

# Coaching the 800m

Unique Event, Unique Athletes,  
Unique Challenges

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# Introduction

- The “Art” of Coaching → Adapting what we all know to fit our environment
- Success at Sacramento State
  - Developed a culture of middle distance running
  - Embraced “The Orphan Event”
- What are the Challenges?



# Introduction

- **Success in the MD events can be cultivated by taking a systematic approach**

## The Four Key Variables

### Unique Athletes

1. Identify the Right Athletes for 800m
2. Create the Right Environment for Success

### Unique Event

3. Train Athlete for Uniqueness of 800m
4. Understand/Master the Tactics of the 800m

# Identifying Athletes for the 800m

- Who is an 800m Runner?

More than just “speedy distance runners”  
→ 800m runners have a unique skill set

# Identifying the Right Athlete



- One Up/One Down Rule
  - 400m/1500m Ability
  - Red Flags
    - 200m > 1500m
    - 3k/5k > 400m
  - IAAF Scoring Tables/Purdy Points

# Case Study



- '96 HS 1:46.45
- 46.15; 21.35
- 1:47.67
- **400m Runner**



- '96 HS 1:52
- 46.90; 3:44
- 1:45.81
- 2xNCAA Champ
- **800m Runner**



- '96 HS 1:49
- 3:35; 14:35
- 1:46.20
- **1500m Runner**

- Deficiencies – Reflection of Training or Ability?
- Coach's job → put athlete in right event and keep the scale balanced

# Creating the Right Environment

- Developing a culture of MDR
- Embracing “The Orphan Event”

# Creating the Right Environment

- Managing “The Force Field” for athlete



Coach can help manage all of the forces and by doing so can be a **MAJOR** positive external force that gets athlete moving in the right direction

# Creating the Right Environment

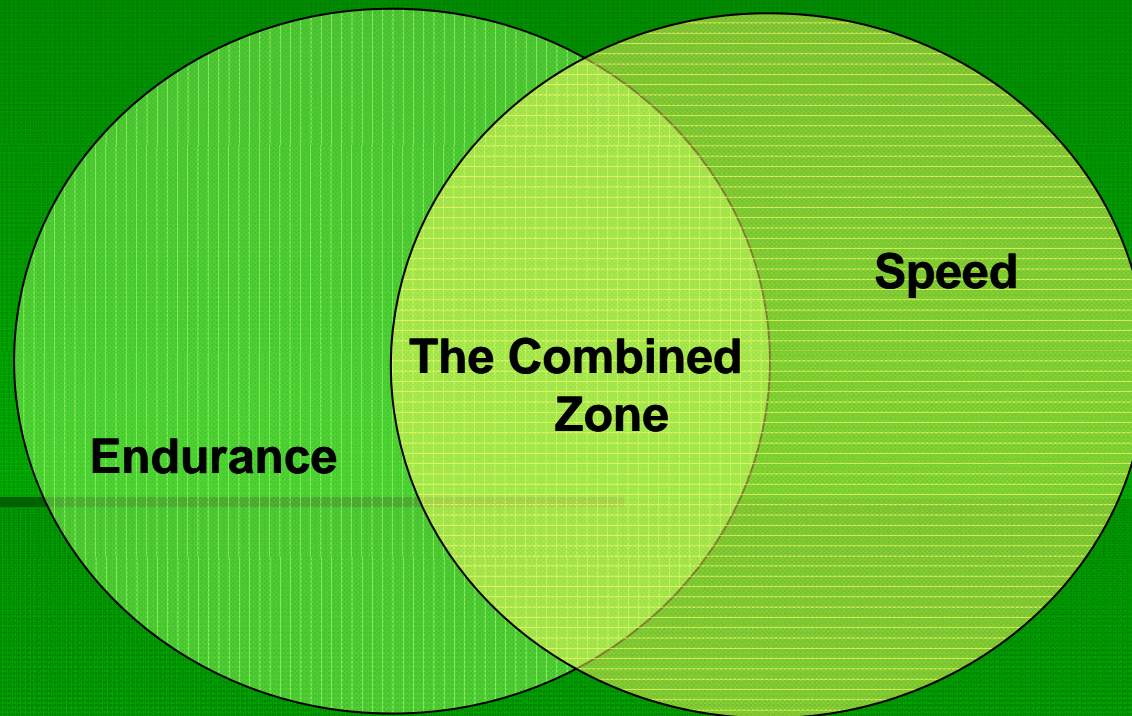
## How does this relate specifically to the 800m/MDR?

- Create/Foster a culture of MDR in your program → Make MD athletes comfortable and confident in their environment
  - Recruiting
  - MDR Group Identity
  - Separate, but don't segregate (Fall is key!)
  - Embrace "The Orphan Event"

# Training the Athlete for the Uniqueness of the 800m

A balance and diversified approach

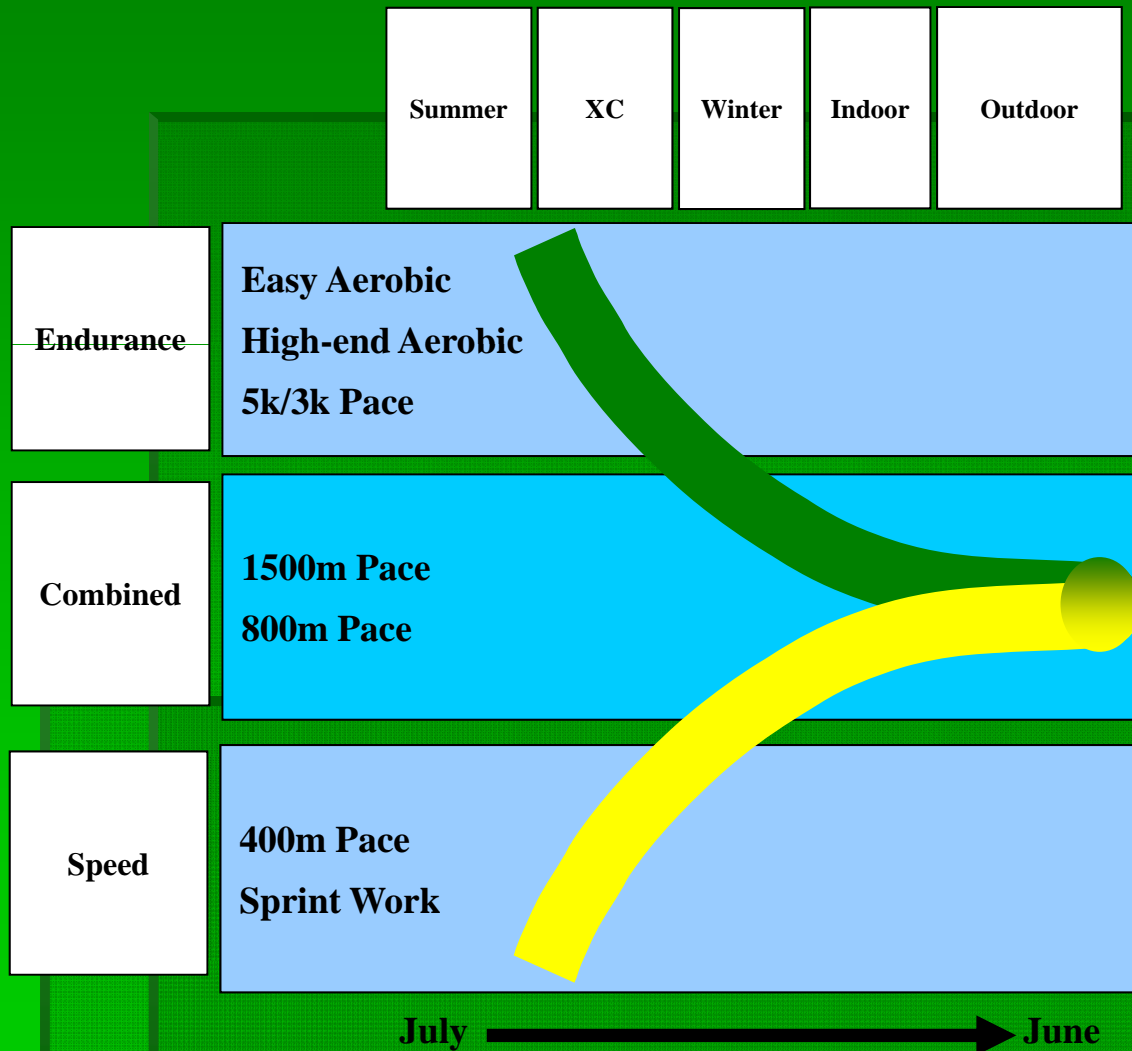
# 3 Training Zones to be Systematically Developed



# Planning the Year

- **Summer** (Recovery/Transition → Base)
- **XC** (Aerobic Development)
- **Winter** (Recovery/Transition → General Track Prep)
- **Indoor** (General Track Prep → Specific Track Prep)
- **Outdoor** (Specific Track Prep → Race Sharpening)

# A Balanced and Diversified Approach



## Training Principles

- 1) We address **all pace zones in every phase of training** (at least once every 14-21 days).
- 2) In terms of emphasis, we work from **peripherals to specific**.
- 3) We try to **resist urge to get too specific too soon**.
  - a) Athletes are naturally strong and comfortable here and will push for it
  - b) System can get overloaded → burnout!
  - c) Races are workouts

# Training the Athlete (cont)

## Endurance Training

### Easy Aerobic

- Easy Runs, Long Runs
- Soft surfaces

### High-end Aerobic

- Steady Runs, Progression Runs, Tempo Runs, Tempo Intervals, Long Hill Reps, 10k or XC pace Intervals, XC Races
- Continuous or short rest (3:1 or 4:1 work-rest ratio)
- Almost always off-track and on soft surfaces
- Must be creative here, as this is most difficult type of training for MDR

### 5k/3k Pace

- 600-1000m Intervals (v=4-7k)
- Equal rest (or 3:2 work-rest ratio)
- Grass, Track, or Trail
- Hill sprints

## Combined Zone Training

### 1500m Pace

- 300-600m Intervals (v=2-4k)
- 2:3 work-rest ratio
- Almost always on track
- 300m hill reps
- 1500m races

### 800m Pace

(is there such a thing?)

- 100-500m Intervals (v=1-2k)
- 1:2 work-rest ratio
- Broken distances with shorter rest for lactate tolerance
- 800m races

## Speed Training

### 400m Pace

- 100-250m Reps (v=600-900m)
- Full recovery
- Broken distances with shorter recovery for lactate tolerance
- 400m races, 4x400m legs
- Hill reps

### Sprint Work

- 40-100m reps
- Full recovery or in/out
- Track or turf
- Hill sprints

### Strength Training

- Stability, Agility, Mobility
- Very general in summer/fall
- MD-specific in winter/spring

### Neuromuscular/Biomechanical

- Drills
- Focus on quick feet; knees up; minimize back-side

# Training the Athlete (cont)

## Summer

- Aerobic
  - Long Runs
  - Progression Runs; Fartlek
- Sprint Work
  - Short hill reps, strides
- Strength Training/Neural Muscular Exercises

## Cross Country

- Mileage Peak
- High-end Aerobic running
- Interval/Fartlek Training
- Speed/Sprint work
  - Hill sprints
  - Grass 200s/150s
- General Strength Training

## Winter

- Similar to Fall/XC
- Convert some of the H-E Aerobic stuff to track work
  - 3k/5k/10k pace work on track
- Speed/Sprint work
  - Hills!!!!
- Begin MD-Specific Strength Training

Breakthroughs in the spring are often traced back to breakthroughs in the fall!

# Training the Athlete (cont)

- Indoor Track Season
  - Most critical training phase (all training pieces coming together)
  - Maintain Fall/Winter Volume
  - Emphasis on High-End Aerobic Running and Intense Speed/Sprint work
  - Begin developing “combined zone” with indoor racing and moderate 800m/1500m workouts
  - Strength training in full gear

# Training the Athlete (cont)

## Indoor Track Season (Sample 21-day cycle)

Lea Wallace (Jan 17-Feb 6)

### Jan 17-23

**Mon:** Sprint Work – “Gauntlet” Drill  
on turf

3x(40-60-40)

PM – Easy Endurance Run

**Tues:** Easy Endurance Run  
(weights)

**Wed:** Speed work – 6x150m  
PM – Easy run

**Thurs:** Easy Recovery run  
(weights)

**Fri:** Pre-Meet Run + Drills/Strides

**Sat: Boise State**  
400m – 56.5; 4x400m (55.x)

**Sun:** Easy Long Run  
70 minutes

### Jan 24-30

**Mon:** H-E Aerobic – 9 Mile Progression  
Run  
(weights)

**Tues:** 1500m pace – 8x400m @ 72  
(90sec)  
PM – Easy run

**Wed:** Easy Recovery run  
(weights)

**Thurs:** Pre-meet Run + Drills/Strides

**Fri: UW Invitational**  
DMR – 4:45 (1600m)

**Sat: UW Invitational**  
800m – 2:05.4

**Sun:** Rest

### Jan 31-Feb 6

**Mon:** Easy Endurance Run

**Tues:** H/E Aerobic  
8.5 mile Progression Run  
(weights)

**Wed:** H/E Aerobic  
6x1000m @ 3:25 (60sec)  
PM – Easy run

**Thurs:** Easy Recovery run  
(weights)

**Fri:** Speed Work -- 4x250m Hill  
PM – Easy Run

**Sat:** Long Run  
75 minutes

**Sun:** Easy Recovery Run

# Training the Athlete (cont)

- Outdoor Track Season
  - Volume drops some
    - More a casualty of competition than a training adjustment
    - Must monitor to avoid “the slow leak”
  - Emphasis on:
    - 3k/5k (V02Mx) session
    - Combined Zone sessions
    - Speed Work/Lactate Tolerance sessions
- Racing!!!
- Continue to tap H-E Aerobic Zone and Sprint work
- Strength training peaks → sharpening

# Training the Athlete (cont)

## Outdoor Track Season (Sample 21-day cycle)

Lea Wallace (April 18-May 8)

### April 18-24

(ran 2:03.67 @ Mt. SAC on April 16)

**Mon:** Recovery Run

**Tues:** Easy Endurance Run

**Wed:** 3K Pace – 5x800m @ 2:32ave (2:30rec)

PM – Easy run

**Thurs:** Easy Recovery run

**Fri:** 1500m Pace – 3x(4x300m) @ 49ave (1:00/5:00rec)

PM – Easy run

**Sat:** Easy Recovery Run

**Sun:** H/E Aerobic -- Tempo Work

3xMile (1:00rec)

PM – Easy run

### April 25-May 1

**Mon:** Recovery Run

**Tues:** H/E Aerobic – 7mi Progression Run

**Wed:** 400m work – broken 400s  
3x250/150 @ 33/21

PM – Easy run

**Thurs:** Recovery run

**Fri:** Light rhythm session  
Straights and Turns

**Sat:** Pre-meet run + Drills/Strides

**Sun:** Payton Jordan Invitational  
1500m -- 4:11.73

### May 2-8

**Mon:** Recovery Run

**Tues:** Easy Long Run  
80 minutes

**Wed:** Sprint work on turf  
3x60-40-60

PM – Easy Run

**Thurs:** Easy Recovery run

**Fri:** Easy Recovery Run

**Sat:** 800m Target workout  
2x(2x400m) @ 57-59

**Sun:** Rest

# Understanding/Mastering the Tactics of the 800m

# The Most Unique Event?

## Tactically, 800m is most unique event on the track

- Shortest and fastest event that does not finish in lanes
- Only race to start in lanes but not finish in lanes
- All other non-lane races follow similar tactics 1500m-10k (even pacing/accelerate to finish)
- 800m is raced like a long sprint with constant deceleration – but done so in traffic unlike 400m



**“Food for thought”:** Could the event be improved by using either the 2-turn or 3-turn stagger?

# To "Get Out" or Not?

- Physiological research says:  
GET OUT!
  - <http://www.ncbi.nlm.nih.gov/pubmed/19727014>
  - <http://www.ncbi.nlm.nih.gov/pubmed/20689463>
- Beyond the physiological data, getting out fast reduces rhythm breaks as you run in less traffic and from a purely spatial perspective makes sense
  - Logic: If you have 8 runners of equal ability and they all fight for same space, the athlete that ends up in the #8 spot is challenged with the task of overtaking 7 other runners of equal ability and the space that they fill

# Championship Race Data

- 2001-2011 NCAA and US Champs 800m Finals:
  - Ave finishing position of 400m leader:
    - Men – 3.875
    - Women – 1.75
  - Ave finishing position of 600m leader:
    - Men -- 3.833
    - Women – 1.33
  - Ave position of race winner at 400m:
    - Men – 5.0
    - Women – 1.75
  - Ave position of race winner at 600m:
    - Men – 4.166
    - Women – 1.50
  - Interesting notes
    - the 400m and 600m leaders are almost always the same
    - **Very few men and no women won from beyond 5<sup>th</sup> at 600m**



**Race data indicates that front-running on the men's side does not work, but it does work on the women's side.**

# The Coaching Nerd's Playlist

- 2 hours of the greatest 800m running the internet has to offer!
- Caution: watching this may be counterproductive to one's social life



<http://www.youtube.com/playlist?list=PL4F9D8D4B21EC99E1&feature=viewall>

# The Cost of Running Wide

## the cost of running wide

# feet out  
↓

# of turns run  
→

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		2.8	5.6	8.4	11.2	14	16.8	19.6	22.4	25.2	28	30.8	33.6	36.4	39.2	42	44.8
2		5.6	11.2	16.8	22.4	28	33.6	39.2	44.8	50.4	56	61.6	67.2	72.8	78.4	84	89.6
3		8.4	16.8	25.2	33.6	42	50.4	58.8	67.2	75.6	84	92.4	100.8	109.2	117.6	126	134.4
4		11.2	22.4	33.6	44.8	56	67.2	78.4	89.6	100.8	112	123.2	134.4	145.6	156.8	168	179.2

Courtesy: Walt Lange, Jesuit High School

# Developing Your Approach

- Considerations
  - Men vs. Women
  - Winning vs. Making a team
  - Championship running vs. time trialing
  - Strength/parity of field
  - Athlete's individual economical threshold (+4 second 400m rule)

## Coaching Points

1. Teach the start and the break
  - \* Run intervals in practice out of lanes
2. Teach athletes to “fill up” the lane (especially indoors!)
  - \* Run 150s/200s with a partner in practice alternating position
3. Race position is more important than pace; teach the subtleties of gaining position
  - \* Going out hard vs. establishing good position
  - \* Making a move vs. “sliding up”

# Developing Your Approach

- When it's all said and done, the runner has to have a strategy that they are confident in based on:
  - Ability
  - Preparation
  - Comfort

The 800m is a unique event with a unique and diverse group of athletes, there is no “right” way to run the race....however:

**Successful 800m runners know their race and run their race**

You have 1 bullet in your gun, you have to decide how and when you are going to use it and have confidence/faith that it will get the job done!

# Final Takeaways

- Success in the 800m requires a systematic process of development:
  - 1) Put the right athletes in the event
  - 2) Build an environment/culture of middle distance running
  - 3) Maintain a balanced training approach that targets the continuous development of the endurance, speed, and combined zones
  - 4) Think critically about the tactics of the event and work with athletes to hone their competitive approach
- Questions?