A History of the South Dakota 4:00 Minute Mile

The 4:00 minute mile has long been one of track and field's mythical barriers. It was long thought to be an unbreakable mark, until Roger Bannister became the first runner on the planet to break the mark. Since then, it has become common for collegiate and professional runners to do it. But in the high school ranks – the distinction belongs to an elite group. In June 2022, Simeon Birnbaum of Rapid City Stevens high school became just the 17th prep to do it.

Simeon Birnbaum

The Distance

The mile run was a standard distance in the track and field world until the sport went metric in the 1970's. Four laps on a standard track became the 1600-meter run, 9.3 meters shorter than a mile. This is the standard high school distance in almost every state in the nation. Because a mile is not a metric measurement, it is not a regular track event in the college and professional ranks nor is it featured in the Olympics. It continues, however, to be run as a special event in many meets.

Bannister and Ryun

Roger Bannister ran the first sub-4 mile on May 6, 1954. The 25-year-old medical student clocked 3:59.4. It broke the existing world record of 4:01.3. On June 5, 1964, Jim Ryun, a competitive runner for only two years, became the first high school runner to break four minutes. The 17-year-old sensation from Wichita East High School ran a 3:59 in the Compton (California) Relays.

The Sub 4 on SD Soil

The first "unofficial" sub 4:00 run on SD soil was run by Drew Hunter, Tinman Elite Track Club (Colorado) at Black Hills State in Spearfish in May, 2020. His clocking of 3:57.31 was hand timed and he used a bicycle pacer and had a running start. Huron native and SDSU alum and coach Rod DeHaven ran a 4:00.96 indoors during a decorated career for the Jacks. Pierre native Brad Lowery, running for SDSU, made a run at the mark at the Howard Wood Dakota Relays on May 6, 2005, running a 4:01.67. Adam Fogg of Drake accomplished the feat at SDSU on February 20, 2021 during the Jack's Last Chance Meet. Fogg clocked 3:59.71 on SDSU's indoor 300 meter track.

The Golden Age of Distance Running

Researching great milers in South Dakota takes us back to the early 1970's – arguably the golden age of distance running in the state. Jeff Schemmel (Madison), Steve Heidenreich (Watertown), Jim Reinhart (SF Lincoln) and Drake Titze (Watertown) ran epic times and three of them still rank in the All-Time Top Ten in the 1600. All four of them ran in the finals of the state meet in 1971 (see attached photo). Heidenreich won the race with Schemmel, Reinhart and Titze following. At the ESD Conference meet two weeks earlier, Heidenreich and Schemmel ran side by side in one of the greatest mile run races ever in the state. The Watertown runner won in 4:11 with the Madison ace finishing second in 4:12.

Reinhart would graduate in 1973 with a PR of 4:06.3. Heidenreich would depart the high school

One of the greatest mile run races ever run in South Dakota occurred at the 1971 State Meet. It featured (from left): Drake Titze, Steve Heidenreich, Jim Rinehart and Jeff Schemmel.

ranks with a 4:09.6 effort while Schemmel would have a best of 4:10.6. Titze left his mark in the 4x880 relay, where he and Heidenreich were joined by Barry Carpenter and Paul Stormo. The foursome ran a 7:52.3 in 1971 that ranked as one of the top times that year in the nation and still sits 6th all-time in SD. Titze attended Missouri as a collegiate.

Schemmel would attend Kansas State where he had a decorated career including the distinction of becoming the first native South Dakotan to run a sub 4-minute mile on June 1, 1974. It was the first of three sub 4's that he ran while competing for the Wildcats from 1972-1976. He anchored K-State's distance medley team to the NCAA championship in 1975 and was second in the NCAA mile run in 1976. He is a 2022 inductee into the SD Sports Hall of Fame.

Heidenreich graduated from Watertown in 1971 with two mile run championships, a medley relay title and state records in the mile (4:11.2) and two-mile relay. He attended Indiana University. In his collegiate and post-collegiate years, he broke the 4:00 minute mark eight times. He had a career best of 3:58.4. He is a member of the SD Sports Hall of Fame.

Reinhart graduated in 1973 and attended Notre Dame. As a high school sophomore, he lost his first cross country race and then never lost again for the remainder of his high school career. He won three straight cross-country titles. When he graduated from Lincoln High, he had all-time state records in the 880, mile, two-mile runs and ran the anchor on the all-time medley squad. He graduated from Notre Dame in 1977 with a PR of 4:01. He is a member of the SD Sports Hall of Fame.

Simeon's Time

After an epic junior year at Rapid City Stevens where he won a state cross country title and four events at the state track meet and set all-time state records in the 800, 1600, 3200 and ran the anchor on the Raider's medley squad, Simeon Birnbaum embarked on memorable post-season that would place him among the nation's elite high school runners.

He had made his mark in early season national competition breaking Jim Reinhart's mile run record at the Arcadia Invite in California. On June 15 he was in Seattle competing in the mile at the Brooks PR Invitational, one of three national high school post-season meets. His odds were daunting. His state record PR time of 4:07.88 ranked last among the dozen entries in the Brooks field and was nearly five seconds off the leading time in the field.

Birnbaum shared the story of his epic run with Matt Case of the Rapid City Journal. Despite his pre-race ranking, Birnbaum moved himself into contention on the fourth and final lap of the race, and used a blistering kick in the final 100 meters to not only win it, but finish in 3:59.51, becoming the 17th high school student-athlete in United States history to run a sub four-minute mile and

the third to do it as a junior. “I’d like to say it feels absolutely wild, but at the end of the day you kind of think about it and it’s just, I just ran another PR,” he said. “Nothing really changes. You’re just a little more known.”

Birnbaum, who won the Class AA state championship in the 1600-meter run for the second straight year at the South Dakota state track and field meet last month, began the race in the back-half of the pack and moved up to fifth halfway through. He started the final lap in fourth, then on the final stretch came off the right side of the runners in front of him and burst past them for the honor to break the finish-line tape.

“Originally I wasn’t even thinking about (breaking four minute),” he said on the last lap. “I was just going for the win and trying to outkick those guys, but I heard the announcer going crazy and I was like wow, that’s pretty amazing, so I was pretty excited.”

He said his strategy for the event was to hover around 61 seconds for the first three laps, which he did by going 1:01.53, 1:00.82 and 1:01.05, then close hard.

He completed the final lap in 56.12 seconds and won the race by .57 seconds.

“Even on the last lap, it wasn’t just a time trial, it was a real race,” he said. “It’s not often you have a race that’s won at sub-four that’s actually a race and was what it took to win, so that was pretty cool.”

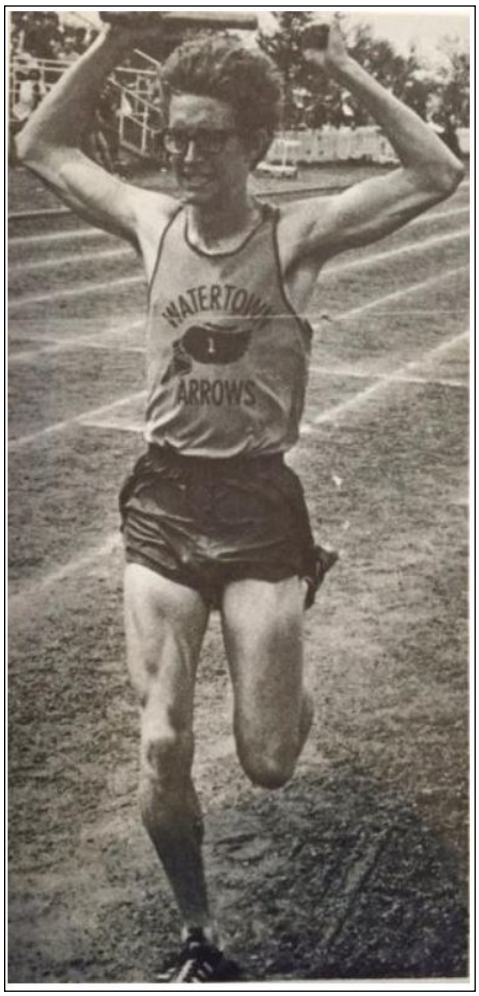
Birnbaum and his competition had the benefit of a pace-runner to set them up to break four minutes. They found out a few hours before the event that Gary Martin, a Pennsylvania high school senior who ran a 3:57.89 mile, would lead the first two laps.

“He did us a big favor by taking us out quickly and bringing the whole field along the first 300,” Birnbaum said. “And then we had a race from there, but we owe him a lot for taking the pace out.”

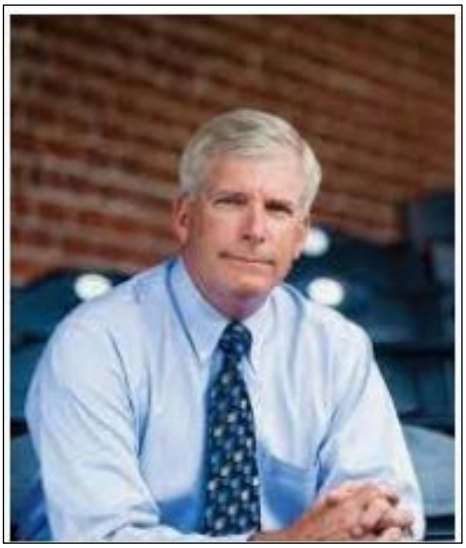
Birnbaum said he hasn’t thought about his future goals for next year’s spring track season, only that he’ll soon be turning his attention to his senior cross country campaign at Stevens as he looks to win back-to-back Class AA individual titles in October.

“I definitely came in with the goal to break four, but I don’t know how realistic many people thought that was because I was the last-seeded guy in the race,” he said. “I had the worst entry time, but the goal was to break four.”

His 2022 track season was not over yet. On June 17 he and Steven’s teammates Tanner Lunders, Justin Juniel and Alex Otten competed in another one of the national meets on the high school circuit – the Nike Outdoor Nationals in Eugene OR at historic Hayward Field. The foursome won by 1.78 seconds in 3:25.12 setting a new SD all-time sprint medley record in the process.



Steve Heidenreich



Jeff Schemmel