

# BEATING BOSTON

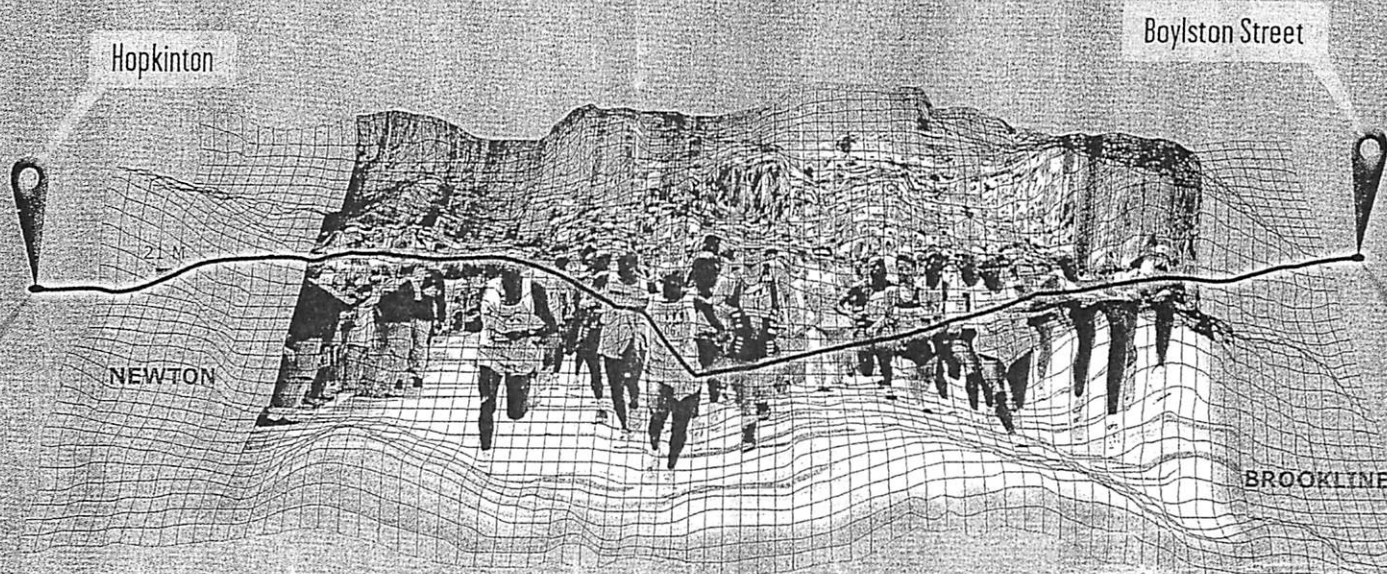


Image generated by ESRI's ArcGIS software, with elevation contour data supplied by MASSGIS.

## How to Master Marathon's Most Famous Course

BY MARC CHALUFOUR

The week preceding the 1973 Boston Marathon was perfect. Temperatures in the 40s greeted runners as they arrived in town, and there was little reason to expect anything short of an ideal marathon Monday. But as New England's springtime weather is prone to do, conditions changed quickly. By noon on Patriots Day, the temperature in Hopkinton was climbing toward 80, sending runners scrambling for the shade.

At least one man, however, was naively unfazed. Tucked in among the favorites on the starting line was number 38, a skinny, long-legged 25-year-old from Connecticut named Bill Rodgers. Though a marathon rookie and relative unknown, Rodgers had high hopes for the day, and he didn't let the weather change them. He'd been training

to run between 2:20 and 2:25, and set off from the gun with that goal still in mind. "I didn't know anything," Rodgers admits today. "I just went out there by the seat of my pants."

Looking back at his running log from 1973, Rodgers sees a string of errors leading up to and following the start—all conspiring to dash his hopes at 21 miles, when he pulled off the road, dropping out of the race. In hindsight, he didn't know the course well enough, had eaten too little, drunk too much, and ran too fast too soon.

Few races offer a greater sense of accomplishment with a slimmer margin for error. Boston will expose your weaknesses and magnify your smallest mistakes. After dropping out in 1973 and struggling in 1974, Rodgers won the 1975 Boston Marathon. He learned from his mistakes, and so can you.

### The Course

Know the course. That's the first step toward a successful run in Boston.

While Bill Rodgers eventually moved to Boston and trained on the Newton hills four or more times per week, he hadn't begun doing so in 1973, when he was confident in his ability but naive to the demands of the course. A naturally aggressive downhill runner, Rodgers pushed too hard in the early going and paid the price.

Though Heartbreak steals most of the headlines, you only need to fear it if you've mismanaged the preceding miles. Heartbreak didn't knock Rodgers out in 1973; it merely dealt the final blow following several rounds of steady pounding from the early downhills and the heat. "If runners can run a real moderate first half, they will

Photograph by Vicliah Sauter/Photo Run

# BEATING BOSTON

loooooove that last half,” Rodgers says today. “The hills are not tough hills unless you play with fire and let the first half of the course seduce you.”

Though it doesn't have a catchy name like its colleague in the 20th mile, the hill that you'll be standing on at the start is actually the largest you'll face. For the first kilometer, you'll descend at a rate of between five and eight percent. “Everything is just geared toward having you run this race fast, fast, fast,” says Dr. David Martin, co-author of *Better Training for Distance Runners*. But he warned: “The seconds per mile that you run too fast at the beginning turn out to be minutes per mile as you run too slow at the end.”

After the screaming downhill of the opening mile, much of the next 15 miles continues to descend at a lesser rate, and though this is a welcome relief, it can still take a toll: You'll find that very little of the course in Boston is actually level. Thirty-nine percent of the course has a grade of greater than one percent (22 percent descending and 17 ascending), and much of the remaining 61 percent runs gradually downhill. Even if you're a master of marathon pacing, don't expect to be able to run on cruise control here. Effort, not pace, should be your guide.

“Throw away your digital watch,” advises Tom Derderian, head coach of the Greater Boston Track Club (GBTC). “The effort level has to be a feeling that is understood viscerally, not intellectually, and portioned out over the race course. If you don't know by feel, you shouldn't be out there.”

In addition, your body probably isn't used to this sort of prolonged pounding. Peter Weyand, Research Director at Rice University's Locomotion Laboratory, agrees that Heartbreak should be the least of your worries. “The biggest part of the story is that the start is downhill,” he says.

All of that descending means that you're generating tremendous force with little muscle as opposed to when you're climbing and generating lower forces but recruiting more muscle. “When you use a little bit of muscle to generate a lot of force, it physically and mechanically tears the muscle apart,” says

Weyand. So while any sensible Boston training plan will include a fair share of hill repeats and hilly long runs, keep in mind that you must teach your body to handle the downhill effort as well as the uphill.

## The Training

Because of the damage that downhills can inflict on your body, particularly if done on hard pavement, a heavy dose of downhill running isn't recommended. But that doesn't mean that manageable amounts shouldn't be incorporated into your larger training plan for a gradual conditioning effect.

When he was coaching himself to a string of Boston Marathons in the mid-1970s, Dr. Martin became a firm believer in specific race preparation. He laid out a 20-mile route near his home in Atlanta, and ran it

“Everything is just geared toward having you run this race fast, fast, fast.”

- DR. DAVID MARTIN -

every week for five weeks straight leading up to Boston. “Terrain-wise, hill-wise, [it] was just like the first 20 miles of Boston,” Martin recalls. “There was a lot of downhill, plus it finished with five uphill.” Because of the added demands of such a course, Martin was careful to take extra rest days after these runs. He also assisted his recovery by carefully placing fluids along his route so he could drink throughout—a simple but oft-neglected practice for runners training for a marathon.

Bill Rodgers's most memorable Boston-specific workouts were done for coach Bill Squires with the high-powered GBTC of the late 1970s. Like Martin, Squires was a firm believer in course-specific training and wanted his team to know the roads of Boston

backward and forward, literally. Squires would send the group on out-and-back runs from Wellesley (mile 13 on the course) to Ashland (mile 3), or Cleveland Circle (mile 22) to Newton Lower Falls (mile 16). The runners would head out at a 70-percent effort, and return at a 90-percent clip. To further simulate race conditions, the group would surge at key locations, learning to run the route competitively, as they would on Patriots Day, all while replicating the same sense of fatigue that they'd be feeling in the race's final miles.

Another Squires staple workout was called, appropriately, The Simulator, and could be customized to prepare runners for any race or course. For Boston, his athletes would open up with some intervals on the track, then head out to the roads and run a hard effort on the Newton hills, followed by another session on the track. Given a course that climbs from mile 16 through 21, then descends into downtown Boston, Squires wanted to teach his athletes to climb while tired, then to close fast despite their fatigue. The results of this approach are hard to dispute: At the club's peak, four GBTCers placed in the top 10 at the 1979 Boston Marathon, led by Rodgers's course record 2:09:55.

## The Big Day

Because of the noon start time, this race morning will be unlike most that you've experienced. You'll be getting up early to trek out to Hopkinton, but then you'll have several hours to wait before you start running.

In the last six years, Boston's fickle weather has varied by nearly 40 degrees on Patriots Day—so never assume certain conditions. Instead, pack for everything from snow to hot and humid so that you won't have to worry about any fluctuations in the mercury as you wait for the start.

Next, have a fueling plan in place. Flashing back to 1973 again, Rodgers sees that he made a critical mistake before the gun sounded. Failing to realize the significance of the noon start time, Rodgers ate nothing more than a cup of yogurt that morning. “An 8 a.m. start—everyone's used to that,” Rodgers says now. Few peo-



ple, however, are accustomed to racing, or even doing their long runs, in the middle of the day.

In any race, you should adhere to the old adage of not doing anything that you didn't practice already in training—but Boston probably doesn't follow the pattern that you're used to. Odds are you ate a large dinner the night before qualifying for Boston, woke up early the next morning, had a small snack, and were heading to the start line as the sun rose. Chances are also good that you followed a similar routine before each of your long runs. That's the pattern that most runners become accustomed to after years of weekend races and early-morning long runs. But a noon start means forcing yourself into a new routine during training, not trying to slide by the old way. Even if this means getting up early to eat breakfast, then going back to bed on the day of your long runs, it's critical to train your body for what it will experience on race day.

"Along with training your muscles, you also have to train your mind, and you have to train your stomach. These are some of the things that can make a difference because a lot of people aren't going to do it—this is exploring another aspect of getting the most out of your body," says Suzanne Girard Eberle, author of *Endurance Sports Nutrition*. And at Boston? "Not eating is not an option," she emphasizes. "Probably the biggest mistake that people make, nutrition-wise, at Boston is they just don't eat enough before the race—and they run out of gas."

Depending on what time he ate, even the winner might have 20 hours between dinner and breaking the tape in Copley Square, so you need to adjust your diet accordingly. There's no need for anything fancy—Girard Eberle recommends simple foods, maintaining a mix of carbs and protein the night before, and focusing on carbs on race day. You might also want to add a little salt to your entrees in the days leading up to the marathon, since a warm day in April can be particularly shocking. If you're emerging from a bitter winter of

training, 70 degrees might feel like 90, so expect to sweat a lot.

When you wake up on race morning, be prepared to consume more than a token snack. "You need to eat a full breakfast," Girard Eberle says. "By that, I mean something like 500 to 600-plus calories. That's more than just an energy bar or a cup of coffee."

Once you're out in Hopkinton, Girard Eberle recommends sipping a sports drink rather than plain water, then "somewhere around 10 or 11, it's going to be perfectly normal to need a snack. If there's a time for an energy bar, that would be a good time."

Once the gun sounds, don't wait to begin drinking. "People wait too long to get going on their drinking plan and [have to] play

**"Not eating is not an option."**

—SUZANNE GIRARD EBERLE—

catch-up," Girard Eberle says. "They get behind in their fluid needs, so there's less blood flow to their intestinal tract, and that's when they decide to put something in there. By then it's already too late, and whatever they put in just sits in their stomach and causes problems." Both Martin and Girard Eberle recommend opting for sports drink over water throughout the race.

Finally, with the race underway, you'll need to keep your emotions in check and trust your training. After 1973, Rodgers went on to win four Boston Marathons—and even though he was known for attacking the downhill aggressively, he was always careful in the early going. "I was never the very front runner. Ever," he says. "There was always someone willing to take over that obligation. And I think that really is an obligation—you really do not want to be in that spot. It's really dangerous, especially in the first mile."

On top of the downhill start, factor in the screaming crowds, F-15 flybys, circling helicopters, and months of anticipation, and you can see why Rodgers deems the first mile dangerous. With everyone's adrenaline surging, those runners who have carefully developed confidence in their ability to judge effort will have a decided advantage.

Boston Athletic Association assistant coach Jeff Staab offers this blunt assessment: "If you think you're going OK early on, then slow down." He learned that lesson the hard way when, like Rodgers, he was lured into a comfortably fast early pace in his first Boston, not knowing that there would be a severe price to pay miles down the road.

"I see people waste so much training," Girard Eberle says, amazed at the stupid mistakes that even the most experienced marathoners sometimes make at the last minute. The best way to avoid this trap at Boston is to re-create race conditions in your training—after months of preparations for this one day, you don't want all of that effort to go to waste because you weren't as prepared as you could have been.

### The Reward

Before you qualified for Boston, you may have sifted through dozens of marathons, looking for your ideal combination of location, field size, climate, course topography, and start time. But in coming to Boston, you've ceded control of those variables in order to be part of this one famous—and infamous—event. When you arrive at the start fully prepared for the challenges ahead, however, you'll know it. Conversely, those who haven't prepared to their fullest will be exposed soon enough.

Those months of specialized training, and hours of race-day execution, will make the final step in the Boston experience all the more rewarding: "Congratulate yourself," says Bill Rodgers. "This is the Olympic marathon for most marathoners. So pick out the spot where you're going to celebrate with your friends that night." ■