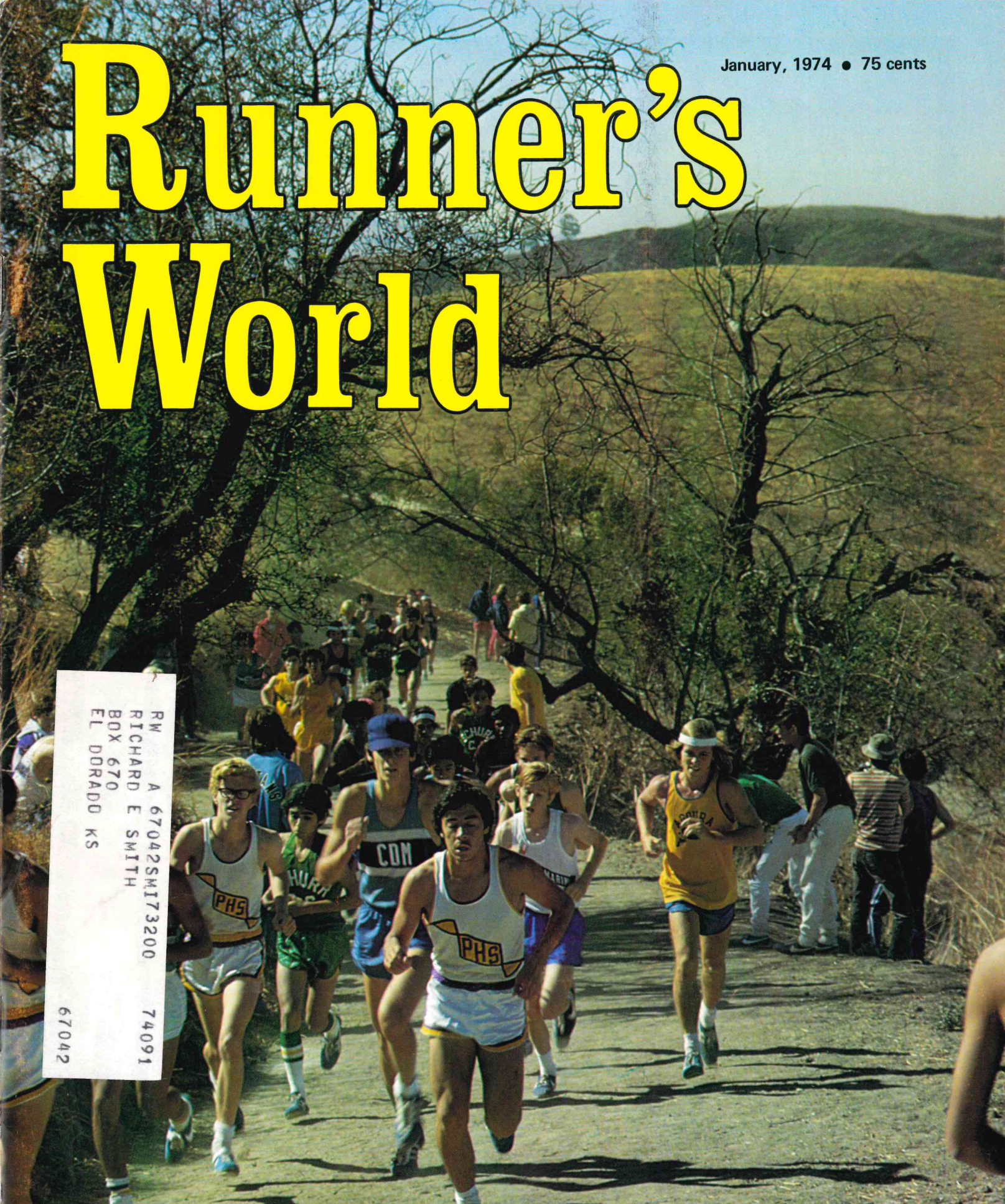


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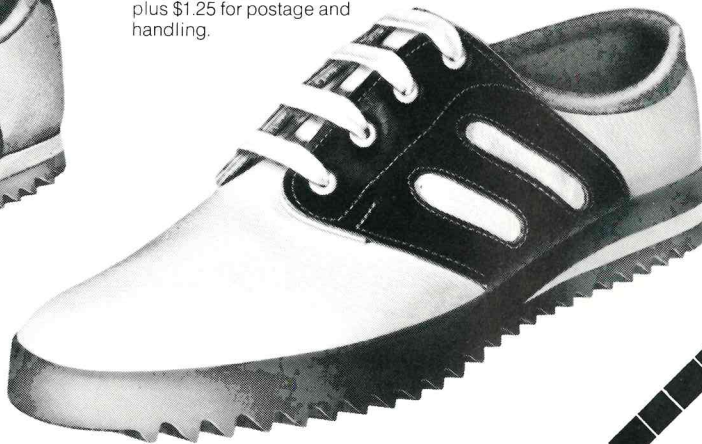
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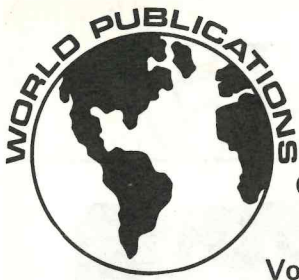


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THE COVER

It could be called "the scenic season". M.J. Baum photographed these high school runners on a country road in Southern California.

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FROM THE PUBLISHER

In the last issue, I made our move really sound easy. Nov. 15 was planned as moving day, but it didn't work out that way. I called the real estate people on Monday the 12th to check on last minute things. "Well, we won't be ready the 15th but everything will be done by early next week," the man said.

That sounded okay. We could move over Thanksgiving Day weekend and be all set up to go by Monday. On Wednesday the 21st I checked again. No, the rugs won't be in until Monday. Great! We had to be out of our place by the 30th and the rugs wouldn't be in until the 26th.

But the back room was ready to go, so we started that weekend moving it over. There weren't any lights and the building was cold, but we did get the place in pretty good shape working all day Friday, Saturday and Sunday. Most everybody helped out.

The power was scheduled to go on Monday afternoon as well as the phones. They did finish putting the rugs in by about 4:00 and we spent Monday moving over some desks and packing at the old place.

Tuesday moving came and we were at it again. We spent the day moving into a dark and cold office. No power, no gas, and we were cold. We didn't have a phone yet either, and in fact we didn't have one until Friday. If you tried to call us during this period, this is why we didn't answer the phones.

By Friday, we were all set up and ready to go. The office is a great improvement, and though there were many headaches in moving here, already we have found that with the added space things are much better all around.

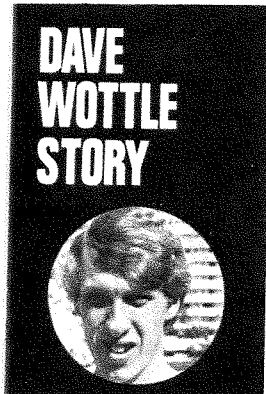
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His tactics are unorthodox. He drops behind at first—too far behind, it seems—then relies on his final spurt to win. At Munich, he let a dangerously wide gap open up. Then he won in the last step.

The next year, he went back to miling and ran one of the fastest times in history—though he says that time doesn't concern him in his races. A fascinating man, this Dave Wottle.

Wottle has talked at length to Jim Ferstle, a former teammate at Bowling Green State University. Ferstle offers a revealing portrait of the Olympic gold medalist... including a summary of Wottle's career, his training background, the injuries that have hounded him through the years, and an appraisal of his unique approach to racing tactics.

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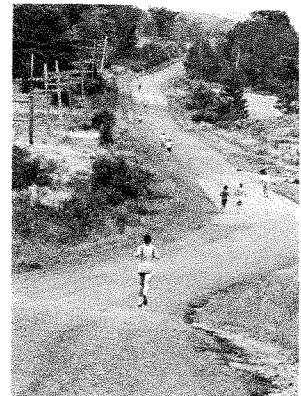
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NO FUEL LIKE YOUR OWN FUEL

The last two generations of Americans have grown up thinking power flows from the light switch and the accelerator. For them, this winter will be the longest, coldest and darkest in memory.

Runners are being hit along with everyone else by the so-called "energy crisis." With year-round daylight savings time now in effect, morning running this winter is bleaker than ever. With fuel shortages, we're coming back to colder houses after runs. With gas stations closed Sundays, weekend races aren't so easy to reach.

But runners are better prepared for the national belt-tightening than the sedentary majority. Runners already know what the others are now learning: that abundance and comfort aren't limitless.

Runners know, as an everyday fact of life in this sport, that the real energy crisis has little to do with electricity and gasoline. It involves man's first-hand dealings with the elements.

The rest of the people are learning this for themselves as they're forced now to draw on the power resources inside themselves, to do without luxuries that have become necessities, or both.

Those of us who run (and our cousins who walk and bicycle) can't be too smug with our advantage. When we aren't running, we sometimes have to drive cars. We depend on the economic prosperity that is threatened by fuel shortages. We like hot showers.

We'll be swearing at inconveniences and discomforts this winter, too. But we can be happy we decided on running as a sport instead of, say, auto racing.

As runners, we know that scarcity, not super-abundance, is the rule in man's association with the natural world. We know we either adapt to natural laws or are stopped by them.

Running is an exercise in "not-enough":

- Not enough cool breeze on hot days.
- Not enough warm sun on cold days.
- Not enough oxygen on short, fast runs.
- Not enough glycogen on longer, slower runs.
- Not enough open space.
- Not enough time.

Yet we manage. By adapting, we manage quite well. We come to tolerate the scarcity, even to like it for the challenge it presents. There is little comfort in running, and little convenience. But the fact that we do it and like it may be a sign that some people are tiring of the air-conditioned, over-fed, over-crowded, over-rushed style of living.

Runners voluntarily give up this lifestyle for at least a bit of each day. Others aren't getting as much choice in the matter right now. But rather than panicking at losing their wheels, they should look to endurance athletes as an example of people living with scarcity and thriving on it.

Our example lends hope and opportunity to the energy bind which is being talked of mostly in doomsday terms. The "crisis" offers the possibility of returning—on a personal basis at least—to a slower, simpler, more natural and less mechanical way of living.

Pleading for people to get fit hasn't worked. Trying to scare them into it hasn't accomplished much more. Perhaps *requiring* them to get back on their feet—walking, running, bicycling not for sport or exercise but for transportation—will succeed where propaganda has failed.

The oil companies and the President may have done us several unintentional favors by saying gas supplies are running low and we can't drive as much from now on:

1. People who've forgotten how

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to move under their own power will find that their own fuel reserves increase rather than drop with moderate, regular use.

2. The streets and the skies will be a little clearer, making self-propelled transportation safer and healthier than it has been.

3. We'll all see the essential element of pace: that by going slower, you can go longer.

We're not talking of driving 50 miles per hour rather than 70. We're talking of slowing one's pace and style much more than that—down to 10-15 or less.

This issue has a feature on heart ailments. Increasingly, doctors are finding that likely candidates for attacks are men—usually, though not always, physically inactive men, often young ones—who drive themselves relentlessly.

Dr. Meyer Friedman has defined the Type A personality (one most prone to heart disease) as one who "struggles too incessantly to accomplish too many things in too little a space of time, thus engendering in himself a sense of urgency."

Dr. Friedman advises against all activities—even running under high stress—which unduly accelerate the pace of living.

He wrote in *RW* ("Running and the Numbers Racket," Sept. 71), "Would any of you dare to race the engine of your car at its maximum rate, hour after hour, day after day, and expect the engine to endure as long as a machine more gently treated? Yet almost half of our American males 'race their engines' at a frightfully increasing pace—and leave survivors who are shocked at their abrupt breakdowns."

Forcing—not advising or begging, but *forcing*—Type A men and women to decelerate might set a slower tone which eventually will lead to a dramatic breakthrough against the country's leading epidemic.

For most of us, though, the benefits of adapting to scarcity and learning to get along without gadgets will be more personal. We may realize what Henry David Thoreau meant, a half-century before electricity and the internal combustion engine were used, when he wrote:

"A man is rich in proportion to the things he can do without."

NEWS AND VIEWS

Test Yourself

Have you ever wondered what your running personality is? Here's a simple test, prepared somewhat tongue-in-cheek, but also with a few real-life examples in mind. Circle "a", "b", or "c" after each question. At the end, add up your score by counting "a" as 1, "b" as 2, "c" as 3.

- When you come upon a runner during a workout, you usually:
 - a. slow down to his pace and talk for a while.
 - b. stay with him for a few strides and exchange pleasantries.
 - c. bury him.

- When someone asks you if you are a jogger, you tend to reply:
 - a. "Yes, it's great fun."
 - b. "Not really—I'm a runner."
 - c. "Hardly. Have you ever heard of the Boston marathon?"
- When you are running a hard workout and a driver asks directions, you usually:
 - a. stop and give them as quickly as you can.
 - b. shout them out as you keep running.
 - c. pretend you are deaf and dumb.
- When carbohydrates are served on a protein day the week before the marathon, you:
 - a. eat them and say nothing.
 - b. leave them on the plate.
 - c. make a big scene.
- When you have learned that a long-time rival ran poorly in his last race and you spot him warming up for today's race, you:
 - a. say "hi" casually and comment on the weather.
 - b. ask how he feels *today*.
 - c. ask what his time was in that last race.

- When your brother-in-law, whose idea of athletics is watching pro football on TV refers to track or cross-country as minor sports, you:
 - a. ignore his silly utterances.
 - b. correct his misunderstandings.
 - c. deck him right on the spot.
- As you cross the finish line in what you know was a sub-par performance, you:
 - a. smile philosophically.
 - b. shake your head in disgust.
 - c. hold your side and limp slightly.
- When you wake unexpectedly early in the morning, you usually:
 - a. roll over to get more rest.
 - b. lie there wondering if you should go out for a quick run.
 - c. dress quickly and sneak in an extra workout.
- When a family outing has unwittingly been planned that conflicts with your scheduled long run on Sunday, you:
 - a. go with the family and plan to run short later.
 - b. go with the family, complain all the way, and run short later.
 - c. hide your sweats in the trunk and begin the long run home, once the obligation is satisfied.
- When someone asks you who runs Boston, you answer:
 - a. "Mayor Kevin White."
 - b. "Do you mean who is mayor, or are you referring to *the* marathon?"
 - c. "Me and 1200 others, including the world's best."
- When the schedule calls for a hard workout, but the weatherman comes on predicting a severe storm, you:
 - a. cancel the workout and hope for a double session tomorrow.
 - b. plan on running in place and doing some exercises at home.
 - c. turn the radio off immediately and run as scheduled.
- When someone asks how much you run, you answer:
 - a. "Every day, if I can."
 - b. "40-60 miles a week, depending on the weather and my schedule."
 - c. "Last week 89.5 miles; this week *only* about 80 due to a race next Sunday."

If you managed to score between 12 and 16, chances are you are an easy-going person who enjoys running but really doesn't live from race to race.

If you scored between 17 and 24, you are definitely a runner but you're also a fairly sociable person both in and out of a race.

Those who scored between 25 and 32 are typical running maniacs. They try hard to be easy-going and sociable, but



the running drive is irrepressible if not always all-consuming.

Those with a score between 33 and 36 are the out-and-out running maniacs. To paraphrase a famous quote from Vince Lombardi: "To them running isn't everything—it's the *only* thing."

From Joe Connolly

Being Ourselves

"My purpose," sports psychologist William Beusay told *Sports Illustrated's* Gwylm Brown, "is to help the individual athlete improve performance through the knowledge of his own psychology and how to get the most out of it."

That certainly sounds as if Professor Beusay is on the side of the angels. He has tested middle linebackers and Indy drivers and found them cut from the same cloth. They are nervous, depressed, aggressive and impulsive. They also perform beautifully. And they perform even more beautifully when they are helped to be more of the same.

Beusay is non-judgmental about these qualities. He is a pragmatist. The only way a linebacker can improve on being dominant and hostile and aggressive is to be more dominant and hostile and aggressive. And Beusay shows them how.

It is only when he turns to distance runners that he reveals his failure to grasp the true role of psychology. There he demonstrates his lack of understanding of the human predicament, and thereby fails in his role of aiding and abetting athletes.

Distance runners, he reports, score surprisingly low in hostility and dominance. "Most runners," he states, "seem to be passive, submissive followers." But instead of developing these traits and making distance runners more of what they are as he has the football players and drivers, he would change them. He would give them the psychic attitude of the Indy drivers.

"When that happens," he says, "the world mile record will come down a full 10 seconds."

I am sure Professor Beusay believes this to be progress. Distance runners just have no business, he thinks, being tolerant and submissive. And so we are faced with the age-old problem where men of convictions, either religious or scientific, would populate the world with people who fit their idea of what is good or normal or successful.

Making runners hostile and aggressive (or football players passive and tolerant) is unnatural and completely

counter to their temperament and personality. It is bound to fail. It would be easier to make a rabbit a killer.

Unfortunately, this self-evident truth has escaped psychologist Beusay and indeed most of the scientific community. Its members continue to ply us with books explaining man as if he was some homogenous composition of traits and values instead of the infinite variety he is.

We distance runners certainly don't want our society to lack aggressive, dominant, confident, adventurous and courageous men (and I'm sure it won't). But they shouldn't expect us to enter into their fun and games. They should not be hurt if we would rather spend our hours with a good book or on a solitary run.

We are not built for the rat-race. Turning distance runners who are made for flight and thought into fighters goes against nature. We distance runners know that.

From George Sheehan

Starting Down

Soviet sports scientists accept no technique at face value, waiting instead until they've torn it apart and studied each piece in their laboratories.

This was the case in 1973 when word was circulating that the standing sprint start may be the best one after all. Evidence from abroad indicated that standing is superior to crouching on at least three counts:

- It's easier for a beginner to learn.
- It takes a sprinter to top speed quicker.
- It results in significantly faster final times.

John Short, a South African, said the time difference—standing over crouching—amounts to two or three-tenths of a second for 50 meters. (See "Standing in the Blocks," May 73 *RW*.)

Scientists at Lesgaft Institute in Leningrad pounced on this claim and began dissecting it for themselves. While Short had done an informal study on his own South African club members, the Soviets carefully selected and controlled 51 subjects. While Short timed his starters by hand, the Soviets used sophisticated electronic timing devices set at 10, 20 and 40 meters.

Each Soviet sprinter took three starts with three separate styles—nine timed starts in all: (a) standing, with a block behind the rear foot; (b) standing, with blocks for both feet; (c) crouched. The athlete's best mark with each technique is included in the overall averages:

OVERALL TIMES (SECONDS)

Start	10m	20m	40m
A	2.35	3.63	6.02
B	2.32	3.58	5.94
C	2.25	3.52	5.87

TIMES FOR SPRINTERS

Start	10m	20m	40m
A	2.29	3.51	5.80
B	2.28	3.51	5.78
C	2.18	3.38	5.65

TIMES FOR NON-SPRINTERS

Start	10m	20m	40m
A	2.36	3.66	6.08
B	2.34	3.62	6.02
C	2.31	3.60	5.97

The results here are precisely the reverse of the South African findings. In all cases, crouch starters show faster times. They're a tenth-second ahead of standing starters after 10 meters, and the margin grows to .15-second at 40 meters.

Trained sprinters benefit most from the crouch. They've mastered this style by practicing it. But the non-sprinters in the test group are also better at crouched starting, even if they aren't trained for it. They pick up half a tenth by 10 meters, and more than a tenth-second in the first 40 meters.

The Soviets have found to their satisfaction that sprinters must stay on their hands and knees.

(This is a summary from an article by Professor Ionov in the Sept.-Oct. 73 issue of *Modern Athlete and Coach*.)

KNIGHTS OF COLUMBUS MARATHON

KNIGHTS OF COLUMBUS MARATHON—1974 Western Regional AAU Champion. April 7, 1974; 9 a.m. Starting Paul Masson Vineyard, Saratoga, California. 60 trophies to top five finishers in 14 classes. T-shirts, too. Deluxe award banquet free to all finishers. A special tour under direction of Stanley Forester open to all runners' guests during race. Contact: Dan O'Keefe; P.O. 1454; Cupertino, California.

JEFF GALLOWAY



J. Bachelier

In the summer of '72, unheralded Jeff Galloway came down out of the mountains of Colorado where he'd been training for two months with his Florida Track Club teammates Frank Shorter and Jack Bachelier. He promptly won a spot on the US Olympic team in the 10,000, finishing an impressive second to Shorter in the US Trials.

In fact, the marathon was supposed to have been Galloway's race. His training had been directed towards the event. But when he made the team in the 10,000 and Bachelier didn't, he was content to sacrifice his chances in the longer event by pacing his teammate the entire distance and then dropping back dutifully (into a non-qualifying fourth place) after they reached the track.

Although the slender native of Atlanta, Ga., with the southern accent didn't race well in Munich (he was only 11th in his 10,000 heat in 29:35), his performances of '72 brought him to the forefront of American distance running. He has remained there this year with a fifth-place finish in the Boston marathon, a third place finish in the AAU six-mile (which earned him a spot on this year's US touring team) and finally a third-place finish in the AAU cross-country.

Galloway, who is 28 and single, graduated in history from Wesleyan University in Connecticut in 1967. He received a master's degree in education from Florida State University in Tallahassee in 1972, just before going to Colorado for altitude training. Last year he taught school in Raleigh, N.C. But he's presently living in Tallahassee where he's planning to open a sporting goods store.

Most of the Florida Track Club runners live and train in Gainesville. But Galloway says he prefers Tallahassee and the trails in nearby Appalachian National Park for training. He says he only visits Gainesville about once every two months to run with his teammates.

RW: I'm sure to many people your emergence in 1972 must have seemed very sudden. But, in fact, you've been running for a long time. I understand that you and Amby Burfoot (1968 Boston marathon champion) were roommates at Wesleyan University back in the '60s.

Galloway: Yes, that's right. Amby was one year behind me at Wesleyan. We roomed together for essentially two years.

In college I didn't make any great breakthroughs on the national scene, although I was a college division All-American in '66 in both cross-country and track, and I did finish, oh, about 11th one year in the university division NCAA. But my times were certainly not spectacular. I wasn't able to do a lot of training because Wesleyan is a very academic-type school and I had to support myself in college with a job on the side. At Wesleyan I only ran about... oh, 50 to 60 miles a week at most. But I had been running... well, ever since about 1959, to be exact.

RW: What were your best times in college at distances like the two mile and the three mile? I suppose you ran the six occasionally, too.

Galloway: I only ran the six once—that was in the nationals in '66. I was 13th when I got lapped by (Gerry) Lindgren and had to drop out. My time would have been somewhere around 30 minutes.

In the three mile, my best time was 14:10 and the two-mile, I think, was about 9:06. But that was about the best I did.

RW: Let me bring you forward to 1972 and your making the Olympic team. Am I correct in the feeling that really the turning point for you that year was the stint of altitude training with Frank Shorter and Jack Bachelier in Colorado? Was that the key?

Galloway: You know, it's really funny. I've often thought about that. I think that was sort of the icing on the cake for me, and I think mentally it was probably the most important thing that happened that year. But prior to that, in the summer of 1971, for instance, I had finished sixth in the Pan-American (marathon) trials and I'd just arrived the night before from an almost continuous drive straight across the country from Florida to Oregon. And so I was really encouraged by that and I really felt that summer, after a good hard summer of training at the Olympic training camp in Montana, among other places, that I really did have a chance, a *chance*, to make the team.

So I started gearing up my mind and my body for that, got in some good training, experimented with a number of things—among them 200 miles a week. And then I came back to Florida and got in a *really great* fall of training, just ran some super workouts, really ran some good mileage. And, then I got injured for three weeks, just before the cross-country nationals.

I didn't do so well in the nationals that year. But I came back and after three weeks of training, after I had come back off that injury in January, I ran an 8:31 two-mile and a 2:19 marathon, back to back, in one week. So I really felt at that stage of the game that it was sort of a continuous development type of thing rather than a great sudden jump forward.

And then, the next stage that I achieved, I think, was due to the training at altitude. Frank had talked about going out to altitude. The first time he mentioned it was out at the cross-country nationals in San Diego (in 1971). I started turning it over in my mind and tried to work everything out so that I could do that. I saved up some money and so forth. I was really convinced that altitude was a factor, having read something about it, and having heard a lot of people talk about it, particularly Jack, who is pretty well convinced that it was an important factor in his running well right after the Olympics in '68. He felt that it really gave him a boost for quite a while after that.

So we went out there, and I think the most important thing, as I said, was a mental preparation. In every single workout that I ran with Frank and Jack, I just got in debt (oxygen debt) early and I just hung on the whole way. And I never felt in control. I never felt comfortable. I never felt I had enough oxy-

gen to breathe. I was just hanging on. The point was, I *was able to hang on* and I really had never put myself, projected myself, mentally, to doing the calibre of workouts, day in, day out, that I was doing up there.

RW: You were training in Vail, right?

Galloway: That's right. It was at 8000 feet.

RW: Do you know whether or not Jack and Frank had the same feelings of oxygen debt?

Galloway: Not quite as much as I did, no. Because I did talk with them—in trying to convey the way I felt—they said that they, at times, really did feel in control, did feel like they were getting enough oxygen. But every time I'd run an interval workout I just couldn't get enough to breathe.

RW: What type of training were the three of you doing?

Galloway: I was doing slightly different training than they were because I was planning... I was putting my emphasis on the marathon, whereas they were putting their emphasis on the 10,000. Well, Frank was doing some marathon work, too. But, Jack, really, at that time, wasn't interested in the marathon to speak of. So, I was throwing in a longer type of run out there every once in a while. About every 10 days or two weeks I'd try to throw in a 25-miler. Instead of running straight interval workouts on the golf courses where we ran, I would run more long hard runs, 10- 12- milers at a pretty hard pace.

Frank and Jack were doing pretty much intervals every other day and then running easy runs two or three times a day on the off days.

RW: Two or three times a day?

Galloway: That's right.

RW: And what was the total mileage?

Galloway: The total mileage that they were running was more than mine. They were running about 170 miles a week and I was only running about 130, the difference being they were running about three to five miles at noon and I wasn't running that.

RW: I gather all three of you were doing nothing but running and relaxing the rest of the time, is that right?

Galloway: That's about it, yeah. Vail was a very pleasant place to run, although the running areas were fairly limited. We were restricted to running on golf courses and roads. But relaxation

was really great. There was a nice pool where we could just sort of lounge around. We could take hikes up in the mountains. There are a lot of very scenic areas up there.

RW: You mentioned intervals that Jack and Frank were doing. Could you tell us specifically what these workouts were?

Galloway: They did more shorter type of intervals. I don't mean Frank Shorter-type. I mean shorter in distance—things like an intensive quarter workout where we'd run, say, up to 12 quarters at about 62 effort. Although, up there they turned out to be about 65 or so.

RW: I'm curious. After the three of you came down from Vail to Eugene, Ore. for the trials, did you feel you had any particular extra energy?

Galloway: You know, I never noticed any difference coming back down. The only difference I noticed was when I got in a race I just seemed to do better. I didn't notice that I felt much better. I didn't notice that I felt stronger. I didn't even notice that my breathing was easier. It just happened that I did better and I do feel that altitude training did have an effect. But I can't put it into a way that I felt.

RW: You're an excellent road runner and an excellent track runner. What is your present feeling about track versus marathon running? Which do you prefer? Do you plan to emphasize one over the other in the future?

Galloway: Well, I think... I don't try to specifically plan things too much. I've had great success with getting opportunities as they come along and seizing them. For that reason my whole plan, my general plan, ever since Munich has been to stay in good enough shape so that I can run a variety of different races.

But I find I've gotten into track racing more and more, particularly the 10,000. And I don't know, I think I might want to try the 5000 this year just to see what happens. Racing and tactics intrigue me a little more now, particularly after running against the Russians. *This summer I got an awful lot of ideas about how to train for a distance race and how to train to be more competitive.* I think that in this respect, the Europeans are quite a bit ahead of us because I believe their training is more geared to competing and ours is more geared to improving our times. Therefore, I've been trying to throw in more hard runs, things like this.

I discovered this sort of training approach accidentally last spring. For one reason or another, I found it very

difficult to get into good interval workouts which have been my bread and butter for the last 10 years. I'd get out there after school and I'd go through half a workout and wouldn't be able to run much quality stuff because my legs would tighten up. So I'd decide that I'd just run the rest of the distance that I'd planned to run that day and I went out and I'd start feeling good about a mile out. So I'd push the pace for, say, the next three or four miles. And I think running those things hard like that is what gave me the shape I had to run well this summer, to run well at the AAU.

Also, this year's tour gave me a lot of ideas about training and competing—competing mainly in shorter races. I also got some ideas about the marathon. I think the marathon is something I can specialize in later, as I get older. And, therefore, I think maybe in these next few years I may concentrate on running the 10,000 and maybe shift to the marathon later. (Quickly) Although you never can tell what will happen. This year I do plan to run more shorter races.

RW: Without asking you to go into detail about what you've learned about training and competing this summer, could you give us perhaps a hint or two in that direction?

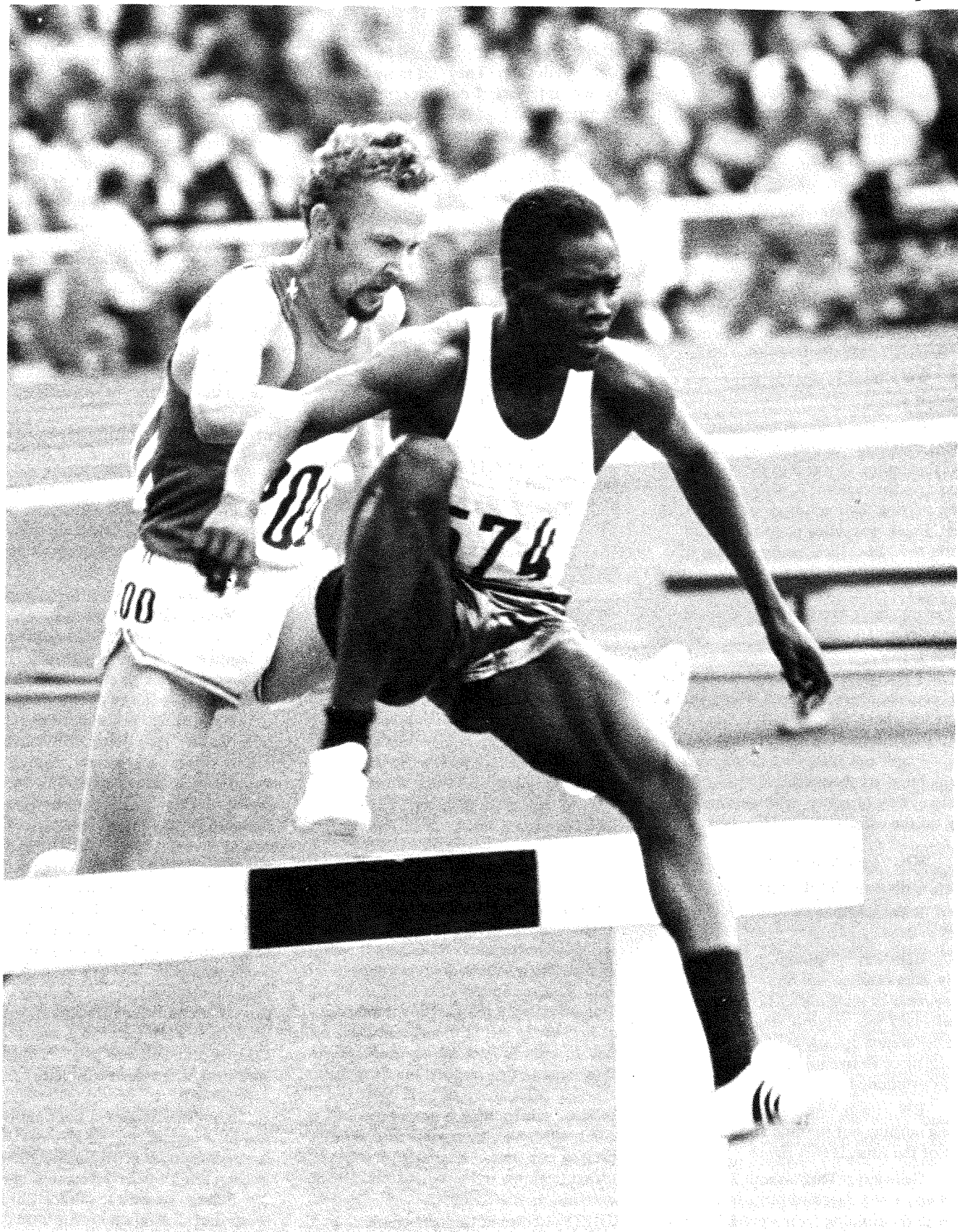
Galloway: Sure. I'll just give you an example. Whereas we in America tend to run a lot of interval workouts to get us ready quickly and bring our level of performance to a peak, the Europeans tend to do a lot more developmental training—fartlek, hard runs. People like Bedford do a lot of long, hard runs. I believe this developmental training enables you to reach your peak later in a *progressive* fashion rather than have you reach your peak early and slowly slide downhill.

Specifically, runners over in Europe, I find, are able to accelerate during their races. When the going gets tough, they're able to hang on longer. They're able to throw in all types of stuff—like accelerations. I think it's *because* they push themselves through hard pace and then accelerate when they're feeling tired, *force* themselves to accelerate and then force themselves to go back to that hard pace whatever it was before the acceleration.

Another tactic (in training) is a real hard opener to a 10-12-miler. Another tactic is interspersing 200-mile weeks. I don't believe you should run 200 miles a week all the time. But like every four or five weeks, run a 200-mile week. I think this really builds your strength up.

Athletes of the Year

Ben Jipcho



ATHLETES OF THE YEAR

In the "Year of the Hurdler", steeplechaser Ben Jipcho of Kenya is top rated.

Filbert Bayi



We were barely halfway through 1973 when *Runner's World* labeled it "The Year of the New Africans." The August issue had an article under that title, describing the incredible running in Europe by Ben Jipcho and Filbert Bayi.

By the time the year was running out, little had happened to change that early analysis. Jipcho of Kenya was the shoo-in choice as *RW's* Athlete of the Year. Bayi of Tanzania, a complete unknown when the year began, finished third in the voting by the magazine's regular contributors.

It was the year of the new Africans, to be sure, as Jipcho set world steeplechase records three times and Bayi ran an electrifying series of boldly-paced miles and 1500s.

But in the end 1973 was more than these two—much more. It was also the year of records and the year of the hurdler. The post-Olympic burst of speed brought track records at distances from 100 yards to 161-plus miles (the distance Ron Bentley went in 24 hours).

Some highlights:

- The half-mile and its metric counterpart finally got moving again after the records had languished for a decade. Marcello Fiasconaro of Italy broke through the 1:44 barrier (with 1:43.7) for meters, and Rick Wohlhuter improved the yard mark to 1:44.6.

- Svetla Zlateva of Bulgaria broke the women's 800-meter record with 1:57.5, at last getting rid of Sin Kim Dan's unrecognized mark which no one had known what to do with since she set it in 1964.

- Jipcho put the steeplechase mark well below 8:20, as he and Anders Garderud of Sweden ran in the teens a total of five times.

- East Germany's women went wild. Renate Stecher improved the 100- and 200-meter marks by two-tenths of a second apiece—to 10.8 and 22.1. Annelie Ehrhardt clipped two-tenths from the 100-meter hurdles best with 12.3.

- Emiel Puttemans, the man who squeezed between Jipcho and Bayi in Athlete of the Year voting, had a spec-

Emiel Puttemans



Athletes of the Year—continued

tacular indoor triple-header. In one race, he broke the 2000- and 3000-meter world marks, and finished with the fastest two-mile ever—indoors or out. The time: 8:13.2.

- Paola Cacchi of Italy put the women's mile record under 4½ minutes for the first time with 4:29.5.

- Between injuries, Dave Bedford improved the 10,000-meter best to 27:31.0.

- Sprinter Steve Williams and hurdler Rod Milburn earned their high spots on the Athlete of the Year voting not so much for setting records—which both did—but for their overall efforts as competitors.

Jipcho, Ehrhardt and Milburn helped make it the finest year hurdling and steeplechasing have known. One statistical authority, in fact, rates barrier-jumpers one-two-three for the year among

Steve Williams



men, and puts four such women in his top seven.

Dr. Gerry Purdy of the Aerobics research center in Dallas uses a computerized set of scoring tables to measure the worth of performances in different events. The Purdy Tables give Milburn's 13-flat high hurdles race 1470 points. Jipcho's 8:14.0 steeple is worth 1425 points, and Garderud's 8:16.2 rates 1370. Only Bedford's 10-kilo time breaks up a hurdling sweep of the top six places.

Annelie Ehrhardt's 100-meter record does so well on the women's tables that there isn't a score for it. It is off the top of the chart at about 1800 points—as it should be for a women who leads the world's hurdlers by half a second.

Ken Young, another computer-oriented runner, rates the performances in a different way. His scoring tables judge men's distance marks by age of the runner. These are his picks as the year's leaders (considering only males in flat races 800 meters up):

Name (Age)	Distance	Time	Points
Ben Jipcho (30)	Mile	3:52.0	1008
D. Bedford (23)	10,000m	27:31.0	1003
M. Kingery (16)	Marathon	2:23:47	998
Puttemans (25)	2 miles	8:13.2	990
Fiasconaro (23)	800m	1:43.7	984

The arguments could go on and on about the criteria and validity of comparing runners over the whole range of events. But no matter what the evidence—subjective voting, scoring tables or age-graded lists—Ben Jipcho is clearly number one for 1973.

Sixteen *RW* contributors voted. In the world athlete class, they listed five people in order of preference. Scoring was five for first, four for second, etc.

Jipcho finished with 74 votes and was the first choice on all but four of the ballots. He was never listed lower than third. Emiel Puttemans had 31 points, Filbert Bayi 23, Steve Williams 21, and Rod Milburn 20.

Others: Dave Bedford (Great Britain) 17½, Renate Stecher (East Germany) 10; Rick Wohlhuter (US) 9½, Brendan Foster (Great Britain) 9; John Akii-Bua (Uganda) 3½; Svetla Zlateva (Bulgaria) 3; Rod Dixon (New Zealand), Annelie Ehrhardt (East Germany), Bernd Kannenberg (West Germany), Larie O'Hara (Great Britain) 2 each; Ron Bentley (Great Britain), Andy Carter (Great Britain) 1 each; Marcello Fiasconaro (Italy) ½.

1-BEN JIPCHO

Kenya's Jipcho is hardly "new" to the international scene. Only his position is new. The August *RW* article on the Africans said of him, "Ben Jipcho had no particular reason to feel frustrated by Munich. He finished second in the steeplechase behind Kip Keino, his countryman. That had been the normal state of affairs for as long as Jipcho and Keino had run together, which had been a long time. Keino the champion, Jipcho the understudy..."

Jipcho turned 30 during the year. Keino left amateur athletics, but that was only incidental as the understudy forced his way out of the star's shadow.

Ben, a converted miler, first tied the steeple record at the African Games with 8:20.8. Then while summering in Europe he ran 8:19.8 and finally 8:14.0.

Though he said, "I have only trained four times a week in the past months, usually not more than six miles per workout," Jipcho had stamina. He also had technique, as evidenced by a low "split" between his flat and barrier 3000's (see "People in the Steeple," Sept. 73).

The final element in good steeplechasing is speed. Jipcho obviously had that, too. In July, he raced a mile against Filbert Bayi, the man who was scorching the tracks of Europe. Ben beat him with 3:52.0, a time only Jim Ryun has surpassed.

2-EMIEL PUTTEMANS

Puttemans told Tom Sturak last summer, "I like to run good times," (see "Catching Up With Puttemans," Oct. 73). He emphasized the "like," indicating he isn't willing to sit back and hope the good times come. Like Ron Clarke before him, the Belgian goes stalking them.

On Feb. 18, on an indoor track in Berlin, Puttemans showed what he meant by that. Without appreciable competition he sped through 2000 meters in five minutes flat, 3000 in 7:39.2, and reached the two-mile finish in 8:13.2.

With these three records, Puttemans increased his total to six. He went looking for others in the summer, and had two near-misses in the 5000, one at two miles.

Athletes of the Year – continued

3-FILBERT BAYI

Bayi was, by any yardstick, the sensation of 1973. Not for many a year has a runner this exciting burst on the scene so suddenly.

The Tanzanian was just turning 20 when he raced in Europe. He seemed to have no knowledge of—or at least no respect for—the laws of pacing.

During his fastest 1500 (3:34.6, second-best ever), he ran 53.6 on the first lap and was 1:51.6 at the half. In the mile against Jipcho, Bayi started even faster. All he would have needed was a 58-second last quarter to break the world record. He didn't quite get it, but still did 3:52.6.

He says, "I have only one definite principle that I try to implement in every race. When I run, I want to win. Other than that, I would like to be near my border of complete performance in every race."

4-STEVE WILLIAMS

Not since Tommie Smith quit sprinting after the 1968 Olympics have we seen a sprinter with Williams' immense talent and possibilities. Steve even looks and runs like Smith. He has the same long and powerful stride, the same ability to accelerate while seemingly going all-out.

Nineteen-year-old Williams, though, uses something Tommie Smith never fully exploited: short-sprint ability. Despite his height of nearly 6'4", which apparently slows his start, Williams gets out well enough to own a share of the world 100-yard record. He tied it with 9.1 in the spring, then won that race in the AAU (along with the 220) and had a successful tour of Europe.

All this he accomplished in spite of his claim to Jim Ferstle ("Interview," Aug. 73), "You have to remember that I'm not a 100-yard dashman." He lists that race third in his preferences, behind the 220 and 440.

5-ROD MILBURN

Milburn has run so well for so long now, we almost take his series of fast times for granted. Not much fuss was raised this summer when he broke the world 110-meter hurdles record. He ran 13.1. Ho hum. Hadn't he done 13-flat for 120 yards a couple of years earlier?

You might not have noticed, but Rod did 13-flat again this year. That time and the metric record gave him four marks this year—five in all—which are better than anyone else has done, ever. His 10 fastest times now average 13.18 seconds, according to *Track & Field News*, again faster than any other man has done in a single race.

Who else could do so much in one season and rank only fifth?

OTHER LEADERS

- **World Sprinter-Hurdler (Men)**—Steve Williams (US), co-holder of world record at 100 yards. (Also the top US sprinter-hurdler, and leading world and US junior athlete of the year.)
- **World Sprinter-Hurdler (Women)**—Renate Stecher (East Germany), world record holder at 100 and 200 meters.
- **World Middle Distance/800-10,000m (Men)**—Ben Jipcho (Kenya), world record holder in steeplechase, second fastest miler of all-time.
- **World Distance/800-up (Women)**—Svetla Zlateva (Bulgaria), world record holder at 800 meters.
- **World Long Distance/above 10,000m (Men)**—Frank Shorter (US), 2:11:45 and 2:12:03 marathons during 1973. (Also top US long distance runner of the year.)
- **World Race Walker**—Bernd Kannenberg (West Germany), winner of Lugano Cup 50-kilometer.
- **World Veteran/age 40-up**—Jack Foster (New Zealand), 2:14:53 marathon during 1973.

- **US Sprinter-Hurdler (Women)**—Patty Mohnson, national indoor and outdoor hurdles champion.

- **US Middle Distance (Men)**—Rick Wohlhuter, world record holder at 880 yards.

- **US Distance (Women)**—Mary Decker, 2:02.4 for 800 meters during 1973.

- **US Race Walker**—John Knifton, winner of four AAU championships during 1973.

- **US Veteran**—Hal Higdon, winner of AAU Masters cross-country, 15, 20, 25 and 30 kilometers.

Rod Milburn



RUNNER'S WORLD ATHLETES OF THE YEAR

Year	World Men	World Women	US Men	US Women
1969	Derek Clayton	J. Jehlikova	George Young	Doris Brown
1970	Ron Hill	Karin Burneleit	Frank Shorter	Francie Larriue
1971	Juha Vaatainen	Karin Burneleit	Marty Liquori	Doris Brown
1972	Lasse Viren	Lyudmila Bragina	Frank Shorter	Kathy Hammond
1973	Ben Jipcho	Renate Stecher	Steve Williams	Mary Decker

by Jim Ferstle

As manager of the San Diego Track Club last year, Jim Ferstle experienced first-hand the workings of the "big-time" track circuit. Without getting into touchy specifics, these are his impressions of the state of US track as 1974 begins.

"The thrill of victory and the agony of defeat; the human drama of athletic competition," proclaims the introduction to ABC's "Wide World of Sports." From the drama of these thrills and agonies comes the reality that big business has moved into what has been known as amateur sports.

CBS Sports Spectacular's coverage of international competition, NBC's coverage of the World University Games in Moscow, ABC's Olympic coverage all add up to the same thing: the movement of track and field from the realm of sport to the realm of business.

Meet promoters and those connected with the business end of track are not the only ones scrambling for a piece of the action. The athletes, too, are becoming aware of their bargaining position and are demanding their share of the revenue.

"The human drama of athletic competition" has become entertainment for the masses and the athlete has moved from the role of sportsman to the role of entertainer. Most entertainers get paid for their work so the athlete is beginning to see himself in that light.



STATE OF THE SPORT—1974

Track as a business, runners as entertainers.

US athletes had their first eye-opening experience with the economic inequality of the world's sportsmen in 1956 when the Russians' state supported squad showed what time and money can do for the athlete. It didn't register then because the purity of amateurism was thought to be abused only by the Communists. Despite the abuses, America thought she would still prevail because of her righteous strength.

Only after the 1960 Olympics in Rome did Americans begin to cry foul because the socialized system of athletics of the Soviets was taking over and using

sports success as a propaganda tool. Sports became more than a means of personal achievement. They became a political force. The goal was to beat the Reds and establish the superiority of the American system.

In Tokyo in 1964, the US was back on top again and the threat seemed stopped. But the decision to hold the 1968 Games in Mexico City brought all the nations into a re-evaluation of their support of sports programs. The altitude factor presented a unique training challenge for the athletes that all countries had to cope with.

Training camps at altitude were set up. Although restrictions were made on the length of time a team could train at one of these sites, there wasn't a strict enforcement of the policy. Sympathy was on the side of the athlete who wasn't altitude trained, and the unfairness of the competition put pressure on all the athletes to seek some way of circumventing this disadvantage.

How does an amateur athlete cope with the unfairness of a condition that favors one athlete over another? He can't, in most cases, and still be an amateur. There has to be some help from

other sources: government, business or earnings from athletic endeavors.

To be a success in the modern Olympics, the athlete has to devote much more time to his sport than ever before. His sport becomes his job in a sense, because of the time and effort that goes into the quest for a gold medal. This fact wasn't accepted by the majority of American athletes until Mexico City, when it became essential for them to leave their homes and jobs for extended periods of special training.

At about this time, television added its dollar power with expanded coverage of the Olympics. This gave the athletes something else to think about. Here was a business, television, making money from their performance and yet they received nothing to further their preparation for what was to them the most important competition of their lives.

Instead of simply accepting the products of shoe companies as gifts for mutual benefit, athletes became willing to accept more. Not that the practice wasn't known before Mexico City, but the atmosphere surrounding the '68 Games made it more conducive to accepting money to

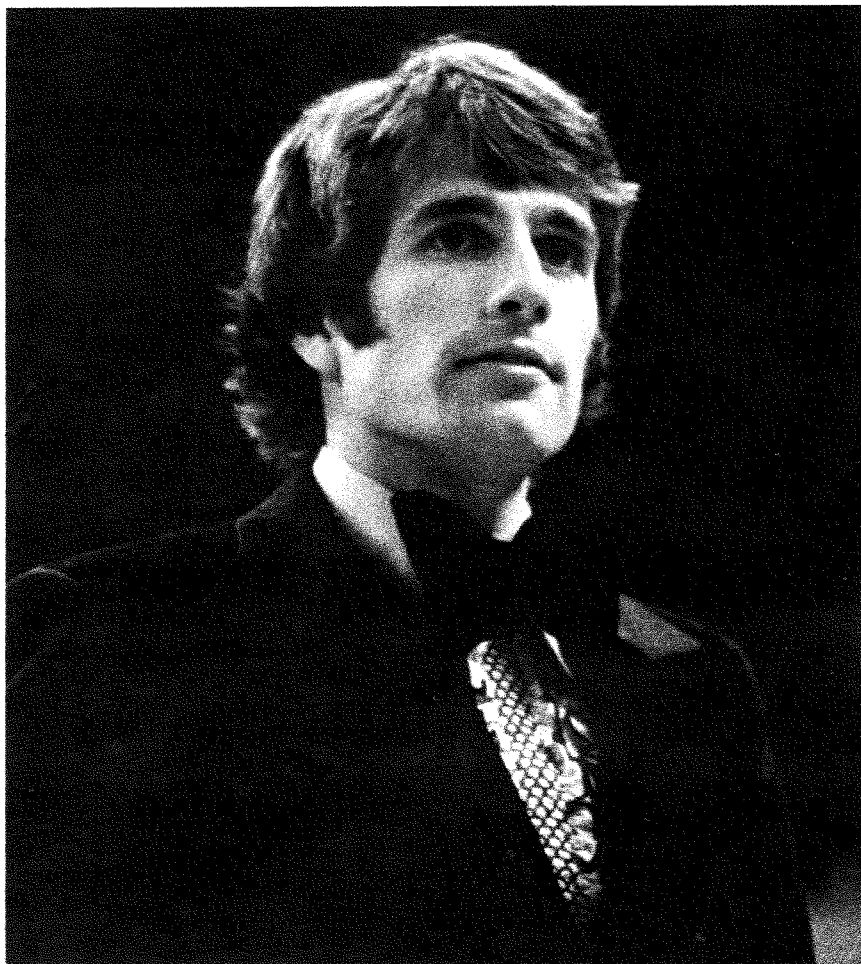
offset a hardship more and more of the athletes began to feel was unjust.

European tours showed American athletes how much money could be made in countries where track was the equivalent of football in America—a true spectator sport. In the time between Mexico and post-Munich, they found out just how much they're worth in dollars and cents.

When one sees teenaged runners being paid \$25-50 to compete in meets and older, more established ones driving Mercedes, it begins to hit home that the principles of amateurism don't begin to match the realities of the times.

This is how it typically happens. A talented athlete who begins to show promise is first contacted by the shoe com-

The mingling of sport and show business: (page 12) cameramen at Munich filming a segment of "Visions of Eight." (below) Marty Liquori, "master of ceremonies" for the ITA professional tour. (Jeff Johnson photo)



panies. He, or she, is outfitted with shoes, T-shirts, sweats, travel bags, rain gear and track shorts.

The athlete is given expenses for trips to meets. If still in school, the scholarship in the case of a male athlete pays for room, board and tuition, and the athletic department takes care of meet expenses. If the athlete belongs to a club, his other needs are taken care of by the club if the club has the capital.

As the athlete's status rises with his achievements, he becomes more in demand. Meet promoters will pay more to sign him for their meet. First it is just expenses to cover room, meals and transportation. This becomes extra days' per diem expenses that the athlete pockets as spending money, and first-class air fare which the ticket-holder exchanges for coach fare and pockets the difference. The more controversial the person, the more people he draws, the higher his asking price.

What started as a simple practice of trying to make the athlete comfortable so he could perform better has turned into a negotiating game between athlete and meet director. Each sets forth his proposal regarding how much he wants or is willing to give, and they bargain until an adequate compromise is worked out.

A newcomer to the ranks of stardom is told by his peers, friendly sportscasters, his coach and his friends that he should demand more. "Get what you're worth." The per diem expenses he once thought were great become an insult. He becomes money-conscious and begins looking at the business side of his activity.

Money will be a motivating factor for future track people. The pro track circuit, proposed legislation to improve the condition of amateur sports in the United States, and the possible economic benefits from winning an Olympic gold medal have made the sport one with career possibilities. "The thrill of victory" will be not only an emotional triumph but a monetary one as well.

This is not intended to be a criticism or in any way a judgment of the sport as it is today. Rather, it is an attempt to put it in perspective from my own viewpoint as an athlete, sports writer, former track club manager and interested "consumer" of the sport and business of track and field.

We seem to be at the verge of a new era in track, and how prominent a role professional and the amateur sports will play in this era will be decided in the near future. Track has always been a sport that is concerned with the welfare of the athlete. The athlete must now decide what direction is best for his welfare.



At four miles of the AAU, Frank Shorter and Doug Brown (left) are this close. The gap wasn't much wider at the end as Shorter won again. (Bob Kasper)



Steve Prefontaine had let Nick Rose get a 70-yard lead at this point in the NCAA. Pre came back to win for the third time. (Jeff Johnson photo)

RUNNING TO EXTREMES

*Climatic insults fail to keep
Shorter, Larrieu,
Prefontaine and Higdon from winning again.*

Cross-country season is the time when summer fades steadily into winter. The early races broil under the sun. The late ones often run through snow. Cross-country runners expect the extremes. They just don't expect them to come so close together as they did this November.

Young Craig Virgin ran a solid 10th in the NCAA championships. Five days later at the AAU, he collapsed with in sight of the finish line. Neil Cusack was fourth at the NCAA. He and about 80 others dropped out of the AAU.

The difference in the two races was a trans-continental plane flight and 50 degrees of temperature. The college championship in Washington was cold, the open race in Florida hot.

The quick change worked to some people's advantage, though. Doug Brown likes the heat. He moved up from seventh at the NCAA to a close second at the AAU. The Florida Track Club runners didn't really need an advantage, but got one anyway by running in their home area.

It was a season of firsts. The men's meet was the first in the South. The women's AAU was run for the first time at high altitude, in Albuquerque. The NCAA (Spokane) and USTFF (San Diego) were in the far west for the first time. And the AAU Masters meet moved out of Detroit, to the Cleveland area.

While the scenes changed, the results upfront weren't much different than they have been the last few seasons. Frank Shorter won his fourth straight AAU. Francie Larrieu repeated as women's winner. Steve Prefontaine led the NCAA for the third time. And Hal Higdon took the Masters race for the second time in its three-year history.

As proof that strong individuals and strong teams go together, the winners of the three biggest races—men's and women's AAU, and NCAA—all ran for teams which won easily: Shorter's Florida Track Club, Larrieu's San Jose Cindergals and Prefontaine's University of Oregon.

From the season, two non-winners emerged as the brightest new talents: Nick Rose and Tony Brien. Rose, of Western Kentucky University, led Prefontaine for much of the National Collegiate race. He finished less than five seconds back in second. Brien attends Marymount College in Kansas. He won the NAIA race, then finished fourth in the AAU—just 10 seconds behind Shorter.

In all, there were 40-some chances to be called "national champion" by one of the alphabet organizations: AAU to

RRC. The number grows each year, and the leading beneficiaries are the age-groupers young and old. The biggest race of all—the RRC Age-Group meet in New York—reached the staggering total of 2587 runners this time. Most of them are under 16 years old.

The other extreme in ages, the Masters, produced innovations that should be copied. At a time when cross-country courses are being made easier for the sake of speed and safety, the over-40 people went in the other direction. They deliberately tried to make their route more like running across the country is

meant to be. They added an artificial hill when no real one was available. Wooden fence-like barriers were strewn around the course, which was muddy from heavy autumn rains.

Meanwhile, in California, the state where runners rarely have to deal with extremes of weather, three San Francisco area meets were switched from the country to the asphalt because courses were ruled "too muddy."

The Europeans will laugh when they read this. They know that cross-country is meant to be a season of weather-induced insults.

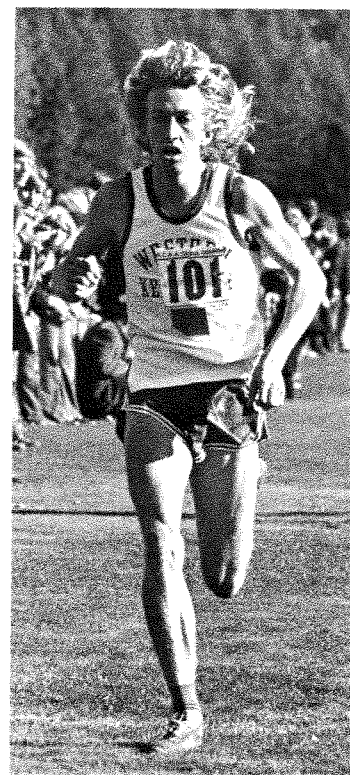
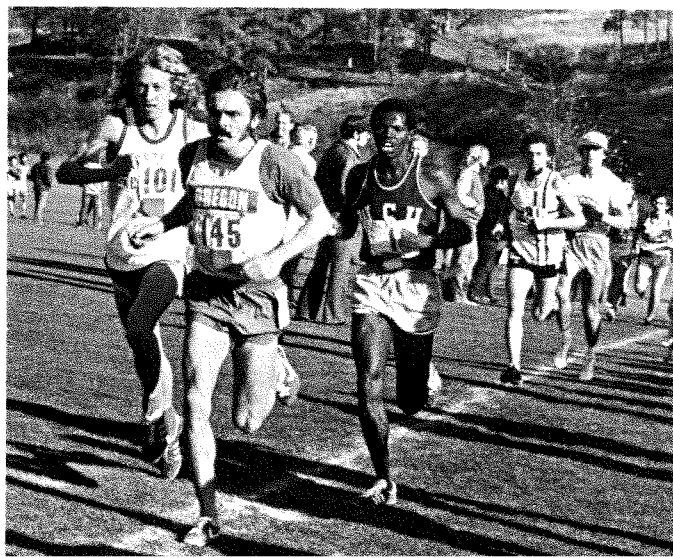
1973 NATIONAL CHAMPIONS

MEET	INDIVIDUAL WINNER	DISTANCE	TIME
AAU Men	Frank Shorter (Fla TC)	10,000m	29:52.6
AAU Women	Francie Larrieu (Cindergals)		
AAU Jr. M	Pat Davis (Motor City TC)	10,000m	30:48
AAU Jr. W	Kathy Whitcomb (Colo)	3 miles	19:12.4
(14-17)	Melody Miller (W Sub. TC)	2½ miles	15:02.4
(12-13)	Robin Castor (Colo Pacers)	2 miles	12:12.8
(10-11)	Terri Anderson (Flat. VT)	1½ miles	9:17.8
(9-under)	Kayle Skelly (Fleet Feet)	1 mile	6:42.3
AAU 3000m	Tom Donahue (No. Jer. Stri.)	3000m	8:18.0
AAU Mast.	Hal Higdon (Ind. Striders)	10,000m	33:37.2
(50-59)	Augie Escamilla (San Die. TC)	10,000m	38:02.0
(60-up)	John Wall (US Nav. Res.)	10,000m	39:01.0
USTFF Men	Ed Mendoza (San Diego TC)	6 miles	29:39.6
USTFF W	Pam Beyst (Michigammes)	2 miles	10:54.2
(14-17)	Barbara Laska (Mil. Badger.)	2 miles	12:31.4
(12-13)	Diane Simon (Saber TC)	2 miles	11:49.0
(10-11)	Margaret La Porte (W. Su. TC)	1 mile	6:45.6
(9-under)	Kayla Skelly (Fleet Feet)	1 mile	7:23.6
USTFF Jr. M	Don Franklin (Okla)	10,000m	32:35.0
(16-18)	Brent Schooley (Okla)	5000m	16:34.0
(13-15)	Kevin McSpadden (Okla)	5000m	17:39.0
NCAA Div I	Steve Prefontaine (Ore. U)	6 miles	28:14.8
NCAA Div II	Garry Bentley (S Dak. State)	5 miles	23:49.0
NCAA Div.III	Steve Foster (Ashland)	5 miles	24:27.0
NAIA	Tony Brien (Marymount)	5 miles	23:42.6
Jr. College	John Roscoe (Southw. Mich)	4 miles	18:41.6
RRC A-G M	Tom Fleming (NJ)	2½ miles	12:06.2
(masters)	Raimo Ahti (Mass)	2½ miles	14:07.4
(14-15)	Matt Leddy (NJ)	1½ miles	7:57.2
(12-13)	Michael Dees (DC)	1½ miles	8:31.2
(10-11)	Louis McClenden (Mich)	1½ miles	9:15.8
(8-9)	Craig Hall (Md)	1½ miles	9:16.4
(6-7)	Joseph O'Connor (NJ)	1½ miles	10:37.8
RRC A-G W	Doreen Ennis (NJ)	2½ miles	14:46.2
(14-15)	Robin Hollidayoke (DC)	1½ miles	9:17.2
(12-13)	Stephanie Clemens (Mich)	1½ miles	9:13.0
(10-11)	Janet Smartt (Mich)	1½ miles	9:41.4
(8-9)	Keleigh Baldwin (Pa)	1½ miles	9:57.2
(6-7)	Davida Jackson (DC)	1½ miles	11:00.8
Canadian M	Grant McLaren (Ont)	12,000m	39:29.8
Canadian W	Thelma Wright (BC intl)	4000m	14:38.4
Canadian Jr.	Neil Hendry (Ont)	8300m	27:52.0



PREFONTAINE: FIRST AND LAST

Everyone was out to beat Steve Prefontaine in his last college race: (above) the NCAA start at Spokane. (below left) Gordon Minty fell early, but came back to place third. (center) At two miles, Prefontaine, Nick Rose, John Ngeno, Neil Cusack and Doug Brown are 1-5. (right) Rose beats fast-finishing Minty for second. (next page) The moment of truth at about five miles, where Prefontaine catches Rose. (photos by Jeff Johnson)



Steve Prefontaine was talking with a hint of sentimentality on the eve of the NCAA cross-country championships at Spokane. It would be his last collegiate race.

"I haven't had that many cross-country races," he told me. "I've only had a total of 11 in college. In that respect, I probably don't have the same feelings about it as I do about track."

He thought for a moment then added, "But I love cross-country. It's a sport in itself, and it separates the men from the boys."

Prefontaine knew no one would simply hand him the national championship because of his reputation. He faced a hungry field, filled with hungry non-Americans like last year's winner Neil Cusack and AAU six-mile champion Gordon Minty.

Pre said he'd stay up as best he could in the early running, then move in the last quarter of the six-mile race. "The last mile and a half," he explained, "is always the strongest part of my race."

True to form, he began to move as planned, and by the start of the last mile had edged into the lead. The battle was coming from one of the foreigners, Nick Rose of England and Western Kentucky.

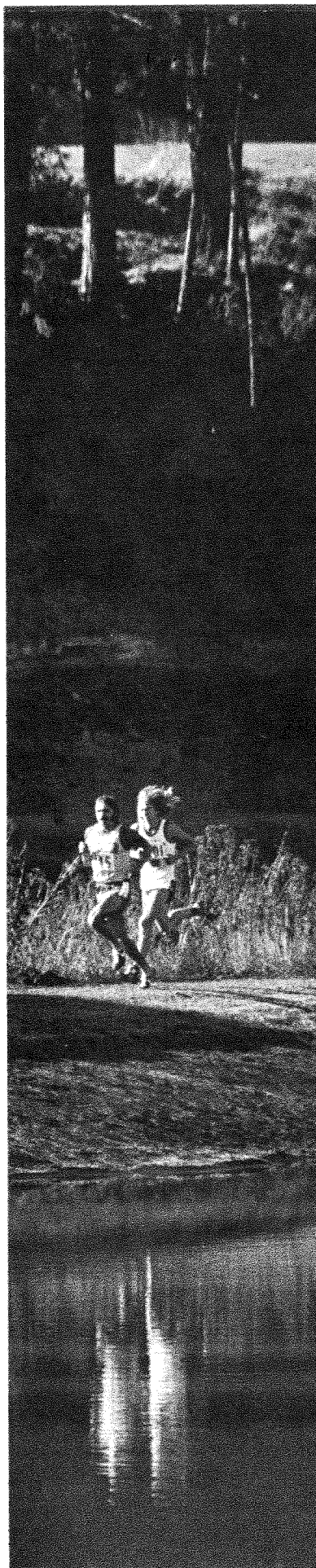
After the first 400 yards, Rose had snatched the lead and blazed the first mile in 4:20. Still streaking, Rose had passed the two-mile point in 8:57, and at halfway was somewhere under 13:40. He had led Prefontaine there by 30 yards.

Rose's lead had stretched out to 75 yards when Prefontaine began eating away at it. Once the two were together, Pre seemed content to bank on a final sprint finish. As he and Rose climbed a short hill with 400 yards to go, and the spectators shouted "Go Pre!", Pre went. He left Rose to record a 28:14.8 to 28:20 victory.

After an early fall, Gordon Minty closed fast for third in 28:22. Neil Cusack (28:28) and Wilson Waigwa of Kenya and the University of Texas at El Paso (28:32.6) completed the front five.

Prefontaine elaborated on his hang-back tactics after watching his University of Oregon teammates collect the team title. "I felt Rose went out too fast," Steve said. "It was the farthest I've been behind since Gerry Lindgren beat me in my first NCAA. But I really wasn't worried. I knew I was coming to the strongest point in my race, so I made my move in the last two miles. I really charged that last hill, and I knew I had him then. I think I could have walked in from there."

Nick Rose, a 3:58 miler, had dreams of grandeur for a few miles of his courageous race. "I was dreaming out there,"



he said. "I expected Pre to catch me. But I was dreaming for awhile. I was still with him with a mile to go, and I really thought I still had a chance. But then we started coming past the people, and they started yelling, 'Go Pre!' He left me there."

Pre complimented Rose: "That guy's really got guts."

True enough, but no more than Gordon Minty. Minty fell at the start and got away dead last, having to pass some 200 runners after that.

Gordon said afterwards, "I kept telling myself that I had to get out fast. I felt that getting into position around the first turn was the whole race. Then the fall..."

The two-lap route over the Hangman Valley Golf Course was quite fast. But a long hill at the start (repeated at three miles) and another at three-quarters (and 3 3/4) was tough enough to keep runners from the 27:40 predicted by Prefontaine before the race.

Three runners fell on the first turn. Irishman Ed Leddy of East Tennessee State experienced trouble here. He came from 117th at 3 1/2 miles to 14th at the finish.

Dan Murphy, of Ireland and Washington State, felt the course was *too* fast. "It was like a six-mile on the track," he complained. "It wasn't really like cross-country at all. I was running flat-out the entire way, and I couldn't make headway." Murphy, who had been in the top five the last two years, was a disappointed 16th this time.

Oregon easily won the team race with 97 points, far ahead of UTEP's 157. Behind Prefontaine were freshmen Terry Williams (22nd) and Dave Taylor (30th), Randy James (33rd) and Gary Barger (50th).

"My days at the university had to come to an end," Pre said. "It's a little sad. But yet I can always look to the future and maybe bigger and better things."

What are the plans for that future?

"It more or less all depends on the job situation. If I can find a job that will allow me the flexibility to train and allow me to take time off to travel and run in competition, yes, I can see competing for another... maybe another five years. But if not, I could probably say, very realistically, only another year or two.

"I'm not going to suffer like the multitude of other athletes in this country who get the royal shaft when they graduate. There's no place for them to go, no place for them to belong to, and nobody gives a damn. I think if that happens to me, I would prefer to retire with the records that I hold."



For the first time in its history, the National AAU cross-country championship was held in the South. But firsts end right there as the meet continued to be dominated by Frank Shorter and the Florida Track Club. This year's host club provided the individual champion for the fifth straight year (Jack Bacheler in 1969, Shorter ever since) and the team champion for the third year in a row.

Probably three of the most asked questions concerning a cross-country meet are: Who won? Who ran? What was the course like? Starting with the last and working forward seems to be the best method to describe the race in Gainesville.

Did I say "in Gainesville"? Well, actually the course was right outside of the college-oriented town, across from the North West campus of Santa Fe Community College. The land belongs to Hugh Edwards, a local real estate developer, who has intentions of developing a new subdivision if and when the local zoning committee approves.

A.A.U. STORY IS ALL FLORIDA

Frank Shorter's condition has been a mystery in recent months. But he solved that at the AAU. He apparently was in complete control as he won. (above) He's about 10th at two miles as (l-r) Howell Michael, Doug Brown, Neil Cusack and Barry Brown lead. (Bob Kasper). (top right) Shorter trails Byron Dyce in the early running. (Penny Crowell). (bottom right) Jeff Galloway (l) was third; Craig Virgin collapsed from the heat. (Kasper)

But for now, Edwards has loaned his beautiful pasture to the hundreds of feet belonging to the local, and national, running community. University of Florida cross-country coach Roy Benson said, "We were plain lucky to find an area that was so much better than one we had planned on using."

Benson, Santa Fe Coach Frank Lagotic, and Florida trainer Chad Greer all three worked many hours on creating a suitable course in the pasture (which still contains cows). Benson said, "The surface is ideal for running. It just needed to be mowed. And by mowing the tall grass, natural markings were created." Also the loops were well marked and barriers blocked the unused paths in hopes of avoiding a mishap such as happened last year in Chicago (Neil Cusack taking a wrong turn).

Doug Brown, who finished a close second to Frank Shorter, said the course was a major factor in his running the AAU race. Brown said, "I came down here to run because I like the course and felt I could run well here. It's the best course I've ever run on." He had won the Southeastern Conference meet on a five-



mile version of the course earlier.

The field numbered over 250 and featured the dual between the defending champion Florida TC and the New York AC. The champs entered Shorter, Jeff Galloway, Barry Brown, Bachelor, Ken Misner, Byron Dyce, Bruce Carpenter and Cos DePieza along with two other teams. The NYAC featured Florida-trained Dick Buerkle and Marty Liquori as well as Sid Sink, Tom Fleming, Pete Squires and Matt Centrowitz. East Tennessee's Neil Cusack and Eddy Leddy, Tennessee's Doug Brown, Illinois' Craig Virgin and NAIA champ Tony Brien led a field of classy collegians.

Doug Brown said the AAU meet is *the* meet to do well in. "The NCAA meet was tough, but it was very cold and I don't run well in the cold. You can look at the results and see most of the collegians placed better in the NCAA's than they did here, with the exception of myself."

Only Brown stayed near Shorter after the first two miles. He wasn't far behind Frank through mile splits of 14:10, 19:05 and 24:03. At five miles, Shorter had to stop to pull a stick off his spikes. He momentarily lost his lead, but quickly regained it. Shorter appeared to be in control of the race though only winning by 2½ seconds.

Many observers still considered his win a surprise. Frank had missed six weeks of training with a stress fracture in the summer, and ran only a few local meets this fall. He trained mostly by himself. Some thought he was looking more to the December marathon in Fukuoka.

"No," said Frank, "I consider myself a 10,000-meter runner who runs an occasional marathon. I don't really train for marathons. I was getting ready for today."

Even as Shorter and the other Florida Track Club runners were congratulating each other at the end of the chute, insiders couldn't help but wonder if this would be the last they'd see of what easily could be the greatest cross-country team in US history. Next summer Shorter will graduate from Florida's Law School. Bachelor's research contract at North Carolina State terminates this year. Galloway is thinking of spending a year running in Europe. Misner is an enlisted man in the Air Force and has requested a transfer out of Florida. The club's central figure, Barry Brown, turns 30 soon.

But when asked about next year, one club member responded, "We'll be back. We want to keep going and be the first over-40 team to win the national title!"

THEY THOUGHT THEY COULD WIN

A little over a year ago, several former University of Colorado teammates decided to hold a reunion at the 1972 Rocky Mountain AAU cross-country championships. Things turned out well. Rick Trujillo won, smashing the old course record. John Lunn took third. Tim Cronin was fifth. Not incidentally, Rick, John and Tim were all running for the winning team—the Colorado Track Club.

The Colorado TC started a

“The Colorado Track Club is a distance running oasis. And in isolation hopes have a way of growing.”

by Jeff Arnold

of the CTC. They compared names and times, made projections and agreed that CTC would win—with some luck.

They scheduled four open indoor track meets, charged 25 cents per entry and made \$400. Later, with the help of a hamburger chain, they sold 800 tickets at \$1.00 apiece to the Indian Summer Pentathlon. Everybody ran with a trip to Florida in the back of his mind, but not everything went as well as the fund raising.



few years ago as a competitive alternative to the handicap-oriented Denver TC (now the Rocky Mountain Road Runners) and as a home for race walkers. The club's success at that Rocky Mountain AAU meet led to its most ambitious project so far.

Lunn and Trujillo thought their act was good enough to take on the road, and a few weeks later they represented the CTC at the National AAU cross-country meet in Chicago. On the way home, they hashed things over. John was fifth, Rick was 15th. They talked about the Florida Track Club and about the guys they left back in Colorado, and decided that in spite of Shorter and Bach-

Pike's Peak marathon champion Rick Trujillo (1) of the Colorado TC in the Rocky Mountain AAU race. (Mike Young photo)

eler they could be toasting each other with orange juice after the 1973 nationals in Gainesville, Fla.

Thus began a year of hoping, planning, training, fund raising, disappointment and hope again. Back home in Boulder, Lunn talked with Jerry Quiller, Colorado University's cross-country and distance coach and administrative motor

Tim Cronin shattered a leg in a skiing accident. He's just now walking without crutches. Damien Koch didn't quite have the summer he hoped for. He wanted to try five or six weeks of 160 miles per, but after two he started breaking down with achilles problems.

As summer ended, things seemed to come apart. Damien Koch moved to Oregon. Lunn's achilles never permitted the hard training he insists on. When he finally realized that he wouldn't be able to run in Gainesville, he submitted to doctor's advice. He's now in a cast. Finally, Rick Trujillo broke two of his vertebrae in a mine accident.

But the club didn't give up. They had a few aces in the hole. Tarry Harrison was one. Tarry, a two-time campaigner at the Olympic Trials with a 13:08.4 three-mile and a third in the 1971 AAU cross-country meet to his credit, is back in his native state doing graduate work at the university and running for CTC.

"I'm back home," Harrison said. "The community supports the team. Between Kansas City and the west coast this is the only thing that's happening."

Charlie Vigil is a junior at Adams State College in Alamosa. He missed his chance at national recognition last year when he showed up at the starting line of the NAIA six-mile without a number. "One of the judges noticed that I didn't have my number on. It hadn't occurred to me at all. I think I would've had a good chance at the top three."

Adams State's NAIA affiliation plus the fact that Charlie doesn't race much in the summer has limited his experience and his opportunities to run quality times. Even so, he's run some impressive races. In 1972, he was AAU Junior 20-kilo champ and third in the AAU 15-kilo.

Wes Crist was one more reason for hope. A sub-2:30 marathoner who prefers shorter distances, Wes is often too tired from his day as an elementary P.E. teacher in Ft. Collins to feel like training. But after a good race in October on low mileage, Wes planned more serious preparation. "I'm going to go after it a little," He said. "I run pretty well under competition pressure."

Someone else who might appreciate that was John Gregorio. After his surprising third-place 13:10.6 in the 1973 NCAA three-mile, John ran 4:01.9 in Canada. Since returning to Boulder to finish up a P.E. degree, he'd been working out with the CU team and pointing for Gainesville.

Rick Trujillo was recovering quickly after his accident. After two weeks on his back in a hospital and three weeks in a restrictive brace, he'd started running again. There is virtually no level ground in and around Ouray, where he lives, and the first week Rick could only run uphill on pavement. Staying off the trails in summer was probably as much torture as the sense of urgency in getting back in time for Gainesville.

Rick won the Pikes Peak marathon in record time in 1973, and he is one of the few for whom mountain running is primary. "Running began for me as a means for enjoying the mountains," he said. During summer months he runs almost exclusively on mountain trails. "I've

learned that I can out-run elk under certain conditions. I have chased mountain sheep until they decide the only way they can get rid of me is to take to their forbidding cliffs. I've chased the blue grouse from tree to tree until they are so exhausted that they offer no resistance when I pick them up."

After a week of pavement, Rick was able to return to his trails and mountain roads.

The team could also have picked up the three top runners from Quiller's strong Colorado University team. Track internationalist Ted Castaneda, Mike Peterson and J.J. Griffin placed 10th, 20th and 35th in the NCAA cross-country race. But it was decided that they would race in the USTFF meet instead.

Jerry Quiller felt the track club team which had shown so much promise was coming apart at the seams. But he was cheered somewhat when Mike Gregorio, a 2:20 marathoner who's no relation to John Gregorio, was added. He is now working in Omaha, and had taken second in the Iowa and Midwest AAU races.

Lee Courkamp, cross-country coach at Arvada West High School, decided to take time off and drive to Gainesville for the race. He joined the Colorado Track Club in a final lineup of Harrison, John Gregorio, Mike Gregorio, Crist, Vigil and Trujillo. The team may not win this time, but it would be there. The disappointment, though, was yet to come.

When the Colorado runners who

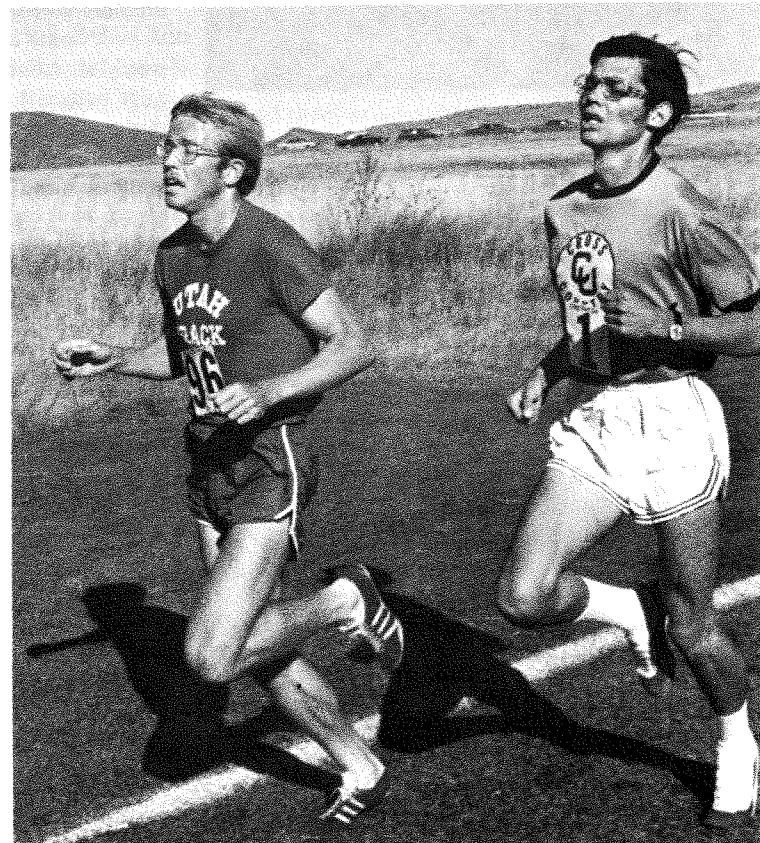
had been training in the snow stepped off the plane into Florida heat, it was like hitting a wall—but nothing like what happened during the race. It was 80 degrees with 100% humidity on race day. Of the 260 runners who started, about 80 (including Neil Cusack) dropped out. Craig Virgin, who was fourth coming into the final straight, collapsed and was still twitching when Tarry Harrison came by.

Harrison, in 27th, led the team to a fifth-place finish. But the Colorado TC had no chance against Florida that day. Frank Shorter, who himself lived in Boulder for a time, said to Harrison, "You guys should have been training in a steam bath." Tarry only groaned.

John Gregorio was 52nd, Mike Gregorio 54th, Wes Crist 56th and Lee Courkamp 63rd. The two mountain men on the team, Charlie Vigil and Rick Trujillo, who think heat training in November is being able to run in 30-degree weather, wilted to 75th and 81st.

All in all, not what they'd hoped. Unlike last year, there are no bright promises, and the hopes have to be tempered with hard experience. But there's no doubt that the Colorado Track Club is a distance running oasis in the middle of a relative desert. And in isolation hopes have a way of growing. Even now in Boulder, Jerry Quiller and some of the guys are sitting around talking about what happened, what might have been, and next year.

The Colorado running oasis is proudest of Ted Castaneda (r), a 10,000-meter internationalist in '73. School competitive commitments kept him off the AAU team. (Richard Kiefer photo)





AUGIE AND HIS ACES

by Dave Prokop

On Sunday, Nov. 18 it was raining in San Jose, Calif. But 20 miles to the east, at the top of Mt. Hamilton, it was snowing, misty and cold. Augie Argabright, bundled in a heavy winter coat, poured orange juice into small paper cups and arranged them on the open tailgate of his yellow station wagon. Beside the cups he placed little boxes of raisins.

Earlier, Argabright and a couple of

Augie Argabright leads his San Jose Cindergals to the mountain and the '73 AAU women's cross-country champions do the rest.

his assistant coaches had driven up the winding mountain road. At points from five to seven miles from the top, they had dropped off 17 of the 18 girls from the club who would be running in the national women's cross-country championships at high-altitude Albuquerque, N.M. a week later. (An 18th runner, Francie Larrieu, who happens to be the best female distance runner in the US, was away in Florida attending university).

At least once a week during cross-country season, Argabright has all his distance runners pounding up Mt. Hamilton Road, sometimes going as far as 14 miles in one long climb. This time they were running the top section—from 3200 to 4200 feet—to help them get as acclimated to altitude as possible. Even so, Argabright felt a mere run or two at this altitude would be of scant help and the secret to success at the nationals lay in careful pacing.

"I told them," he said, " 'If you go out so fast you find yourself in the top ten of your race after a quarter mile you just stop right there and warm down because your race is (as good as) over and you've cost us a national championship.' "

When the girls, ranging in age from 12-22, started arriving at the top of Mt. Hamilton, in groups of twos and threes, they looked surprisingly fresh and predictably cold.

"Come over here," Argabright would shout cheerfully. "Get the orange juice before it freezes. And take some raisins. You need the iron and vitamin C."

The first two girls in had been Teri Anderson and Judy Graham, both of whom have come from other parts of the country to run with the Cindergals—Teri from Topeka, Kan., and Judy from Los Angeles, Calif.

"Mr. Argabright," Teri chided, "You don't know how happy you made Judy feel today. All the way up she was saying, 'Oh, look! There's some snow on the trees!' Then, 'Look, it's coming down!' She said it was the only the second time in her life she'd ever seen snow falling."

"Well, you should be happy, too," Argabright retorted. "Doesn't this remind you of Kansas?"

"Awww," Teri Anderson groaned. Judy Graham just smiled shyly.

The San Jose Cindergals number 56, most of them distance runners. In past years, the club had won several national

age-class cross-country championships. But it wasn't until this year's AAU that they cashed in on the big one—the women's championship. Leading them in their triumph was, naturally, Francie Larrieu, who won the individual title in a breeze. (She's since returned to Calif.)

As if to show they've got some talent for the future as well, the Cindergals also finished second in the 14-17 age group and third in the 12-13 group. The club's current roster boasts the following runners: Larrieu (2:05 for the 880, 4:36 in the mile and 10:02 in the two-mile); Vicki Eberly (2:12 880 and 4:40 1500 meters); Val Eberly (4:32 1500 and 9:52 3000); Cindy Poor (2:07 and 4:52); Valerie Cooper (2:11); Teri Anderson (2:10, 4:41 and 10:08 for two miles); Judy Graham (2:07 and 4:48); and Amy Halberman (4:59 and 10:30). Indeed, with the arrival on the scene of the last three girls (Miss Halberman is from Wisconsin), the Cindergals have become something of a Florida Track Club West for girls.

The man who makes the Cindergals run is a 33-year-old, good-humored railroad engineer and self-confessed sports nut with a college degree, a wife who is a teacher and a two-year-old daughter he hopes will someday be an athlete. Augie Argabright fell into coaching girls' track eight years ago when he was working for the San Jose Recreation Department and saw some public school girls who liked to run. When he contacted the AAU, he was urged to start a club. So he did.

The club has since gone far beyond the stature of being a mere sideline to the native of Alturas, Calif., a little town in the state's northeast corner. Since 1968, he has coached the club as a professional venture, taking a modest salary for himself and paying his assistant coaches out of the \$10-a-month dues club members pay. The idea came from his good friend, George Haines, coach of the famous Santa Clara Swim Club. Haines had told him that he probably wouldn't last more than two years, and certainly his family wouldn't tolerate it, if he was going to devote 30-40 hours a week to coaching a large club without getting paid for it.

The club has taken on such importance to Argabright, he even explains his reasons for getting a college degree in terms of it (he graduated from San Jose State, having majored in physical educa-

tion, several years after the club was started).

"I thought it was very important, even for an AAU team," he says, "that a coach have a degree. I felt that we were going to be a tremendously powerful team and in order to get college girls and older girls in general into the team—see, we just had a lot of young kids in the team then—I was going to have to have a degree, too, to talk to them on their level."

In his present job with the railroad, Argabright makes a good salary and has his afternoons free to coach (he works an all-night shift, taking boxcars to different San Jose industries or picking them up to make up trains). But he makes it no secret where his real interests lie. Next year all seven of his best runners will be students at San Jose State (Cindy Poor, Judy Graham and Vicki Eberly are students there now, in fact). The university has no girls' track program at the moment. Argabright would like nothing better than a chance to coach girls' track full-time at his alma mater.

"I would take a big pay cut to go over there from my railroad job," he says, "but I would do it."

When Argabright started the club, he called it Augie's Aces. The world of girls' track and field in the US abounds with colorful club names. On the West coast alone one finds Will's Spikettes, the Blue Angels, the Long Beach Comets and The Redwood City Fliers. One club in Michigan called itself, simply but imaginatively, Flying Feet. Nonetheless, reconsideration brought Argabright to the conclusion that Augie's Aces somehow didn't have the right ring to it. He pulled the present club name out of a newspaper.

"I had given some results of one of our very early dual meets to Wes Mathis of the *San Jose Mercury*," says Argabright, "and the headline the next day read 'Cin-

dergals Win Dual Meet' or something like that. I liked that name—Cindergals— so we changed it."

He adds with a slight chuckle, "I think the parents kinda helped me a little on that, too."

In its first year of operation, the club consisted of four or five public school girls. They competed in all-comers' meets but went to the AAU meets only to watch.

By the next spring, Argabright had recruited 20-21 girls and they competed in a full schedule of AAU meets. Their record was unimposing, to say the least. He had to hold an intrasquad meet at the end of the season so every girl on the team could have at least a ribbon to show for her efforts. Eighty percent of them hadn't won anything in the regular meets.

It was during the cross-country season that fall that the club fortunes first took a turn for the better. Make that a *marked* turn for the better. After being beaten in the Northern California cross-country meet, the Cindergals came back two weeks later to win the California state title for 12- and 13-year-old girls (12 and 13-year-olds was about all the

club had at the time). Two weeks after that they won the national 12-13 title.

"We really did have a super bunch of kids," Argabright says. "Four of the kids who were on that team have either made track All-American or they've made the international cross-country team when they were older—Shirley Springer, Jackie Dixon and the two Eberly sisters, Val and Vicki. The Eberly girls are still with us, of course."

It was at the California state meet that year that Argabright noticed a slender, dark-haired girl from nearby Sunnyvale running unattached in the 14-17 division. Her name was Francie Larrieu and she had finished seventh or eighth, he can't remember which now. He didn't approach her then. But the following summer, at a meet in Oakland, he fell into conversation with her parents. He told them about his club and his coaching philosophy (which includes the rule *no parents at practices*—"I don't want kids running themselves into the ground in practice because their parents are watching. Nor do I want to worry about impressing anybody when I'm coaching.") That August, Argabright received a call from Francie's parents informing him she'd be coming out for the team.

At first Francie ran second-string to Vicki Eberly. But by the end of that season she was able to win both the California state and the national cross-country championships in the 14-17 division. It was in the latter race, Argabright feels, that she first realized her athletic ability and potential.

"That year we hadn't raised enough money to go to the senior nationals in Frederick, Md.," he explains. "Instead, we went to the junior nationals in Seattle. And there was a girl in Seattle named Judy Oliver who had finished seventh or eighth in the women's senior nationals

(opposite page) The coach gives his girls a little moral support at the tough Northern California cross-country meet. (Below) The close-knit, hard-working San Jose Cindergals. They were 1-2-3 at the AAU cross-country: 1st, women's division, 2nd, 14-17 division, 3rd, 12-13 division. (Beinhorn photos)



the previous year. She was just the pride of Seattle—next to Doris Brown, of course. The race was on a two-mile loop. After the first loop, Francie was about 150 yards ahead of her. I remember Francie coming by at the halfway mark and saying, 'Where are they?' And I said, 'Well, you've got it won. They're way back—at least 100 yards behind you.' She won by about 200 yards and I think that was when she really began thinking, 'Well, maybe I'm pretty good'."

When Argabright started coaching girls, he was short on experience and probably expertise as well. When you ask him, for instance, if he saw any great potential in Francie Larrieu when he first saw her, he says, "To tell you the truth, that's the first meet I'd ever been to in cross-country and I really didn't know. I didn't know how good any of those girls could be. It's just that they kept working and kept beating the best girls in the United States."

But what Argabright might have lacked in experience he made up for with a firm belief in good old-fashioned hard work. One of his favorite slogans is "It's the hard workers who achieve," and the Cindergal achievers do work hard. His college-age girls (like Larrieu, Graham, Anderson) train twice a day. Many of them will total up to 100-125 miles a week during cross-country season, running 5-7 miles each morning and an average of 8-9 in formal workouts in the afternoon. The younger runners naturally, train less. But from the oldest to the youngest, every Cindergal works hard and, by and large, is happy to do it. It's as Argabright says, "These girls are out there running because they want to be."

His belief in the high work capacity of girls is revealed in statements like "I think they can do just as many intervals as boys can, only slower." A typical week's training during cross-country season for the Cindergals would be 30 x 330 on grass Monday, a run of up to 14 miles up the Mt. Hamilton Road Tuesday, three-quarter-mile repetitions (again on grass) Wednesday, a steady 10-mile run or repeats up a gigantic 1100-yard hill in San Jose's Alum Rock Park Thursday and, finally, on Friday, some type of timed workout on the track.

Often the Friday session is a friendly, competitive game in which Argabright sets certain time goals for girls of different ages (e.g., 4 x 660 in 1:44 for the older girls) with those achieving their goal getting a free milkshake. Argabright is often out a few dollars as a result of this workout—18 girls once achieved their "milkshake time" in one workout—but he also gets some solid workouts in return.

Two trademarks of his training are that he likes to use several training sites (to avoid monotony) and to have all the girls run together as much as possible (to push and pull each other to better workouts). He has devised numerous ways for girls of varied abilities to run together. In interval training, for instance, he will have the younger girls start each repetition early or have them try to stay up with the older girls but do a fewer number.

During track season at least half of the workouts are done on the track but the emphasis generally seems to remain on strength rather than sheer speed. The team almost never does workouts consisting entirely of short, nearly flat-out sprints. Instead, they will do a small number of long hard intervals (e.g. 3 x 660 or 3 x 880) and numerous workouts where they will do repetitions over a variety of distances. A typical hard workout on the track, Argabright says, would be 2 x 1½ miles timed, with a full mile jog after each one, then a hard 660 or 330, followed by another mile jog, and finally 20 x 100 at faster than race pace.

Before the '72 Olympics, Francie Larrieu, who has run two miles unofficially in 9:44, was able to run the 1½-mile sections of this workout in 7:30 or better consistently and follow it with a 1:39 660. No wonder the event Argabright hopes they'll add to the girls' track program at the next Olympics is the 3000 meters rather than the 400 hurdles!

What appears to take the place of fast, intense speedwork in Argabright's program is hill running. At least once a week during track season he has the girls do a hard hill workout ("to get them used to running in oxygen debt."). Usually this workout is done on the 1100-yard hill in Alum Rock Park. To develop a finishing kick in his runners, he likes to have them do quick, short uphill sprints immediately after many of the track workouts.

It's probably safe to say that the training Argabright puts his runners through sounds more difficult on paper than it is in reality. If you pace yourself properly and stay relaxed, even running up mountains and 110-yard hills can be bearable if not exactly a pleasure. If it wasn't, his girls wouldn't, and probably couldn't, do it—no matter what their dedication, which is considerable.

To his athletes, Argabright is known as a demanding though understanding man. If you're injured or tired, they say, he won't push you. Argabright himself says, "I think you have to have an ESP of how much training an athlete should and can take. If I see anyone starting to

strain I'll have them cut back. If you just keep hammering at them they just become stale."

One of the greatest strengths of the Cindergals is their team spirit. The girls not only train together but participate in run-a-thons and the sale of raffle tickets to raise the money for their travel expenses (about \$5,000 a year). When Francie Larrieu made her first US team and travelled to Europe, she sent back postcards to every girl on the club—40 in all at that time.

Cindergal newcomer Judy Graham says, "I used to be with the Los Angeles Track Club which is supposed to be the best girls' track club in the world. But the girls came from all over the LA area, they had different coaches, they didn't train together. So there wasn't any real team spirit. Here the girls are behind you. The club backs you up. We train together, the girls scream for you at the meets. When you're slowing down or thinking of slowing down, they help keep you going."

Team spirit from a different perspective is seen in girls like 14-year-old Vicki Alford. She's a struggling runner to whom success—in its usual definition (victories, trophies)—has been a total stranger. When Vicki went out for her high school girls' cross-country team, she found the coach pressuring her to deliver the performances one might expect of a San Jose Cindergal. Vicki's ability, however, couldn't match the coach's expectations. Bitter and frustrated, she quit the team. With the Cindergals, however it's different.

"I wouldn't quit the Cindergals for anything," she says. "I don't care if someone paid me a million dollars.

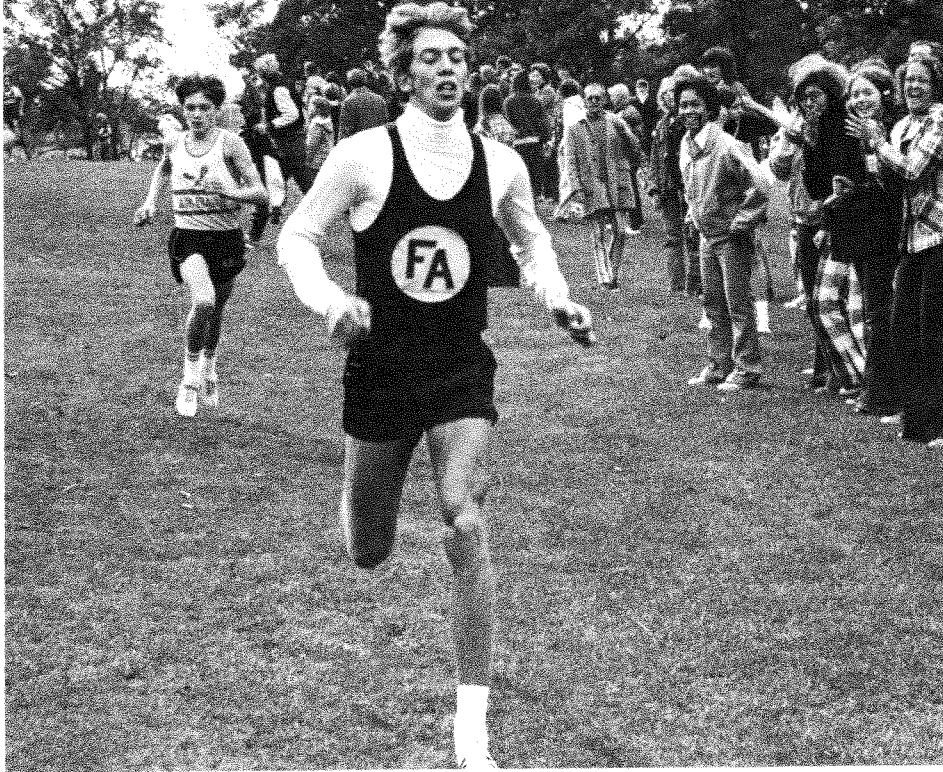
"You know, Francie has been through the Olympics and it makes us feel like we're a big team.

"We'll drop our boyfriends just to run. We'll give up our weekends to go out and run.

"Our practices sometimes get so hard. But still we keep trying. I don't know why. I guess we just want to see the team do good. I think if we had a different coach we wouldn't do that."

Argabright sees the team spirit as being largely the result of success. "We were very lucky at the start to have a lot of success. Anytime you're successful, you know, you have a lot of team spirit. I know one year we had a 'down' year and I don't think the spirit was nearly as high."

The San Jose Cindergals have had success alright—so much success one might say they've turned out to be Augie's Aces after all.



HE WOULD ALWAYS BE SECOND

by Brian Jones

Brian Jones writes for his high school paper in Ft. Atkinson, Wisc. When he was assigned to cover a relatively insignificant four-way meet, he produced this extraordinary account of the essence of cross-country competition.

Phil Jackson dresses mechanically in the dark and dingy cross-country locker room. He wears a smile which he never loses, whatever the odds.

"Come on, you guys," Phil laughs, "who swiped my gym bag this time." He spies it quickly, but now the game is "keep away."

When Phil finally gets his gum bag back, he continues dressing, still smiling and joking.

"Nothing will ever make Phil mad," a friend once said. "We pick on him constantly, but he never gets mad. If it bothered him, we'd stop it. But it doesn't. In fact, he seems to enjoy it."

Slowly the locker room empties out. Only those who will need a moment of thought remain. There aren't many. Phil and Steve Larsen are the last to leave, taking with them the hope of a team victory.

As Phil and Steve walk, they speak calmly of their chances in this meet. But underneath the calm runs something

much deeper and more meaningful for Phil. It's a goal he's reached for ever since becoming a member of the team. Now he wants, more than ever, to beat his running-mate, the unbeatable Steve Larsen.

Ever since he'd given up football and joined the team, Phil had heard nothing but stories concerning the domination of this one runner. Whenever cross-country was mentioned, the name Steve Larsen was not far from the tip of the tongue. And now, as a senior, Phil should be making one last stab at dethroning a king. If successful, he'd gain a piece of the cake. If not, he would be listed at the bottom of the sports page as an also-ran.

Out on the track the warm-up is almost over. Phil moves slowly, stretching and bending, testing his legs with each stride. Now he strolls over to a bench and sits, emptying his mind of all hostile thoughts. There is no psych-up for Phil. He slows his mind into a hypnotic trance. When he runs, he wants to feel nothing, to disassociate his mind and body as much as possible.

Phil will be ready. He's run more this year than ever before. He runs seven miles to school each day and by the time his practice day is over he's run 20 miles

all told. It's not easy to beat the best, and you can bet Larsen has run the same or more. He won't give up his throne easily, and he doesn't appear likely to fall.

Now the tension begins to build as the teams line up for the start of the race. This will be a relatively small meet, only four schools, but the competition will be tough. The gun sounds and 32 sets of shoes thunder viciously on the autumn ground. Phil will use the other runners surrounding him to set a pace. Other than that, his awareness of them will be small. Although he may be surrounded by as many as 10 runners at a time, from now on he'll be all alone.

Phil is loose. The first mile goes well, much better than he has expected. He seems to be holding his own without overworking. His legs are very distant as they glide almost automatically. His mind screams, "Look for Larsen!" and his eyes respond.

Larsen is still in sight, a good sign. His legs desperately fight off the brain which calls, "Here's your chance. Pick up the pace." But his months of training tell him to run his own race.

By the end of two miles, Phil begins to feel the pain every distance runner must endure. The trees and grass are only a blur. If Phil is going to die, this is the point. Thoughts of his many second-place finishes run through his mind. Twice the year before he'd beaten a sick Larsen, but that wasn't victory. The coaches said Larsen gave the races away because of his illness.

For the first time since the start of the race, Phil begins to notice the presence of his legs. They seem like a burden rather than the wings which running demands.

On other days, at other points in his career, Phil Jackson might have ridden these last 880 yards to an easy finish, but not this year—and certainly not today. He's gaining now on Larsen. Maybe this is it! His body tells him to play it safe, but his mind says, "Kick!" And the mind wins.

He tires now and every muscle aches, he sucks it up and picks up the pace. He's no longer racing to catch a man, he is racing to catch a dream. With 220 yards left, he's within arm's length of that dream, but that's as close as he will get. Larsen has his pride and his awesome kick. When the dust clears away, Larsen has another easy victory.

Second out of 32 wasn't bad. But to Phil, it would always be second.

NEW FEAR IN OUR HEARTS

by Joe Henderson

We thought running was so good for us, that our future would be free from heart worries if we just kept exercising aerobically. Now doubts have been planted.

- The wire services report that Kerry O'Brien of Australia, former world record holder in the steeplechase and indoor two-mile, is ordered to retire. He has a "strained heart." If a world record holder isn't safe, is anyone?

- The rumor circulates that Harold Gale's death after the Boston marathon resulted from a heart attack. Gale, a veteran long distance runner from Connecticut, had a history of heart disease. Apparently, his running didn't correct it. If a marathoner isn't protected, can a mile-a-day fitness runner be?

- A California man had run a mile a day for five years. One morning after finishing his run, he dropped dead of a heart attack. The man's case is included in a study by Drs. Meyer Friedman, Ray Rosenman and associates. The recently published results warn that running can be hazardous to one's health. If this is so, have we been deceiving ourselves all along about its benefits?

If running missionaries had raised false hopes in the minds of converts with claims of everlasting health, the initial wave of faith is giving way now to largely unwarranted fears. Dr. George Sheehan's "Medical Advice" mail has been heavy with this kind of letter the last few months:

"I have always been under the impression that running has a therapeutic effect. Now I'm not really sure what I should do. To be overcautious and cut out all stresses would reduce the quality of exercise. On the other hand, the dangers of overdoing are clear."

The worried writer continues, "I enjoy running and was always running for fun rather than 'running for my life.' I enjoy running as an end, not as a means. But if the risks are as high as some doc-



tors are saying, I might have to consider stopping."

Sheehan is a cardiologist, a heart specialist. He's a runner, too. And this combination makes him particularly annoyed at the recent warnings.

He writes, "The medical profession should be learning from us (runners), not threatening and frightening us. Any number of reports have shown that regular vigorous exercise protects people to a large degree from heart attacks. And should an attack occur, exercisers have an eight times better chance to survive it."

Sheehan quotes two studies to offset the claims issued by Friedman, Rosenman, et al.

"In a three-year Health Insurance Plan of New York survey of 110,000 people, physically active men had only one-half the number of heart attacks of the inactive men—and in the most active men only one-eighth the number of deaths.

"Such results have been repeated recently in a survey of 17,000 civil servants in England. There, among men reporting vigorous exercise, the relative risk of developing coronary disease was about a third of that in men who did not exercise."

These studies, though, talk in mass figures. What about specific individual cases: Kerry O'Brien's "strained heart," Harold Gales' and the Californian's heart attack deaths? Is it possible to explain

Marathoners: one doctor says they're almost 100% safe from heart trouble. Pictured are, l-r, Bob Darling, Ron Zarate, Mitch Kingery and Darren George in West Valley race, 1973. (George Beinhorn photo)

these incidents to the satisfaction of runners and their families? Perhaps it is. As a start, we can look deeper into the facts of these cases.

O'Brien was touring Europe last summer, perhaps traveling too much and racing too often. He felt so run-down he could barely summon the energy to finish his races. He checked in with a Swedish doctor to find what the trouble was. The doctor made the "strained heart" diagnosis—a finding that is suspect among some sports medical experts.

Dr. Ernst Jokl of Kentucky, an authority on exercise physiology, has said it is impossible to damage the healthy heart with exercise—no matter how severe.

A man like Kerry O'Brien who sets world records undoubtedly has a healthy heart. Fit hearts, however, aren't *normal* hearts—and that's the problem. Doctors accustomed to viewing the electrocardiograms (EKG's) of unfit people often are alarmed at the "abnormal" tracings of athletes.

We can't second-guess the Swedish doctor from this distance. But there

Isolated accidents and and rumors produce an unwarranted wave of doubt about running's health benefits.

apparently is at least the possibility that O'Brien's "strained heart" was nothing more than a harmless (perhaps even beneficial) irregularity.

At any rate, O'Brien continues to "run for my health" back home in Australia.

Harold Gale fought for seven weeks after his collapse at Boston before dying. He was past 40 years old. And because he'd had a serious heart condition at 19, it was assumed it had caused his death.

But his clubmate Charley Dyson says, "I learn now from a runner-physician who investigated the case reports that, while there may have been some heart involvement, Harold's death was due to heat stroke."

Dyson adds, "He was a well-trained runner, and raced (the marathon) in the low 2:50's. So the heart condition was, I think, a thing of the past."

Dr. Thomas Bassler of the American Medical Joggers Association checks the autopsy reports of all known running-related deaths. "So far," he says in a recent issue of *Hospital Tribune*, "true marathoners—those who can complete the 26.2 miles—appear to be immune to coronary heart disease (CHD). We have yet to find a marathoner of any age with fatal CHD. There is no evidence that speed protects, but mileage does."

Bassler notes, "It is safe to say that a hobby marathoner who finishes a four-hour marathon has at least six years of CHD protection."

Protection, maybe. But what about "curing" those who already have suffered heart attacks? There's reassuring news here, too.

Quoting from the August *RW* "Running Shorts": "Eight runners from Toronto, all former heart attack victims, came (to Boston) to run. Seven of them finished in close to 80-degree weather. The one who dropped out wasn't in distress. He simply felt he hadn't done enough training to go all the way."

The evidence here is that while running per se may not give heart protection, a supervised and graded program leading to a lot of running at a moderate pace has great value.

The objections to Drs. Friedman, Rosenman and Co. are hardest to deal with because these people are specialists who obviously have done their research.

Few runners have read their technical article in the Sept. 10, 1973, *Jour-*

nal of the American Medical Association (Vol. 22, No. 11, pp. 1319-1328). It details their years of work on "Instantaneous and Sudden Death."

Only a couple of paragraphs in the 10-page article deal with exercise. But sensation-seeking columnists have seized on this point and given it mass circulation. This is the version runners have seen and have been frightened by.

Let's go back to the original piece, and see if we can deal with the subject as calmly as the doctors do.

They looked into "instantaneous" deaths—those in which the victim died within a half-minute of his attack. Of the 27 subjects, four died while running.

"More than half the subjects' deaths occurred during or immediately after either severe (e.g., jogging, running, playing handball, digging a ditch, carrying heavy objects and calisthenics) or moderate (e.g., golfing, gardening and walking) physical activity," the authors of the *JAMA* articles write.

They conclude, "The close temporal relationship between severe and moderate physical activity and more than one-half of the instantaneous death cases makes us question whether it is worth risking instantaneous coronary death by indulging in an activity, the possible benefit of which...has yet to be proved.

"It is also disconcerting to find that many of our subjects who died during or immediately following their exertion had been well accustomed to the specific physical activity involved in the exertion."

On these two points, the advocates of exercise argue with the more cautious physicians. The advocates say Friedman's and Rosenman's own figures could be interpreted other ways.

These are the statistics on their study group of 27:

Average age	54
Average height	5'9"
Average weight	164
Behavior pattern	
Type A (tense)	24
Type B (relaxed)	1
Undetermined	2
Vocational physical activity	
None	14
Moderate	8
Heavy	5
Avocational physical activity	
None	11

Moderate	13
Heavy	3
Activity prior to attack	
Severe exercise	10
Moderate exercise	4
Sitting/reclining	9
Sleeping	2
Standing	1
Defecating	1

Alternate interpretations:

1. These individuals appear somewhat overweight for their height—at least according to runners' standards. A long form of running might have reduced them.

2. They were hard-driving types who probably would have driven themselves into the grave by another route if not by exercise. A gentle form of running might have relaxed them.

3. Those who worked hardest (physically) for a living were least likely to have a fatal attack. They had only one-third the attacks of non-exercisers.

4. Those who worked hardest at play were least likely to be stricken. They had three times the protection of both non-exercisers and moderate exercisers.

5. While 14 individuals died during or just after exercise, almost as many (13) had heart attacks while standing still, going to the bathroom, sitting, reclining or sleeping. Non-exercise is no guarantee of longevity, either.

Exercise didn't kill these 14 people. It may have administered the final blow, but it wasn't the *cause* of the trouble.

Dr. Ernst Jokl writes in *Consultant* magazine (July 72, pp. 46-48), "Unexpected fatal collapses during exercise do happen, but rarely. In more than 100 cases Dr. J.T. McClellan and I studied at autopsy, we found the following causes of death: coronary atherosclerosis accompanied by degenerative myocardial changes; congenital anomalies of the coronary arteries; myocarditis; cardiac tumors, and obstructive cardiomyopathy."

Don't rush to a medical dictionary to find out what the big words mean. They are all gross heart irregularities resulting from inherited defects or, more likely, neglect. The point is, according to Dr. Jokl, "In no case was death caused by physical exertion. In people with normal hearts, strenuous exercise does not cause death."



Of course there's some risk in running. We don't deny that. But the risk of getting run down by a car is infinitely greater, and we don't quit running for that reason.

Viewpoint, the newsletter of the American College of Sports Medicine, recently published figures on the risk of "stress-testing" (taking an EKG reading during exercise). The odds against suffering an attack during a stress test—with efforts equivalent to a demanding run—are reportedly 10,000 or 20,000 to one. And yet much of the testing involves persons just beginning to exercise, many with known heart problems. The odds among active athletes probably would be far greater.

It's better to risk running with these odds than to sit idly by, watching them shorten. That's what Jim Waters would say, anyway. Waters, brother of Eileen Waters, the woman who has run the world's fastest 50-mile (see Dec. 73 *RW*)—was watching his odds drop in the late 1960's. Dr. Kaj Johansen relates "Until 1969, Jim Waters could have modeled for the average American male. He had smoked occasionally, exercised himself on the golf course intermittently, spread 190 ample pounds on his 5'9" frame and took a number of pills for his

With the Pacific surf crashing in his ears and the hard, wet sand under his feet, the last thing on a runner's mind is his heart. Should he be more concerned? Dr. George Sheehan says: "The medical profession should be learning from us (runners), not threatening and frightening us. Any number of reports have shown that regular vigorous exercise protects people to a large degree from heart attacks. And should an attack occur, exercisers have an eight times better chance to survive it."
(George Beinhorn photo)

chronic, stress-induced high blood pressure.

"There is a family history for early heart attacks. But Jim thought, 'I'll wait until I'm 35, then get into shape.' As it turned out, had he waited until 35, he might have died first. In 1969, at age 29, Jim began to notice constricting or crushing chest pains, often related to ex-

ertion. EKG's revealed, not unexpectedly, that he had coronary artery disease.

"He started a panic-stricken running program, but found that for more than six months his heart was too weak to tolerate the added load. Finally, with weight loss (he currently is a trim 142) and moderation, he was able to step up his program. His chest pain diminished to nil and his cardiogram returned toward normal."

In 1973, just four years after noticing he was headed down the path to a heart attack and decided he didn't want to wait for one, Jim Waters ran a 3:06 marathon. It was only a little faster than his sister's time, but he wasn't complaining.

Dr. Johansen says, "This virtual return from the dead has been under the enlightened medical guidance of Dr. Tom Gable, who has readily accepted the still revolutionary idea that chronic vigorous exercise can indeed halt or even reverse the inexorable progression of blood vessel disease that is epidemic in the overfed, under-exercised American populace."

(Next issue: How valuable is exercise stress testing as a screening for potential heart problems? Some surprising new conclusions.)

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DRESSING TO FACE THE COLD

*In Saskatchewan,
the temperature
hovers below zero
for weeks on end.
Running goes on.*

by Jim Sexton

"The current temperature is..." How many times last winter did you listen to your friendly local TV or radio announcer tack a number on the end of this sentence so low that you decided to call off your run until tomorrow? If you live in any of the northern states or Canada, this thought probably crossed your mind quite often. If you were inclined to give in to temptation then I have advice you might use, since I live and run in Canada where temperatures can go 100 degrees below zero.

The most important factor to remember when running in sub-zero weather is that nothing, short of a blizzard, should stop your running—if you are prepared! "Prepared" is the key-word. Running in cold weather can be as harmful as running in hot weather if you are not adequately prepared. The problem then is how to get prepared. Here are a few guidelines I follow:

- Probably the most important "rule" to remember when running is to avoid heavy, bulky garments. Use several layers of light-weight clothing. Running in severe winter conditions often dictates the use of up to four layers.

The first layer should be absorbent and non-irritating. Fishnet underwear made of wool is excellent.

The second layer should be a good insulator. For this layer, I often use a turtleneck shirt as this allows me to retain important warmth in my arms and neck without adding the extra weight of a sweater and scarf.

The third layer, if chosen carefully, can allow you to run at all but the coldest temperatures. This layer is, of

course, the age-old sweatshirt. But a sweatshirt made of the wrong materials, or with the wrong "features" is of no use to anyone. A good sweatshirt should have: a hood, preferably with a tie around the neck, long arms (especially welcome when running into a wind without mittens), a pocket to keep mittens, kleenex or a stop watch handy, and proper materials. Proper materials? Wool, fleece-lined cotton, anything that is not made of nylon and keeps you warm.

The fourth layer is the most important when it comes to running in extremely cold or windy weather. It is the wind-breaker. Although it is possible to use any type of material in a windbreaker, it is better to use cotton poplin. Cotton poplin allows sweat to evaporate without condensing on the inside of the jacket. At the same time, it will not allow wind to penetrate. A jacket of this type is available at any cross-country ski store.

- Guidelines for leg care: *no more than two layers of clothing for the legs!* I don't care how warm and cuddly you feel wearing two pairs of underwear and three pairs of sweatpants. What good are all those clothes going to do if you can barely walk? A pair of wool or nylon warmup pants and long underwear are more than adequate for all types of weather. I do not wear more than one pair of pants unless the weather gets below minus-100 with the wind-chill factor.

I have found that it is more comfortable to wear shorts instead of a jock strap. If you don't believe me, just try

ABOVE LEFT: Ron Daws, after a 17-mile workout in Minnesota in 15 below zero cold.

RIGHT: Snow is no reason for a runner to stop training. (M.J. Baum)



and adjust a jock when it is 50 below zero and you are wearing mittens!

A word of caution: be sure that you wear a good pair of cotton twill shorts beneath your sweat pants. This is vital (particularly for male runners) and, unless you're willing to undergo considerable agony, take this bit of advice to heart.

● Footwear is, thank goodness, the simplest part of all as far as dressing is concerned. The cardinal rule is always wear socks. One pair will suffice for nearly all conditions (as long as you keep moving).

If you are planning on doing a lot of running in deep snow, a rather interesting gadget to keep the snow out of your shoes is a gaiter. Gaiters are tube-shaped pieces of nylon or poplin which are pulled over your pants legs then fastened at the bottom of your shoes with an elastic strap. With an arrangement of this sort, there is no chance of snow getting into your shoes. One warning: the elastic piece used to keep the gaiter on is not very strong, as it is a good idea to limit your gaiter-wearing to snow.

As far as shoes are concerned, leather and nylon work equally well, with leather being preferred for running through puddles. It is a good idea to protect leather shoes with a silicone agent available at any shoe repair shop.

● If you have run cross-country during the fall and early winter, you will have noticed that the first parts of your body to get cold are your hands and arms. This is equally true in winter and spring training, and it is of prime importance to keep your hands well protected. Mittens are very good for this purpose and are far superior to gloves. Probably the best mittens are those made of leather with a high cuff. Although it is not vital, a liner made of wool or silk can be added.

A trick which mountain climbers often use to increase their resistance to cold while working at high altitudes is to avoid wearing gloves while skiing and doing lower-altitude climbing. Because of the constant exposure to cold atmosphere their spleen enlarges, which enables them to carry more blood to the surface of the skin. Those of you who ski and have the internal fortitude to do this, go ahead. People who suffer frostbite while getting a dish of ice milk out of the freezer, are better off sticking to mittens.

A rather interesting variation among people regards the circulation in the hands. If you're right-handed, you'll find that your left hand gets cold first and tends to stay colder, and vice versa if you're

left-handed. The degree to which this affects people varies immensely. After only a short run, some are so cold that it takes a full day to defrost. Others can run for miles at sub-zero temperatures with no noticeable effects.

● Head gear is probably the most important piece of equipment that you can have if doing a lot of training in extremely cold and windy conditions. Insufficient protection against cold and wind in this area is asking for a whopping case of pneumonia or a bronchial infection. Just ask me. During the fall, I picked up a slight cold, nothing serious. Or at least it wouldn't have been serious if I had stopped racing. I continued—with disastrous results. I might add that most of my competing was done in very windy conditions. I think that this is a very important factor as it is not so much the cold which caused damage, but the cold and wind combined (more on this later).

The most important function of a head covering is to keep your face warm. The best material for keeping your face (and breath) warm is wool. Wool, because of its ability to absorb great amounts of moisture without losing its insulating properties, would be used in as many places as possible when collecting a winter uniform. The cost is well worth it. A ski mask made of either wool or orlon is far superior to anything else I have tried. (Don't take my word for it, though. Experiment!)

At this point, I should comment about the safeness of the cold and the meanness of the wind. In Saskatchewan, we have very severe weather conditions, both in winter and summer. It is not unusual for temperatures to go to 40-50 degrees

below zero for weeks on end during the winter. Nor is it unusual for the temperature to go to 100 above for weeks during the summer. Add a 40 m.p.h. wind to either of these conditions and it can become pretty uncomfortable. I have learned to respect that wind.

A person can run for up to two hours a day in 50-below weather without any fear of "freezing lungs" or, if properly protected, frostbite. Add a 10 m.p.h. wind to this, though, and everybody goes scurrying for ski masks. This is why it is so important to take the direction of the wind into consideration when planning a workout. This is crucial.

Always go into the wind at the start of a run and with it on the way back. Running with the wind causes the body heat to build. Having to run back into the wind with your outer garments sweaty can be disastrous. It is a very good idea to tell your next of kin where you are running and the expected time of return, in case you are overdue on your schedule.

While most articles on cold weather running include a chart on the wind-chill factor, I'm skipping that detail. (Okay, if you're really interested, there's one in the Feb. 73 RW.) The reason I don't have it is because by the time you're finished figuring out the wind-chill factor, you will already have decided to take up a sensible indoor activity like ping pong.

But if you're well prepared, you'll be warm at any temperature. True, a person from California who has just moved to Saskatchewan would not be able to run at 100-below immediately, but adaptation comes fairly quickly. When it does, there is little further trouble.

To give you an idea of how much a runner's body can take, I relate an experience I went through in January 1972. Sometime around noon, disregarding the pleas of my parents and assorted other kin, I went out and ran 7½ miles when the official temperature was 125 below zero. That's right, one hundred and twenty-five below. I really did not feel cold—just slow. Of course I was wearing all five layers and then some, but I had absolutely no trouble with frostbite. Although this has not been verified by the Guinness people, I think this must be a world record for cold running. It had better be, because I'm never going to attempt a stunt like that again.

Writer's Note: I would like to thank Pat Lanin for allowing me to use parts of previous articles he has written on this subject, one of which appeared in Guide to Distance Running.

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by Dr. Ernst van Aaken



WINTERIZED RUNNING TRAINING

*Some say this is the most
important season of the year for runners.*

This article by the West German physician and running coach, is reprinted from the November 1973 issue of *Condition* magazine, and was translated by George Beinhorn.

In earlier years, athletes used to take a break in the winter in order, they

thought, to regenerate their strength. However, this we found to be valid only on a psychic level nowadays. If you're sick of running month after month on the road or the track, you should change athletic gears for a while, but by no means rest or get rusty. Getting rusty happens fast.

Racing continues through the long and cold Finnish winter. (Tapio Pekola photo)

Emil Zatopek once said, "If I miss one day, I can tell that I'm several seconds slower." Famous pianist Arthur Rubenstein said of pauses in practice, "When I take a day off, I notice it. When I miss two days, the audience notices it." And so it is with running training.

There should be no such thing as sitting out cold, wet weather. You just have to protect yourself accordingly. Obviously, you don't have to work for maximal hardness and natureboy exhibitionism. Just dress warmly to conserve energy. In very cold weather, hands and face must always be protected. Running shoes should be waterproof or coated with water repellent.

Even in great cold, distance runs in winter have to lead to perspiration—not because of running speed but because of the length of the runs. This slow heating of one's own inner oven strengthens the runner's resistance. If you change clothes immediately after running, there's no danger of catching cold. Even when you don't feel quite right or have a mild fever, distance running in winter can accelerate a cure.

A mistake often made—especially among marathoners—is to believe that the most miles ought to be run during the rawest part of the year, in January. There are great losses of heat, even freezings. Runners doing this kind of training don't build their reserves but squander their capital to the point of depletion. Naturally, they catch cold easily.

During very cold weather, then, only run as many miles as you can while staying comfortably warm and reasonably dry. There should be no more effort to force more miles out of yourself in winter than in summer. You can always make it up in March and April during the early good weather.

Though winter training consists of slow runs and perhaps less miles than in fall or spring, it is done daily, regardless of the weather.

Winter training should strengthen the heart, increasing oxygen uptake capacity and keeping the circulation tuned. This is true for sprinters as well as distance runners. It's best to do long runs all winter long, finishing the season with gradually increased tempo runs (maximum length of 700-1000 meters at 70% of top speed).

Every long run can be followed by just one tempo run a day, or a few sub-maximal accelerations of 60 meters or so. This way, you will be sure to have practiced all the possible variations of tempo from warmup to sprint, and you won't have to go through a radical change at the end of the winter.

The runner should be ready to race at any time on this base training, but actually he should only race playfully and without any great attachment to results—just to test his form or learn tactics. The most important thing is for the runner to very seldom give his all during winter.

Muscles are best irrigated by slow running and a heart rate of 130-150, and they are strengthened only by tension. The running muscles require formation during the winter of a great number of fine, hair-like blood vessels to insure a better blood supply. The runner has to make his body an oxygen supermarket in winter, and avoid as much as possible all consumption of energy in oxygenless (anaerobic) reactions.

In winter, it comes right down to the vital stuff of life, oxygen. In summer competition, you can occasionally overdraw your account and incur an oxygen debt. You survive these overdrafts better when you have a nice, fat oxygen account.

PRE-SEASON SPRINT WORK

BY VERNON GAMBETTA

Vern Gambetta, a decathlete, is a graduate assistant coach at Stanford University, working with sprinters and weight trainers.

Sprinters are coming to accept an idea which has been part of distance runners' thinking for decades: runners are made, not born. This means *all* runners—sprinters and hurdlers as well as those who go long.

Running parallel to this idea that absolute speed is an acquired characteristic is the realization that the foundation for speed improvement is laid long before the first race of spring.

This also means, of course, extending the sprinter's training year so it more closely resembles the distance runner's in length and content. More specifically, it asks sprinters to run through the winter—starting two, three months or more before the season warms up.

Sprinters are "made" through sound all-around pre-competitive training. This

is the most important part of the sprinter's year because it establishes the base of strength and endurance from which speed will come. The broader that training base, the higher the peak which will come in racing. Hard, intelligent work during the winter means faster, safer sprinting in the spring and summer.

It is important to establish why sprinters need this base. By nature, they aren't patient people. They're explosive, and don't like to wait. But they have to realize that winter training is a time for waiting, for holding back. During this time, they must take a gradual approach, working on individual components of the race which won't combine and come to a point until later. They must keep in mind that the goal is to run faster *during the season*. Attempting too much, too fast, too soon will undermine that possibility by shrinking the conditioning base.

More than anyone, Valeriy Borzov has changed sprinters' thinking on what they can do to improve themselves. The Soviet Olympic champion followed a precisely planned and controlled six-year schedule leading to his two wins at Munich (see "Scientific Sprinting," Jan. 73). He trained almost year-round, with the year divided into several cycles.

In the winter preparatory cycle, according to Borzov's coach Valentin Petrovskiy, there are three main tasks:

- Perfection of running technique in general.
- Strengthening of weaker muscle groups.
- Development of motor characteristics.

While working on general endurance and strength (primarily with distance or slow-interval running and weight or hill training) during the winter, a sprinter has to remember he's first of all a speed runner. He has to keep sprinting, when the weather allows.

German sports physiologist Toni Nett says (in the book *Run Run Run*) that in training for absolute speed a main aim should always be the improvement of neuro-muscular coordination. Form problems during high-speed runs are always caused by the tiring of the nerves rather than the tiring of the muscles. Sprint form training teaches coordination and therefore is an essential element in sprint training in any season.

Nett says sprint training ideally should progress gradually from slow to fast, from easy to difficult and from quantity to quality through the winter and early spring.

Valentin Petrovskiy, too, stresses

a combination of general and specific conditioning, along with a gradual shift in emphasis as the pre-season period goes on.

He writes in *Guide to Sprinting*, "Speed of movement (starting time) and running speed can only be improved by appropriate specific exercises, and by running fractional distances at maximal or near-maximal speed. Repeat runs at competitive distances are neither possible nor helpful, because the consequence is rapid exhaustion.

"Therefore, the principle method of developing absolute speed and speed-endurance consists of specific exercises (such as starting) plus runs over fractions of the racing distance (30-60 meters) from both block and flying starts at near-maximal or (less often) maximal speeds."

Petrovskiy adds that a sprinter "can and should be prepared for such work by other means, among them longer runs at moderate speed for endurance." Borzov prepared for his Olympic speed work with half-mile intervals and half-hour cross-country runs, in addition to his short sprints which rarely were at 100% effort.

The Soviet coach has written in a series of articles translated from *Leichtathletik* magazine that periods and cycles of training "do not have fixed boundaries, but flow into each other." He says during the pre-season conditioning period sprinters move steadily from the general (endurance and strength) to the specific (speed).

"During the preparation period, volume and intensity are increased in a wave-like manner, with periods of recovery. Volume reaches a maximum near the end of the cycle then gives way to quality work."

Petrovskiy says the winter training period is "in turn composed of mini-cycles. These last two to three weeks: two weeks with increased loads (in extent and intensity), and a third with a decrease and change of training methods."

He warns that "only during the competitive period, when technique is stabilized, does a runner need to run at maximum speed. For the rest of the time, he should only run at 60-90% of maximum."

During the winter, cold weather and heavy clothing hold speed well below maximum on most outdoor runs. The cold makes indoor sessions of weight training more inviting than usual. If dashes are run indoors, they're usually short ones. By a fortunate coincidence, the weather encourages sprinters to do just what they need.

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Miki Gorman

● Miki Gorman, the woman who set the world marathon record in December, was having her story told as far back as the May 1971 *RW*. We wrote for her there after she ran 100 miles in 21 hours.

Mrs. Gorman, who ran 2:46:36 at Culver City, is 38 years old. She was born in China of Japanese parents, and is 5'1" and weighs less than 90 pounds.

Miki is coached by ultra-distance runner Lu Dosti (also featured in May 71) and by one-time Hungarian miler Laszlo Tabori. She trains with Boston women's champion Jacki Hansen, and in fact followed Jacki through 15 miles (in 1:34) at Culver City before Jacki dropped out with a calf injury.

● Mihaly Igloi, who has coached world record setters in both Hungary and the United States, reportedly is returning to the US after working for several years with the Greek national team. Igloi is expected to resume coaching his old club, the Santa Monica TC in southern California.

● Amby Burfoot, Boston marathon winner in 1968, is one of a number of runners now serving with the Peace Corps. Burfoot coaches in El Salvador, where the national records for the 5000, 10,000 and marathon are 16:46 35:10 and 3:02.

"At least there's plenty of room for improvement," he says. "But of course there's not reason for motivation. Everyone works under the hot sun all day and drinks beer through half the night."

Leo Duarte, a long distance runner from Massachusetts, is stationed in Venezuela. He was supposed to coach distance runners there, but found none. A fellow volunteer, Glen McCarthy, reports, "He's only coaching himself. He was in

Looking At People

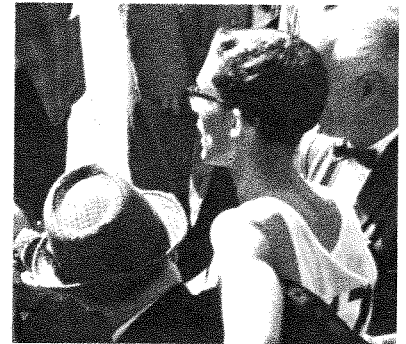
pretty good shape, so he decided to ride his old five-speed bike from Merida to Caracas, about 400 miles. He was planning another ride over a 13,000-foot pass in the hottest part of the year."

McCarthy says, "I'm having a hard time training in Venezuela, as there is a law which says if a man goes on the street in short pants and T-shirt he is indecent. Leo got stopped in a little town for that."

RW contributor Janet Newman is now Mrs. Tom Heinonen. Tom and Janet were married in June. The next day they ran a race in Eugene, Ore., starting under a shower of rice. Then they left for a honeymoon at Peace Corps training camp.

They were to leave the camp in Puerto Rico for their coaching assignments in Chile the day the government of Salvador Allende was overthrown. After a long delay, Tom and Janet are now coaching Chilean runners and watching their own steps.

looked like a refugee from a bowling alley or softball game. His stomach showed he definitely was not a former distance runner. He was too sick to drink his beer. In popped a skinny little guy. He proceeded to down the pitcher of beer and win the marbles. I don't know the winning time. But it probably doesn't make any difference as every thing was done with spirit(s)."



Amby Burfoot

● Bruce Kidd, a onetime Olympian himself and now a political activist in Canada, has sided with the walkers in their fight to stay in the Games. Kidd is spokesman for a group attempting to get the Canadian Track and Field Association (CTFA) to back a resolution expressing "deep regret" that the 50-kilometer walk has been dropped from the 1976 program.

Kidd's group thinks the walk "is as important...as the 5000-meter run or the javelin throw or the 400-meter hurdles, or any other event" and that "virtually no economies are to be gained by eliminating approximately 50 walkers from Olympic competition."

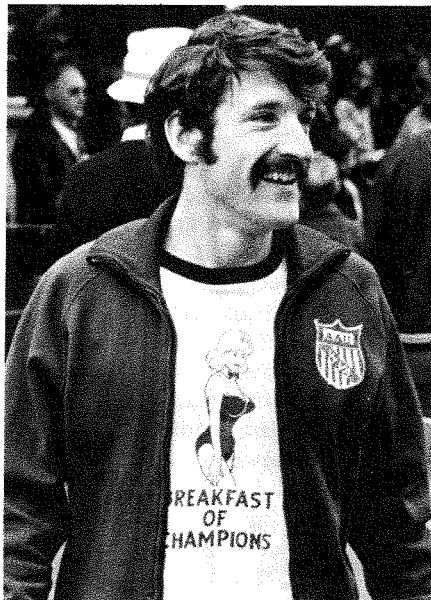
Kidd urges the CTFA to:

1. "...petition the International Olympic Committee, the Montreal Organizing Committee and the International Athletic Federation to reinstate the 50-kilometer walk in the 1976 program; failing that...

2. "...petition the Montreal Organizing Committee to stage a 50-kilometer walk as a demonstration event; and failing that...

3. "...apply to the IAAF for permission to stage a world championship 50-kilometer walk in Montreal at the time of the Montreal Olympics in the summer of 1976; and failing that...

4. "...CTFA itself stage an invitation- al 50-kilo walk in Montreal at the time of the Montreal Olympic in the summer of 1976, to which the best walkers in the world would be invited."



Carl Hatfield

● Carl Hatfield reports on another event that has latched onto the "marathon name:

"It's called the Dick's Den marathon, named after a local watering hole near the Ohio State University campus in Columbus. Each contestant has to down two glasses of beer and two double shots of whiskey. Then he runs out the door and follows High Street for roughly four miles to the ABC (state liquor) store. There he must purchase a certain type of liquor. With a bottle in hand, he runs back to Dick's Den, where he must guzzle down a huge pitcher of beer.

"The first man back this year

GUIDE TO MILWAUKEE

Milwaukee suffers from an unfair image. Outsiders treat it as though it were on the Siberian frontier, and it is continually labeled with such titles as "Sudsville" or "Beertown." For those unaware millions in the American public, the making of beer is *not* Milwaukee's major industry. The city is a leading center in the manufacture of heavy machinery, headquarters for such firms as Harley-Davidson and Allis-Chalmers, among others.

Most of Milwaukee's own citizens aren't even aware of this fact, since they do lead the country in beer consumption, although also having the sophistication to lead in brandy drinking. All this tipping might be caused by the cold winters. But many people would blame it on the lack of things to do at night. Everyone will admit, however, that even though you may not want to visit, Milwaukee really is a nice place to live, especially for the runner.

Milwaukee is known as "the city of parks," with a nationally acclaimed park system of infinite variety and beauty. Its pride is its celebrated County Zoo, and its glory is the Mitchell Park horticultural conservatory, housed in three imposing geodesic domes. The rest of the area abounds with splendid and well-kept parks, linked wherever possible with a series of parkways and boulevards. Some feature lagoons while others follow rivers and streams. The city is a golfer's paradise, with a course wherever you turn. With all this greenery, it is a haven for the runner.

Perhaps Milwaukee's most invigorating run is a six-mile round trip on the shore of Lake Michigan, stretching from the Art Center at the eastern end of Wisconsin Avenue north to the far edge of Lake Park, at the intersection of Kenwood Boulevard and Prospect Avenue near the University of Wisconsin's Milwaukee campus.

On this jaunt, you will pass Juneau Park's lagoon with its squawking ducks (they never fly south because they are overfed), the McKinley Marina and a long stretch of sandy beach. Depending on the time of year, you will be treated to a panorama of Wisconsin fall color in the trees dotting the bluffs, or be forced to slow your pace as you pass hordes of comely sun-worshippers. Even winter

there has a stark beauty, seen in the waves crashing against the shore.

Taking this run, you will be amazed at the knowledge that Lincoln Memorial Drive, as the lakefront area is called, is man-made, built long ago as a defense against erosion. Plans have been revived to extend the Drive another four miles, as have other more odious plans for building a freeway there. Opposition is mounting against the freeway, but the area is in danger.

Grant and Sheridan Parks, on the heavily ethnic South Side, are other magnificent lakefront parks, both popular with runners and the sites of many high school cross-country races. A few blocks south from Sheridan is Cudahy High School, the starting point for the national USTFF 10-mile championship, sponsored annually by the UW-Milwaukee Track Club. This past August the race attracted about 400 runners.

Just as with everywhere else, running in Milwaukee is on the rise, and the Track Club is responding with its extensive schedule of meets throughout the year. A club with growing pains but great ambition, it also sponsors the USTFF national junior marathon championship as part of the Wisconsin AAU five-and 10-kilometer championships each November at Estabrook Park, and the AAU track championships for the state in spring at Marquette Stadium.

Informal runs to accommodate

runners of all levels are held in various parts of the city, such as Whitnall Park in Greenfield (site of stunning gardens) and Hansen golf course in Wauwatosa. A 15-mile race was even held recently in Delafield, in neighboring Waukesha County. Runners of every ability compete, and a strong spirit is developing.

To list every good running spot in the city is impossible. Parkways like the Root River and the Kinnickinnic are exciting, as are a number of parks like Greenfield and Jackson. UW-Milwaukee runs at Estabrook and Marquette University at Washington Park. High schools have their courses all over. If you are so inclined, most of these schools have their own track, many of them all-weather. For a major city, Milwaukee has a great deal of breathing room.

No runner visiting "Beertown" need complain about running space. One sampling of the fare is sure to satisfy. And, when done with your workout, be sure to sample the fare at some of Milwaukee's famous restaurants, especially the German ones. You will be treated to a healthy helping of *gemuetlichkeit* (hospitality), and some of "what made Milwaukee famous." Try it—you only go around once.

(For more information on running in Milwaukee, contact John Tierney, Track and Cross Country Coach, University of Wisconsin-Milwaukee, Milwaukee, Wisc. 53201.)

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by George Sheehan M.D.

MEDICAL ADVICE

PHYSIOLOGY BRIEFS

● "Freezing of the lungs," an oft-expressed worry of coaches and runners in very cold weather, does not occur. Carl Gisolfi, University of Iowa physiologist who has centered his research on the reaction of the human body to heat and cold, says there is no evidence of cold injury to the larynx or bronchi.

According to Gisolfi, when air is inspired at 40 degrees below zero it is already at 50-60 above when tested in the mouth. He suggests, however, that the extreme dryness of cold air may lead to cracking and bleeding of the respiratory passages. This may account for the fact that Arctic explorers frequently cough up blood for a few hours after heavy exertion.

● Anaerobic fitness is now the difference between winners and losers, reports physiologist Fritz Hagerman of Ohio University. Difference in aerobic capacity (maximal oxygen consumption) in top-flight runners is minimal. Races are won by fast finishes, an essentially anaerobic activity.

Anaerobic fitness relates to two factors: (1) lactic acid buildup in the blood, and (2) use of high-energy phosphate compounds. According to Hagerman, we are having some of this anaerobic activity going on all the time, even in a marathon. We are not a multi-state rocket shifting into another system, but all systems are working simultaneously.

The best training for high-energy phosphates, he says, is 15 seconds at maximum speed with a 2-3 minute rest. This allows no significant lactic acid accumulation. The best training for lactic acid accumulation is high-intensity training runs of 220 yards to two miles. Hagerman thinks that interval hill running may be the best high-intensity exercise.

● Physiotherapist Wayne Rasmussen of the Sports Medical Clinic in Seattle recommends the following exercises for the prevention of shin splints.

1. Increase the flexibility of the plantar flexor muscle group by stretching the achilles tendon group.

2. Increase the strength of the

dorsal flexors by (a) using a paint can or other weight across the toes and lifting weight repeatedly; (b) using a one-inch wide inner tube strip over the toes of both feet; force feet to work against the rubber; (c) turning the feet inward while standing, which increases the strength of the arch muscles.

3. Add arch supports, heel lifts and anterior crests to shoes when needed.

STRETCHING

Q: Several months ago, I read that Rick Wohlhuter, the world 880 record holder, had alleviated an achilles tendon condition with exercises. What might these exercises be? (P.W., Kentucky)

A: Stretching of the achilles is a relatively simple procedure. The usual method is to stand flat-footed about three feet from a wall, tree or fence and lean into it, keeping the knees locked. You can increase the stretching action by doing it one leg at a time, keeping the knee locked and forcing the hip toward the wall.

Sitting toe-touching, forcing your head toward your knees, stretches the hamstrings, and the achilles benefits from that.

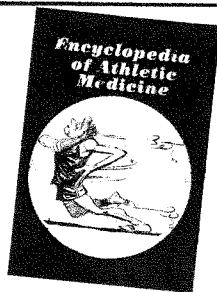
Standing on a two-inch board with the balls of your feet and dipping your heels to the floor is another exercise.

I would also recommend going barefoot at home and wearing heel-less shoes while at home. This gradually stretches the achilles without the acute tension of running.

BENDING

Q: Someone asked in the November *RW* if you thought a person would get the same sort of exercise from bending over at the waist in gardening as he would get from bent-leg situps. You said he would. You are wrong!

Bending over at the waist will exercise the muscles of the lower back, not the abdominals. Have you considered



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submitting questions like this to someone who has studied exercise physiology before you answer them? (M.G., Texas)

A: I assumed that what the correspondent said was correct. And actually if your knees are bent, bending and lifting from the waist does help your belly muscles. Straight leg lifts, as you have noted, are done by the back muscles.

I like very much to enlist the help of other specialists in answering the questions, and frequently do. What generally happens is that they respond directly to the questioner and we don't get a copy to use in the columns.

Ideally, I suppose, we should have multiple answers and let the readers make a choice. In time, we may move to a panel of experts. The questions are becoming more and more sophisticated.

SWIMMING

Q: What do you think about swimming instead of running, or as an aid to running, in building endurance? I have heard that it builds up muscles that are useless to running, and that it may even slow you down. What are your views? (J.F., California)

A: One is either a swimmer or a runner, not both. Swimming can be used to maintain cardiopulmonary fitness when injured, or perhaps as a period of relaxation when a runner is in danger of overtraining. Otherwise, swimming has little or nothing to add that will help in performance, especially when you are in a period of good, serious training.

On the other hand, I doubt that it would be detrimental to swim. It is an excellent cardiopulmonary exercise.

DIZZINESS

Q: I frequently feel dizzy when standing up from a squatting or stooping position. Is this something to be concerned about? I am 45, weight 151 pounds, 5'10" tall, blood pressure 110/80, pulse down to 42. (H.R., California)

A: You are describing a phenomenon called orthostatic hypotension, i.e., a drop in blood pressure immediately on assuming a standing position. It should go up.

I have myself experienced this just about when I am peaking out (or overtraining), so it appears to be a near-exhaustion symptom. At any rate, I view it as such and usually cut back on the frequency and intensity of training.

In my practice, it also appears to be an exhaustion phenomenon, and patients who experience this usually have this feeling for 4-6 weeks before it disappears. The medical explanation is relative adrenal insufficiency (which Hans Selye defines as a failure of adaptation).

FEBRUARY 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 scheduled date.

NORTHEAST

- 8 US Olympic Invitational indoor, New York, N.Y. (Madison Square Garden; invitational; Jesse Abramson, Hotel New Yorker, Room 1514, 8th Ave. & 34th St., New York, N.Y. 10001).
- 10 DC AAU 20-kilometer, Washington, D.C. (East Potomac Park, 11 a.m.; open; Graham Huston, 5314 N. 27th St., Arlington, Va. 22207).
- 17 Nittany Valley Track Club marathon, State College, Pa. (11 a.m.; open; Harry Groves, Track Coach, Penn State, 247 Recreation, University Park, Pa. 16802).
- 17 Washington's Birthday marathon, Beltsville, Md. (1 p.m.; open; William Mish, 5615 Duchaine Dr., Lanham, Md. 20801).
- 22 National AAU indoor, New York, N.Y. (Madison Square Garden; invitational; Dan Ferris, AAU, 444 Madison Ave., Room 2405, New York, N.Y. 10022).

SOUTHEAST

- 2 Mardi Gras Marathon, New Orleans, La. (8 a.m.; open; Dreux Summers, 549 Brookmeade Dr., Gretna, La. 70053).
- 2 15-kilometer, Raleigh, N.C. (Carmichael Gym, 11 a.m.; open; Russell Combs, Dept. of P.E., North Carolina State University, Raleigh, N.C. 27607).
- 2 Ground Hog Day marathon, Morrilton, Ark. (Petit Jean State Park; open; Bill Nutter, Dept. of Health and P.E., State College of Arkansas, Conway, Ark. 72032).
- 8 Montgomery USTFF indoor, Montgomery, Ala. (Garrett Coliseum; invitational; John Mitchell, Track Coach, University of Alabama, University, Ala. 35486).
- 9 Mason-Dixon Games indoor, Louisville, Ky. (Fair and Exposition Center; invitational, men and women; Charles Ruter, P.O. Box 91053, Fern Creek, Ky. 40291).
- 17 Knoxville Track Club marathon, Knoxville, Tenn. (Open; Harold Canfield, 502 Alandale Rd., Knoxville, Tenn. 37920).
- 17 20-mile, Ft. Lauderdale-Hollywood, Fla. (International Airport, 2 p.m.; open; Ray Russell, 2506 N.E. 8th St., Ft. Lauderdale, Fla. 33304).
- 17 20-kilometer, Raleigh, N.C. (Carmichael

Gym, 2 p.m.; open; Russell Combs, Dept. of P.E., North Carolina State University, Raleigh, N.C. 27607).

MIDWEST

- 2 Cleveland Knights of Columbus Indoor, Cleveland, Ohio (Public Hall; invitational; Dan Ferrazza, K. of C. Meet Headquarters, Sheraton-Cleveland Hotel, Cleveland, Ohio 44101).
- 9 Bison USTFF indoor, Fargo, N.D. (North Dakota State University; invitational; Roger Grooters, Track Coach, North Dakota State University, Fargo, N.D. 58102).
- 10 20-mile, St. Louis, Mo. (8 a.m.; open; Carl Muckler, 2680 Countryside, Florissant, Mo. 63033).
- 22-3 USTFF Midwest indoor, Columbus, Ohio (Ohio State University; invitational; Bob Epskamp, Track Coach, Ohio State University, Columbus, Ohio 43210).

SOUTHWEST

- 1 Coaches' indoor, Ft. Worth, Tex. (Convention Center; invitational; Jerry Sadler, 5701 Shelton, Ft. Worth, Tex. 76112).
- 2 Albuquerque Jaycee indoor, Albuquerque, N.M. (Tingley Coliseum; invitational; Drew Hunter, P.O. Box 2273, Albuquerque N.M. 87103).
- 8-9 Astrodome indoor, Houston, Tex. (Astrodome; invitational; Cleburne Price, Track Coach, University of Texas, Austin, Tex. 78712).
- 9 Northern Arizona USTFF indoor, Flagstaff, Ariz. (invitational; Leo Haberlack, Track Coach, Northern Arizona University, Flagstaff, Ariz. 86001).
- 9 Arizona Admissions Dave marathon, Tucson, Ariz. (open; J. McGee Evans, 400 N. 2nd Ave., Tucson, Ariz. 85705).
- 16 Eastern New Mexico marathon, Portales, N.M. (11 a.m.; open; Bill Silverberg, P.E. Dept., Eastern New Mexico University, Portales, N.M. 88130).
- 23 Texarkana Track Club 6½-mile, Texarkana, Tex. (open; Ron Isom, Route 7, Box 577F, Texarkana, Tex. 75501).
- 23 White Rock marathon, Dallas, Tex. (White Rock Lake Park, 9 a.m.; open; Ralph Taite, 6891 Avalon, Dallas, Tex. 75214).

ROCKIES

- 9 Bennion Relays indoor, Pocatello, Idaho (invitational; Bob Beeten, Idaho State University, Box 159, Pocatello, Idaho 83201).

WEST

- 1 Examiner Invitational indoor, San Francisco, Calif. (Cow Palace; invitational; Jim Terrill, P.O. Box 1032, Los Altos, Calif. 94022).
- 2 Seattle indoor, Seattle, Wash. (Seattle Center Coliseum; invitational; Bill Roe, 2557 25th Ave. E., Seattle, Wash. 98112).
- 2 Pan-American Cup cross-country, Alameda, Calif. (international championship; Robert DeCelle, Box 1606, Alameda, Calif. 94501).
- 2 Oregon AAU 30-kilometer, Eugene, Ore. (Crow High School, 1p.m.; open; John Hepner, 4160 Avalon, Eugene, Ore.)
- 2 Las Vegas marathon, Las Vegas, Nev. (University of Nevada, 9 a.m.; open; William Freedman, P.O. Box 869, Las Vegas, Nev. 89101).

- 8 Los Angeles Times indoor, Inglewood, Calif. (The Forum; invitational; Will Kern, Special Events Dept., Los Angeles Times; Los Angeles, Calif. 90053).
- 10 National AAU Women's and West Valley marathon, San Mateo, Calif. (San Mateo High School, 9 a.m.; open; Jack Leydig, West Valley T.C., P.O. Box 1551, San Mateo, Calif. 94401).
- 16 San Diego indoor, San Diego, Calif. (Sports Arena; invitational; David Pain, 1951 Cable St., San Diego, Calif. 92107).
- 16 Oakland Invitational indoor, Oakland, Calif. (invitational; Robert DeCelle, P.O. Box 1606, Alameda, Calif. 94501).
- 23 Trail's End marathon, Seaside, Ore. (11:30 a.m.; open; Seaside Chamber of Commerce, P.O. Box 7, Seaside, Ore. 97138).

CANADA

- 15 Maple Leaf Games indoor, Toronto, Ontario (Invitational; Ken Twigg, 281 Wedgewood Dr., Oakville, Ontario, Canada).

INTERNATIONAL

- 3 San Blas 1½-mile, Coamo, Puerto Rico (4 p.m.; invitational; Delta Phi Delta Fraternity, Box 56, Coamo, Puerto Rico 00640).
- 6 International marathon, Beppu, Japan
- 6 International marathon, Kyoto, Japan
- 27-13 Central American and Caribbean championships, Santo Domingo, Dominican Republic.

RACE WALKING

1974 National Championships

10 kilometers	Chicago, Ill.	25 May
15 kilometers	Los Angeles, Calif.	4 May
20 kilometers	East Meadow, N.Y.	9 June
25 kilometers	Des Moines, Ia.	28 Apr
30 kilometers	Columbia, Mo.	20 Oct.
35 kilometers	Los Angeles, Calif.	17 Mar.
40 kilometers	Long Branch, N.J.	4 Aug.
50 kilometers	Seattle, Wash.	1 Sept.
75 kilometers	West Long Branch, N.J.	23 Apr.
100 kilometers	Des Moines, Ia.	pending
One hour	Boulder, Colo.	14 Apr.

Junior (19-under) Championships

5 kilometers	Portland, Ore.	21 May
10 kilometers	Gainesville, Fla.	22 Jun.
15 kilometers	Reno, Nev.	10 Mar.
20 kilometers	West Long Branch, N.J.	11 Aug.
25 kilometers	East Meadow, N.Y.	26 May
One hour	New Jersey	pending

Masters (40-over) Championships

5 kilometers	Gresham, Ore.	5 Jul.
20 kilometers	Gresham, Ore.	7 Jul.

Division B Championships

10 kilometers	Oregon	pending
15 kilometers	Inland Empire Assn.	pending
20 kilometers	East Meadow, N.Y.	9 Jun.
35 kilometers	Chicago, Ill.	27 Oct.
40 kilometers	Long Branch, N.J.	4 Aug.

(other races not yet awarded)

Women's Championships

5 kilometers	Rialto, Calif.	pending
10 kilometers	Columbia, Mo.	19 Oct.

OTHER CHAMPIONSHIPS

Men's track	Los Angeles, Calif.	June
Women's track	Bakersfield, Calif.	28-29 Jun.
Junior track	Gainesville, Fla.	21-22 Jun.
Masters track	Gresham, Ore.	5-7 Jul.
Women's 5-km.	Edwardsville, Ill.	April
Women's 10-km.	New York, N.Y.	9 Jun.

RACING HIGHLIGHTS

NORTHEAST

● New York, N.Y., Nov. 3—National AAU 50-mile: 1. Ed Walkwitz (23, Montana U) 5:31:01.8; 2. Richard Warren (26, US Army) 5:45:14; 3. Darryl Beardall (37, Redwood City Striders) 5:48:03; 4. Park Barner (23, Harrisburgh AA) 5:50:21; 5. Vince Chiappetta (40, Millrose AA) 5:52:35; 6. Bruce Woolford (22, Erie AA) 6:06:39; 7. Clayton Bristol (23, Bethel Bananas) 6:15:27; 8. William Bredenbeck (35, Erie AA) 6:33:15; 9. Roy Cobb (30, Erie AA) 6:34:13; 10. Craig Harms (23, Erie AA) 6:59:34. Teams: 1. Erie AA9; 2. Redwood City Striders 12. (14 finished, 12 under 8:00; from Joe Kleinerman).

● Freehold, N.J., Nov. 3—National 3000-meter team race: 1. Tom Donahue (North Jersey Striders) 8:18; 2. Dick Buerkle (New York AC) 8:19; 3. Karl Thornton (Philadelphia T&FC) 8:24; 4. Walt Hawkins (Phila. T&FC) 8:24; 5. Howie Ryan (NYAC) 8:27; 6. Elliott Rogers (NYAC) 8:28; 7. Julio Piazza (Phila. T&FC) 8:32; 8. Harry Nolan (Shore AC) 8:37; 9. Bill Scholl (Shore AC) 8:43; 10. Jim Schindler (NYAC) 8:45. Teams: 1. New York AC 24; 2. Shore AC 41; 3. North Jersey Striders 57. (from Elliott Denman).

● Marlboro, Mass., Nov. 4—New England AAU 25-kilometer: 1. Tom Derderian (North Medford Club) 1:19:51; 2. Rick Bayko (NMC) 1:20:06; 3. Mike Chambers (U Mass) 1:20:40. Team: North Medford Club. (7 under 1:25; from Bob Campbell).

● Holmdel, N.J., Nov. 11—New Jersey AAU cross-country (10 kms.): 1. Eamon Downey (North Jersey Striders) 32:52; 2. Tom Donahue (NJS) 32:52; 3. Harry Nolan (Shore AC) 33:10. Teams: 1. NJ Striders 27; 2. Shore AC 29. (from Elliott Denman).

● Buffalo, N.Y., Nov. 11—National AAU Junior cross-country (10 kms.): 1. Pat Davis (Motor City TC) 30:48. Team: Motor City TC. (only these results available).

● Bronx, N.Y., Nov. 11—Metropolitan AAU cross-country (6 miles): 1. Dick Buerkle (NYAC) 29:24.6; 2. Tom Fleming (NYAC) 29:40; 3. Elliot Rogers (NYAC) 30:41; 4. Howie Ryan (NYAC) 31:18; 5. Jim Schindler (NYAC) 31:18... 21. Vince Chiappetta (40, Millrose AA) 34:22. Teams: 1. New York AC "A" 25; 2. New York AC "B" 43. 100 finished, 28 under 35:00, 71 under 40:00; from Joe Kleinerman).

● Arlington, Va., Nov. 11—Potomac Valley 30-kilometer: 1. Tom Childers (Quantico Marines) 1:41:21.8; 2. Martins Ande (Nigeria) 1:42:22; 3. Robert Bognione (Quantico) 1:43:05... 17. Mike Heylin (43, unat) 1:55:52... 25. Bob Horman (55, Potomac Valley Seniors) 1:58:46. Teams: 1. Quantico Marines 6; 2. Washington Sports Club 15. (47 finished, 8 under 1:50, 26 under 2:00; from Norm Brand).

● Bronx, N.Y., Nov. 18—Eastern Regional RRC 9-mile cross-country: 1. Tom Fleming (22, NYAC) 45:17.6; 2. Norb Sander (31, Millrose AA) 47:23; 3. Tony Colon (21, NYAC) 47:54... 8. Anthony Fiorentino (19, unat) 49:25... 43. Joe Burns (44, unat) 54:11... 86. Bill Coyne (52, Millrose AA) 1:00:05... 122. Mary Mapalli (20, Lehman College) 1:07:54. Teams: 1. New York AC 45; 2. St. Johns AA 20. (148 finished, 12 under 50:00, 48 under 55 minutes; from Joe Kleinerman).

● Millersville, Pa., Nov. 18—Turkey Trot 10-mile: 1. Jeff Bradley 51:34; 2. Joe McCool 52:16... John Schwanger (40+) 1:02:53... Carol Fridley 1:03:13. (131 finished, 23 under 1:00; from Harold Kramer).

● Manchester, Conn., Nov. 22—5-mile: 1. Amby Burfoot (Mohegan Striders) 22:37; 2. John Vitale (New Haven TC) 22:42; 3. Steve Flanagan (Mohegan Striders) 23:05; 4. Ray Crothers (Mohegan Striders) 23:07; 5. Bill Rogers (unat) 23:15. (538 finished).

● Poughkeepsie, N.Y., Nov. 22—Metropolitan AAU 25-kilometer: 1. Terry Gallagher (28, unat) 1:23:56.6; 2. John Herries (18, Orange County TC) 1:26:29; 3. Jim Boyle (24, Rochester TC) 1:27:05... 15. Joe Burns (43, United AA) 1:33:54... 47. Ted Corbitt (53, NY Pioneer Club) 1:59:04. Team: St. Anthony's Boys' Club 15. (60 finished, 9 under 1:30, 23 under 1:40; from Joe Kleinerman).

● Baltimore, Md., Nov. 24—Maryland marathon: 1. Vic Nelson 2:22:56; 2. Martins Ande 2:24:12; 3. Ed Hereford 2:26:50; 4. Mike Sabino 2:27:03; 5. Till Luftt 2:28:52; 6. Tom Derderian 2:30:25... Kathy Switzer 3:10:37. (67 under 3:00; from Larry Noel).

SOUTHEAST

● Conway, Ark., Nov. 17—Arkansas AAU cross-country (5 miles): 1. Cliff Clark (USAF) 25:21; 2. Tim Geary (Harding College) 26:14. (10 under 28:00; from Gerald Cound).

● New Orleans, La., Nov. 22—Thanksgiving 5-mile: 1. Taylor Aultman 25:21; 2. Bill Marino 25:34; 3. Ken Stelley 25:51... Lou Gregory (68) 35:37. (168 finished; from Cy Quinn).

● Louisville, Ky., Nov. 22—Turkey Day 5.9-mile: 1. Ron Pontrich 29:29; 2. Gary Clouse 30:54... William Wright (40+) 35:42. (from Donovan Davidson).

● Gainesville, Fla., Nov. 24—National AAU men's cross-country (10 kms.): 1. Frank Shorter (Florida TC) 29:52.6; 2. Doug Brown (U of Tennessee) 29:55; 3. Jeff Galloway (Fla TC) 30:03; 4. Tony Brien (Marymount College) 30:09; 5. Dick Buerkle (New York AC) 30:13; 6. Barry Brown (Fla TC) 30:23; 7. Jack Bachelor (Fla TC) 30:31; 8. Marty Liquori (NYAC) 30:33; 9. Ed Leddy (East Tennessee State) 30:47; 10. Howell Michael (US Marines) 30:52.

11. Ken Misner (Fla TC) 30:59; 12. Domingo Tibaduiza (West Valley TC) 31:03; 13. Tom Fleming (NYAC) 31:05; 14. Byron Dyce (Fla TC) 31:08; 15. Don Timm (Athletes in Action) 31:05; 16. Sid Sink (NYAC) 31:14; 17. Pete Squires (NYAC) 31:14; 18. Tom Childers (USMC) 31:16; 19. Bruce Carpenter (Fla TC) 31:18; 20. Terry Furst (Golden Triangle TC) 31:23.

21. Matt Centrowitz (NYAC) 31:28; 22. Lee Fidler (Club South) 31:33; 23. Tracy Smith (Athletes in Action) 31:36; 24. Bill

Louv (William & Mary AA) 31:38; 25. Paul Talkington (Summit AC) 31:39. Teams: Florida TC 20; New York AC 44; US Marines 128; Athletes in Action 131; Colorado TC 146. (182 finished, 34 under 32:00, 60 under 33:00, 82 under 34:00, 107 under 35:00).

● Clinton, Miss., Nov.—USTFF Regional cross-country (5.85 miles): 1. Tom Carter (Knoxville TC) & Bill Havilam (Knoxville TC) 28:16; 3. Bob Cox (Knoxville TC) 29:14. (6 under 30:00; from Joe Walker).

● Talahassee, Fla., Nov.—National Junior College cross-country (4 miles): 1. John Roscoe (Southwestern Michigan) 18:41.6; 2. Bernard Rose (Odessa JC) 18:46; 3. Jeff Jirele (Golden Valley Lutheran) 18:49; Paul Stemmer (Allegheny CC) 18:53; 5. Glen Wilburn (Lincoln Land CC) 18:57. Teams: Allegheny CC & Southwestern Michigan 72. (from Neil Cohen).

MIDWEST

● Des Moines, Ia., Nov. 3—Iowa AAU cross-country (6 miles): 1. Lynn Lee 31:58; 2. Mike Gregorio 32:16. (40 finished, 9 under 35:00; from Butch Hammer).

● Kenosha, Wisc., Nov. 3—USTFF Mid-America cross-country (10 kms.): 1. Lucian Rosa (UW Parkside) 30:46.2; 2. John Lesch (UCTC) 31:01; 3. Mark Gibbons (UCTC) 31:06; 4. Tom Hoffman (UCTC) 31:41; 5. Chuck Dettman (UW Parkside) 32:03. Teams: UCTC 35; UW Parkside 69. (95 finished, 47 under 35:00).

USTFF National Masters 3-mile: 1. Roger Swank (unat) 17:05.8; 2. Al Brodzik (UCTC) 17:09.6; 3. Duane Holtz (UWMTTC) 17:32; 4. Lloyd Bostian (Vilas RC) 17:46; 5. Wes Mayer (USMTC) 18:12. (28 finished, 11 under 20:00).

USTFF National women's 2-mile: 1. Pam Beyst (Michigammas TC) 10:54.2; 2. Peg Neppel (Iowa State U) 11:03.6; 3. Annette Class (Track Am.) 11:09; 4. Robin Evans (Iowa State U) 11:10; 5. Kim Piper (UW Parkside) 11:24; Teams: Iowa State U 28; West Union North HS 77. (53 finished, 10 under 12:00; see age-group winners listed in "Running to Extremes" feature; from Vic Godfrey).

● St. Paul, Minn., Nov. 10—Minnesota AAU cross-country (6 miles): 1. Mike Slack (22) 29:33; 2. Don Timm 29:35; 3. Clint Chamberlin (28) 30:16... Alex Ratelle (48) 35:39. (59 finished; from Steve Hoag).

● Wheaton, Ill., Nov. 10—NCAA Division II cross-country (5 miles): 1. Garry Bentley (South Dakota State) 23:49; 2. Charles Duggan (Springfield) 24:09; 3. Joe Ruken-shagiza (Siena) 24:10; 4. Roger Schwegel (North Dakota State) 24:15; 4. Cyle Wold (SD State) 24:17. Teams: South Dakota State 88; Southwest Missouri State 93.

NCAA Division III: 1. Steve Foster (Ashland) 24:27; 2. Behnke (North Central) 24:35; 3. Shroder (Albany) 24:38; 4. Verdoliva (Oswego) 24:41; 5. Suarez (Oswego) 24:44. Teams: Ashland 66; North Central and Albany 172.

● Grand Rapids, Mich., Nov. 10—Grand Valley marathon: 1. Barney Hance (23) 2:26:42; 2. Jim Carter (25) 2:26:42; 3. Paul Bedford (21) 2:31:31... Ed Kimmel (45) 3:07:47. (64 finished, 13 under 3:00, 42 under 3:30, 54 under 4:00; from Bob Martin).

● Elyria, Ohio, Nov. 17—National AAU Masters cross-country (10 kms.):

1. Hal Higdon (Indiana Striders) 33:37.2; 2. John Doyle (Metro Toronto) 33:46; 3. Art Taylor (Metro Toronto) 34:09; 4. Henryk Kupczyk (Nashville Striders) 34:44; 5. Bob Bowman (Metro Toronto) 35:07; 6. Bill Allen (Metro Toronto) 35:11; 7. Ken Napier (Pacific AAU) 35:26; 8. Walt McConnell (Jersey Senior TC) 35:31; 9. Bob Lazenby (Metro Toronto) 35:35; 10. Jim Shettler (Pacific AAU) 35:43.

Ages 50-59: 1. Augie Escamilla (San Diego TC) 38:02; 2. Alexander Hossack (unat, Mass) 39:14; 3. John O'Neil (Lake Erie AA) 40:12; 4. Bill Eppright (unat, Ohio) 40:40; 5. Franklin Moore (Finger Lakes RC) 40:41.

Ages 60-up: 1. John Wall (US Naval Reserve) 39:01; 2. William Andberg (Twin Cities TC) 39:43; 3. Norm Bright (Snohomish TC) 41:50; 4. Norman Tamanaha (Hawaii Masters) 44:57; 5. Otto Essig (Springfield YMCA) 46:05.

Teams: Pacific AAU 76; San Diego TC 88; Kettering 98. Metro Toronto won with 22 points, but ineligible for US championship. (116 finished, 12 under 35:00, 50 under 40:00).

● Mission, Kans., Nov. 17—National AAU Junior women's cross-country (3 miles): 1. Kathy Whitcomb (unat, Colo) 19:12.4; 2. Cindy Rice (Albuquerque OC) 19:21; 3. Cindy Ashby (Albuquerque OC) 19:24; 4. Jeanne Collopy (Colorado TC) 19:30; 5. Karin McKeachie (Michigammas) 19:31. Teams: Albuquerque OC 28; Flathead Valley Timberettes 84. (53 finished, 10 under 20:00; see winners of other divisions listed in "Running to Extremes"; from John Davis).

● Hinsdale, Ill., Nov. 18—Hinsdale Central marathon: 1. Bill Cooke (St. Thomas College) 2:36:44; 2. Bill McDermott (Iowa State U) 2:38:45; 3. Vic Lantz (Dupage TC) 2:40:12. (64 finished, 15 under 3:00, 43 under 3:30, 59 under 4:00). from Conrad Truedson).

● Indianapolis, Ind., Nov. 17—Indiana AAU cross-country (10 kms.): 1. Tim Zimbaugh 31:01; 2. Gary Romesser 31:26; 3. Dean Reinke 31:29; 4. John Roscoe 31:35; 5. John Reedy (jr) 31:38... 67. Oliver Dawkins (40+) 40:45... 77. Hank Braddock (50+) 44:43... 87. Brenda Beasley 57:12. (87 finished, 29 under 35:00; from Carl Carey).

● Winfield, Kans., Nov. 24—Missouri Valley AAU 10-kilometer: 1. Ken Bell 30:17; 2. Frank Rodriguez 30:18... Tim Aiken (jr) 33:28. (42 finished, 16 under 35:00; from Robert Karr).

SOUTHWEST

● Houston, Tex., Nov. 3—Gulf AAU 30-kilometer: 1. Clyde Villemez (27, Cameron TC) 1:58:01; 2. Wayne Comer (32, Cameron TC) 1:59:08; 3. John Stowers (45, Terlingua TC) 2:02:39... 14. Clyde Villemez Sr. (62, Cameron TC) 2:35:10... 20. Nancy Laird (32, Cameron TC) 3:10:11. Teams: 1. Cameron TC. (21 finished; from Pete League).

● Tulsa, Okla., Nov. 17—30-kilometer: 1. Steve Wolfe (19) 1:48:00; 2. Guy Ramsey (19) 1:49:31... 6. H.E. Barker (43) 2:00:43. (16 finished, 5 under 2:00; from Vern Whiteside).

● Galveston, Tex., Nov. 17—American National marathon: 1. Gary Tuttle 2:29:35;

2. Andy Senorski 2:37:20... 13. A.C. Becken (40+) 3:06:39... Kathy Loper 3:36:18. (7 under 3:00).

WEST

● Honolulu, Hawaii, Nov. 4—Mid-Pacific RRC 10-kilometer: 1. Duncan Macdonald 31:14; 2. Dave Sutherland 31:42... Leah Ferris 41:06. (from Chuck Greenley).

● Phelan, Calif., Nov. 4—15-mile: 1. Don Ocana 1:22:44; 2. Jose Garcia 1:22:58... 12. Del Linam (41) 1:41:53... 16. Jim Gorell (52) 1:52:58. (30 finished, 4 under 1:30, 12 under 1:45; from John Brennand).

● Portland, Ore., Nov. 10—10-mile track: 1. Damien Koch (28) 50:24; 2. Joe Skaja (23) 50:32... 21. Clive Davies (58) 1:05:03; 22. Norm Bright (64) 1:06:54... 27. Sue Rossiter (27) 1:11:39. (31 finished, 12 under 1:00).

● San Francisco, Calif., Nov. 10—Pacific AAU cross-country (10 kms.): 1. Hans Menet (25, U Nevada) 30:05; 2. Domingo Tibaduiza (U Nev) 30:07; 3. Phil Camp (26, US Navy) 30:42; 4. George Stewart (24, West Valley TC); 5. Jim Nuccio (23, WVTC) 30:52. (186 finished, 51 under 35:00). Teams: West Valley TC 30; U of Nevada 35.

● Pueblo, Colo., Nov. 10—Rocky Mountain AAU cross-country (10 kms.): 1. J.J. Griffen (18, Colorado U) 29:47.2; 2. Roger Hansen (19, Colo U) 30:05; 3. Ted Castaneda (21, Colo U) 30:13; 4. Richard Trujillo (25, Colo TC) 30:20... 27. Roger Willcox (45, Southern Colorado Striders) 34:09 (84 finished, 35 under 35:00; from Don McMahill).

● Sacramento, Calif., Nov. 11—Pacific AAU 50-kilometer: 1. Steve Dean (24, Golden West) 2:56:06.8; 2. Frank Krebs (30, GW) 3:28:34... 6. Ed Dally (42, US Navy) 3:50:20. (13 finished, 9 under 4:00; from Walt Betschart).

● Seattle, Wash., Nov. 16—Pacific Northwest AAU cross-country: 1. Jim Johnson (Club Northwest) 32:19; 2. Rick Albright (CNW) 32:39; 3. Steve Sooter (Seattle Pacific College) 33:10; 4. Guy Renfro (Snohomish TC) 33:17; 5. Don Kardong (CLW) 33:25... Denny Meyer (40, unat) 35:30. (41 finished, 11 under 35:00).

● Fresno, Calif., Nov. 17—USTFF Western cross-country (5.75 miles): 1. Domingo Tibaduiza (U Nevada) 29:05; 2. Hans Menet (U Nev.) 29:07; 3. Carl Smith (CSUN) 29:25; 4. Keith Falla (U Nev.) 29:50; 5. Mark McConnell (Stanford TC) 29:55. Teams: U Nevada 25; Cal State Northridge 57. Masters: 1. Peter Mundle (Santa Monica TC) 32:33; 2. Tom Sturak (Beverly Hills Striders) 32:56... 10. Mauro Hernandez (50+, SMTTC) 36:22. (25 finished; from Red Estes).

● San Diego, Calif., Nov. 17—Pacific Southwest AAU cross-country: 1. Dennis Kasischke (SDTC) 33:31.6; 2. John Wickstrom (SDTC) 33:52; 3. Bill Gookin (41, SDTC) 34:20... 28. Wayne Zook (56, SDTC) 41:26.

● Spokane, Wash., Nov. 19—NCAA cross-country (6 miles): 1. Steve Prefontaine (Oregon) 28:14.8; 2. Nick Rose (Western Kentucky) 28:20; 3. Gordon Minty (Eastern Michigan) 28:22; 4. Neil Cusack (East Tennessee State) 28:28; 5. Wilson Waigwa (Texas/El Paso) 28:32.6; 6. Pat Mandera (Indiana)

28:38.8; 7. Doug Brown (Tennessee) 28:40.4; 8. Garry Bentley (South Dakota State) 28:44; 9. John Ngeno (Washington State) 28:45.6;

10. Craig Virgin (Illinois) 28:47.8.
11. Ted Castaneda (Colorado) 28:55;
12. Chris Ridler (Western Kentucky) 28:56.8;
13. Larry Brown (Texas/El Paso) 28:58.2;
14. Ed Leddy (East Tenn State) 28:59.4; 15. Ed Mendoza (Arizona) 28:59.6; 16. Dan Murphy (Wash State) 28:59.8; 17. Scott Eden (Duke) 29:05.4; 18. Mike Durkin (Ill) 29:06.2; 19. William Louv (Wm & Mary) 29:07.2; 20. Mike Peterson (Colo) 29:08.2.

21. Paul Bannon (Memphis State) 29:10;
22. Terry Williams (Ore) 29:12.4; 23. Charles Maguire (Penn State) 29:13.6; 24. Sam Torres (Murray State) 29:15.2; 25. Daniel Hayes (Ind) 29:12.2. Teams: Oregon 89; Texas/El Paso 157; Washington State 166; William and Mary 174; Oklahoma State 194; Colorado 217. (210 finished, 73 under 30:00, 156 under 31:00; from Rick Riley).

● Portland, Ore., Nov. 24—Island marathon: 1. Joe Skaja (23) 2:22:07; 2. Wolf Schamberger (28) 2:23:11; 3. George Oja (30) 2:23:36; 4. Wayne Ristau (25) 2:24:06; 5. Jack Taunton (26) 2:27:49; 6. Terry Heath (19) 2:29:53... 17. Ross Smith (45) 2:37:56... 54. Frank Grey (52) 3:04:31... 58. Marilyn Paul (35) 3:05:41. (168 finished, 46 under 3:00, 112 under 3:30, 146 under 4:00).

● Cheney, Wash., Nov. 24—Cheney marathon: 1. Russ Akers (40) Walla Walla RR) 3:05:19; 2. David Haugen (35, Cheney TC) 3:15:09. (5 finished, 4 under 3:30, all under 4:00).

● San Diego, Calif., Nov. 24—USTFF National cross-country (6 miles): 1. Ed Mendoza (San Diego TC) 29:39.6; 2. Hans Menet (U Nevada) 29:39.6; 3. Dave Babiracki (Beverly Hills Striders) 30:18; 4. Tony Waldrop (U North Carolina) 30:25; 5. Harvey Klivers (Santa Monica TC) 30:30; 6. Gordon Innes (SMTTC) 30:31; 7. J.J. Griffen (U Colorado) 30:36; 8. Pete Span (Sun Devil TC) 30:37; 9. Dwayne Harms (Aggie TC) 30:42; 10. Jeff Mathews (SDTC) 30:51. Teams: Santa Monica TC 65; U of Nevada 113; San Diego TC and U of Colorado 127. (106 finished).

CANADA

● Victoria, B.C., Nov. 17—Canadian cross-country championships: Men's 12-km.—1. Grant McLaren (Ontario T&FC) 39:29.8; 2. Dan Shaughnessy (OTFC) 40:02.8; 3. Knut Kvalheim (Ore TC) 40:05.8; 4. John Sharp (OTFC) 40:22.8; 5. Tom Howard (BC Intl) 40:27.2; 6. Bob Moore (OTFC) 40:32.2; 7. Larry Switzer (Manitoba) 40:39.6; 8. Chris McCubbins (Mant) 40:56.8; 9. Bob Williams (Ore TC) 41:08.6; 10. Russ Pate (Ore TC) 41:13.6. Teams: Ontario 24; Oregon TC 52; BC International 78.

Women's 4-km.—1. Thelma Wright (BC Intl) 14:38.4; 2. Claire Morgan (Ontario) 14:55.6; 3. Abby Hoffman (Ont) 15:08; 4. Anne-Marie Davis (Manitoba) 15:12.4; 5. Shauna Miller (Alberta) 15:19.2; 6. Bernadette Vossen (Alta) 15:20.4; 7. Maureen Crowley (BC Intl) 15:27.8; 8. Vicki Foltz (Falcon TC) 15:29.2; 9. Debbie Mitchell (Ont) 15:29.4; 10. Fiona Cribb (Sask) 15:32.6. Teams: Ontario 15; BC International 19. (from Derek Ellis).

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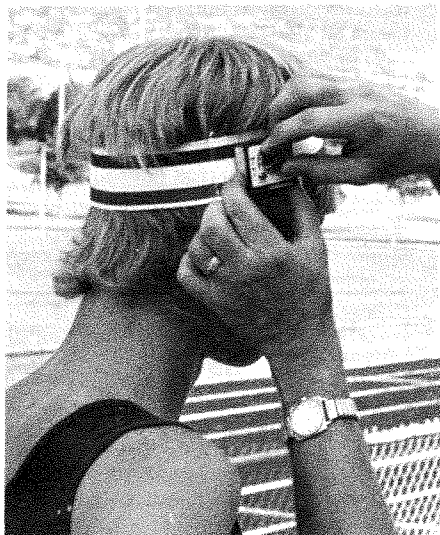
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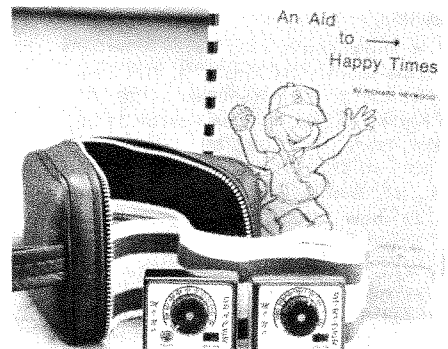
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READERS' COMMENTS

CROSS-COUNTRY CHANGE

I can't understand the reasoning for pushing the National AAU cross-country race into March and thus out of its natural season in this country ("From the AAU Convention," Dec. 73).

I think we're chasing a mechanical rabbit in trying to adjust ourselves to the international championships, which don't mean all that much. Sure, it's nice to send a team there, and what runner wouldn't like a free trip to Europe in March? But the decision is going to reduce the stature of the National AAU event.

I suggest that what will happen is that the USTFF cross-country championship race will probably now take over as the top meet, at least unofficially. I wonder if the AAU delegates realized that when they voted their meet into March.

And another comment on the direction the AAU is going is that apparently nobody wants the bother of running the track and field meet for 1974.

It won't be the protests of athletes or the NCAA that will sink the AAU, but the AAU itself. Look for a time in the near future when the Road Runners Club of America will have taken over the function of the AAU in long distance running. The writing is on the wall.

*Hal Higdon
Michigan City, Ind.*

BREAKING POINT

The 3000 meters as the break point for long distances (away from the jurisdiction of track and field) is based on a number of aspects ("Progress in Running Reform," Nov. 73):

1. Speed programs for long distance are based on competition at two and three miles. These events are scheduled to provide competition for distance runners throughout the year, with specific emphasis during the summer.

2. Steeplechase is an extension of cross-country. The international cross-country is a steeplechase race with grass footing and additional obstacles.

3. The long distance committee (of the AAU) conducts more events at

two and three miles than track and field does in the US.

4. Long distance runners compete from two miles to the marathon. The two-mile is the cradle of distance runners. A program of activity between two miles and 10,000 meters is required, independent of track and field.

5. Track and field cannot provide the necessary activity.

All committees of athletics of the AAU (men's and women's track and field, long distance and race walking) have agreed at the convention on this definition—that long distances begin at 3000 meters.

*Aldo Scandurra
AAU Distance Committee
Greenlawn, N. Y.*

MASTERS

On Nov. 17, I happened to be one of the hundred or so cross-country nuts of the Masters' variety—40 years and up—who competed in the AAU championship. The race was one of the best organized and run races that I have ever competed in. Certainly a lot of credit is due the sponsors of this race.

In these days of professionalism, one wonders why these athletes travel from such places as California, Oregon, Minnesota, Florida, Canada, etc., at their own expense to run a race. Is it for the reward of a medal, or maybe to fraternize with friends of years past whom one only sees perhaps once or twice a year and to meet new recruits to this ever-growing Masters' division?

*Whitey Sheridan
Waterdown, Ontario*

SHOE GLUE

The article about the electric glue gun ("Happiness is a Warm Gun," Nov. 73) filled a real need. As one who has gone through the patch, goop and chunk routine of trying to maintain heels on running shoes, I can second these ideas about

the utility of a glue gun. Its ease of use and wearability of the product make it a real winner.

I can only suggest that runners go one step further to really make those heels work like new. Set a pair of plastic heel taps in the hot glue. Your heels will hold up for many more miles, and you may strike terror into your running associates when they begin to hear that faint click, click sound as you come up on them from the rear in your next race.

*Donald Perkins
Newport News, Va.*

THANKS

Thank you very much for writing about me ("The Two Fastest Fifties," Dec. 73). The magazine arrived right on my birthday, which was a wonderful surprise.

The ideas and thoughts on running in the magazine have always helped me. Whenever I feel any pressure about my running, I read the articles and I get back on an even keel. Your magazine helps everyone this way. I think you should have a record for helping runners, through the magazine, continue to have all those good feelings that come from doing it.

*Eileen Waters
San Diego, Calif.*

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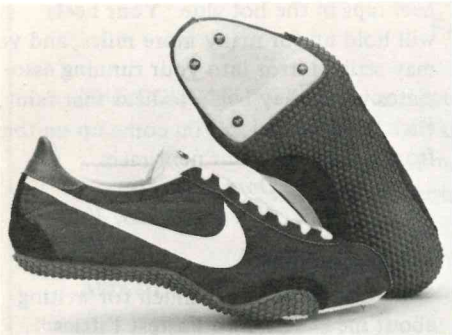
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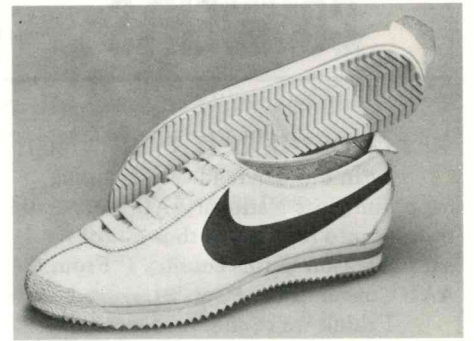
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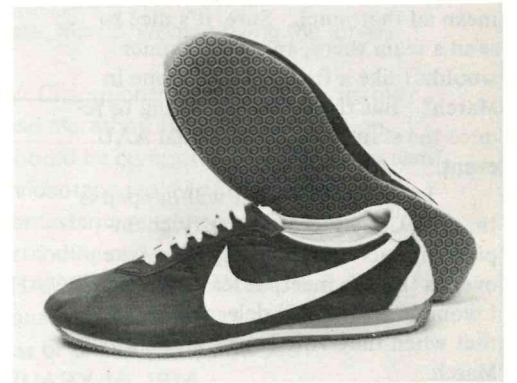
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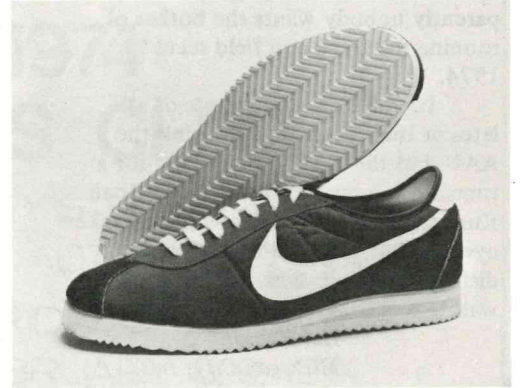
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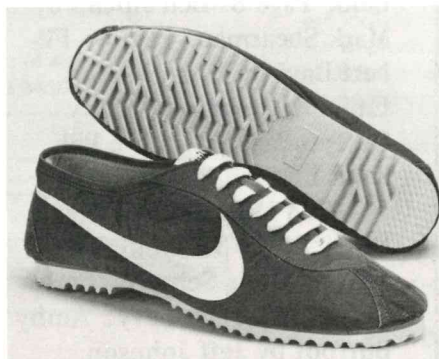
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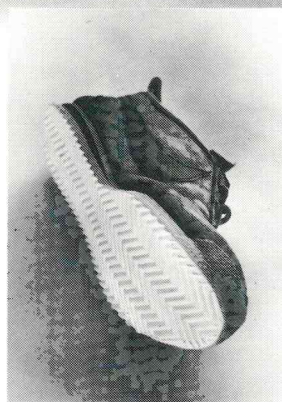
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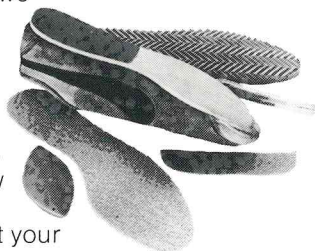
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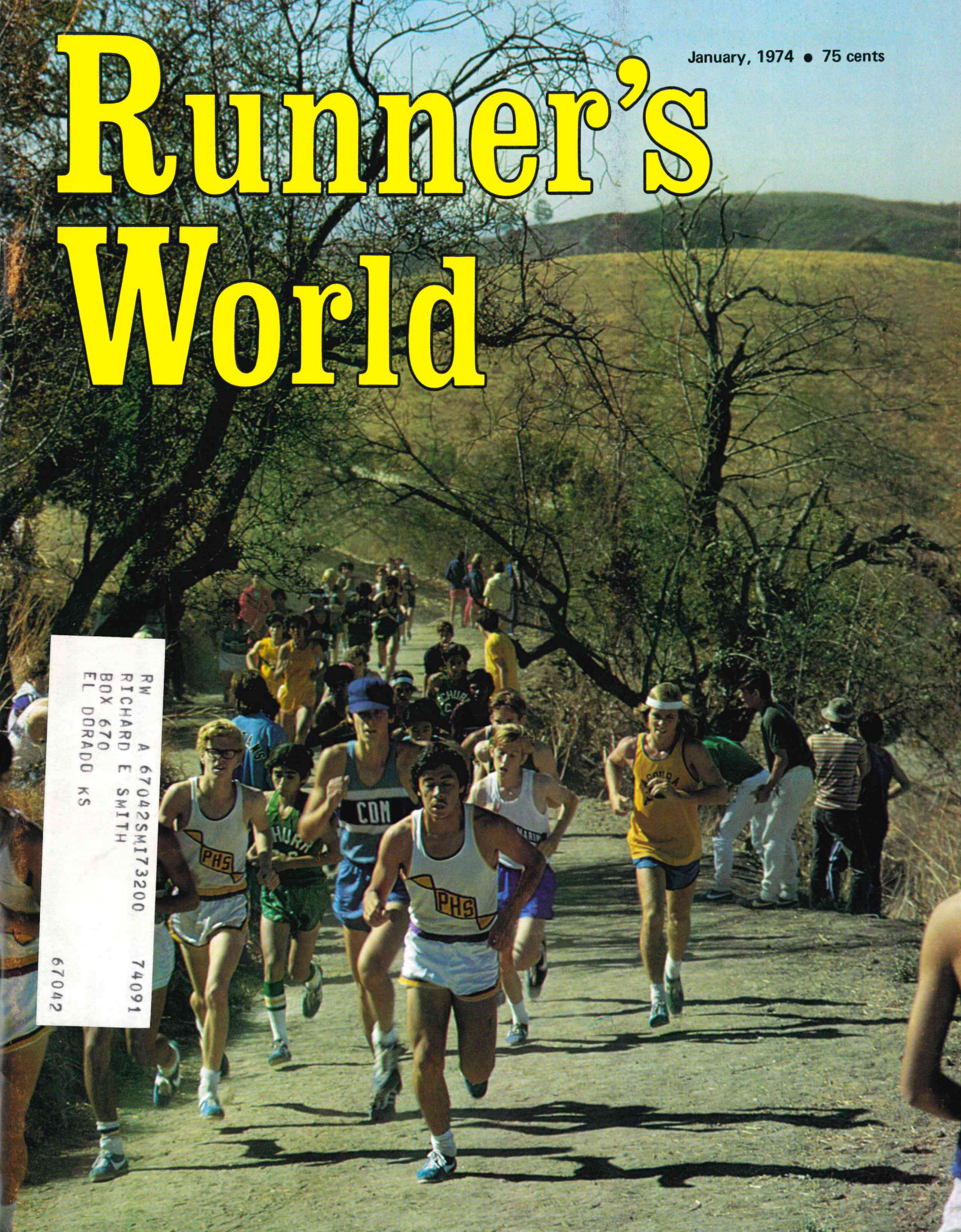
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