

Key factors for the long hurdles

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Presented by Justin Wickard



If you had to choose just *one* factor that makes or breaks a long hurdler

1. Speed
2. Rhythm
3. Endurance
4. mental toughness

which would you pick and why?

Training Perspective
Should we train the long
hurdles like a 400 meter
athlete?

Establishing a stride pattern for the long hurdles



!!First we must know Athlete's stride length!!

Steps taken based on Stride length

Strides Between the Hurdles / Required Stride Length Needed by Athlete

14 Strides 2.28m

15 Strides 2.13m

16 Strides 2.00m

17 Strides 1.88m

18 Strides 1.77m

19 Strides 1.68m

Sub-maximal hurdling TO ESTABLISH stride Rhythm

300/400mH Practice Spacings

86	% of normal distance spacing										* practice strides
Steps=	9	10	11	12	13	14	15	16	17	18	
14	20.27	22.24	24.20	26.17	28.13	30.10					
15	19.09	20.93	22.76	24.60	26.43	28.27	30.10				
16	18.06	19.78	21.50	23.22	24.94	26.66	28.38	30.10			
17	17.15	18.77	20.39	22.01	23.62	25.24	26.86	28.48	30.10		
18	16.34	17.87	19.40	20.93	22.46	23.98	25.51	27.04	28.57	30.10	
Strides in Comp											

Focus on 7-12 step spacings

Long Hurdles Performance Chart

300mH Touchdown Times

Enter Target Time: **43** seconds

Enter Target Time: **37.5** seconds

Women

Hurdle		
1	7.09	Hurdle Splits
2	11.70	4.61
3	16.39	4.69
4	21.16	4.77
5	26.03	4.87
6	31.03	5.00
7	36.09	5.06
8	41.44	5.36
Finish	43.00	1.56 Run In

Men

Hurdle		
1	6.38	Hurdle Splits
2	10.42	4.04
3	14.49	4.08
4	18.66	4.16
5	22.92	4.26
6	27.30	4.38
7	31.79	4.50
8	36.40	4.61
Finish	37.50	1.10 Run In

300mH Analysis

200m Split Time

24.78

	H1	H2	H3	H4	H5	H6	H7	H8	Finish
Distances in Meters	45	80	115	150	185	220	255	290	300
Step Pattern	R	L	L	L	L	L	L	L	Run In
Touchdown Times	6.38	3.98	4.06	4.23	4.40	4.43	4.56	4.60	1.21
Cumulative Time		10.36	14.42	18.65	23.05	27.48	32.04	36.64	37.85
Steps Taken	22	14	15	15	15	15	15	15	4
Hurdle Velocity	7.05	8.79	8.62	8.27	7.95	7.90	7.68	7.61	8.26

Average Velocity H1-8

7.99

Race Distribution

% of Time

Time Difference

Difference %

1st (150)

18.65

49.27

0.55

1.45

2nd (150)

19.2

50.73

If more then 5% *improve* second half of race

Difference btw best & worst hurdle split

0.62

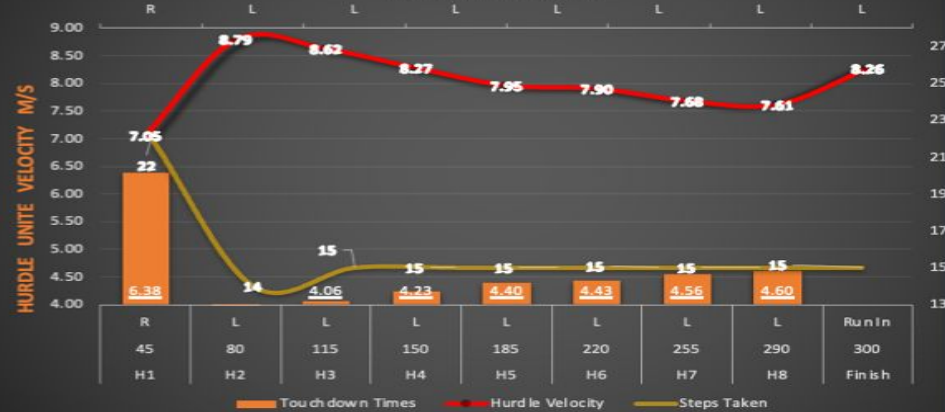
Elite
> 1.25

Av
> 2.0

Poor
< 2.50

300H Analysis

LEAD LEG AT EACH HURDLE



Select Athlete's Name

Select Date of Race

Bryson Crippen

4/30/22

Ref

Analyze
Performances to
adjust training

Seasonal Game Plan to Establish the Long Hurdle Race Strategy

GPP

Areas of Focus

- Acceleration & Speed Development
- Intensive Tempo Work
- Low Amplitude Plyometrics
- Circuit Training to improve aerobic fitness, coordination,
- Off leg hurdling emphasis (2 step Drill)
- Off leg hurdle drills
- Steering work at random spacings

SPP

Areas of Focus:

- Speed Development & Max Velocity
- 1x a week Speed Endurance
- Use intensive tempo work over hurdles to establish stride rhythm.
- Hurdle Step/Rhythm (Reduced Spacings 7-12 Steps)
- Higher Amplitude Plyometrics



Thank you

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