# Long Sprint Training 200 & 400 Meters

by Coach Steve Silvey Championship SSE Products SSEproducts.com

Based on the times posted in the 200, 400 meters and the 1,600 meter relay by athletes I've coached I feel I can speak with some authority on the topic.

## Top 200 Meter Runners of Coach Silvey

Jason Hendrix Blinn College 20.2	25
Derrick Thompson Arkansas 20.3	31
Henry Neal Blinn College 20.4	10
Aham Okeke Blinn College 20.4	17
Melvin Lister Arkansas 20.5	51
Tyree Gailes Texas Tech 20.5	57
Trevor Rush Arkansas 20.5	58
Ricardo Greenidge Blinn College 20.6	33

Top 400 METERS	<u> Times</u>	Top 1600 METER RELAY Teams			
Lamont Smith	44.30	Texas Tech University	3:01.69		
Darnell Hall	44.34	Blinn Junior College	3:01.89		
Kempa Busby	44.80	University of Arkansas	3:02.02		
Samuel Matete	44.88	Blinn Junior College	3:02.22		
Seymour Fagen	44.88	Blinn Junior College	3:02.86		
Andrae Williams	44.90	University of Arkansas	3:03.14		

## **200 METERS**

The 200 meters while considered a long sprinting event is unique due to the fact that in order to excel in the event and be great the athlete must have the,

## • Speed of a 100 meter runner

• Strength of a 400 meter runner

## • "Aggressiveness" of an NFL middle linebacker

In addition the athlete must run "smart." The 200 meters is split into equal parts. The first 100 meters is run on the curve. The second half is on a straightaway. To run this race takes an effective strategy.

At the Division 1 level I believe it is vital for the athlete to attack from the start by "getting the jump" on the rest of the field during the first 60-70 meters of the race when they are running on the curve. Being aggressive from the start around the curve often translates into an "edge" going into the straightaway where it is important to have the lead or "edge" on the rest of the field.

In 1993 one of my junior college athletes who no one knew or had ever heard of, Jason Hendrix of Tatum Texas, used this strategy at the USA National Championships. Hendrix blasted off the turn in Eugene, Oregon and held off the "100 meter World Record Holder" (at that time) Leroy Burrell to earn the final spot on the World Track and Field Championships team in the 200 meters.

Why, because he met the criteria mentioned above and took the edge on the curve. Athletes who are aggressive in the first 60-70 meters and willing to lay it on the line with "heart" are true winners in my book!

Most 200 meter races won or lost by the 150 meter mark. Too often 200 meters runners are ready quit by this point if they are 5-8 meters behind. Athletes who choose to waiting until the final 100 meters and don't "take it on the turn" will never be great 200 meters runners at a Division 1 level. That is what is known as a "high school" strategy/mentality and it doesn't enable an athlete to be in medal contention in major championship races!

In the 2005 Big 12 Outdoor Track and Field Championships held at Kansas State University, my 200 meter runner Tyree Gailes, ran a brilliant technical race and won the championship with a time of 20.57 (FAT) into a negative 1.0 headwind despite having the two pre-meet favorites inside: Nate Probasco, Nebraska Big 12 Indoor 200 meter Champion and DaBryan Blanton of Oklahoma, the NCAA Indoor 60 Meter Champion. Gailes blasted the first 60-70 meters of the turn and made these outstanding athletes quit the race by the 150 meter mark.

This strategy took them out of their own race plans and presented Tyree Gailes with his first Big 12 Championship!

## The Use of Dorsi-Flexion

Great Sprinting is always done with the use of "Dorsi-Flexion". Dorsi-Flexion is running with the toe and heel up while running. Literally, the athlete is stretching the calf muscle while running.

To run with Dorsi-Flexion, the athlete pulls the heel through to the "buttocks". he/she then places the heel on the ground under the knee. When the athlete lands on the track surface or ground, the foot is then cycled backwards or pulled up to the buttocks. At this point the foot is then brought back down to the ground with again the (toe up) as it makes contact with the ground underneath the knee.

A common mistake made by coaches is telling their athletes to take longer strides. Instead of making the athlete faster, over-striding causes a breaking effect since it causes the athlete to land more often on his/her heel and causes the athlete to lose power.

## **CURVE RUNNING**

Because half of the race is run on the curve it is vital that the athlete know how to run the turn. To master the race, the athlete must learn to "lean" into the curve. To do this the athlete dips the head inwards to the left and at the same time lowers the inside left shoulder. This enables the athlete to "flow" gracefully around the turn instead of trying to "fight" or "outmuscle" the turn. In addition, the athlete's arms don't cross the mid-point of their body when running the curve. No matter how strong the athlete is, he/she will never win if they fight the curve.

## **FINAL 100 METERS**

When the athlete enters the straight-away for his the final 100 meters, the athlete must be running in the "Hips Tall" position. This position enables the athletes to maximize 100% of his leg power capabilities. During this final stage of the race, it is important that the athlete focus "quick arm" frequency. To have good knee lift, the athlete must maintain a "normal head" position at all times. Once the athlete drops or lowers his head, high knee lift is immediately diminished and stride length starts to shorten. Most athletes try to "over-stride" or "reach" during this final segment which causes them to fatigue or tire faster.

In addition it is vital that the athlete keep his/her shoulders and face relaxed during this final period in the race due to the level of lactic acid build-up. When he/she follows these guidelines, a successful finish with a great performance will be theirs.

## SAMPLE WORKOUTS

Listed below are some workouts which that are good simulators as preparation for the athlete running the 200 meters:

- 4 x 100 meter (Curve) "*Flys"* 20 meter Running start
- 4 x 60 meter (Curve) "Flys" with 20 meter Running start
- 5 x 60 meters (Curve) From Starting blocks
- 4 x 70 meters (Curve) From Starting blocks
- 4 x 150 meters (Full Curve) From Starting blocks
- 4 x 100 Meters (Curve) From Starting Blocks

### FLY's=Are running starts into the timed distance of 15-20 meters.

## **RACE DISTRIBUTION**

Listed on the next page are race splits from the 1993 World Track & Field Championships Stuttgart, Germany. I witnessed this race as the head coach of the Zambia Team and it was truly a great race.

## 1993 World Championships Stuttgart, Germany (200 Meters-Final)

	Athlete	Country	1st 100	2 <sup>nd</sup> 100	200 Final	
1.	Frankie Fredricks	NAM	10.39	9.46	19.85	"GOLD"
2.	John Regis	GBR	10.28	9.66	19.94	"SILVER"
3.	Carl Lewis	USA	10.31	9.68	19.99	"BRONZE"
4.	Mike Marsh	USA	10.43	9.75	20.18	
5.	Dean Capobianco	AUS	10.36	9.82	20.18	
6.	Jean Ch.Trouabal	FRA	10.46	9.74	20.20	
7.	Emmanuel Tuffour	GHA	10.60	9.89	20.49	
8.	Damien Marsh	AUS	10.62	9.94	20.56	

## 400 METERS

You may be aware that the human body can't sprint an entire 400 meter distance. Scientific studies have shown that the human body can only sprint all out for about 350 meters. Because of this, the athlete must find a point somewhere in the race to "relax" for about 50 meters in the race.

If you break down the 400 meter race into four equal parts, there will be four 100 meter segments. When looking at the races of the great world class 400 meter runners the first thing to notice is that the first 100 meter segment is always the fastest of the four. This is because the human body's "SPEED" energy system is completely fresh at the beginning of the race. No matter how hard the athlete tries to run any of the other four 100 meter segments, the first 100 meter segment will always be the fastest provided an honest effort is being put forth by the athlete.

It is my belief that to be a great 400 meter runner, athletes must have good 200 meter speed along with the strength of an 800 meter runner.

### Race Modeling

As preparation for a great 400 meter race, I like to have my athletes do 300 meter "event" runs. I break these event runs down into the following zones:

150 Meters: Get out *hard* and "*Attack*" at 90%-95% effort!
151 to 199 Meters: "Chill-out" and let the momentum that you created during the first 150 meters carry you to the 200 meter mark.
200M Finish: With the emphasis on cycling the arms quicker and be sure to not over stride or reach. During this final phase to the finish "desire" and "heart" are vital to overcome the lactic acid that often surfaces during this final

### How to Time the 300 Meter "Event" Run

phase of the race.

I time the first 150 meters and then time the next 50 meter zone and then get a split time for the final 100 meters. Then, I give the athlete a final or total time for the 300 meters. Here is an example:

 150 Meters
 16.5

 50 Meters
 6.5

 100 Meters
 12.5

 300 Meters
 35.5 seconds

## Curve Running

It is important that the athlete is aware of how to run the turn as there are two 100 meter segments in the race or ½ of the race is run on a curve. To master the race, the athlete must learn to lean into the curve. To do this the athlete must dip the head inwards to the left as well as lower the inside left shoulder. This will allow the athlete to "flow" gracefully around the turn with the turn instead of trying to fight or "out-muscle" the turn. The athlete's arms should not cross the mid-point of their body when running the curve. *No matter how strong the athlete is he will never win fighting the turn*.

## Late Race Charge

After the athlete relaxes for about 50 meters he must be ready to attack the final segment of the race by shifting gears one final time. Great 400 meter runners attack from 150 to 200 meters from the finish line. Athletes who wait until the final 100 meters and then find a last minute gear, cheat themselves out of running a much faster time. Athletes who attack from 150 to 200 meters out from the finish line are the true champions in my opinion. They are willing to lay it on the line with "heart".

## The Final 100 Meters

As the athlete comes of the curve, he must be running in "*Hips Tall*" position. During this final stage of the race it is important that the athlete focuses on great frequency with "*quick arms*" and good knee lift. Most athletes try to "over-stride" or reach during this final segment only to find that they tire even quicker. If the athlete keeps the shoulders and the face relaxed during this period of great lactic acid build-up they will be successful in getting to the finish line with a great time.

### Race Splits

As I coach I believe in the high school and the college 400 meter runner running the first and the second 200 meters in the race with 1.50 second differential. World Class athletes should have a differential of between: 1.00 to 1.25 seconds. Here are examples below:

First 200 Meters	Second 200 Meters	Final 400 Meter Time		
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22.25	23.75	46.0		
22.5	24.0	46.5		
22.75	24.25	47.0		
23.0	24.5	47.5		
23.25	24.75	48.0		
24.0	25.5	49.5		
24.5	26.0	50.5		
25.0	26.5	51.5		
25.5	27.0	52.5		

# 400 Meter Dash FINAL 1988 Summer Olympic Games

Seoul, Korea

Place	Athlete	Country	First 200	Second 200	Time	Dif.
Gold Medalist	Steve Lewis	USA	21.41	22.46	43.87	1.05
Silver Medalis	t Butch Reynolds	USA	21.68	22.22	43.93	.57
Bronze Medal	Danny Everett	USA	21.37	22.72	44.09	1.35
4 <sup>th</sup> Place	Darren Clark	Australia	21.61	22.94	44.55	.33
5 <sup>th</sup> Place	Innocent Egbun	ike Nigeria	21.76	22.96	44.72	1.20
6 <sup>th</sup> Place	Bert Cameron	Jamaica	21.66	23.28	44.94	1.66

I have published the following materials for junior high and high school and track coaches:

- The 49 Minute Championship Workout for Track & Field (Book & DVD)
- (workout's from 100 meters to 800 meters)
- Successful SPEED Training Methods for All Sports (Book & Dvd)
- The 45 Minute Workout for Middle School & Small HS Program's (Book & DVD)
- Coach Silvey's "Arkansas" Training Program (Book)

If you like information on any of these Books, go to my website:

## <u>SSEproducts.com</u>

Good luck in developing your 200 & 400 meter runners

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