

# The Hammer Thrower Takes TIME

By Rande Treece

Many a hammer thrower asks, "How long does it take to excel?" Or, "How much does the *average* thrower increase between his first and second year, second and third,..?" Or, "I threw x feet in my first year. Do I have what it takes to be good?"

I thought it would be useful to examine the progression of several throwers, from the world record, to American record holders, and to up-and-coming U.S. throwers. The data presented was gathered from publicly available sources including the USATF web site, the IAAF web site, *Long & Strong Throwers Journal*, and personal conversations.

## The Data

Since the object of the study was to examine progress, only athletes with data from their first year until their retirement (or their latest result if they are still active) were considered. Each of the nine athletes has thrown in excess of 225 feet. (What this study does not do: it is not a broad-based statistical analysis of hundreds, or even dozens of athletes. And, it does not examine the role of strength or supplementation.)

The yearly throwing bests for each athlete are plotted in Figure 1. One feature that is quite prominent is that it takes many years to reach a peak with a career-best mark. Yuri Syedikh peaked in his 13th year, Lance Deal in his 11th year, and Jud Logan in his 8th year. (This chart shows the number of years from the time Syedikh recorded distances throwing the senior implement. He is actually credited with throwing the 5 kg. hammer 125 feet when he was 13 years old. That

means it took him a total 17 years to peak.) Everyone who threw less than 8 years had his best result the last year he competed. None of these athletes broke the 250-foot barrier before their fifth year of throwing.

It is also interesting to quantify the rate of increase between successive years for athletes that attain high levels of performance. Figure 2 shows the percentage increase from one year to the next for each athlete, as well as, the average (mean) increase for all of the athletes each year. The average rate of increase in performance decreases each year. In the second year, there is an average increase of 13% over the first season. The average increase is 8.7% in the third year, 4.5% in the fourth, 3.0% in the fifth, and 1.9% in the sixth year. Eventually, athletes that reach the highest levels begin to have up and down performances from year to year.

## The Application

The application of the data to athletes and coaches should be to encourage the athletes to continue training and to not be too easily discouraged. The world record holder began throwing the hammer at around 13 years old and peaked when he was 31 years old. American hammer throwing over the last decade and a half has been dominated by two men now in their 40's.

It should be clear that national success in the hammer will come when young athletes can be trained for 8+ years to get them to an international level, and then kept in competition through their prime. *\*LSTJ\**

