



Kenyan runners compete in the national trails for the London 2012 Olympic games.

# THE LAND OF RUNNERS

Athletes run across the Lewa wildlife conservancy as part of the Lewa Marathon.



by Christine Graf

“**W**hen I grow up, I want to be a runner.” These words are spoken by the thousands of Kenyan children who see running as their only way out of a life of poverty. World-class Kenyan runners are heroes for the many children who dream of a better life. The prize money that can be won from just one race can change a Kenyan’s life forever.

A large percentage of Kenya’s top runners are members of Kalenjin, one of the country’s more than 70 different ethnic groups. They live in high-elevation villages in the Rift Valley in western Kenya. Within this group of approximately 10 million people, there are eight different ethnic groups. One of these groups, the Nandi, has become synonymous with long-distance running. Although they make up less than two percent of Kenya’s population, 50 percent of the country’s top runners are Nandi. They are known for their traditions of individualism, competitiveness, pride, and achievement.

Runners from the seven other Kalenjin ethnic groups are also among the fastest runners in the world, yet the Kalenjin’s only make up .07 percent of the world’s population. This fact has both fascinated and perplexed sports scientists. As a result, they have spent

considerable time and effort trying to answer one question: What enables the Kalenjin people to run so fast? Although the question seems simple, finding the answer has proven to be difficult and controversial.

In the 1990s, a team of Danish sports scientists spent 18 months with the Kalenjin in Eldoret, a town located on a plateau in the Rift Valley, 7,000 feet (2,133 meters) above sea level. The researchers discovered the Kalenjins had remarkably slow heart rates even when running long distances. People living at high elevations produce more red blood cells, which aid in the transport of oxygen throughout the body. Because the air is thinner and contains less oxygen at high elevations, the body compensates by producing more red blood cells. Scientists believe there is a correlation between increased red blood cells and low heart rates and that both may enable high-altitude athletes to outperform those who train at low altitudes.

The Danish scientists also studied the bodies of the Kalenjins and compared them to those of the Danes. They found that the Kalenjins have “birdlike legs, very long levers that are very, very thin” that allow them to “bounce and skip” over the ground and gracefully flow through the

running motion. In comparison, the Danes “landed heavily and sunk into the ground and almost had to pull themselves forward.” In addition to having longer and more slender legs, the Kalenjins also have lower body mass indexes (a measure of body fat based on weight and height) and shorter torsos than their Danish counterparts.

The scientists randomly selected three groups of schoolboys who had no previous athletic training. The groups were from Denmark, Eldoret, and Nandi Hills (home to the Nandi people). The boys were asked to run 10,000 meters after receiving three months of training. When their times were compared, the Nandi Hills boys were the decisive winners. The scientists also pitted Thomas Dolan, one of their Denmark’s top distance runners, against the Nandi schoolboys. Much to Dolan’s surprise, two of the boys easily beat him.

As a result of the Danish study, some scientists made the controversial conclusion that Kenyans – and specifically the Kalenjins and Nandis – possessed what was called a “speed gene.” Many Kenyan runners were offended by this conclusion and said it was racist. They credited their success to hard work and endless hours of training.

Hugh Montgomery, a cardiovascular geneticist, disagrees that the conclusion is racist. “There is clearly an influence of race on performance,” he says, “and that isn’t to be racist; it’s just saying that different races have different strengths.”

Although the controversy over the “speed gene” remains unresolved, British runner Mo Farah’s experience offers an interesting perspective on the subject. In 2005, after realizing he wasn’t meeting his potential as a runner, Farah moved in with a group of elite Kenyan runners who were training in England.



It’s all a blur! Kenyans race in a 10,000-meter competition in 2015.



After observing the Kenyans' strict training routines and dedication to their sport, Farah says it was like a switch had been turned on in his head. "I knew what I had to do to win," he says in his autobiography. "From that day on my attitude changed completely." He began eating healthy foods, going to bed early, and training harder than he had ever trained in his life. After living and training with the Kenyans, Farah's running career exploded. He has won seven consecutive world and Olympic titles in the 5000m and regularly beats Kenya's top runners — runners who most likely wish that their countrymen had never welcomed Farah into their home!

Farah's story illustrates what Kenyans have known all along. Regardless of genetics, their success would not be possible without hard work, dedication, sacrifice, and mental toughness. Their "secret" is simple. Train hard, run fast, and never give up.

### Fast Facts

- In the 1988 Olympics in Seoul, Korea, Kenyan men won the 800m, the 1500m, the 3000m steeplechase, and the 5000m. The likelihood of that happening was calculated to be 1 in 1.6 billion.
- A University of California biologist calculated that Kenyans outperform the rest of the world in long distance running by a factor of 1,700 to 1.



Stanley Biwott holds up the Kenyan flag after winning the 2015 New York City Marathon.