

A Running Tradition and Geometry

From American Indian Sports Heritage by Joseph B. Oxendine. See more information in other stories.

A Running Tradition

With the possible exception of lacrosse, running, especially long-distance running, has been the sport most closely identified with the American Indian. Strong interest and a high level of skill were characteristic of Indian runners in pre-Columbian times. These traits persisted through more recent centuries and continue today. The popularity of distance running has been universal among all Indian groups, especially so among those in the southwestern United States and in Mexico.

Some evidence of the general practice of running is provided by Catlin (1841/1944). He described the excellent musculature of the legs of the Indian youth in the 1830s and stated that “he who would get a perfect study for a Hercules or an Atlas, should take a stone mason for the upper part of his figure and a Comanche or a Blackfeet Indian from the waist downwards to the feet” (p. 140).

Indians of the Southwest were perhaps the most famous of all runners. The Hopi and the Zuni were recognized by numerous writers as outstanding distance runners. Stevenson (1904) reported that she “has never known the Zunis to lose a footrace with other Indians or with the champion runners of the troops at Fort Wingate, who sometimes enter into races with them” (p. 328). She emphasized that young Zuni boys began training at an early age and developed into excellent runners. Some of the most astonishing reports of long-distance running for sport and for more utilitarian purposes came out of the Southwest and Mexico.

Page 68

Some Outstanding Running Feats

Most Indians concentrated on and excelled in distance running rather than short races. For example, Adair (1775/1968) reported that he and other non-Indians could compete favorably with the Indians in short races. In long races, however, he stated that “without any seeming toil, they would stretch on, leave us out of sight, and out-wind any horse” (p. 318). He also recounted the story of a devious French peddler. After being caught cheating by the Choctaw Indians, the Frenchman was able to saddle “a fine strong sprightly horse, and long winded, like wolves”; nevertheless, Red Shoes, the Choctaw Chief, “ran him down in about the space of fifteen miles...” (p. 318).

Page 72

...the name Tarahumare may be translated as “footrunners”. The most important of all games of this group is the kick-ball race, which often lasted for two days and a night. When night races were run, the course was lighted with torches. It was the dream of every Tarahumare boy to be a great runner. Although training began soon after birth, it was said that practice in running was not necessary because they were always racing.

The times recorded for completing ball races were indeed astonishing in view of the fact that runners had to slow down somewhat to kick the ball periodically. Lumholtz (cited in Culin, 1907) stated that he observed a twenty-one mile race in 1892 and that the time required was 2 hours and 21 seconds. This speed was faster than that required to win prominent marathon races many years later. In the first Boston marathon (26 miles, 285 yards), which was run in 1897, the winner’s time was 2 hours and 55 minutes, a pace considerably slower than that reported by Lumholtz.

An even more impressive performance was recorded by Owens (1891) and Hodge (1890), reporting independently on a ball race among the Zuni. Owens wrote that “the distance traversed is nearly twenty-five miles and they pass over it in about two hours.” Hodge observed the same ball race and also reported that the course was 25 miles long. He further stated that “curiosity prompted me to note the time occupied in

performing this feat, which was found to be exactly two hours.” If the distance and time were accurately reported by these two writers, this performance would remain a world record even today.

However, not all outstanding running accomplishments were in endurance events many Indians exhibited excellent sprinting speed. Hoffman (1896) described an incident that occurred at the White Earth agency in Minnesota: “One of the champion Ojibwa runners walked 23 miles after dinner, and the next morning ran 100 yards in ten and one quarter seconds, easily beating his professional opponents.” The time recorded for that race was comparable to the official world record of twenty years later.

During the 1860s the world’s best runner was Louis “Deerfoot” Bennett, a Seneca Indian from the Cattaraugus reservation in New York. As a professional runner in this country and in England during the 1850s and early 1860s, he won almost all of his races, from four miles to more than twelve miles. He established a distance standard in a one-hour run of 11 miles and 970 yards.

P. 75

Running for Profit

Nabokov reported that John Burke paid a Mohave Indian \$2 to run a twenty-one-mile errand through heavy sand, a task that was completed in three and a half hours. Bourke also related that another Mohave took less than twenty-four hours to run the 200 miles from Fort Mohave to the Reservation and back. This astounding feat is roughly equivalent to running eight consecutive marathons, non-stop, at a three-hour pace!

P. 76

Running Folklore

Fables were also used for the purpose of developing appropriate character traits among young people. Variations of the “Tortoise and the Hare” story were used in several tribes to encourage children to persevere and to keep their attention on the task at hand. Such stories emphasized that success in races is as much a matter of the mind as of the body. The intention was that these lessons of mental control, or discipline, be carried over to other behaviors in life.

An illustration of faking injury is provided in the popular “tricksters race” legend among the Blackfeet Indians. In this story, cited by Thompson (1941), Old Man challenges Coyote to a foot race. On the day of the scheduled race, Coyote appears with one leg tied up and begs to be excused from the race, indicating that he is crippled and cannot run. Old Man insists on going through with the race as planned, and Coyote finally agrees to a short race. Old Man demands that the longer race be held, and Coyote reluctantly agrees. After the race begins, Coyote continues to plead with Old Man to wait for him because of the great pain in his leg. However, as they arrive at the half-way point, Coyote suddenly takes off all bandages and runs the remaining distance without encumbrances or injury, leaving Old Man far behind. With stories such as this, young people were encouraged to guard against being distracted or deceived by their opponents.

P. 81

Running Tracks

Formal race tracks were apparently developed and used by Indians many centuries ago. Culin (1907) cited a report by Russell, an archaeologist, stating that “at various points in Arizona I have found what appear to have been ancient race tracks situated near the ruins of buildings.” He reported that one of these tracks was “five meters wide and 275 meters long.” It had been leveled by clearing away boulders of the mesa and by cutting down obstacles. In another location he discovered what he assumed to be a running track that was 6 meters wide and 180 meters long.

Culin (1907) cited Hayden's description of a three-mile race course that he observed in use by the Mandan Indians in 1892. He reported that it was on the level prairie and was cleared of every obstruction and kept in condition for racing purposes only. The design of the track was an arc, which formed an almost complete circle. Posts marked the starting and terminating points and were only a few hundred yards apart. Spectators were able to observe the beginning and the end of the race from a single point.

P. 82

The ball race

One of the most unusual of all Indian sports in the minds of modern non-Indians was the ball race (also called the kick-ball race). This activity was more a racing event than a ball game and was extremely popular in the Southwest, particularly among the Zuni, Pima, and Papago tribes. In Mexico the ball race was the foremost sporting event among the Tarahumare.

In this race a small wooden ball or stick was repeatedly kicked forward by the runner, who ran along a prescribed racing course. After kicking the ball, the runner ran after it and kicked it again. This was repeated continuously as he moved steadily along the course. The kick was actually a throw, or flip, of the object with the top of the foot. While running at a steady pace, the runner approached the ball and positioned the foot immediately behind it. Then he swung the leg vigorously forward, without breaking stride, and propelled the ball fifty yards or so into the distance. This sequence continued for the whole race, which typically covered a distance of twenty-five miles.

The race course was generally laid out on a circuit that went to some distant point and returned to the starting place. Ball races were sometimes held with two individuals competing against each other, but more often it was with a team of four to six who competed against another team of equal size. In such races the team members alternated kicking the ball as they all ran along in a group. The ball race was run by both men and women. However, the game was modified for women; instead of kicking the ball, they used a stick to toss a hoop or ring ahead as they ran. In another variation, women used a two or three-pronged stick to propel a ball forward. In either case they were not allowed to touch the ball or the ring with their hands.

P. 87

Some "Modern" Running Performances

One of the most astonishing running performances took place in 1876 and was later reported in Ripley's Giant Book of Believe It or Not (Ripley, 1976). According to this report, a Pawnee Indian, Koo-tah-we-Coots-oo-lel-r-hoo-La-Shar (Big Hawk Chief), ran the mile in 3 minutes and 58 seconds. This one-mile race was timed by U.S. Army officers using stop watches. Although this was the first sub-four-minute mile reported, "official" records credit England's Roger Bannister with first breaking that barrier more than three-quarters of a century later in 1954.

Extraordinary running feats by American Indians continued into the 20th century; however, precise measurements were often not available for performances taking place within the traditional setting. Among those occurring within a non-Indian setting, and having been verified by external observers, are the performances of Tom Longboat of the Onondaga tribe. He won the Boston Marathon in 1907, breaking the previous record by five minutes. No less outstanding were the accomplishments of Louis Tewanima, the Hopi Indian who attended the Carlisle School along with Jim Thorpe. In addition to numerous record-breaking performances in college meets, he finished second in the 5,000 and 10,000-meter runs in the 1912 Olympic Games in Stockholm and won the New York half-marathon in 1911. Nabokov (1981) reported that Tewanima once missed the train from Carlisle to Harrisburg and ran the eighteen-mile distance in time to enter and win the two-mile event.

Outstanding Running Feats

p. 70

Activity 1 Show your work for all problems.

1. In the reading about running from the book “American Indian Sports Heritage” by Joseph Oxendine, the story of the French peddler and Red Shoes was told. Although this was not a race in the strict sense, We can find some interesting facts about it. How long was the “race”? _____
2. A good long distance runner can cover about 12 miles per hour. How long would it take Red Shoes to cover that distance? _____
3. It is obvious that the horse did not run as fast as Red Shoes. If the French peddler had a half mile head start, how fast did the horse run? (nearest hundredth) Show your work. _____
3. If the French peddler had a fifteen minute head start, how fast did the horse run? (nearest hundredth) Show your work. _____
4. The quote below is from the story. How do you compare the “pace” of the races mentioned? Show your work.
“Lumholtz (cited in Culin, 1907) stated that he observed a twenty-one mile race in 1892 and that the time required was 2 hours and 21 seconds. This speed was faster than that required to win prominent marathon races many years later. In the first Boston marathon (26 miles, 285 yards), which was run in 1897, the winner’s time was 2 hours and 55 minutes, a pace considerably slower than that reported by Lumholtz.” (1 mile = 1760 yards)

Deerfoot

Activity 2 Show your work for all problems.

1. Deerfoot ran as far as he could in one hour. This is a different kind of race than we see today. How far did he run? _____

Change this distance from yards to miles (to the nearest thousandth) ? _____

2. That distance gives Deerfoot's speed in miles per hour. At the same rate, how far would he run in 20 minutes? _____

3. Often, a runner's speed is given in the length of time it took him to run one mile. At the same rate, how long would it take Deerfoot to run one mile? _____

4. Deerfoot's time for a 4-mile race was 20 minutes 15.5 seconds. If he could run at the same rate, how long should it take for a five mile race? _____

The time listed for five miles is 25 minutes 24 seconds. If he could have run at the rate of the four mile race,

how much more quickly could he have run the race? _____

By how many yards would he be ahead? _____

5. Of the six races listed, in which did Deerfoot run at the fastest speed? _____
How did you find the answer?

Kick Ball Race

P 76 Show your work on all problems.

1. If a runner kicked the ball every fifty yards as it states in the story, how many times would he kick it in a 25 mile race?
2. It takes an average of 2.2 seconds extra for each kick of the ball, how much longer would it take to run the 25 mile race with the ball than without?
3. What is the difference in the runner's speed (in miles per hour) running the 25 mile race with the ball than without?
4. A team was running the ball race on a "circuit". They ran 10 miles out at an average speed of 11.2 miles per hour. How fast would they have to run on the way back to average 11.5 miles per hour for the whole trip?
5. Explain a "relay" method for a team of four runners in the ball race. How could they participate equally in the race?

Running Tracks

P 81 Show your work.

1. The Mandan race course was three miles long. If it was a complete circle, what was the diameter of the circle? (to the nearest hundredth foot)? _____

2. The arc was 300 yards short of a complete circle. If the arc was filled in, 3 miles plus 300 yards, how much would the diameter increase? _____

3. The Mandan race course was three miles long and 5 yards wide. How much farther would a runner have to run on the outside of the track (to the nearest hundredth foot)? _____

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1. Find out what Roger Bannister’s time for the mile was and compute the difference in times.
2. It is pretty easy to figure that a four minute mile is equivalent to 15 miles per hour. How much faster is the speed of Big Hawk Chief in his one mile race?
3. In this race, let’s guess that Big Hawk Chief was 22 seconds ahead of the second place runner. How far was this in yards?
4. Assume that in another race Big Hawk Chief ran the mile in exactly 4 minutes and was fifty yards ahead of the second place runner. If that runner finished the race at the same rate, what was his time for the mile?
5. Look up the record of Billy Mills and compare his record time with Big Hawk Chief.
6. If you have a track team, compare the times and rates of those “modern” runners.