

## MY VISION OF THE 400M & THE 400M HURDLES

COACHING CLINIC IN PAPENDAL  
(NED) 24-27.10.2018



## SHORT > LONG / LONG > SHORT

### SHORT > LONG

- Speed reserve
- Rhythm + Speed
- Acceleration work
- High volume of strength, plyometrics and speed

-> **Watch out the running economy!**



## SHORT > LONG / LONG > SHORT

### LONG > SHORT

- 30-40% aerobic
- A lot of highly specific work (2x more)  
@80-85%

-> **You need genetically talented athletes (for sprint)**



## SHORT & LONG TO...SPECIFIC

- During the career
- During the season
- **WORK 90% AND ABOVE AND 75% AND BELOW**

**SPEED OF A SPRINTER AND ENDURANCE OF 800M RUNNER**



## LEA'S DEVELOPMENT

YEAR	200M	400M	400H	800M
2009	24.06			2:23.94
2010	24.04			2:32.83
2011	23.81			2:30.07
2012	23.08			
2013	23.31			
2014	23.12	53.49		
2015	23.41	53.49	55.60	
2016	22.38	51.09	54.92	
2017	22.56	50.52	54.29	



**MAXIMIZE YOUR STRENGTH AND MINIMIZE  
YOUR WEAKNESS POINTS**



**IT'S EASIER TO DEVELOP STAMINA AND  
ENDURANCE FOR A SPRINTER THAN SPRINT  
ABILITIES FOR 800M RUNNER...**



### SOLID BASES / U18

- HARMONIOUS AND VERSATILE DEVELOPMENT
- EARLY WORK IN STRENGTH (TECHNIQUE, CONDITIONNING, CORE)
- GENERAL ENDURANCE
- SPEED AND COORDINATION QUALITIES
- BUILD A BODY



### SPEED DEVELOPMENT / U20

- FOCUS ON 100-200M
- NO SPECIAL ENDURANCE
- UNDERDISTANCES / SPEED ENDURANCE
- MAX STRENGTH DEVELOPMENT



### SPECIFIC DEVELOPMENT / U23

- FOCUS ON 200M WITH SOME 400M
- DEVELOPMENT OF GENERAL ENDURANCE
- PROGRESSION IN SPECIAL ENDURANCE
- DEVELOPMENT OF EXPLOSIVE STRENGTH



### POLARIZED TRAINING

- **GENERAL ENDURANCE SESSIONS (3):**

30' PROGRESSIVE JOG (EVERY 10' FASTER)  
10' JOG + 3x6' FAST R.3' SLOW + 5' COOL DOWN  
6X500 R.2' (500: 1:45)

- **STRENGTH SESSIONS (3):**

4 SETS OF 6 REPS @80%

- **SPEED DEVELOPMENT (2):**

Sprint drills, In-out-in's, Sprint-specific strength  
Hills: 2x (4x15'') r.2' R.6'



## SPEED

- ALL OVER THE YEAR
- SPEED RESERVE
- ACCELERATION WORK
- FLY IN'S SPRINTS
- RESISTED SPRINTS
- DISTANCES: 30-100M

-> SUBMAX AND MAX SPEED / SPEED ENDURANCE



## SPEED

- **PREPARATION 1:**

3x40m accelerations r.3-4' + 5x60m (mix of fly'in and in-out-in's) r.6'

Or

3x (4x60m) 90-95% r.2' R.10'

- **PREPARATION 2:**

Fly in's 20s-30s-40s-50s @95-100% r.5-8'

Or

40-60-80-60-40 r.5-7-9-7'

- **PRECOMPETITION**

4x60-3x80-2x100 @90-95% r.2'-3'-4' R.12'



## STRENGTH

- PERFORMANCE: RESISTANCE + SPEED
- STRENGTH DIRECTION: DON'T FORGET HORIZONTAL STRENGTH VECTOR!
- HIGH RESISTANCE -> SPEED IMPROVEMENT
- LOW RESISTANCE -> ENDURANCE IMPROVEMENT
- IMPORTANCE MUSCLES (GROUPS): HIP EXTENSORS, KNEE FLEXORS AND HIP FLEXORS



## STRENGTH

- **HAMSTRINGS:** ABILITY TO ABSORB ENERGY AT LONG MUSCLE LENGTHS (ECCENTRIC)

-> Flywheel Leg Curl, Nordic curl, SL Hip extension, Dead lifts or Lunges

- **HIP EXTENSORS&FLECTORS:** ABILITY TO PERFORM CONCENTRIC WORK AT HIGH VELOCITIES WHILE OPERATING AT SHORT MUSCLE LENGTHS

-> Heavy kettlebell swings, Heavy resisted sprints, Explosive hip thrust and Squat jumps

-> Hip flectors with bands or weights



## ENDURANCE

- MAX 30'
- TO 30KM/WEEK
- ENDURANCE DEVELOPMENT (OCTOBER/ NOVEMBER & MARCH)
- ENDURANCE RETENTION AND RECOVERY SESSIONS
- RUNNING ECONOMY



## ENDURANCE

- 400M: 1/3 AEROBIC
- PROGRESSIVE ENDURANCE (1X)
- INTERVALL TRAINING (1-2X)
- TEMPO RUNS (1X)



## ENDURANCE

- PROGRESSIVE ENDURANCE: 30'
- THRESHOLD 2: 3x6' or 2x8' r.3-4' slow jog
- TEMPO RUNS:  
Long 5x3' r.2' or 6x2' r.2'  
Short 12x30'' r.30''  
2x (5x200) r.1' R.5' (200: 34.0)  
8x200 r.2' (200: 30-32.0)  
2x (4x300) r.2' R.6' (300: 54.0)



## SPECIAL ENDURANCE

- @80%**  
3x (300-200) r.3' R.10'  
2x (150-300-200) r.3' R.10'  
4x300 r.4'  
2x(500-300-200) r.5' R.12'
- @90%**  
3x300 r.10'  
3x350 r.15'  
500-300-200 r.12'
- Split 400s**  
300-100 / 200-200 r. 1'30 R.30'



## SPEED ENDURANCE

- @90%**  
3x (3x150) r.3' R.12'  
5x150 r.5-6'
- @95-100%**  
200-150-120-100 r.15'



## HURDLES

- **PREPARATION 1**  
Hurdles drills, 4 to 6 steps
- **PREPARATION 2**  
7 steps or 2x (4x100 H9-10-11) r.2' R.10'  
3x (3x120 H9-10-11) r.3' R.12'  
4x (100 H6-7-8 + 100 H9-10-11) r.1'30 R.8'
- **PRECOMPETITION**  
4x (200 H9-10-11 + 100 H9-10-11) r.1'30 R.8'  
3x (300 H9-10-11 + 100 H9-10-11) r.1'30 R.8'  
3x (300 + 100 H9-10-11) r.2' R.12'



## DOUBLE PERIODIZATION

- ALWAYS AN INDOOR SEASON
- 3 PEAKS YEARLY
- IN MARCH YOU SHOULDN'T START FROM 0 AGAIN (SPEED-STRENGTH)
- MAINTAIN ALL QUALITIES TO THE NECESSARY LEVEL DURING COMPETITION PERIOD
- 16 WEEKS FOR THE 2 MAIN BLOCKS

