

# **Hurdle Philosophy, Drills, Training**



**Brandon Harrington- GINW**  
**bharrington@ginorthwest.org**

## Short Intro about Background

**Dave Gee** ( NW/ Neb Christian)

- Relatable cues, Short, Tight Hurdle work, Competition
- Running Technician 1st

**Willie Hoffman** (CSC)

- Speed Work

**Justin Wickard** (CSC)

- Overload Training
- Varied Workouts Distance, Heights, Zones

**Matthew Sparks** (CSC)

- Technician
- Short and Sweet, Tight and Fast

# Philosophy

Stride length and stride frequency are the parameters for faster sprinting. What about hurdling? In hurdling, stride frequency between hurdles is the limiting factor. A 15 sec hurdler covers the race distance using the same number of strides as a 13 sec hurdler; they both take 50 strides over the race distance (8 strides at the start + 3 strides between hurdles x 9 hurdle spacing + 10 hurdle clearance strides + 5 steps between the last hurdle and the finish line). Therefore, the ability to accelerate to the first hurdle, efficient hurdle clearance mechanics, stride frequency/efficiency between hurdles, re-accelerate after hurdle clearance, and the aggressive acceleration from the last hurdle to the finish line are the elements that need to be developed in any high hurdling training plan

**By Coach Karim Abdel Wahab-Colorado State University's sprints, hurdles and relays coach**

**EVERYONE is taking the same amount of steps, so let's find the fastest way for each athlete to do that...**

# Philosophy

## NW Hurdler FOCUS

- Need to be exceptional running technicians
- Technique-body positioning-speed
- Develop technique with both legs as lead and trail legs
- Focus on Trail leg (Unnatural, doing the most, power leg)
- Drills everyday to develop muscle memory/hip flexibility/Strength
- Create workouts over hurdles that are “Race” like
- Emphasize 1-2 things each day
- I Always tighten hurdles or lower hurdles(Race like and turnover in between)
- Progress through workout starting shorter and working to distance (Beginning most important)
- I do not use High Hurdles as conditioning
- Try to be Short, Sweet, Full Speed over hurdles (100/110)
- All hurdlers are treated as High Hurdlers
- Try and Send athletes out of practice into a race confident and feeling “fast”

# WAYS I HAVE CHANGED MY COACHING

## Crawford High/Limon Colorado

- 2-4 Hurdlers
- Very Specific in workouts to each athlete, could try more advanced workouts
- Maybe too much Information?

## NW High

- 10-25 Hurdlers Boys and Girls
- General but Group kids according to ability (JV/Varsity)
- Set up workouts for boys and girls with Varying depth and difficulty
- 1-2 Points of Emphasis

# General Practice Outlook

## Meeting

General Active warm up (Occasionally will kick hudlers out of meeting early to warm up as small group so they can start drills while Active Warm up is going on)

## Hurdle Warm up

-Hip mobility 3 sets x 5 hurdles

-1-3 hurdle length drills 3x5 hurdles

-Depending on day either 5 step drills or quick step drills

- If we 100/110 hurdle usually do 5 step drills. If its off day or 300 we will quick step or partner drill

## Workout

## Drills [NW Hurdle Drills Youtube link](#)

**Wall drills:** Diving Leads, Trails, Holding Trails

**Single hurdle drills:** Hanging leads, Partner Pull-overs

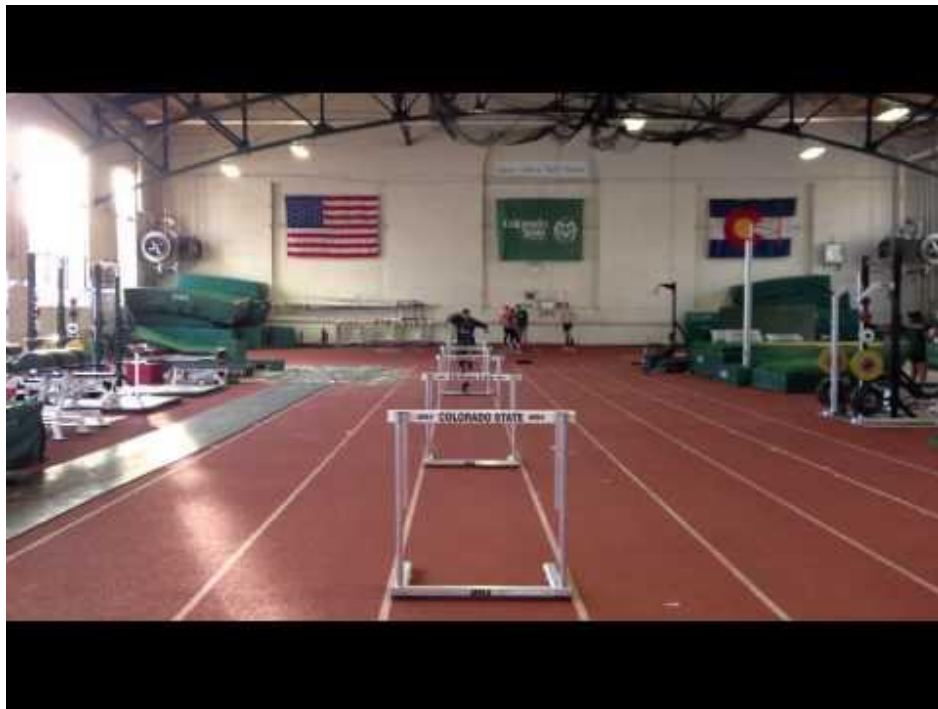
**Close Hurdle Drills (Hip Mobility):** Hands on Step throughs, reaching over each, Lead overs each, up 2 back 1, over unders

**Spread 3 steps(hurdle lengths) or 1 Hurdle Length:** Leads each, trail each, over the top, 1 step or 3 step quick (Leads, Trails, Tops)

**At Distance Drills:** 5 step: leads, trails, over tops

# 1 Step and 3 Step drills for more advanced hurdlers

[Coach Karim Abdel Wahab Youtube Channel](#)





# COACHING POINTS/FIX ITS

**Lead Leg:** (Spend very little time talking about or specifically working on lead-leg) Pendulum  
I Spend 90% of any lead-leg discussion talking about body positioning and knee drive  
Some keys I talk about:

- Aggressive body lean (Attacking the hurdle like you're jumping through a window)
- Lead with the knee, chest and lead arm
- Drive the knee not the foot
- Maintain Shoulders over the knee
- Try and maintain shoulder, hip, foot alignment on take off and again at landing

## Common Errors

- Leading with the foot or swinging
- Collapse off the hurdle
  - Not maintaining toe dorsiflexion and active lead leg
  - Not Maintaining shoulders over knee throughout hurdle

## Fix Its

Drills: Focus on knee drive and forward lean, don't allow crunch at the hips  
Using takeoff and touchdown lines



# COACHING POINTS/FIX ITS

## Lead arm: (Lead over, drive down)

- Elbow Out, Turn hand out(so eyes can see back of hand)
- Arm should lead over the hurdle
- As hips are clearing hurdle the elbow moves slightly back and lower arm back down toward hip



## Common Errors

- Watch for athletes swinging or wanting to jerk elbow back

## Fix its

Using a piece of tape or pre-wrap on the lead wrist.

Teaching athletes the door open reference

Focus are arms through drills



# COACHING POINTS/FIX ITS

**Trail Leg:** (Primary objective is developing EFFICIENT Trail leg)

Some keys I talk about:

- Keeping the trail leg 90\*or tighter almost seeming tucked through hurdle clearance
- Toe Dorsiflexed
- Heel should stay in line with knee
- Trail leg traveling flat to slightly upward as hurdle clearance occurs then back to a position of sprinting off the back of the hurdle

## **Common Errors**

- Leg whipping or becoming untucked
- The trail leg slamming in front

## **Fix its**

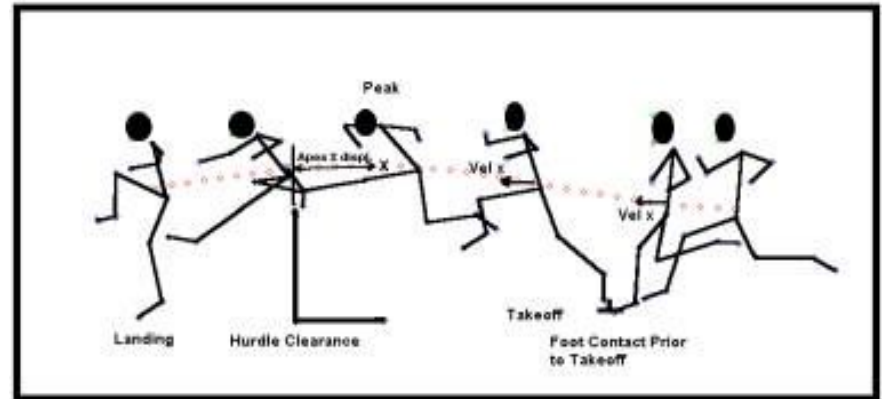
- Using tape or dot to make touchdown off hurdle
- Working on trail leg down the side of hurdle-using the lane line as reference point of trail leg contact
- Moving hurdle placement so that lane line is reference point of tail leg contact
- Partner Pullovers
- Single hurdle drills (Partner Coach)
- Trail drills



# COACHING POINTS/FIX ITS

## Take off/ First Hurdle:

- Proper take off distance and body position is essential for being efficient throughout the race
- 1st hurdle is most important for setting up your race
- Blocks on average ( blocks 1' trail leg 2' lead leg 3') to start
- The Average distance of take off into the first hurdle for men is about 7-8'
- The Average distance of take off into the first hurdle for women is about 5-6'
- The hurdler must be upright by the 5 stride
- A slight cut step should be performed to allow the take off(Trail leg) foot to be inline with the hips on take off
- the Apex of your flight should be in-front of the hurdle allowing max velocity through flight
- Then that trail leg should accelerate underneath the body to maintain acceleration.



## Take off distance and landing 100/110 Hurdles by Marc Mangiacotti

Men's Height	Take Off	Landing	Women's Height	Take Off	Landing
5' 3"	7' 5"-7' 9"	2' 9"-3' 3"	5' 3"	6' 5"-6' 9"	2' 9"-3' 3"
5' 5"	7' 4"-7' 8"	3' 0"-3' 3"	5' 5"	6' 4"-6' 8"	3' 0"-3' 6"
5' 7"	7' 3"-7' 7"	3' 3"-3' 9"	5' 7"	6' 3"-6' 7"	3' 3"-3' 9"
5' 9"	7' 2"-7' 6"	3' 6"-4' 3"	5' 9"	6' 2"-6' 6"	3' 6"-4' 3"
5' 11"	7' 1"-7' 5"	3' 9"-4' 9"	5' 11"	6' 0"-6' 5"	3' 9"-4' 5"
6' 1"	7' 0"-7' 4"	4' 0"-4' 10"	6' 1"	5' 10"-6' 3"	4' 0"-4' 6"
6' 3"	6' 11"-7' 3"	4' 3"-5' 0"			
6' 5"	6' 10"-7' 2"	4' 6"-5' 3"			

# Developing HS Hurdler

## Developing Hurdler

**New Hurdler:** 5 Stepper developing technique- I leave hurdles at distance, and shorten height 1 height less than race height. Try and force them to hurdle with both legs as lead leg.

**Transitioning to 4 Stepping:** I start to tighten the hurdles. Most times an athlete will naturally get too close to 5 step at race distance, Shortening the hurdle 1-2 steps at most for most athletes ready to 4 step. I usually start to work them at race height for the height if they are tightened, and if they are becoming consistent 4 stepper, start to do workouts at distance with 1 height less than race.

**Transitioning to 3 Steps:** I will start 1 yard tight maybe a little more, and down at least 1 height from race height. Throughout the season, progress to practicing 1-2' short and at race height.

# High School Season Training Progression

## **First few weeks (Usually take all hurdlers first 2 weeks)**

- Drills Daily/ Technique
- First Year Hurlers don't hurdle till week 2-3
- Everything Standing Start
- Lots of 5 step work x5-7 hurdles
- Progress from 4x1 4x2 3x3 2x4 all Short in height Distance dependent on ability
- Focus on touchdown of trail leg (trying to repeat the action of striking under the hips)
- General conditioning throughout preseason (Condition with or similar too sprint group)
- 300 conditioning closer to the 1st meet (usually 4x5 touchdowns/ 3x5 finishes)

# High School Season Training Progression

## **1st-4th meet (Start To Split JV/Varsity Groups Everyone 300 Hurdles Together)**

- Will do 300 workouts once a week and 100 hurdle twice a week drill every day
- Begin to work on start over 1-5 (same type of progression as before)
- Furthest I take a workout is 5 hurdles (always tightened/Shortened)
- Starts from blocks(usually once a week, then premeet)
- Usually do 1-2 workouts racing someone similar, or sprint start vs hurdle start
- Usually 100/110 hurdle 5th hurdle touchdown time During preparation for first 2 meets
- 300 workouts
  - 2x1 blocks, 2x3, 1x5 touchdown time
  - 4x last 5
  - 2x5 whistle touchdown times



# High School Season Training Progression

## **5-9th meet ( Usually Consistent JV/Varsity Schedule)**

- Will do 300 workouts once a week and 100 hurdle twice a week drill every day
- Middle of season usually will still go around 5-7 hurdles max (maybe only over 7 once)
- 3 step hurdlers- Work the last 5 over this time( set up mini hurdles first 5 and race distance and low last 5)
- More starts from blocks coming out with partners (racing over 3-5 maybe 7)
- 300 Workouts
  - 3x2-5 Whistle Touchdowns (Usually do the 1st set with spikes)
  - 2x1 2x3 1x4- Blocks racing 2 guys and 2 girls
  - 2x1st 3 hurdles 2x 2nd 3 hurdles 2x last 3 hurdles

# High School Season Training Regiment

## **Districts/State (Short/Fast/Confident)**

- Short quick workouts( Example: 3x3 standing start then 2x1, 2x2, 2x5 starts Full Recovery)
- Everything still in a step or short (Trying to replicate race speed)
- 1st hurdle at race height
- Whatever I feel I need to do to make the athlete most confident going into the races

# 100/110 Workouts

## 100/110 Training

- Anytime I use blocks 1st hurdle at race height
- Anytime I don't (Standing Start) at least 1 height short and at least 1' short
  - 1st hurdle Race Distance
  - 2nd Hurdle 1' -3' short
  - 3rd hurdle 2'-6' short ect..

## Workouts:

- **Last 5 hurdles-** Set up mini hurdles for first 5 hurdles then race distance and low hurdles last 4 or 5
  - Force hurdler to take over accelerated speed into last 4-5 hurdles (Forces shuffle, and attacking speed through the end of race)
- **Speed Zone** -Hurdle 1st 3 hurdles short, take out 4th, leave 5-6 closer to race distance
  - Force hurdler take an over accelerated speed into 5-6 hurdle (Try to force advanced hurdlers to develop a shuffle cadence in-between)

# 100/110 Touchdown Times

Men's 110m Hurdle Touchdown Times										
H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Projected
2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	10.5	11.6	13.0
2.5	3.5	4.4	5.4	6.4	7.4	8.5	9.6	10.7	11.8	13.2
2.5	3.6	4.6	5.6	6.6	7.7	8.8	9.9	11.0	12.2	13.6
2.5	3.6	4.6	5.7	6.8	7.9	9.0	10.1	11.2	12.4	14.0
2.6	3.6	4.7	5.8	6.9	8.1	9.3	10.5	11.7	12.9	14.4
2.6	3.7	4.7	5.8	7.0	8.2	9.4	10.6	11.8	13.0	14.6
2.6	3.7	4.9	6.0	7.2	8.3	9.5	10.7	12.0	13.2	15.0
2.7	3.8	5.0	6.2	7.4	8.6	9.8	11.0	12.3	13.6	15.5
2.8	3.9	5.1	6.4	7.6	8.8	10.1	11.3	12.6	14.0	16.0
Women's 100m Hurdle Touchdown Times										
H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	Projected
2.3	3.3	4.2	5.1	6.0	7.0	8.0	9.0	10.0	11.1	12.0
2.3	3.3	4.2	5.1	6.1	7.1	8.1	9.1	10.2	11.3	12.2
2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.5	10.6	11.7	12.8
2.4	3.4	4.4	5.5	6.6	7.7	8.8	9.9	11.0	12.1	13.2
2.5	3.5	4.6	5.7	6.8	7.9	9.1	10.2	11.4	12.6	13.8
2.5	3.5	4.6	5.7	6.9	8.1	9.3	10.4	11.6	12.8	14.0
2.5	3.6	4.7	5.9	7.1	8.3	9.5	10.7	11.9	13.1	14.3
2.6	3.8	4.9	6.0	7.2	8.4	9.6	10.9	12.2	13.5	14.8
2.8	3.8	4.9	6.1	7.3	8.5	9.7	11.0	12.3	13.6	15.0
Courtesy of SpeedEndurance.com										

# 300 Workouts

## 300 Training

- Only once a Week for conditioning purposes
- Use Target and touchdown times for workouts
- Work in pairs or guy/girl combos (Create competition)
- Usually workouts in Flats and 1 hurdle height lower
- Focus on start(many times athletes switch blocks from 100/110 start)
- Only times we wear spikes are for starts and touchdown times
- Teach kids to break race up in head: accelerate into and out of each hurdle or counting strides
- Emphasis attacking the first 3 hurdles
- If stuttering occurs teach kids a sense of urgency and attack on the next hurdle to try and get back into rhythm

## Workouts:

5 hurdle finishes- Over first 5 hurdles and finish through 300 mark

Phase workout- 2-3x first 3-4, 2-3x second 3-4, 2-3x last 3-4

Timed 200's- Touchdown times over 5 or through 200

Touchdowns over 3

Whistle Touchdown times

200 finishes- Start at the 3rd hurdle and go through finish

# 300 Touchdown Times

Touchdown Times 300m Hurdles

USA

Jan Lips

	40.0	40.8	41.6	42.4	43.1	44.0	44.8	45.6	46.4	47.2										
h1	6.5	6.6	6.7	6.8	6.8	6.9	7.0	7.1	7.2	7.3										
h2	4.2	10.7	4.3	10.9	4.4	11.1	4.5	11.3	4.6	11.4	4.7	11.6	4.8	11.8	4.9	12.0	5.0	12.2	5.1	12.4
h3	4.3	15.0	4.4	15.3	4.5	15.6	4.6	15.9	4.7	16.1	4.8	16.4	4.9	16.7	5.0	17.0	5.1	17.3	5.2	17.6
h4	4.4	19.4	4.5	19.8	4.6	20.2	4.7	20.6	4.8	20.9	4.9	21.3	5.0	21.7	5.1	22.1	5.2	22.5	5.3	22.9
h5	4.5	23.9	4.6	24.4	4.7	24.9	4.8	25.4	4.9	25.8	5.0	26.3	5.1	26.8	5.2	27.3	5.3	27.8	5.4	28.3
200		26.5		27.0		27.6		28.1		28.6		29.2		29.7		30.3		30.8		31.4
h6	4.7	28.6	4.8	29.2	4.9	29.8	5.0	30.4	5.1	30.9	5.2	31.5	5.3	32.1	5.4	32.7	5.5	33.3	5.6	33.9
h7	4.9	33.5	5.0	34.2	5.1	34.9	5.2	35.6	5.3	36.2	5.4	36.9	5.5	37.6	5.6	38.3	5.7	39.0	5.8	39.7
h8	5.2	38.7	5.3	39.5	5.4	40.3	5.5	41.1	5.6	41.8	5.7	42.6	5.8	43.4	5.9	44.2	6.0	45.0	6.1	45.8
run in	1.3	40.0	1.3	40.8	1.3	41.6	1.3	42.4	1.3	43.1	1.4	44.0	1.4	44.8	1.4	45.6	1.4	46.4	1.4	47.2

	48.1	48.9	49.7	50.5	51.2	52.1	52.9	53.7	54.5									
h1	7.4	7.5	7.6	7.7	7.7	7.8	7.9	8.0	8.1									
h2	5.2	12.6	5.3	12.8	5.4	13.0	5.5	13.2	5.6	13.3	5.7	13.5	5.8	13.7	5.9	13.9	6.0	14.1
h3	5.3	17.9	5.4	18.2	5.5	18.5	5.6	18.8	5.7	19.0	5.8	19.3	5.9	19.6	6.0	19.9	6.1	20.2
h4	5.4	23.3	5.5	23.7	5.6	24.1	5.7	24.5	5.8	24.8	5.9	25.2	6.0	25.6	6.1	26.0	6.2	26.4
h5	5.5	28.8	5.6	29.3	5.7	29.8	5.8	30.3	5.9	30.7	6.0	31.2	6.1	31.7	6.2	32.2	6.3	32.7
200		31.9		32.4		33.0		33.5		34.1		34.6		35.2		35.7		36.2
h6	5.7	34.5	5.8	35.1	5.9	35.7	6.0	36.3	6.1	36.8	6.2	37.4	6.3	38.0	6.4	38.6	6.5	39.2
h7	5.9	40.4	6.0	41.1	6.1	41.8	6.2	42.5	6.3	43.1	6.4	43.8	6.5	44.5	6.6	45.2	6.7	45.9
h8	6.2	46.6	6.3	47.4	6.4	48.2	6.5	49.0	6.6	49.7	6.7	50.5	6.8	51.3	6.9	52.1	7.0	52.9
run in	1.5	48.1	1.5	48.9	1.5	49.7	1.5	50.5	1.5	51.2	1.6	52.1	1.6	52.9	1.6	53.7	1.6	54.5

Questions?

