Mesa, Ariz. 85204 (602) 834-0496.

PAUL SMITHS' COLLEGE MARATHON (Men & Women) and **ADIRONDACK ASSOC. AAU CHAMPIONSHIP** (Men)—Saturday, September 21, 1974, Paul Smiths, NY. Circuit course: Start and finish on campus of Paul Smiths' College Intersection Rtes. 30 & 192 (22 miles from Lake Placid). Scenic Run: Lakes, ponds, mountains. Runners' rates available at College-owned & operated Hotel Saranac, Saranac Lake, NY 12983 (518) 891-2200. Entry fee: \$3.00. Blanks and information: Tom Agan, Box 83, Paul Smiths, NY 12907 (518) 327-3493 (Home), 327-6334 (Office).

PHILADELPHIA MASTERS TRACK AND FIELD CHAMPIONSHIPS—August 3, 1974, Ursinus College, Collegeville, Pa. (suburban Philadelphia). Full schedule of age-group events for AAU members 30 years and older. For information, contact: Walt Fisher, 100 Rodney Circle, Bryn Mawr, Pa. 19010 (215) 525-5081.

CAN-AM INTERNATIONAL CAMP—The East's finest track-field and cross country camp for men and women. For information write: Can-Am Camp, Country Hills, Tully, N.Y. 13159.

HARRISBURG NATIONAL MARATHON—November 3, 1974 at 9:00 a.m. Be on the mailing list. Write: Jack Scarbrough, c/o Harrisburg YMCA, Front & North Streets, Harrisburg, Pennsylvania 17101.

ALBUQUERQUE MARATHON—Sunday, October 20, 1974 at 8:00 a.m. Scenic Course, Ideal Temperature, between 35-50 degrees. Awards: Open, places 1-25, Seniors (35-39) 1-3, Masters (40-49) 1-3, and Super Masters (50 and over) 1-3. First Woman finisher. T-shirts to all finishers. Entry fee \$2.50. Contact: NMTC, P.O. Box 4071, Albuquerque, NM 87106.

FIRST ANNUAL MAYORS' MARATHON—Anchorage, Alaska, June 22, 1974 at 7 a.m. "Morning of the Midnight Sun". Supported by combined Parks and Recreation Departments of the City of Anchorage and Greater Anchorage Borough. Mayors George Sullivan and Jack Roderick endorsements. Planned as an Alaskan qualifying race for marathons throughout USA. Certification not expected until 1975. Course nearly flat over City of Anchorage new bike trails and Greater Anchorage Borough highways. Start and finish at West Anchorage High School. Entry fee \$2.00. Entry deadline application postmark June 15, 1974. All late entries \$1.00 extra with absolute cut-off June 21, 1974 at 5 p.m. Race Director Terry Martin of Anchorage Boys Club. Race Coordinator Jim Cody of Anchorage Parks and Recreation Department. This is a joint effort of Pulsators Running Club and Boy Scouts of Alaska. Applications by writing Marcie Trent, Pulsators Running Club, 1700 Tudor Road, Anchorage, Alaska 99507.

HIGH ENERGY FOOD—Pure bee gathered pollen. 4 tbs. entire protein meal. Almost instant assimilation. Free sample literature. \$5.50 lb. Also fresh Royal Jelly, \$14.00 oz. Breath of Life, Box 747, Los Altos, Ca. 94022.

MASTERS (30+)—For information on championship and development meets send self-addressed stamped envelope to Masters Sports Assoc., 11 Park Place, New York, New York 10007.

RACING NUMBERS—Bib style or single. Consecutive sets from 1 to 50, 1 to 100, etc. up to 250. Plain numbers in stock or imprint your name or logo—2 weeks. Reusable. Inexpensive. Write for complete catalogue. Reliable Racing Supply, 253 Bay Road, Glens Falls, N.Y. 12801.

RUNNING SHORTS

● Roger Moffat writes, "My father had a watch put in his hand by a runner at the congested start of the Boston marathon. It was a bit of a shock, and he didn't get the runner's number nor was he able to find him at the finish (he had trouble finding me). If a reader handed a watch away or knows someone who did, please write me and identify the make and inscription." Moffat's address is 1212 Woodside Rd., Westfield, N.J. 07090.

● Stuart Smith of Washington, D.C., has this story told about him in the *Washington Star*:

He was running in Rock Creek Park "when he became aware that an automobile was moving along beside him. He slowed his pace, hoping the car would pass and go on, but it didn't... Stu turned to see who was in the car. He found himself looking into the barrel of a revolver.

"Not knowing what else to do, he kept on jogging until the man with the gun said, 'Hold it right there, mister. This is a holdup.'

"'I don't have any money,' Stu said. 'All I ever carry when I'm jogging is my apartment keys.'

"Why the robber didn't make Stu take them to his apartment remains a mystery..."

● Twelve men from the aircraft carrier USS Hancock claim a world record for running on water. During a recent cruise, they ran 4660 miles on deck, non-stop, in 36 days. Total distance averaged 388 miles.

● Runners from Harding College in Arkansas and the Illinois Belles didn't like what they didn't read in the February *RW*. Late last year, the Harding team ran a 24-hour relay, covering 272 miles 1713 yards. The mark wasn't listed in the February magazine. The team should have been eighth for the year. The Illinois Belles weren't credited for their five-woman record of 127 miles 690 yards.

Other goofs: In the April issue, steeplechasers John Davies and Bernie Hayward are described as "Englishmen."

They both represented Wales in the Commonwealth Games.... In the March "Looking At People" column, David Baxter is said to have devised a formula for predicting marathon times. That was actually the work of Dan Moore, a frequent *RW* contributor (see "Making of a 2:20 Marathoner" in this issue).

● We've thought for some time that there are no marathon races in North Dakota. The North Dakota marathon at Grand Forks has been a well-kept secret, but it is scheduled for its third running on June 29. Contact Eric Parker, 1924 N. Fourth St., East Grand Forks, Minn. 56721.

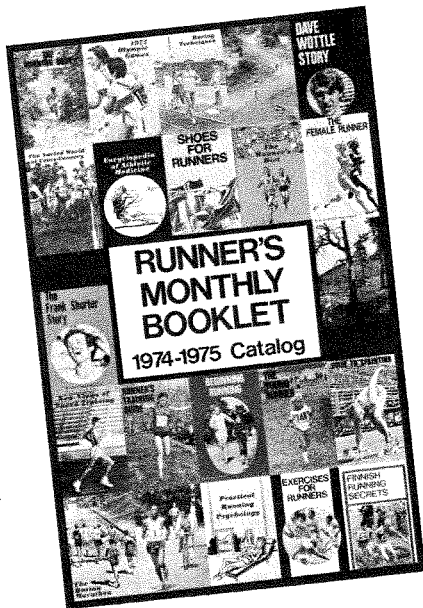
● Tom Brunick announces that the first national coaches cross-country meet is set for Nov. 15, in conjunction with the NAIA championship at Salina, Kans. The four-mile race is open to "anyone who has a coaching card proving you coach somewhere—college, high school or club." For details, contact Brunick at College of St. Francis, Joliet, Ill.

● The Shore Athletic Club of New Jersey regained the 100-runner 100-mile relay record in March with a time of 8:06:14.8, breaking the US Naval Academy's mark by about two minutes. The individual times ranged from 4:17 (Harry Nolan) to 5:46 (George Gloede—"That was the first mile of my career. I'm really a high jumper.")

● Jesse Castaneda of Albuquerque, who last year set a "world record" for continuous walking (with 302 miles in 103 hours), planned to go even farther in late May. He traveled to England to race 20 other walkers for as long as they could stay on their feet. Another Albuquerque walker, Tom McGrane, also planned to compete.

● Dr. Joan Ulliyot, writing in *The Female Runner*, says, "The beginning woman runner always asks, 'Will I lose weight?' Answer: probably not, but you will redistribute it and firm up. Any woman who loses weight with our program has dieted to do so. The men, surprisingly, often lose weight along with inches, without dieting. This sex difference may result from different eating patterns. In rats, males that are exercised don't increase their caloric intake to match the energy spent. Females, however, eat more and don't lose. They compensate perfectly for the calories worked off. If this is true of humans as well as rats, it would account for the observed pattern of weight loss among runners."

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No. 37. RUN GENTLY, RUN LONG—July 1974. This sequel to the popular "LSD" tells how to enjoy a long and productive running career with a minimum of pain. 100 pages. Single copy price \$2.50.

No. 38. HURDLING AND STEEPLECHASING—August 1974. This is a simple step-by-step guide to the barriers—the only truly "technical" events in running. 52 pages. \$1.75.

No. 39. AGE OF THE RUNNER—September 1974. Examining running's effects on aging and longevity, and how a runner's age affects his performance. 68 pages. \$1.75.

No. 40. FIRST STEPS TO FITNESS—October 1974. The beginning runner has a thousand questions come up as he progresses. Here those questions are answered. 68 pages. \$1.50.

No. 41. BIOGRAPHY—November 1974. We aren't yet able to announce the subject, except to say he's one of the major stars of the sport. Length and price pending.

No. 42. ATHLETE'S FEET—December 1974. Foot care is vital to the health and performance of all athletes. Here experts tell how to carry out preventive maintenance. 52 pages. \$1.75.

No. 43. RACE WALKING—January 1975. A former national-caliber walker surveys the sport, offering valuable advice on training and mastering the walking action. 52 pages. \$1.50.

No. 44. 1975 MARATHON HANDBOOK—February 1975. The sixth edition of the perennial favorite in this series. 116 pages. \$1.95.

No. 45. STRESS OF SPORT—March 1975. This booklet examines stress concepts from the scientist's, the coach's and—most importantly—the athlete's viewpoint. 100 pages. \$2.50.

No. 46. AFRICAN RUNNING REVOLUTION—April 1975. Here is the background story of who these sensational runners are and why they have come so far. 84 pages. \$1.95.

No. 47. RUNNING WITH STYLE—May 1975. Running should be graceful and economical motion. Proper running form is the subject of this well-illustrated guide. 52 pages. \$1.50.

No. 48. TRACK RACERS—June 1975. A who's who of runners from the sprinters through 10,000 meters. 84 pages. \$1.75.

RUNNER'S GUIDE TO BALTIMORE

Prepare yourself for the two H's if you're planning on running in Baltimore. Hills and humidity are the biggest challenges facing the visitor, as well as the local runner.

The hilliest and most scenic running spot in Baltimore is Loch Raven reservoir, just north of the city line. The sights and smells of the tall pines, clear water and clean air refresh the spirit as much as running itself. Starting from the dam parking lot, north to Dulaney Valley Road and back is a seven-mile run.

Head two miles to the south and you'll encounter Baltimore's wickedest hill. The infamous Satyr Hill lies waiting to gobble up runners. Climbing steeply, undulating and bumping all the way; it is agony going up, ecstasy on top and hell coming down.

In sharp contrast is the 1.35-mile flat course around Lake Montebello in northeast Baltimore. A haven for runners and bicyclists, this is the site of many local races. If you want to run a fast time, this is the place to do it. Interference from auto traffic is minimal at Montebello.

Herring Run Park, across Harford Road from the lake, is the scene of cross-country races in the fall. This two-loop course is one of my favorites. Winding through woods and over hills, the two-mile loop challenges the runner more than the flat three-fourth mile loop around the athletic fields. If you like you can stray from the course and follow the waters of Herring Run for several miles as it flows through the city.

Patterson Park in southeast Baltimore is another popular place to run.

One lap around the hilly park road is two miles. Since cars are banned, you'll have the course to yourself.

Other parks where runners can find a patch of grass among the concrete and asphalt are Druid Hill Park (site of the zoo), Leakin Park, Gwynns Falls Park, Clifton Park and Clyburn Park.

If you're into interval training, Baltimore has several cinder tracks within its boundaries. Johns Hopkins University, Morgan State College and Clifton Park all have 440 tracks. All-weather tracks can be found at most high schools in suburban Baltimore County.

Visitors staying downtown who don't have time to visit the parks won't have to forego their daily run. The Central Branch YMCA on Franklin Street features an elevated, banked indoor track.

Or you can soak in a bit of history by running on Charles Street, to Fort Avenue, to Fort McHenry. On this approximately six-mile round trip run, you can tour the birthplace of the Star Spangled Banner, and get an excellent view of cargo-laden ships entering and leaving Baltimore harbor.

I've described the first H—hills. The second H—humidity—puts a damper on warm weather running in Baltimore. During the summer months, runs should include as many en route drinking fountains as possible. Running in the early morning or late evening is the best way to avoid the humid heat.

Except for an occasional below zero wind-chill factor, winter weather is relatively mild by some standards. October and November are the best months for running in Baltimore. The cool and

breezy autumns are ideal for those long training sessions.

Races are sponsored by several groups in the Baltimore area. The Baltimore Road Runners schedule a road race nearly every weekend throughout the year. Cross-country in the fall and track meets in the spring are promoted by the South Atlantic AAU. Open indoor meets are held in the field houses of Essex Community College, Catonsville Community College and the University of Maryland, Baltimore County. Each of these schools has excellent indoor running facilities.

Fun-runners have their events, too. Every Sunday at 2 p.m., the Towson YMCA sponsors a one and two-mile Run For Your Life program. Also, the Baltimore Road Runners usually have a two-mile Fun-Run along with their longer road races.

The biggest race in Baltimore is the Maryland marathon. The first one in November 1973 attracted more than 400 competitors, and the race is already one of the largest on the east coast.

Baltimore is convenient to other running centers in the sprawling Boston-to-Richmond megalopolis. The Washington metropolitan area, a hotbed of running activity, is less than an hour's drive to the south. Races sponsored by the Annapolis Road Runners are also less than an hour away.

Runners visiting Baltimore will find interesting and challenging conditions and a rapidly growing community of running fanatics.

(Race information: Les Kinion, 1363 Halstead Rd., Baltimore, Md. 21234).



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1976 Games

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by George Sheehan M.D.

MEDICAL ADVICE

MORTON'S FOOT

In his article "Toe Trouble" ("News and Views," April 74), Dr. Steve Subotnick forgot to mention a very important point in making the Morton's Foot pad. That is sciving or rounding the edges. This point should be brought out, for the pad is very uncomfortable if the edges are left sharp. Also, a short pad is often used for this purpose if the runner cannot tolerate a long pad. These pads can be glued in the shoes. (Francis A. Lantz, D.P.M., Pomona, Calif.)

TRIGLYCERIDES

In the April issue ("Medical Advice") there is an alternative explanation for the runner with elevated triglycerides (fats in the bloodstream). I am a pathologist. Recently, I fasted for 12 hours, ran seven miles and then conducted numerous blood tests. To my surprise and consternation, my triglycerides were elevated. They had always been normal in the past.

I fasted the next evening and re-did the tests the next day without running. The tests were normal. Since then, I've learned that triglycerides are typically elevated after running. This is another hazard runners may face when they have routine physical exams. (Stanley Lightfoot, M.D., Tyler, Tex.)

A: Generally speaking, we should make it a rule to recheck any abnormal test after a period of inactivity. However, few runners, including myself, are going to give up a day or more of running just to make their physician feel better. Again, as you say, the normal "abnormality" rears its head and provides another hazard.

COLDS

Q: What do you recommend when I have a cold, sore throat or am not feeling up to par: (a) stop completely until all symptoms are gone; (b) moderate running, but do not stop completely; (c) continue normal running no matter how I feel? (A.D., Connecticut)

A: I treat colds with respect. It is my feeling that they represent a breakdown of the defense system. The cold

is an early warning system of exhaustion. Because of this philosophy, I tend to draw back on my training. Depending on the symptoms, I may stop running for one to three days and then resume a slow pace for relatively short distances. However, I do not wait for all the symptoms to subside unless there seems to be a major bronchial element to the infection. I do think that the sore throat should clear before you do any serious running.

ACHILLES TENDON

Q: I have been forced to drop my weekly mileage from 30 to zero due to achilles tendon soreness. During two years of running, I have had no previous problems. I did start wearing a pair of Earth Shoes about the same time the injury occurred. (T. R., Washington)

A: It seems to me that you could do more for your achilles at the present time:

1. Eliminate the Earth Shoes for a while. These shoes with the heel lower than the sole puts a strain on the achilles which may be too severe just now.
2. Use a heel lift and a Dr. Scholl's "A" arch in your shoe, and an anterior crest (Scholl's) to prevent digging in with your toes.
3. Do intensive flexibility exercises for your achilles, gastrocs and hamstrings.
4. Apply ice after each run.
5. Continue running unless pain gets progressively worse while running.

REST

Q: My doctor has diagnosed my problem as a chronic strained tendon where the tendon joins the tibia bone in the left leg. The only thing it has responded to is rest. Is this my only choice? (J. F., Massachusetts)

A: I'm unhappy when anyone advises rest for a running injury. It usually means he has no idea of the causative mechanism. And, therefore, the resumption of running will bring back all the symptoms.

The treatment of any problem such as yours is a total assessment of the foot-leg complex. This should include (1) the biomechanics of your foot; finding and maintaining the neutral position of your foot; (2) investigation for the short-leg syndrome; (3) evaluation for strength-flexibility imbalances.

WEIGHT

Q: I lost 20-25 pounds the first five months after starting to run. Now I have leveled off at 155 (I am 5'11"). Everyone says I look weak, skin-

ny, arms thin, no chest, etc. I would like not to look bad. What must I do? (G. M., South Carolina)

A: Be happy with your appearance. If anyone tells me I look good, I know I'm out of shape—usually 5-10 pounds overweight. Runners should have a lean, hungry look, and from your statistics you may not even now be lean and hungry enough.

EXERCISES

Q: You have stated that bent-leg situps are a remedy for sciatic pain. My question is, when you say "remedy" do you mean that a runner should wait until he gets sciatic pain to do the situps, or should they be done by all runners as a preventive? (M. C., Oregon)

A: Runners should do bent-leg situps as part of their daily routine. Along with flexibility exercises, they will help prevent sciatic pain. In addition, the number of bent-leg situps you can do correlates with resistance to exhaustion.

Unfortunately, we runners are lazy. We will do any amount of mileage, which we love, but will find reasons to skip our exercises.

DIET

I would rather be a healthy 70 or 80 than a deteriorated 50-60. Just pushing an unnatural diet as a super sugar to the unsuspecting athlete in order to achieve maximal effort or performance whips up a frenzy of deterioration.

A super diet of protein, fats and carbohydrates, well-laced with vitamins and minerals, would more than make up for that extra "go" an athlete needs.

A super sugar diet is as dangerous as cortisone and novocaine in acutely strained ligaments or joints. The athlete then becomes a beast of burden with full and disastrous exploitation. Let us feed correctly, train correctly and thus enhance our performance. Efficiency in any effort comes from a sound body, not a body "suped" up on Dianabol (an anabolic steroid) and sugar. (Dr. Harold Rosenberg, New York, N.Y.)

A: My mother always told me to avoid discussing religion and politics. I'm about to add diet to the list.

The "super-sugar" (high carbohydrate) diet isn't that big a deal. I am a non-deteriorating 55 and use this regimen before marathons and races over 15 miles. This amounts to about five times a year. I could do myself more dietary harm on one vacation trip to the Caribbean.

The "unsuspecting" athlete, incidentally, frequently is better read about sports medicine than his physician

JULY COMING EVENTS

Please send your race information to **Runner's World**, Box 366, Mountain View, Calif. 94040. For races to appear here, we must know of them at least two months before the scheduled date.

NORTHEAST

- 6 RRC 10-mile, N.Y., N.Y. (Queensboro College, 5 p.m.; open; Road Runners Club, P.O. Box 881, FDR Station, N.Y., N.Y. 10022).
- 21 Metropolitan AAU One-hour, Long Island, N.Y. (open; Road Runners Club, P.O. Box 881, FDR Station, N.Y., N.Y. 10022).

SOUTHEAST

- 4 Florida AAU 15-kilometer, Hallandale, Fla. (Gulfstream Park; open; Raymond W. Russell, 2506 N.E. 8th St., Ft. Lauderdale, Fla. 33304).
- 4 Tuborg-Peachtree 10-kilometer, Atlanta, Ga. (open; Don Gamel, 2493 Ben Hill Rd., East Point, Ga. 30344).
- 5-6 US vs. USSR Track, Durham, N.C.
- 13 Mountain marathon, Boone-Grandfather Mt., N.C. (11 a.m.; open; Ed Strabel, Rt. 3, Box 335, Boone, N.C. 28607).

MIDWEST

- 7 Whitewater marathon, Whitewater,

Wisc. (5 a.m.; open; Rex Foster, R.R. 4, Whitewater, Wisc. 59190).

- 7 International Freedom Festival 10-mile, Detroit, Mich. (Belle Isle; open; Ernest B. Smith, 39500 Warren Rd., No. 242, Plymouth, Mich. 48170).
- 13 Mo. Valley AAU 15-kilometer, Columbia, Mo. (Cosmo Park, 8 a.m.; open; Joe Duncan, 4004 Defoe Dr., Columbia, Mo. 65201).
- 14 Mystic Mt. 7-mile, Mystic, S.D. (10 a.m.; open; Jim Brown, Mystic Rt., Hill City, So. Dakota 57745).
- 27 30-kilometer, Columbia, Mo. (Cosmo Park, 6:30 a.m.; open; Joe Duncan, 4004 Defoe Dr., Columbia, Mo. 65201).
- 27 Indiana AAU 15-kilometer, Anderson Ind. (open; Steve Kearney, 1202-9 Jefferson, Chesterton, Ind. 46304).

ROCKIES

- 10 Kalispell marathon, Kalispell, Montana (4 p.m.; open; Larry O'Neil, 233 Fifth Ave. E., Kalispell, Mont. 59901).
- 13 Mt. Evans 14.2-mile, Mt. Evans, Colo. (8 a.m.; open; Roger Gerard, Denver YMCA, 25 E. 16th St., Denver, Colo. 80202).
- 24 Deseret News marathon, Big Mountain-Salt Lake City, Utah (6 a.m.; open; Deseret News marathon, P.O. Box 1257, Salt Lake City, Utah 84110).

WEST

- 5-7 National AAU Masters Track, Gresham, Oregon.
- 7 National AAU Masters marathon, Portland, Ore. (Sauvies Island, 6 a.m.; Jim Puckett, Mt. Hood C.C., 2600 S.E. Stark, Gresham, Ore. 97030).
- 13 Ore. AAU One-hour, Central Point, Ore. (Crater H.S., 7 p.m.; open; Jerry Swartsley, P.O. Box 1072, Phoenix, Ore.).
- 13 Ore. AAU One-hour, Portland, Ore. (Duniway Park, 7 p.m.; open).
- 20 Ore. AAU One-hour, Salem, Ore.

(Willamette Univ., 7 p.m.; open; Chuck Bowles, Willamette Univ., Salem, Ore. 97301).

- 27 PNW-AAU 30-kilometer, Seattle, Wa. (West Seattle Stadium, tentatively; open; Guy Renfro, 24911 38th Ave. S., Kent, Wa. 98031).
- 27 Southern Pacific AAU One-hour, Goleta, Calif. (UC/Santa Barbara, 4 p.m.; open; John Brennand, 4476 Meadowlark Ln., Santa Barbara, Calif. 93105).
- 27 Ore. AAU One-hour, Roseburg, Ore. (Roseburg H.S., 7 p.m.; open; Stan Stafford, 744 S.E. Rose St., Roseburg, Ore. 97470).

CANADA

- 27 Police International marathon, Toronto, Ontario (Exhibition stadium, 9 a.m.; open; D.R. McBrien, Metropolitan Toronto Police, 590 Jarvis St., Toronto, Ontario, M4Y 255, Canada).

INTERNATIONAL

- 6 International marathon, Rotterdam, Netherlands.
- 21 International marathon, Szeged, Hungary.

RACE WALKING

- 10 National AAU Masters 35-kilometer walk, Kalispell, Mont. (4 p.m.; open; Larry O'Neil 233 5th Ave. E., Kalispell, Montana 59901).
- 13 Iowa AAU One-hour walk, Ankeny, Ia. (8 a.m.; open; Dave Eidahl, Box 72, Richland, Ia.).
- 27 20-kilometer walk, Columbia, Mo. (Cosmo Park, 6:30 a.m.; open; Joe Duncan, 4004 Defoe Dr., Columbia, Mo. 65201).
- 27 20-kilometer walk, Seattle, Wa. (West Seattle stadium tentatively; open; Guy Renfro, 24911 38th Ave. S. Kent, Wa. 98031).
- 27 Iowa AAU 15-kilometer walk, Madrid, Ia. (6:30 p.m.; open; Dave Eidahl, Box 72, Richland, Ia.).

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RACING HIGHLIGHTS

Results received by May 10.

NORTHEAST

● **St James, Md., Mar. 30**—John F. Kennedy 50.2-mile: 1. Max White 6:06:19; 2. Park Barner 6:27:19; 3. George Stewart 6:28:58; 4. Carl Robinson 7:33:50; 5. Bill Dower 7:36:46; 6. Don Muffley 7:50:13; 7. Gary Naugle 8:06:27; 8. John Devlin 8:11:13; 9. Andy Nebesny 8:12:31; 10. Bob Leache 8:13:40; 11. Don Dalvell 8:31:43; 12. Leonard Reddick 8:38.2; 13. Tom Lambert 8:44; 14. Paul Butchko 8:54:04; 15. Jerry Cadick 9:01:35.

● **Albany, N.Y., Mar. 31**—25 kilometer: 1. Joe Rukanshagiza (Siena TC) 1:18:26; 2. Carlo Cherubino (Albany TC) 1:18:55; 3. James Shrader (Albany TC) 1:20:25; 4. Tom Derderian (Sugarloaf Mt. TC) 1:22:14; 5. Larry Fredericks (New York AC) 1:22:16... 13. Vincent Fandetti (40+, Hartford TC) 1:27:20... 140. Cathy Shrader 1:53:19. (207 finished, 27 under 1:30).

● **Washington, D.C., Mar. 31**—Acacia Cherry Blossom Classic 10-mile: 1. Jack Mahurin (31, N.C. TC) 50:50; 2. Bynum Merritt (Woodbury Forest School) 52:07; 3. Mark Stanforth (US Army) 52:14; 4. Robert Baglione 52:12; 5. Robert Sabino (Balt. Olympic Club) 52:38; 6. Tom Donnelly (Phil. TC) 52:39; 7. Rick Katz 52:50; 8. Bruce Robinson (Wash. SC) 52:55; 9. Ray Morrison (Wash. SC) 53:19; 10. Bob Thurston (Wash. SC) 53:31... 35. Bill King (45, Penn. AC) 58:26... 45. Bob Horman (56, Potomac Valley Sr. TC) 59:08... 96. Carol Fridley (25, Elizabethtown AC) 62:48... 114. Chris Sherwin (10) 64:08... 148. Robin Hallidayoke (14, Sports Inter.) 66:58. (344 finished, 57 under 1:00, 121 under 1:05; 228 under 1:10; from Bob Thurston.)

● **Wilmington, Del., Apr. 7**—Caesar Rodney 13.1-mile: 1. Moses Mayfield (Penn. AC) 1:13:11; 2. Ken Kling (Sports East) 1:14:15; 3. Jim Bray (Delaware SC) 1:14:16; 4. Frank Goldcamp 1:14:17; 5. Bob Zoellick (Swarthmore) 1:14:35... 24. Carmen Hagelgans (40+, Central Jersey TC) 1:21:34... 65. Marilyn Bevans (Baltimore RR) 1:31:20. (168 finished, 18 under 1:20, 58 under 1:30; from Thomas Fort).

● **Boston, Mass., Apr. 15**—Boston Marathon: 1. Neil Cusack (East Tenn. State U, Ireland) 2:13:39; 2. Tom Fleming (New York AC) 2:14:25; 3. Jerome Drayton (Can) 2:15:40; 4. Lucien Rosa (Ceylon) 2:15:53; 5. Vilho Paajanen (Fin) 2:16:15; 6. Steven Hoag (Twin Cities TC) 2:17:44; 7. Bob Moore (Can) 2:16:45; 8. Ron Wayne (Oregon TC) 2:16:58; 9. Bernie Allen (Eng) 2:17:02; 10. Carl Hatfield (West Va. TC) 2:17:36; 11. John Vitale (New Haven TC) 2:18:54;

12. Dan Moynihan (N.M.C.) 2:19:13; 13. Reid Harter 2:19:13; 14. Bill Rodgers (Greater Boston TC) 2:19:34; 15. Heinz Kubelt (W. Ger.) 2:19:50; 16. Don Kennedy 2:20:22; 17. Rick Bayko (N.M.C.) 2:20:56; 18. Lee Fidler 2:21:27; 19. Ray Hughes (Beverly Hills Striders) 2:21:45; 20. Martin Sudzina 2:22:11; 21. Ron Daws (Twin Cities TC) 2:22:16; 22. Robert Eierman (W. Ger.) 2:24:10; 23. Glen Logan (Tidewater Striders) 2:24:38; 24. Wolf Schamberger (Can) 2:24:50; 25. Pete Span 2:24:52; 26. Kim Nutter (W. Va. TC) 2:24:53; 27. Will Rogenbach (W. Ger.) 2:24:54; 28. Joel Paster-nack 2:25:03; 29. Wille Speck (Boston AA) 2:25:08; 30. Tom Derderian 2:25:23; 31. Tom Antczak 2:25:37; 32. Ken Young (U. of Chicago TC) 2:25:46; 33. Bob Thurston (Wash. SC) 2:25:46; 34. Rick Bourrier (Razorbacks TC) 2:26:02; 35. Peter Farwell (UCTC) 2:26:04; 36. Ken Scalmanini 2:26:10; 37. Jim Bowles (West Valley TC) 2:26:17; 38. Keith Hartman (Finger Lakes RC) 2:26:29; 39. Bill Bragg 2:26:35; 40. John Cederholm (Boston AA) 2:26:38; 41. Tim Smith (Mohegan Striders) 2:26:42; 42. Uwe Schuder (W. Ger.) 2:26:57; 43. Paul Peeters (W. Ger.) 2:26:58; 44. Art McAndrew (Boston AA) 2:27:03; 45. Manfred Steffny (W. Ger.) 2:27:11; 46. Michael Cryans (No. County AC) 2:27:18; 47. Roger Rouiller (W. Va. TC) 2:27:39; 48. Russ Pate (Oregon TC) 2:27:50; 49. Guenther Schmitt (W. Ger.) 2:27:52; 50. Steve Molnar 2:27:54; 51. James Boyle (Rochester TC) 2:27:56; 52. Ken Mueller (Boston AA) 2:28:05; 53. Mike Baxter (Boston AA) 2:28:37; 54. Fred Best (No. Jersey Striders) 2:28:39; 55. Dennis Spencer (Georgia U) 2:28:46; 56. Bill Carr (Indiana Striders) 2:29:10; 57. Earl McGil-very (No. Medford Club) 2:29:38. (161 under 2:40, 325 under 2:50, 611 under 3:00; from the Boston Athletic Association).

Boston Marathon, women: 1. Miki Gorman (Los Angeles AC) 2:47:11; 2. Christa Kofferschlagel (W. Ger.) 2:53:00; 3. Nina Kucscik (Suffolk AC) 2:54:24; 4. Manuela Preuss (W. Ger.) 2:58:46; 5. Kathy Switzer 3:01:38; 6. Lydia Ritter (W. Ger.) 3:05:12; 7. Renate Kieninger (W. Ger.) 3:08:44; 8. Valerie Rogosheske 3:09:26; 9. Lucy Bunz (U Cal. Med. Cen) 3:10:55; 10. Irene Rudolf (UCM) 2:12:11; 13. Kathryn Loper (San Antonio RR) 3:14:30; 12. Merry Cushing (Sugarloaf Mt. AC) 3:16:37; 13. Joan Ulliyot (UCMC) 3:17:08; 14. Marilyn Bevans 3:17:42; 15. Luanne Kralick (Seniors TC) 3:18:45; 16. Nancy Linday 3:20:10; 17. Lori Watkins 3:24:25; 18. Chantel Lang-lace 3:24:40; 19. Mary Mapelli (Lehman Coll.) 3:25:29; 20. Constance Junghans (D.C. RR) 3:29:00; (35 finished, 20 under 3:30, 32 under 4:00; from Sara Mae Berman).

● **Pittsburgh, Penn., Apr. 21**—5-mile: 1. Mark Blum (18) 28:36; 2. Mike Sprys (18) 28:50... 11. Richard Smethurst (40) 32:04... 28. Ray Bower (50) 40:05. (36 finished; from John Harwick).

● **Phil., Penn., Apr. 23**—Penn Relay marathon: 1. Dave Patterson 2:33:03; 2. Curt Alitz (Hill School) 2:34:59; 3. Frank Goldcamp 2:35:41; 4. Gary Pierce (Mon-mouth Coll.) 2:38:23; 5. Larry Hanson 2:33:40... 19. Bill King (45, Penn. AC) 2:46:48... 46. Everitt Newell (50+, Penn. AC) 3:11:03. (38 under 3:00; from Paul McSorley).

● **Castleton, Vt., Apr. 28**—Edward Ellis Memorial 13.1-mile: 1. Guy Lepine (Montreal

Chaparral) 1:13:50; 2. Chris Chambers (Sugarloaf Mt. AC) 1:15:20; 3. Tom Derderian (Sugarloaf Mt. AC) 1:19:05... 24. Gerald Rowe (50) 1:43:03... 32. Gwenne Rippon 1:47:02. (37 finished, 14 under 1:30).

● **Yonkers, N.Y., Apr. 28**—Eastern Regional 10-kilometer: 1. Morgan Fennell (24, Millrose AA) 31:06; 2. Marcel Phillippe (22, New York AC) 32:02; 3. Robert Byrne (20, Fordham U) 32:05; 4. Arthur Hall (27, Oakwood TC) 32:16; 5. Bill Bragg (25) 32:36... 10. Howie McNiff (19, Fordham U) 33:59... 19. Pat Bastick (40, Millrose AA) 35:40... 29. Jim McDonagh (50, Millrose AA) 37:18. Teams: 1. Fordham U AA, 34 2. Millrose AA, 38 (96 finished, 35 under 35:00, 45 under 40:00). Women: 1. Cathy Greene (15, L.I. Golden Spikes) 39:19. (12 finished). (from Joe Kleinerman).

SOUTHEAST

● **Elizabeth City, N.C., Mar. 30**—10-mile: 1. Glen Logan (22, Tidewater Striders) 51:45; 2. Scott Miller (18) 53:30... 15. Kathy Taylor (17, Bethel Striders) 1:02:38... 22. Donald Grey (46, Tidewater Striders) 1:11:31. (24 finished, 10 under 1:00; from Woody Harrell).

● **Gainesville, Fla., Mar. 30**—Florida Relays marathon: 1. Ken Misner (Florida TC) 2:30:31; 2. Bob Varsha (ATC) 2:34:07; 3. John Perry (U of Ky.) 2:35:08; 4. Pat Chester (USA) 2:36:21; 5. Ronald Chase (FTC) 2:37:20... Mary Gleny 3:31:35. (62 finished, 46 under 3:30, 58 under 4:00; from Herbert Wills).

● **Nashville, Tenn., Mar. 30**—Music City Run: 5.8-mile: Bruce Sacks 33:05; Debbie Cocke 41:14; Ray Chambers (40+) 41:25. 11.2-mile: Royce Williams 1:14:44; Joe McGinness (50+) 1:16:58. (from Kent Rea).

● **Chickamauga, Tenn., Apr. 6**—Chickamauga Chase 10-mile: 1. Wayne Roach (ATC) 50:25; 2. Carl DeSantos (ATC) 53:12; 3. Bob Varsha (ATC) 53:12; 4. Ricky Stetson (TTC) 53:16; 5. Randy Stroud (ATC) 53:18... Nick Costes (40+ TTC) 55:26... Joe McGinnis (50+, CTC) 63:18... Kathy Seigler (N.W. Fla.) 67:35... John Robere (60+, CTC) 1:09:16. (from Don Gamel).

● **Atlanta, Ga., Apr. 13**—Ga. AAU One-hour: 1. Wayne Roach (21) 11m 292y; 2. Randy Stroud (18) 10m 1102y... George Crerar (41) 9m 1416y... H.T. Marshall (56) 8m 1018y... Gillian Valk (31) 8m 391y. (36 finished, 6 over 10 miles; from Billy Daniel).

● **Daytona Beach, Fla., Apr. 14**—4-mile: 1. Frank Shorter 20:31; 2. Marty Liquori 20:41; 3. Dave Millimin 20:44; 4. Coswell DePeiza 20:52; 5. Ron Nabors 21:10... 12. Joe Franklin (14) 21:26... 56. Jim Montgomery (58) 25:17. (280 finished; from Terry Smith).

MIDWEST

● **St. Louis, Mo., Mar. 3**—Third Olympiad Memorial marathon: 1. Bob Fitts (31) 2:22:52; 2. Robert Busby (24) 2:30:49; 3. Bob Rosen (22) 2:35:40; 4. Tom Hoff- (26) 2:40:01; 5. Ed Steingraber (18) 2:46:58;

6. Bob Green (39) 2:49:02... 9. Ed Weber (42) 2:53:09... 15. Rich Renshaw (13) 2:59:15... 31. Jeff Shuman (13) 3:08:34... 79. Marilyn Good (36) 3:57:35. (98 finished, 55 under 3:30, 80 under 4:00).

● **Toledo, Ohio, Mar. 24**—Heart-watcher's marathon: 1. Doug Nevius (Malone Coll., 20) 2:39:32; 2. Gary Peterson (19, Malone Coll.) 2:44:04... 3. Lou Wagner (30) 2:46:14... 10. Jack Gray (46, Canada)... 20. Becky Wagner (16) 3:41:10. (27 finished, 16 under 3:30; from Sy Mah).

● **Chicago, Ill., Mar. 31**—Lakefront 25-kilometer: 1. John Lesch (33, UCTC) 1:19:54; 2. Dike Stirrett (25, E.I. Striders) 1:20:56; 3. Phil Davis (28, ITC) 1:23:32... 11. Steve Goldberg (41, ITC) 1:29:41. (31 finished).

● **Canton, Ohio, Mar. 31**—Sheriff's Trophy Run: Women, 5-mile: 1. Sue Mallery (19) 31:12; 2. Rose Thomas (34) 35:38. Men, 10-mile: 1. Carl Hatfield (26) 49:07; 2. Kim Nutter (20) 50:07... 6. August Jarvis (42) 54:22. (26 men under 1:00). (128 finished from both races).

● **Madison, Wis., Apr. 6**—13.1-mile: 1. Glen Herold (23) 1:07:05; 2. Jim Drews (22) 1:08:23; 3. Alan Claremont (38) 1:11:33... 23. Richard Durbin (44) 1:23:11... 41. Arnold Johnson (53) 1:34:47... 50. Donna Senzig (33) 1:40:47... 65. John Dick (63) 2:09:34. (65 finished, 17 under 1:20, 33 under 1:30; from Harry Welles).

● **Lawrence, Kans., Apr. 20**—Kansas Relays marathon: 1. Terry Ziegler (Tulsa RC) 2:21:58; 2. Paul Hoffman (N. Tex. State U) 2:25:07; 3. Roger Vann (John Brown U) 2:27:43; 4. Dike Stirrett (E. Ill. Striders) 2:28:26; 5. Rick Lower (Colo. U) 2:29:48; 6. John Bramley (Colo. State U) 2:32:36. (92 finished, 35 under 3:00, 67 under 3:30, 79 under 4:00).

● **Champaign, Ill., Apr. 28**—Central AAU One-hour: 1. Phil Davis (28, ITC) 11m 53y; 2. Greg Palmer (20, ITC) 10m 85y. 3. Joe O'Shea (30, ITC) 10m 38y; 4. Kent Davis (19, ITC)... 19. Sarah Brichford (14, Mid-State) 8m 80y. (37 finished, 6 over 10 miles).

SOUTHWEST

● **Tulsa, Okla., Mar. 23**—Oil Capital marathon: 1. Rick Richardson (28) 2:28:05; 2. Roger Vann (19) 2:34:50; 3. Terry Ziegler (23) 2:35:00... 17. C.J. Swyden (43) 3:14:16... 25. Eugene Askew (53) 3:25:11... 34. Cynthia Whitney (22) 3:52:00. (40 finished, 28 under 3:30, 37 under 4:00; from Vern Whiteside).

● **Houston, Tex., Apr. 6**—Gulf AAU 25-kilometer: 1. Wayne Comer (32, Cameron TC) 1:30:06; 2. Norman Cooper (31, Cameron TC) 1:32:58; 3. Simon McNamee (34, Cameron TC) 1:34:19; 4. Charles Bernick (19, Cameron TC) 1:34:36; 5. John Stowers (45, Terlingua TC) 1:35:25... 35. Sally Jurgenson (27) 2:19:14. Teams: 1. Cameron TC; 2. Terlingua TC. (41 finished, 9 under 1:45; from Pete League).

● **Tulsa, Okla., Apr. 27**—15-kilometer: 1. Larry Aduddell (28) 50:19; 2. Brent Wooten (24) 55:04; 3. Dan Metcalf (34) 57:00; 4. H.E. Barker (43) 57:00. (15 finished; from Vern Whiteside).

WEST

● **Littleton, Colo., Mar. 24**—RMRR 15-mile: 1. Ken Young (32, U of Chicago TC) 1:23:45; 2. Ronn Smith (24) 1:24:47; 3. Eric Groon (33, Boston AA) 1:25:18... 14. Roger Wilcox (45, Southern Colo. Striders) 1:31:52... 26. Frank McCabe (56, RMRR) 1:43:33. (42 finished, 10 under 1:30, 26 under 1:45; from Dennis Kavanaugh).

● **San Martin, Cal., Mar. 24**—Marathon of the Lakes: 1. Bill Peck 2:52:14; 2. Gary Chilton 2:53:30; 3. Ben Sawyer 2:53:50; 4. Ed Dally 2:55:00; 5. Richard Stiller 2:55:41... 19. Norm Bright (60+) 3:45:30. (23 finished, 14 under 3:30; from Bill Flodberg).

● **Morro Bay, Cal., Mar. 30**—5-mile: 1. Steve Harney (26) 25:21; 2. John Burns (24, Santa Barbara AA) 25:33... 7. Cherrie Bridges (26, Los Angeles TC) 29:05... 8. Ray Gil (49, Seniors TC) 29:28... 9. Dave Pickett (13, San Luis Jr. High) 29:33. (30 finished, 10 under 30:00; from Stan Rosenfeld).

● **Los Angeles, Cal., Apr. 6**—City of Los Angeles marathon: 1. Bill Scobey (Beverly Hills Striders) 2:24:19; 2. Wayne Akiyama 2:31:09; 3. Ken Moffitt 2:31:21; 4. Carlos Alfaro 2:35:13; 5. William Anderson 2:37:39... 23. Mike Heylin (40+) 3:00:38... 47. Ruben Hurida (50+) 3:16:36... 73. Nicki Hobson 3:26:01. (176 finished, 21 under 3:00; 75 under 3:30, 122 under 4:00).

● **Denver, Colo., Apr. 7**—RMRR 9-mile: 1. Ken Young (32, UCTC) 49:00; 2. Don Starbuck (27, CTC) 50:46; 3. Wayne Snow (28, RMRR) 52:30; 4. Roger Wilcox (45, SCS) 52:56... 23. Frank McCabe (56, RMRR) 59:01... 51. Barbara Martin (29, RMRR) 65:43. (65 finished; from Dennis Kavanaugh).

● **Blaine, Wash., Apr. 13**—Birch Bay marathon: 1. Mike Shaw (23) 2:29:19; 2. Jim Pearson (29) 2:31:17; 3. Jim Pearson (29) 2:35:56; 4. Richard Whiting (36, Canada) 2:37:04; 5. Roy Prior (20) 2:37:25... 8. Howard Miller (47) 2:47:12; 9. Mark Anderson (15) 2:48:50... 21. Frank Grey (53) 3:15:30... 25. Janet Heinonen (23) 3:19:06. (53 finished, 14 under 3:00, 27 under 3:30, 39 under 4:00).

● **Los Angeles, Cal., Apr. 13**—10-mile: 1. Ronald Kurrle (25, PCC) 51:11; 2. Ed Chaidez (21) 51:23; 3. James Perez (27, GWAA) 52:52; 5. Skip Shaffer (36, CCAC) 53:22... 17. Rudy Ceja (51, STC) 1:01:59... 50. Linda Bottlik (11, SBDR) 1:12:11. (68 finished, 10 under 1:00; from John Brennand).

● **Arcata, Cal., Apr. 19**—One-hour: 1. Hersh Jenkins 11m 20y; 2. Mark Dulaney 11m 15y.

● **San Diego, Cal., Apr. 20**—Mission Bay 15-kilometer: 1. Dennis Kasichke (29, SDTC) 48:54; 2. Frank Bozanich (30, SDTC) 51:16; 3. Bill Gookin (41, SDTC) 51:46; 10. Ed Almeida (51, SDTC) 56:16... 20. Jacki Hansen (Beverly Hills Striders) 57:22. (93 finished; from Kaj Johansen).

● **Las Rosad Hills, Cal., Apr. 27**—11-mile: 1. Gary Tuttle (BHS) 1:00:44; 2. George Stewart (WVTC) 1:02:21; 3. Pat Miller 1:07:35; 4. Jim Arquilla (23) 1:08:43; 5. Alan Schofield (SBAA) 1:09:58; 6. Dick Bartek (40+, SBAA) 1:10:12... 27. Rudy Ceja (51, STC) 1:19:54...

28. M. Montgomery (67) 1:20:08... 61. Sharon O'Halloran (CCAC) 1:31:39. (95 finished, 15 under 1:15; from John Brand).

● **Honolulu, Hawaii, Apr. 21**—5.4-mile: 1. Gordon Haller 27:13; 2. Dave Cadiz 29:25... George Puterbaugh (40+) 32:48. (52 finished; from C.H. Greenley).

CANADA

● **Montreal, Canada, Mar. 17**—Montreal marathon: 1. Guy Lepine 2:43:15; 2. Vaughn Johnson. (from Gabriel Duguay).

● **Hamilton, Ontario, Mar. 30**—Billy Sherring Memorial 19-mile: 1. Jerome Drayton (TOC) 1:39:40; 2. Robert Moore (TOC) 1:43:00; 3. Doug Scorer 1:43:36; 4. Peter Lever (TOC) 1:44:30; 5. Paul Pearson (40+, TOC) 1:45:15. (91 finished, 28 under 2:00; from Graham Knox).

● **Richmond, B.C., Apr. 16**—Kajak One-hour: 1. Tom Howard 12m 31y; 2. Colin O'Brien 11m 84y; Ross Jackson 11m 84y; Chris White 11m 84y; 5. Jack Taunton 11m 32y; 6. Jim Scorgie 10m 160y; 7. Sue Taylor 7m 109y.

RACE WALKING

● **Des Moines, Ia., Mar. 30**—National AAU 100-kilometer walk: 1. Shaul Ladany (Israel) 10:12:53; 2. Augie Hirt 10:51:4; 3. Jerry Brown (Colo. TC) 11:05:17; 4. Bill Walker 11:13:55; 5. Chuck Hunter (Colo. TC) 11:25:12; 6. Chris Amoroso (Colo. TC) 11:41:0; 7. John Marken 11:53:18; 8. Larry O'Neil 12:01:14; 9. Dave Leuthold 12:37:03; 10. Dave Eidahl 13:01:00; 11. Rod Spier 13:18:13. Teams: 1. Colo. TC, 14 pts.; 2. Missouri TC, 22 pt. (from Dave Eidahl).

TRACK

Recent records:

● 60-meter hurdles (women)—7.90 by Annelie Ehrhardt (East Germany), Gothenburg, Sweden, March 10, tying world indoor record.

● 400 meters (women)—52.44 by Nadezhda Ilyina (Soviet Union), Gothenburg, Sweden, March 10, breaking world indoor record of 52.64.

● 1500 meters (women)—4:11.0 by Tonka Petrova (Bulgaria), Gothenburg, Sweden, March 10, breaking world indoor record of 4:12.2.

● 6 miles—26:51.8 by Steve Prefontaine, Eugene, Ore., April 27, breaking American outdoor record of 27:09.4.

● 6 miles (women)—34:24.4 by Jacki Hansen, Orange, Calif., May 5, breaking American outdoor record of 34:51.0.

● 10,000 meters—27:43.6 by Steve Prefontaine, Eugene, Ore., April 27, breaking American outdoor record of 27:51.4.

● 30-kilometer walk—2:14:21.2 by Peter Frenkel, Berlin, April 12, breaking world outdoor record of 2:14:45.6.

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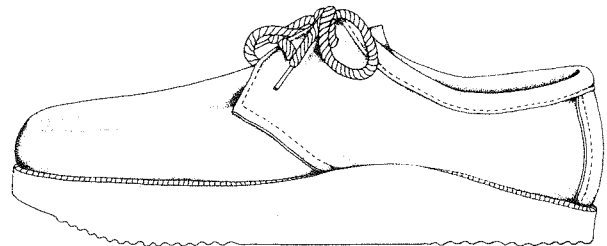
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READERS' COMMENTS

SMOKING

I have kept a log on my running over the last several years. Recently, while reviewing this diary, I came to a startling revelation about my occasional use of tobacco. (Notice how much more refined "tobacco" sounds than that nasty word "cigarettes.") I found that if I smoked two packs in a month's time, I missed running about 10-12 days during the month. On months that I did not smoke, I missed 3-5 days.

I believe that smoking kills the desire to run. Let me go a week without a cigarette and I look forward to a five-mile run. But let me smoke five cigarettes at a Saturday night party and I have to force myself to run the next day.

I have noticed that my times are about the same. But psychologically I feel that the run after I have smoked is simply to purge my bod of these poisonous fumes. I have gone up two steps and back down three. I have run to exorcise my aveoli and, I might add, my conscience. Conscience is what hurts when everything else feels so good.

*Gordon Persons
Montgomery, Ala.*

BOSTON

I interviewed Frank Shorter recently, and asked him, "Do you know that no Olympic marathon winner has ever won at Boston?" He said he was aware of that, then asked me, "Did you ever hear of the BAA giving expense money?" The interview ended on that note.

I think the real story of the Boston

PHOTO CREDITS:

Page 10—Rod Milburn, by Stan Pantovic. 15—The crowded Boston start, by Jeff Johnson. 20—Neil Cusack being interviewed and interfered with, by Jeff Johnson. 21—This group at the 1971 AAU marathon includes four sub-:20 men: (from left) Kenny Moore, Herb Lorenz, Frank Shorter; (far right) Tom Fleming. 26 & 28—Cartoons by Bil Canfield.

marathon is the *avoidance* of it by our "top runners." Are they "black balling" it for some reason? Where were Ken Moore, Shorter, Jon Anderson, all our other top guys?

*Flory Rodd
Alameda, Calif.*

Women's marathoning continues to march, through the commendable efforts of the BAA's Will Cloney and Jock Semple and Sara Mae Berman and Jenny Taylor of the Cambridge Sports Union. Their sensitive leadership and administration on behalf of the women at this year's Boston marathon provided new successes:

(1) Establishment of women's officials at Boston; (2) very satisfactory pre-race facilities and instructions; (3) official women's press conference and excellent coverage; (4) acceptance and great interest in the women runners by spectators and news media; (5) international interest expressed by Canadians, Europeans and Americans.

Thank you, Boston, for what you have given women. It was a privilege and an honor to attend.

*Dawn Bressie
San Mateo, Calif.*

MUSCLE FIBERS

I respect Dr. David Costill ("Championship Material," April 74) because he is a doctor and I am not even out of high school. But in his article he overlooks several facts in his formulas for maximal oxygen uptake and percentage of ST (slow-twitch muscle fibers) that may mislead a runner.

First, according to the formulas if a person's time for 10 miles improves, that person's percentage of ST fibers will increase—which, as Dr. Costill explains, can't happen. This proves to be an imperfection in the formula, especially to young runners who improve not only with practice but also with age.

Second, his conclusion is that if one does not have a high percentage of ST fibers, one will never run super times. He should at least back this up with the ST percentages of some top runners. He should remember also that as the distances of the run decreases, so does the need for a higher percentage of ST fibers. Therefore, it is possible for a runner to have super times in the mile while running only mediocre times in marathons.

*Steve Palladino
San Mateo, Calif.*

Dr. Costill's reply: It appears that the obvious should never be taken too lightly. The equations I offered are, at best, rough estimates of muscle fiber

type. Prior to stating the equations, I listed three major assumptions: (1) "that the 10-mile performance was representative of your distance running ability," (2) "that you are efficient," and (3) "that you were at a high level of fitness at the time of the run."

The first comment regarding changing percentage of ST fibers with improving times is a good one. It is obvious that I gave little thought to the young runner, since all of our subjects were over 24 years of age. One might, however, consider that the young runner's 10-mile time does not represent his *true* distance running ability, which may not be achieved until he is in his mid-20s.

Steve states that "as the distance of the run decreases, so does the need for a high percentage of ST fibers." I agree. It is true that good sprinters have a high percentage of FT fibers. However, the original title of my article was "Predicting Success in Distance Running." I believe my comments were in that direction and not toward sprint and middle distance running.

As I stated, "There is no way of knowing (your percentage of ST fibers) for sure unless such (muscle biopsy) tests are performed." So if Steve or any top runners are interested, I am standing with muscle biopsy needle in hand.

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