From empty canvas to masterpiece: 1600m training design





Influences













Why the 1600m?

- ♦ 1600m PR gives most accurate vVO2
- ♦ It is what I use to calculate paces for all workouts
- ♦ 1600m is a 'gateway' event



1600m% sheet

| | 1600 PR | | 85% | 88% | 90% | 93% | 95% |
|------------|---------|------|------|------|------|------|------|
| Baker | Daniel | 4:21 | 5:07 | 4:56 | 4:50 | 4:40 | 4:34 |
| Childree | Michael | 4:31 | 5:18 | 5:07 | 5:01 | 4:51 | 4:45 |
| Hoffpauir | Gavin | 4:14 | 4:58 | 4:48 | 4:42 | 4:33 | 4:27 |
| Hollie | Trey | 4:51 | 5:42 | 5:30 | 5:23 | 5:12 | 5:06 |
| Jones | Matthew | 4:31 | 5:18 | 5:07 | 5:01 | 4:51 | 4:45 |
| May | Lee | 5:04 | 5:57 | 5:45 | 5:37 | 5:26 | 5:20 |
| Mercado | Ethan | 4:22 | 5:08 | 4:57 | 4:51 | 4:41 | 4:35 |
| Papalexiou | George | 4:32 | 5:20 | 5:09 | 5:02 | 4:52 | 4:46 |
| Poon | Clark | 4:45 | 5:35 | 5:23 | 5:16 | 5:06 | 5:00 |
| Raiford | Ryan | 4:33 | 5:21 | 5:10 | 5:03 | 4:53 | 4:47 |
| Samways | Cameron | 4:29 | 5:16 | 5:05 | 4:58 | 4:49 | 4:43 |
| Scott | Brendan | 4:41 | 5:30 | 5:19 | 5:12 | 5:02 | 4:55 |
| Sudharsan | Suraj | 4:53 | 5:44 | 5:32 | 5:25 | 5:15 | 5:08 |
| Tugano | Joshua | 4:34 | 5:22 | 5:11 | 5:04 | 4:54 | 4:48 |
| West | Calder | 4:32 | 5:20 | 5:09 | 5:02 | 4:52 | 4:46 |
| Wright | Noah | 4:30 | 5:17 | 5:06 | 5:00 | 4:50 | 4:44 |

TWHS 1600m 2013-2017

- 2013 4:14, 4:16
- *2014 4:15
- \$2015* − 4:15, 4:15, 4:16, 4:17, 4:18, 4:18, 4:20, 4:21
- 2016 4:15, 4:15, 4:15, 4:17
- 2017 4:13, 4:14, 4:14

1600m design requirements

♦ Energy contributions for middle/long distance races

| � | Event Anaerobic A-L | actic (ATP-CP) % | Anaerobic Lactic (Glycolytic)% | Aerobic % |
|----------|---------------------|------------------|--------------------------------|-----------|
| � | 800 meters | 10 | 30 | 60 |
| ⋄ | 1500 meters | 8 | 20 | 72 |
| ⋄ | 3,000 meters | 5 | 15 | 80 |

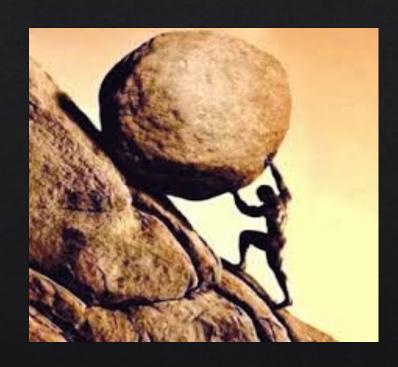
Training set up

- ♦ Timeframe: 20-22 weeks
- ♦ 5 x 4 week cycles:
- ♦ 3 'on', 1 'off'
- ♦ 4 phases:
- ♦ Base
- Pre-Competitive
- Competitive
- Championship



Base phase details

- ♦ Aerobic volume is high (75% runs 5 of 12 runs/week)
- ♦ Aerobic Threshold work is high (2 5 miles)
- Strength work is maintained
- Introduction of running economy work (speed work)



Pre-competitive phase

- Aerobic volume still high
- ♦ Introduce slow intervals: 8x400, 12x200 at 3200m or 1600m t.p.
- Progress towards proper interval training
- ♦ Speed/acceleration work increased (formally) *lactic/A-lactic



Competitive phase

- ♦ *Races become the focal point
- ♦ Aerobic element plateau's
- Anaerobic training increases
- *Target paces zeroed in on during workouts



Championship phase

- *Looking for 'goal-achieving' efforts
- ♦ Decrease volume minimally
- ♦ Increase intensity with short, sharp efforts.



Workout design (choose 3)

- Make each 3 weeks repeatable.
- ♦ Use familiar workouts throughout the season as fitness markers for athletes
- No magical combination- just choose workouts that achieve elements you want your athlete to be exposed to.

- ♦ 1600m ladder
- ♦ Rpt 400's

Peaking strategies

♦ No one way to get the most out of an athlete!

- ♦ TWHS: A tiered reduction in volume AND how the week is stacked.
- ♦ TWHS: Intensity is increased in workouts with an overall reduction in volume of the workout.
- ♦ 10% per week for three weeks

Nutritional considerations

- Do you have a fueling/re-fueling protocol?
- Do you take time to speak on the nutritional requirements for distance running?

- ♦ Hydration: ~120oz/day
- ♦ Nutrition: Balanced diets with a focus on protein intake @ 1.6g/kg body weight
- ♦ Take hydration and protein values and divide by 5 for 5 'intakes' per day.

Protein calculation sample

| | | | lbs | kg | at 1.6g/kg | 5 doses |
|-----------|---------|----|-----|----------|-------------|------------|
| Hoffpauir | Gavin | 12 | 124 | 56.24545 | 89.99272621 | 17.99855 |
| Baker | Daniel | 12 | 135 | 61.23497 | 97.97595192 | 19.59519 |
| | | | | | | |
| Mercado | Ethan | 12 | 157 | 71.214 | 113.9424033 | 3 22.78848 |
| Samways | Cameron | 12 | 155 | 70.30682 | 112.4909078 | 3 22.49818 |
| Wright | Noah | 12 | 142 | 64.41012 | 103.0561865 | 20.61124 |
| Hammer | Ethan | 10 | 114 | 51.70953 | 82.73524829 | 16.54705 |
| West | Calder | 12 | 130 | 58.96701 | 94.34721296 | 18.86944 |
| Raiford | Ryan | 12 | 107 | 48.53438 | 77.65501374 | 15.531 |
| Childree | Michael | 12 | 138 | 62.59575 | 100.1531953 | 3 20.03064 |
| Jones | Matthew | 12 | 136 | 61.68856 | 98.70169971 | 19.74034 |
| LaChance | Cade | 11 | 142 | 64.41012 | 103.0561865 | 20.61124 |

Requirements for a successful season?

- ♦ Base work solid platform to run off of
- Logical volume for event specific athletes
- ♦ Logical Interval sessions specific for goals
- ♦ Nutritional elements introduced
- ♦ Luck
- Create your masterpiece.
- ♦ Good luck to you all in your upcoming season!!