Scottish Athletics Coaching Conference

400m - Training & Racing

Jared Deacon



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Brief overview:

- Former UKA Sprints & Hurdles Coach
- Currently SRU Academies S&C Edinburgh
- Coached several internationals over sprints & hurdles
- Former England & GB International 400m athlete
- BSc, PGCE, MSc, UKA L4, ASCC















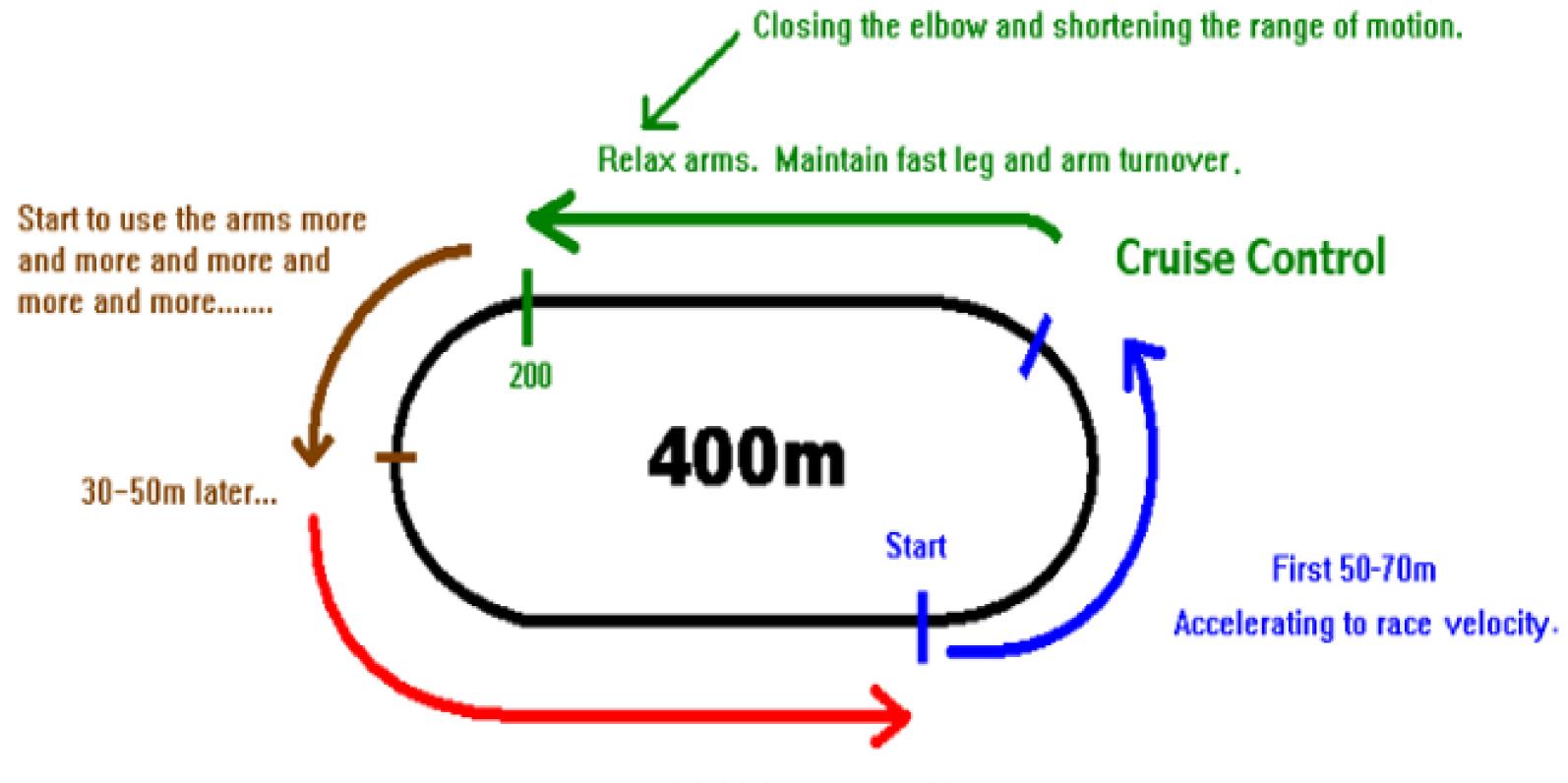
....and any other coach I have stolen an idea from! scottishathletics

The Race



The Race Model





powerful driving arms and legs.

(Power up/Hammer back). Create "lift".

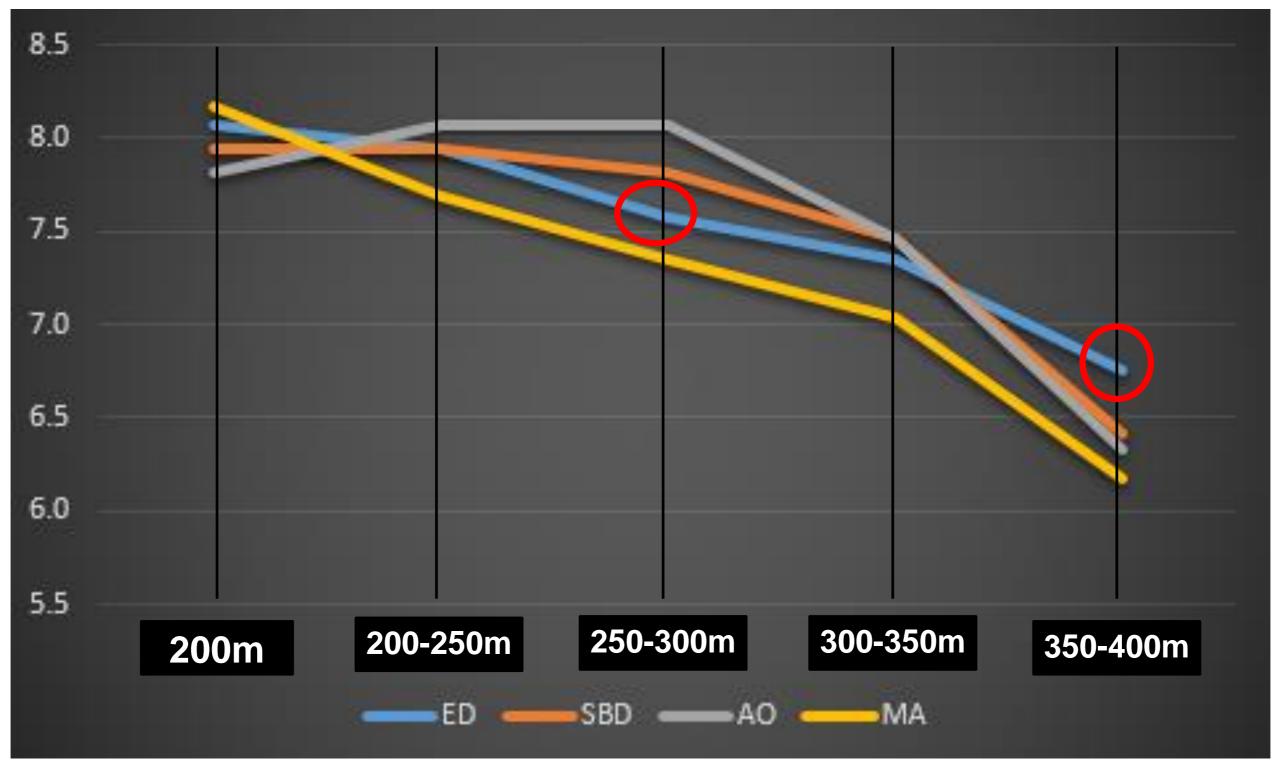


The Biomechanics



	ED	SBD	AO	MA	MI	KM	LN
200m	24.8	25.2	25.6	24.5	24.8	25.2	24.8
250m	31.1	31.5	31.8	31	31.1	31.8	31.1
300m	37.7	37.9	38	37.8	38	38.4	38
350m	44.5	44.6	44.7	44.9	45.2	45.5	45.2
400m	51.9	52.4	52.6	53	53.5	53.6	53.9
200-250m	6.3	6.3	6.2	6.5	6.3	6.6	6.3
250-300m	6.6	6.4	6.2	6.8	6.9	6.6	6.9
300-350m	6.8	6.7	6.7	7.1	7.2	7.1	7.2
350-400m	7.4	7.8	7.9	8.1	8.3	8.1	8.7
1ST 200	24.8	25.2	25.6	24.5	24.8	25.2	24.8
2ND 200	27.1	27.2	27	28.5	28.7	28.4	29.1
DIFF	2.3	2	1.4	4	3.9	3.2	4.3





Breakdown of capabilities for 52sec 400m female and 46 sec 400m male

	<u>52.0</u>	<u>46.0</u>
1st 200m	25.0	22.0
2nd 200m	27.0	24.0
Differential	2.0	2.0
1st 100m	12.8	11.3
2nd 100m	12.2	10.7
3rd 100m	12.9	11.4
4th 100m	14.1	12.6
300m	37.9	33.4



What do you need to do in order to run this?

	<u>52.0</u>
1st 200m	25.0
2nd 200m	27.0
Differential	2.0
1st 100m	12.8
2nd 100m	12.2
3rd 100m	12.9
4th 100m	14.1
300m	37.9

09.01
m/s

4.43-4.48	30m blocks
3.33-3.38	Flying 30m
7.3	60m
9.4	80m
11.5	100m
13.9	120m
17.5	150m
21.1	180m
30.3	250m
Sub 7.60	60m Race
Sub 11.80	100m Race
Sub 24	200m Race



What do you need to do in order to run this?

	<u>46.0</u>
1st 200m	22.0
2nd 200m	24.0
Differential	2.0
1st 100m	11.3
2nd 100m	10.7
3rd 100m	11.4
4th 100m	12.6
300m	33.4

3.82-3.85	30m blocks
2.72-2.75	Flying 30m
6.6	60m
8.5	80m
10.4	100m
12.5	120m
15.6	150m
18.8	180m
27.1	250m
Sub 6.90	60m Race
Sub 10.70	100m Race
Sub 21.30	200m Race

11.03 m/s



CONTROLS FOR 100M/200M ATHLETES Time Trials-hand timed

																	Ĭ.	electric timi	ng)		
30m Blocks	30m Flying	60 BLO			lm CKS		Om OCKS	120 STA		150 STA		180 STA	MD)m+	250 STA	MD m*	60)m	10	0m	200	m
3.58-3.61	2.48-2.51	6.22	6.27	8.02	8.09	9.82	9.90	11.84	11.93	14.87	14.97	17.91	18.04	25.47	25.72	6.49	6.53	10.09	10.16	20.17	20.32
3.62-3.65	2.52-2.55	6.28	6.33	8.10	8.16	9.91	9.99	11.94	12.03	14.98	15.08	18.05	18.18	25.73	25.98	6.54	6.58	10.17	10.24	20.33	20.48
3.66-3.69	2.56-2.59	6.34	6.39	8.17	8.24	10.00	10.08	12.04	12.12	15.09	15.19	18.19	18.32	25.99	28.24	6.59	6.63	10.25	10.32	20.49	20.64
3.70-3.73	2.60-2.63	6.40	6.45	8.25	8.31	10.09	10.17	12.13	12.22	15.20	15.30	18.33	18.48	26.25	26.5	6.64	6.68	10.33	10.40	20.65	20.80
3.74-3.77	2.64-2.67	6.46	6.51	8.32	8.39	10.18	10.26	12:23	12.32	15.31	15.42	18.47	18.60	26.51	26.76	6.69	6.73	10.41	10.48	20.81	20.98
3.78-3.81	2.68-2.71	6.52	6.57	8.40	8.46	10.27	10.35	12.33	12.43	15.43	15.54	18.61	18.74	26.77	27.02	6.74	6.78	10.49	10.56	20.97	21.12
3.82-3.85	2.72-2.75	6.58	6.63	8.47	8.54	10.36	10.44	12.44	12.53	15.55	15.66	18.75	18.89	27.03	27.28	6.79	6.83	10.57	10.64	21.13	21.28
3.86-3.89	2.76-2.79	6.64	6.69	8.55	8.61	10.45	10.53	12.54	12.63	15.67	15.79	18.90	19.04	27.29	27.54	6.84	6.88	10.65	10.72	21.29	21.44
3.90-3.93	2.80-2.83	6.70	6.75	8.62	8.69	10.54	10.62	12.64	12.74	15.80	15.92	19.05	19.19	27.55	27.8	6.89	6.93	10.73	10.80	21.45	21.61
3.94-3.98	284-288	6.76	6.81	8.70	8.76	10.63	10.71	12.75	12.85	15.93	16.06	19.20	19.41	27.81	28.08	6.94	7.00	10.81	10.90	21.62	21.88
3.99-4.03	2.89-2.93	6.82	6.87	8.77	8.84	10.72	10.81	12.88	12.97	16.07	16.20	19.42	19.59	28.07	28.31	7.01	7.08	10.91	11.00	21.89	22.09
4.04-4.08	294298	6.88	6.93	8.85	8.92	10.82	10.90	12.98	13.08	16.21	16.35	19.60	19.78	28.32	28.55	7.07	7.12	11.01	11.09	22.10	22.30
4.09-4.13	2.99-3.03	6.94	6.99	8.93	8.99	10.91	11.00	13.09	13.20	16.36	16.51	19.79	19.98	28.58	28.8	7.13	7.18	11.10	11.19	22.31	22.50
4.14-4.18	3.04-3.08	7.00	7.05	9.01	9.07	11.01	11.09	13.21	13.33	16.52	16.68	19.97	20.18	28.81	29.08	7.19	7.25	11.20	11.29	22.51	22.72
4.19-4.24	3.09-3.14	7.08	7.12	9.08	9.16	11.10	11.20	13.34	13.48	16.69	16.86	20.17	20.37	29.07	9.34	7.28	7.32	11.30	11.40	22.73	22.95
4.25-4.30	3.15-3.20	7.13	7.19	9.17	9.25	11.21	11.31	13.47	13.61	16.87	17.05	20.38	20.59	9.35	29.63	7.33	7.39	11.41	11.51	22.96	23.19
4.31-4.36	3.21-3.28	7.20	7.26	9.26	9.34	11.32	11.42	13.62	13.75	17.06	17.25	20.60	20.81	29.64	29.91	7.40	7.48	11.52	11.62	23.20	23.43
4.37-4.42	3.27-3.32	7.27	7.33	9.35	9.43	11.43	11.53	13.76	13.90	17.26	17.46	20.82	21.05	29.92	30.19	7.47	7.53	11.63	11.73	23.44	23.69
4.43-4.48	3.33-3.38	7.34	7.40	9.44	9.52	11.54	11.64	13.91	14.05	17.47	17.67	21.06	21.29	30.2	30.5	7.54	7.61	11.74	11.85	23.70	23.95
4.49-4.54	3.39-3.44	7.40	7.50	9.52	9.65	11.64	11.80	14.08	14.20	17.68	17.80	21.30	21.54	30.51	30.91	7.62	7.71	11.86	12.01	23.96	24.27
4.55-4.60	3.45-3.50	7.50	7.60	9.65	9.78	11.80	11.96	14.20	14.41	17.81	18.09	21.55	21.88	30.92	31.32	7.72	7.81	12.02	12.17	24.28	24.64
4.61-4.70	3.51-3.60	7.60	7.70	9.78	9.91	11.96	12.12	14.42	14.59	18.10	18.30	21.89	22.18	31.33	31.74	7.82	7.91	12.18	12.33	24.65	24.98
4.71-4.80	3.61-3.70	7.70	7.80	9.91	10.04	12.12	12.27	14.60	14.78	18.31	18.55	22.17	22.48	31.75	32.15	7.92	8.02	12.34	12.49	24.99	25.30
4.81-4.90	3.71-3.80	7.80	7.90	10.04	10.17	12.27	12.43	14.79	14.98	18.56	18.81	22.47	22.77	32.16	32.58	8.03	8.12	12.50	12.65	25.31	25.65
4.91-5.00	3.81-3.90	7.90	8.00	10.17	10.30	12.43	12.60	14.99	15.21	18.82	19.12	22.78	23.10	32.57	33.08	8.13	8.25	12.66	12.85	25.66	25.99
5.0-5.1	3.9-4.0	8.0	8.1	10.3	10.5	12.6	12.8	15.2	15.5	19.2	19.6	23.1	23.6	33.1	33.7	8.3	8.4	12.9	13.1	26.0	26.5
5.1-5.2	40.4.1	8.1	8.2	10.6	10.6	13.0	13.0	15.6	15.8	19.6	20.0	23.6	24.1	33.7	34.3	8.4	8.5	13.3	13.3	26.5	27.0
5.2-5.3	4.1-4.2	8.2	8.3	10.6	10.8	13.0	13.2	15.8	16.1	20.0	20.4	24.1	24.5	34.3	35.0	8.5	8.7	13.3	13.6	27.0	27.5
5.3-5.5	4.2-4.4	8.3	8.5	10.8	11.0	13.2	13.5	16.1	16.4	20.4	20.8	24.5	25.0	35.0	35.6	8.7	8.9	13.6	13.9	27.5	28.0
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Competition Performance

The 200m v 400m

400m / 200m = ~2.20

No oine seems capable of going below 2.13

200m best of 22.0sec = \sim 48.4sec but realistic range of 47.5 - 48.8sec 200m best of 24.0sec = \sim 52.8sec but realistic range of 51.8 – 53.3sec

Indicates that 400m time is very dependent upon 200m capabilities PLUS specific 400m speed endurance.



The 200m v 400m

- I decided to use this principle to analyse my own performance as an athlete over the years I competed.
- Started running 400m at the age of 16 (U17 athlete) and finished as a 29 year old competing every year in that period.
- Good number of 200m races which gives a good indication each year other than a couple of years where injuries, race schedules or weather conditions prevented a true reflection of what I was capable of over 200m
- For those years I have taken an estimate from my training times as to what I know I was capable of for 200m for that year



Year	Age	200m Time or est equiv	400m Time	Ratio
1992	16	22.8	50.12	2.20
1993	17	22.3	48.25	2.16
1994	18	22.2	47.50	2.14
1995	19	21.5	46.45	2.16
1996	20	21.1	46.02	2.18
1997	21	21.3	45.94	2.16
1998	22	21.4	46.32	2.16
1999	23	21.1	45.88	2.17
2000	24	21.3	45.69	2.15
2001	25	21.3	46.56	2.19
2002	26	21.0	45.57	2.17
2003	27	21.6	46.39	2.15
2004	28	21.3	45.86	2.15
2005	29	21.6	46.87	2.17



Key findings:

- Generally the faster 200m time the faster 400m time
- I was a stronger athlete that I was fast ratios in the 2.teens with only my first year being outside of that range at 2.20sec
- In 2002 when I ran my PB shows a reasonable ratio based on what I think I was capable of that year
- If I had run a 200m on the day I did my 400m PB I believe I would have run 21.0sec
- 45.57sec 400m time isn't a true reflection of what I should have run either
- A performance around 45.3sec would have been more in the region of what I should have run



• This would then have been a ratio of 2.16sec which should have been readily achievable given that I had been capable of that ratio and better for a number of years before that

 From the information, I believe that for me 2.16sec was the right ratio to balance speed and speed endurance ability.

On the years I feel my 400m was held back for whatever reason I can see that a 2.16 ratio
would have given me the time I should have ran that year.

 As a back up to this I timed almost every rep of every session I ever did and still have these recorded, this means I have a good idea of what I was capable of.



So then, what is the key? Speed or speed endurance?

It has to be a fine balance of both, but without speed there is a definite limiting factor as to how far or how fast an athlete can get in running the 400m.

For me the final piece in the puzzle would be to see what I could have done with my fastest 200m and best ratio indicating the higher levels of relative speed endurance – 21.0sec 200m and a 2.14sec ratio.

This would have taken me to 44.94sec!

If only it is that simple! Maybe it is?

Maximising speed and speed endurance capabilities and the exact time together.....possible?!



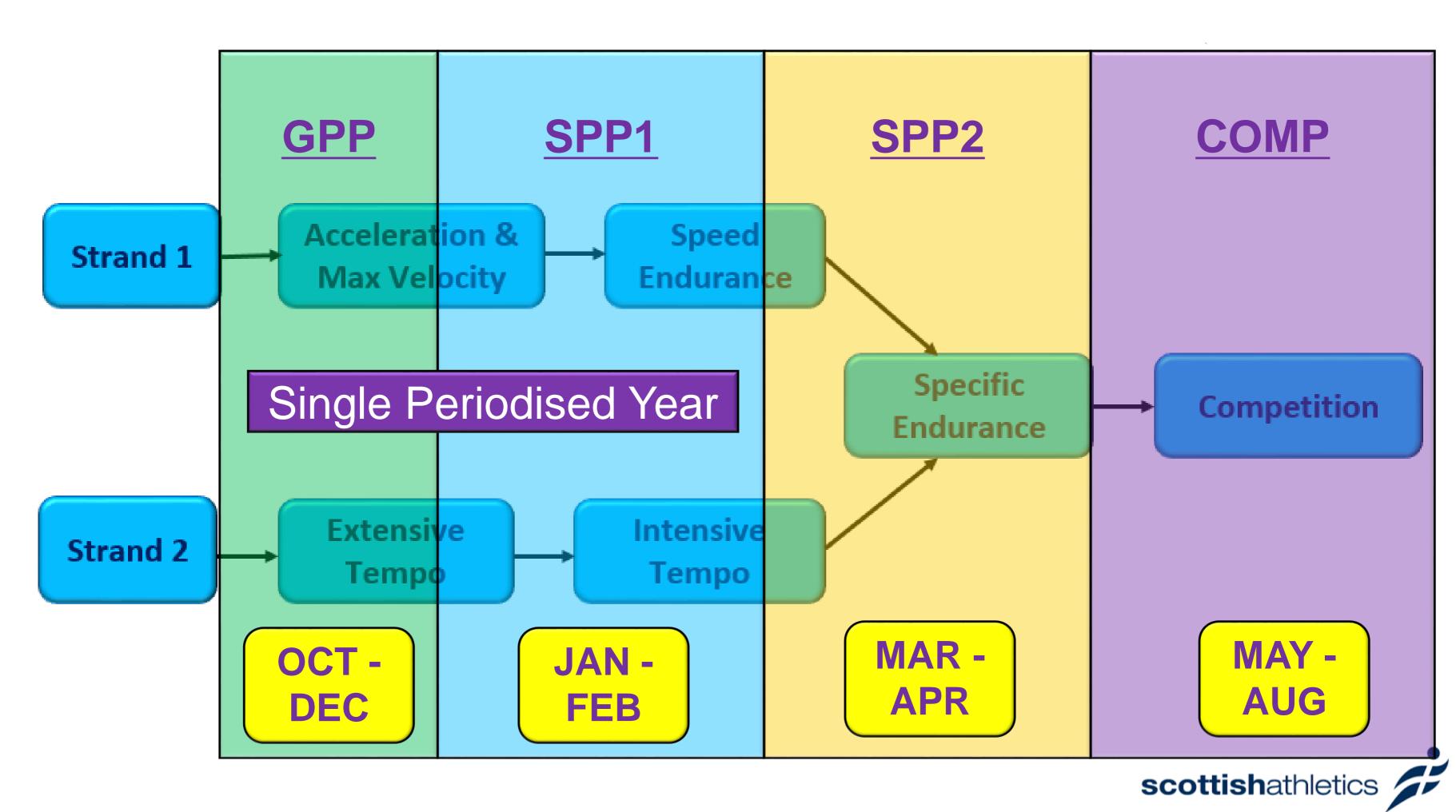
The Plan

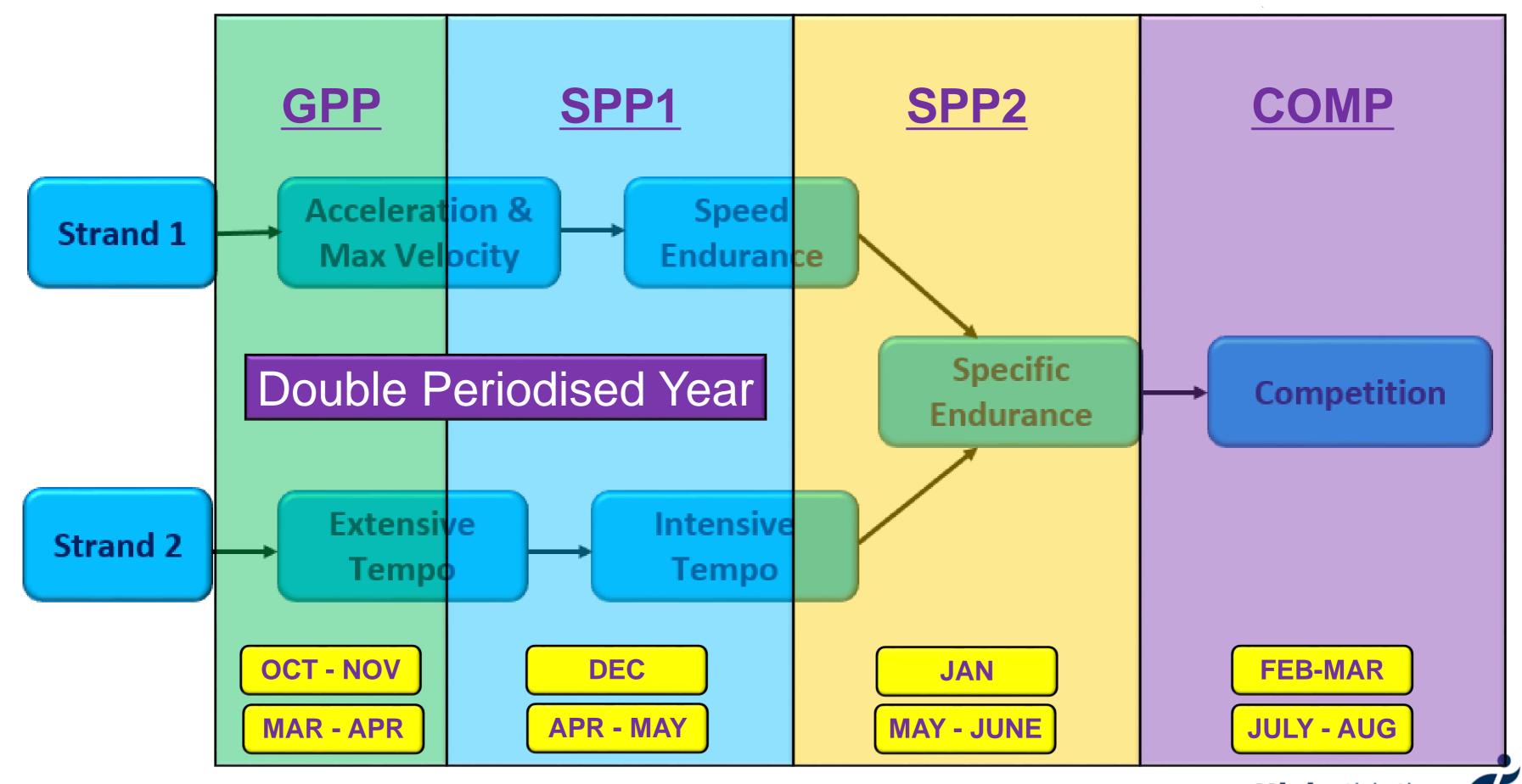


What are we trying to create?

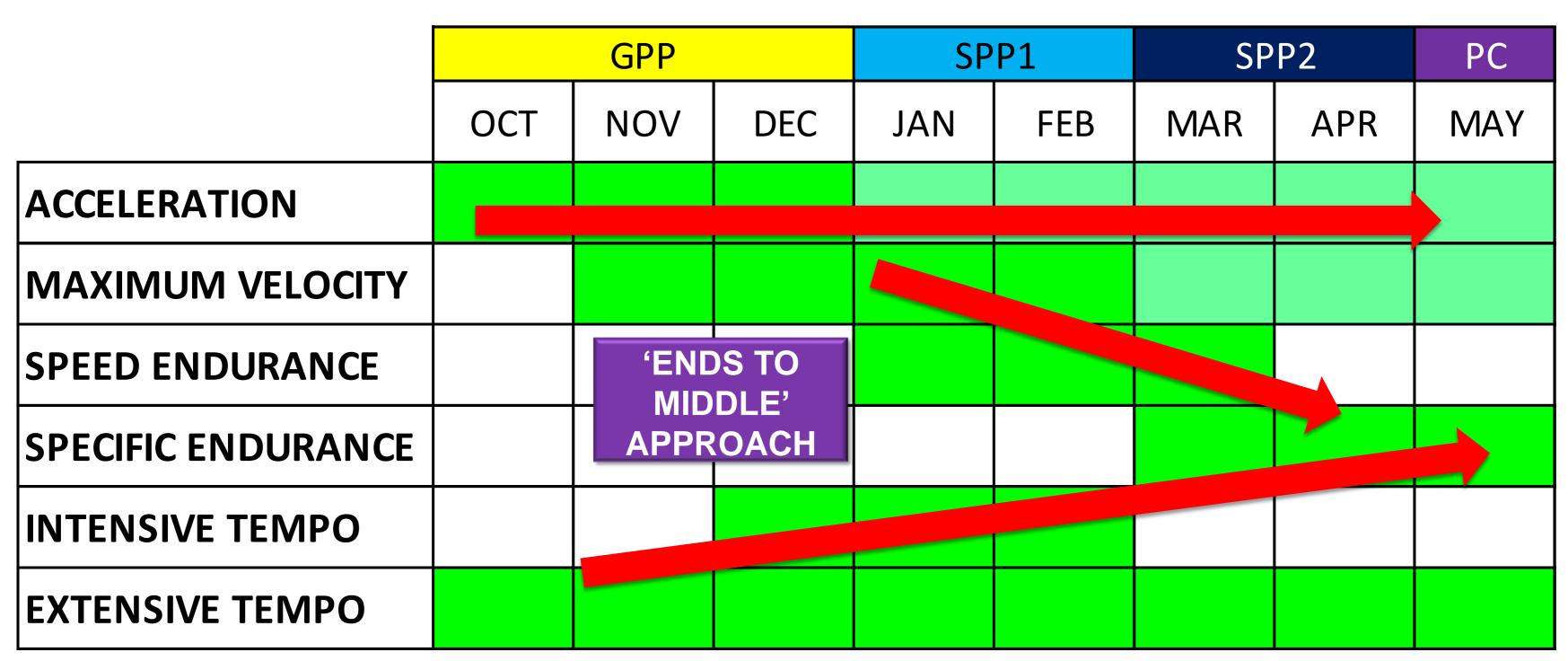
- An athlete with the ability to run fast and sustain it
- Ability to get up to speed quickly
- Ability to have high level of maximum velocity
- A significant 'speed reserve'
- Specific speed endurance capabilities
- A speed-emphasis ends-to-middle speed-reserve approach if it has a label!







Emphasis Elements in Running Programme





Weekly Set Up



Many Roads & Individual Circumstances

General week to include:

- 3 running
- 2 weights/plyo
- 1-2 tempo

Running going from speed based to speed endurance based sessions through the week – SHORT/MEDIUM/LONG

MON	TUE	WED	THU	FRI	SAT	SUN
SPEED	WEIGHTS	TEMPO	SPEED ENDURANCE	WEIGHTS	ENDURANCE	RECOVERY
MON	TUE	WED	THU	FRI	SAT	SUN
SPEED	TEMPO	SPEED	WEIGHTS	TEMPO	ENDURANCE	RECOVERY
& WEIGHTS		ENDURANCE				

Many Roads & Individual Circumstances

Alternative week to could include:

- 4 running
- 2 weights/plyo
- 2 tempo

3 day rollover protocol:

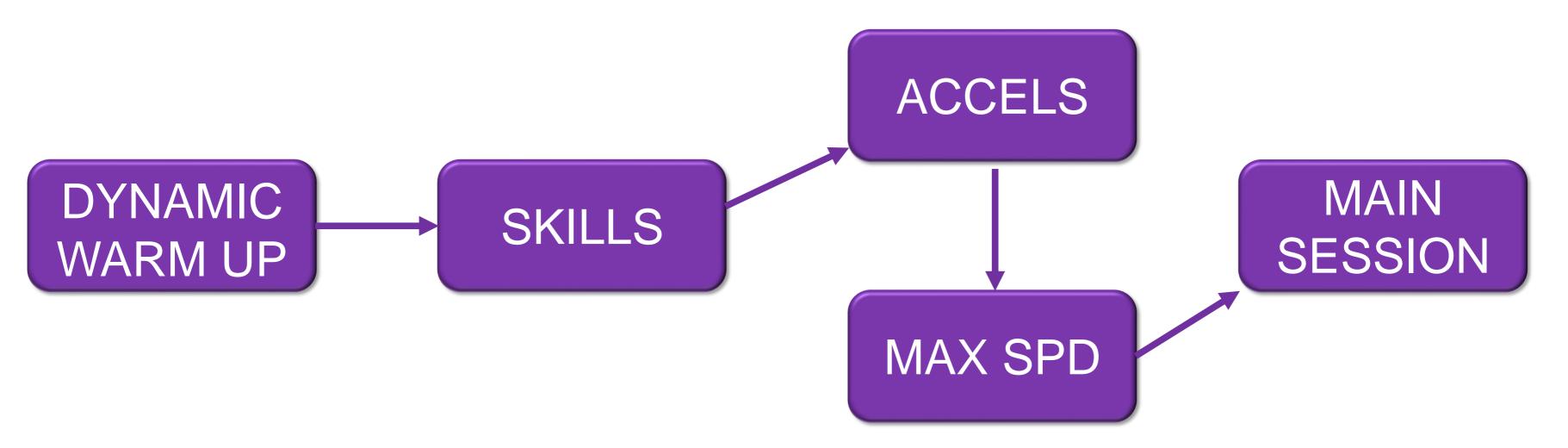
MON	TUE	WED	THU	FRI	SAT	SUN
SPEED & PLYO	SPEED ENDURANCE &	TEMPO	SPEED & PLYO	SPEED ENDURANCE &	TEMPO	RECOVERY
	WEIGHTS			WEIGHTS		



Session Set Up



Session Set Up





Sample Sessions



GPP	GPP	GPP	GPP
SPEED	SPEED	SPEED	SPEED
2x(4x20m SP) 6x20m ALT SS 3x20m DRILLS 90sec RR/3min SR	2x(4x20m SP) 6x20m ALT SS 3x20m DRILLS 90sec RR/3min SR	2x(4x15m SP) 4x20m ALT SS 3x20m DRILLS 60sec RR/3min SR	2x(4x15m SP) 4x20m ALT SS 3x20m DRILLS 60sec RR/3min SR
MAS	MAS	MAS	MAS
6x20-30m ACCELS 45/60/90/60/45/60/90/ 60/45/60/90 1:1 WORK:REST	6x20-30m ACCELS 2x90/3x60/2x90/3x60 60sec RR 2-3min SR	6x20-30m ACCELS 2x90/3x60/2x90/3x60 60sec RR 2-3min SR	6x20-30m ACCELS 1400m 5min RR 2x90/3x60/4x45 60sec RR 2-3min SR
TITH	ППН	TITH	HILL
4x20m ACCELS 3xSHORT/SHORT/MEDIUM 2min RR/5min SR 3x20m DRILLS	4x20m ACCELS 3xSHORT/SHORT/MEDIUM 2min RR/5min SR 3x20m DRILLS	4x20m ACCELS 3x3xSHORT 2min RR/4min SR 3x20m DRILLS	4x20m ACCELS 3x3xSHORT 2min RR/4min SR 3x20m DRILLS

SPEED	6x20m SP/2x(3x60m 20m+) ALT SS 3x30m DRILLS 90sec & 2min RR/3-5min SR	MAS	6x20-30m ACCELS 1400m 5min RR 4x45/6x30/4x45 30sec RR/2-3min SR	HILL	4x20m ACCELS S/S/S 2min RR/4min SR S/M/L 2&3min RR/6min SR S/M/L 2&3min RR/6min SR
SPEED	2x(3x20m SP/3x60m 20m+) ALT SS 3x30m DRILLS 90sec & 2min RR/3-5min SR	MAS	6x20-30m ACCELS 6x30 30sec RR/2-3min SR 4x45 30sec RR/2-3min SR 3x60 60sec RR/2-3min SR 6x20 30sec RR	HILL	4x20m ACCELS S/S/S 2min RR/4min SR S/M/L 2&3min RR/6min SR S/M/L 2&3min RR/6min SR
SPEED	3x(2x20m SP/2x60m 20m+) ALT SS 3x30m DRILLS 90sec & 2min RR/3-5min SR		6x20-30m ACCELS 8x20/6x30/8x20/4x30 30sec RR/2-3min SR	HILL	4x20m ACCELS 3xSHORT 2min RR/4min SR 3xMEDIUM 3min RR/5min SR 3xLONG 4min RR
SPEED	6x20m SP/2x(3x60m 25m+) ALT SS 3x40m DRILLS 90sec & 2.5min RR/3-5min SR	MAS	6x20-30m ACCELS 6x30 30sec RR/2-3min SR 4x45 30sec RR/2-3min SR 3x60 60sec RR/2-3min SR 6x20 30sec RR	HILL	4x20m ACCELS 3xSHORT 2min RR/4min SR 3xMEDIUM 3min RR/5min SR 3xLONG 4min RR

SPEED	2x(3x20m SP/3x60m 25m+) ALT SS 3x40m DRILLS 90sec & 2.5min RR/3-5min SR	MAS	6x20-30m ACCELS 1400m 5min RR 8x20/8x20 20sec RR/3-4min SR	HILL	4x20m ACCELS 2xSHORT 2min RR/3min SR 3xMEDIUM 3min RR/5min SR 4xLONG 4min RR	
SPEED	3x(2x20m SP/2x60m 25m+) ALT SS 3x40m DRILLS 90sec & 2.5min RR/3-5min SR	MAS	6x20-30m ACCELS 8x20/10x10/8x20/10x10 20sec RR/3-4min SR	HILL	4x20m ACCELS 2xSHORT 2min RR/3min SR 3xMEDIUM 3min RR/5min SR 4xLONG 4min RR	
SPEED	6x20m SP/2x(3x60m 30m+) ALT SS 3x50m DRILLS 90sec & 3min RR/6min SR	MAS	6x20-30m ACCELS 8x20/10x10/8x20/10x10 20sec & 10sec RR/3-4min SR	HILL	BUFFER FOR MISSED/ADJUSTED SESSIONS/WEEKS	
SPEED	2x(3x20m SP/3x60m 30m+) ALT SS 3x50m DRILLS 90sec & 3min RR/6min SR	MAS	6x20-30m ACCELS 8x20/10x10/8x20/10x10 20sec & 10sec RR/3-4min SR	HILL	BUFFER FOR MISSED/ADJUSTED SESSIONS/WEEKS	ن

SPEED	4x60m 30m+ 3min RR/6min SR 4x60m FEF 4min RR 3x50m DRILLS 90sec & 3min RR/6min SR	INT TEMPO	6x20-30m ACCELS 6x200m 3min RR SUB 27 FOR AS MANY AS POSSIBLE THEN TAKE A LONGER BREAK AND FINISH OFF REMAINING REPS IN SUB 27	INT TEMPO	2x(3x300m) 3min RR/6min SR TARGET 44sec	
SPEED	4x60m 30m+ 3min RR/6min SR 4x20 FLYING 4min RR 3x50m DRILLS 90sec & 3min RR/6min SR	INT TEMPO	6x20-30m ACCELS 5x250m 5min RR TARGET SUB 34.0sec	INT TEMPO	RECOVERY	
SPEED	4x60m 30m+ 3min RR/6min SR 4x60m FEF 4min RR 3x50m DRILLS 90sec & 3min RR/6min SR	INT TEMPO	RECOVERY	INT TEMPO	2x(3x200m) 2min RR/8min SR TARGET 27.0sec	
SPEED	4x60m 30m+ 3min RR/6min SR 4x20 FLYING 4min RR 3x50m DRILLS 90sec & 3min RR/6min SR	INT TEMPO	6x20-30m ACCELS 4x300m 8min RR TARGET SUB 41sec	INT TEMPO	2x(4x150m) 60sec RR/10min SR TARGET 18.5-19.0	ىن

INT TEMPO	6x20-30m ACCELS 3x350m 8&10min TARGET SUB 50sec	INT TEMPO	2x(3x300m) 3min RR/6min SR TARGET 44sec	
INT TEMPO	6x20-30m ACCELS 6x200m 3min RR SUB 27 FOR AS MANY AS POSSIBLE THEN TAKE A LONGER BREAK AND FINISH OFF REMAINING REPS IN SUB 27	SPD END	2x150m/3x90m 3min/8min/3min RR	
INT	6x20-30m ACCELS 5x250m 5min RR TARGET 34.0sec	INT TMEPO	2x(3x200m) 2min RR/8min SR TARGET 27.0sec	
INT	6x20-30m ACCELS 4x300m 8/10/12min RR TARGET SUB 40sec	SPD END	2x150m/3x90m 5min/8min/4min RR	
INT	6x20-30m ACCELS 3x350m 10&12min RR	INT TEMPO	2x(4x150m) 60sec RR/10min SR	
INT TEMPO	6x20-30m ACCELS 6x200m 3min RR SUB 27 FOR AS MANY AS POSSIBLE THEN TAKE A LONGER BREAK AND FINISH OFF REMAINING REPS IN SUB 27	SPD END	2x150m/3x90m 7min/10min/5min RR	etics

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	
02 May 2016	03 May 2016	04 May 2016	05 May 2016	06 May 2016	07 May 2016	08 May 2016	
WEIGHTS	TRACK	TEMPO	TRACK	WEIGHTS	RECOVERY	TRACK	
AS PER SCHEDULE	2-4x 20m BS 350m/300m/250m 25min RR		4x60m 30m+ 4-6min RR/6-8min SR 3x20m FLYING 3-5min RR/6-8min SR 2x90m FEF 7-8min RR 2x45sec RUNS IN TRAINERS 90sec RR	AS PER SCHEDULE		3-4x30-40m ACCELS 2x(2x200m) 60sec RR/25-30min SR	
	45.5, 38.5, 31.3					23.5/26.0, 24.9/26.1	
09 May 2016	10 May 2016	11 May 2016	12 May 2016	13 May 2016	14 May 2016	15 May 2016	
ТЕМРО	TRACK & WEIGHTS	TEMPO	TRACK	RECOVERY	RACE	RECOVERY	
	4-6x 30-40m ACCELS 2/3 FROM BLOCKS? 5x120m 8-12min RR BACK STRAIGHT RHYTHM & FEELING WTS AS PER SCHEDULE		FULL WARM UP MORE DRILLS STRIDES IN TRAINERS		RACE IN GERMANY ELLWANGEN 400m		
					53.6		
16 May 2016	17 May 2016	18 May 2016	19 May 2016	20 May 2016	21 May 2016	22 May 2016	
WEIGHTS	TRACK	TEMPO	RECOVERY	RACE	RECOVERY	RACE	
AS PER SCHEDULE QUALITY WARM UP INC HURDLE DRILLS, ANY UPWARD PLYO JUMPS, MED BALL THROWS	3x90m FEF ON STRAIGHT 7-9min RR/10-15min SR 150m/180m 15-20min RR/10min SR 2x250m DISCUSS WITH JD FOR HOW TO RUN THESE	IF CAN BE FITTED IN SOMEWHERE. IF NOT THEN TAKE THE DAY OFF OTHER THAN ANY PHYSIO STUFF TO GET DONE		RACE AT MANCHESTER CITY GAMES 200m	POOL/STRETCH/ MASSAGE	RACE AT LIA 4x400m	
				23.25	Relay Practice at 1pm	52.4	
23 May 2016	24 May 2016	25 May 2016	26 May 2016	27 May 2016	28 May 2016	29 May 2016	
TEMPO	TRACK & WEIGHTS	TEMPO	TRACK	WEIGHTS	RECOVERY	TRACK	
LIGHT TEMPO & MOBILITY	2x(250m/200m/150m) 6 & 4min RR/15-20min SR <32/<25/<19 PLUS WTS AS PER SCHEDULE		4x60m 30m+ 4-6min RR/6-8min SR 3x20m FLYING 3-5min RR/6-8min SR 2x90m FEF 7-8min RR 2x45sec RUNS IN TRAINERS 90sec RR	AS PER SCHEDULE		3x120m DOWN BACK STRAIGHT 8-10min RR/10-15min SR 350m	نير
	30.9, 25.0, 18.2					44.3	
	31.9, 24.8, 18.0					L.J	

Summary



WEEK	1	2	3	
1	SPEED	HILL	GRASS	
2	SPEED	HILL	GRASS	
3	SPEED	HILL	GRASS	
4	SPEED	HILL	GRASS	
5	SPEED	HILL	GRASS	
6	SPEED	HILL	GRASS	
7	SPEED	HILL	GRASS	
8	SPEED	HILL	GRASS	
9	SPEED	HILL	GRASS	
10	SPEED	HILL	GRASS	
11	SPEED	HILL	GRASS	
12	SPEED	HILL	GRASS	
13	SPEED	INT TEMPO	INT TEMPO	
14	SPEED	INT TEMPO	INT TEMPO	
15	SPEED	INT TEMPO	INT TEMPO	
16	SPEED	INT TEMPO	INT TEMPO	
17	SPEED	INT TEMPO	INT TEMPO	
18	INT TEMPO	SPEED ENDURANCE	SPEED ENDURANCE	
19	SPEED ENDURANCE	INT TEMPO	INT TEMPO	
20	INT TEMPO	SPEED ENDURANCE	SPEED ENDURANCE	
21	SPEED ENDURANCE	INT TEMPO	INT TEMPO	
22	INT TEMPO	SPEED ENDURANCE	SPEED ENDURANCE	
23	SPEED	SPEED ENDURANCE	SPECIFIC ENDURANCE	
24	SPEED	SPEED ENDURANCE	SPECIFIC ENDURANCE	
25	SPEED	SPEED ENDURANCE	SPECIFIC ENDURANCE	
26	SPEED	SPEED ENDURANCE	SPECIFIC ENDURANCE	
27	SPEED	SPEED ENDURANCE	SPECIFIC ENDURANCE	
28	SPEED	SPECIFIC ENDURANCE	SPECIFIC ENDURANCE	
29	SPEED	SPECIFIC ENDURANCE	SPECIFIC ENDURANCE	
30	SPEED	SPECIFIC ENDURANCE	SPECIFIC ENDURANCE	etics 🐬
31	SPEED	SPECIFIC ENDURANCE	SPECIFIC ENDURANCE	

In Season Training



Principles

- What is the race stimulus?
- What recovery post race/pre race is required?
- What is the impact of travel?
- What is the main aim of the season?
- What level of importance was the race/is the race? (1,2 or 3?)
- What is sensible?
- What is safe?
- What is the athlete feeling like?



In General

- Maintain base aerobic fitness tempo
- Maintain weight training
- Decrease amount of race specific endurance over race specific distance
- Get a routine for the build up towards races for the last couple of days out

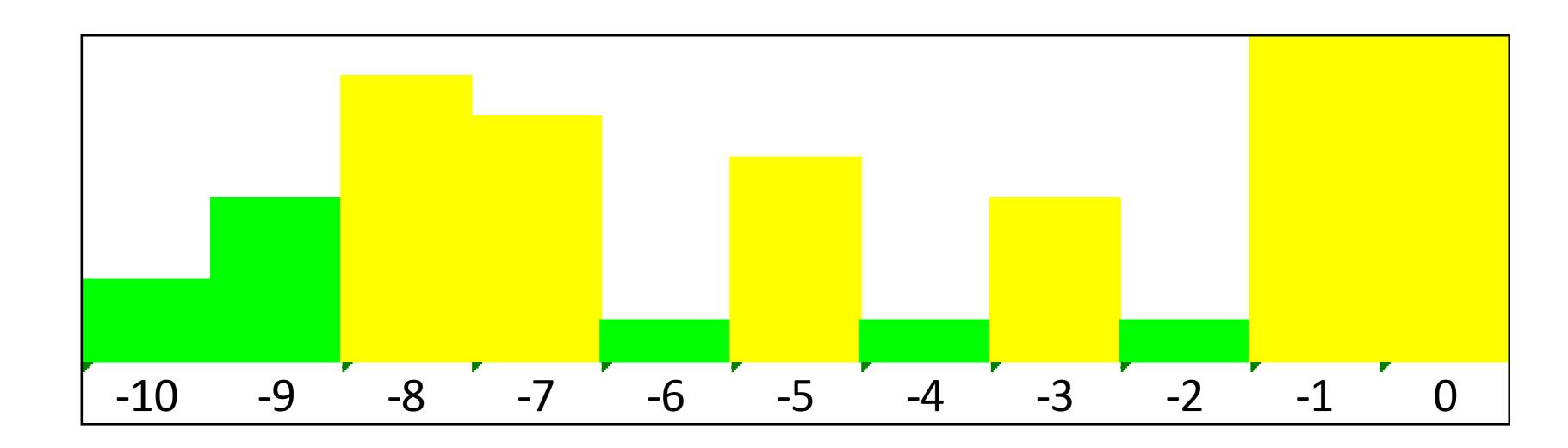
Don't under estimate the training stimulus from races!



Preparing for Race Day



Peaking/Taper





Race Day

Deliberate, planned and timetabled

	DAY 1 PLAN	BICARE	3 PLAN		DAY 2 PLAN	BICARB	PLAN
08.30	GET UP			08.30	GET UP		
09.00	BREAKFAST	10.30	6	09.00	BREAKFAST		
11.00	LEAVE HOTEL	11.00	6	10-11.00	RELAX/SNOOZE		
11.30	ARRIVE AT TRACK	11.30	4	11.00	JOG/STRETCH/MASSAGE		
12.10	WARM UP	12.00	3	13.00	LUNCH		
13.10	CALL ROOM			14.30	LEAVE FOR TRACK		
13.30	RACE - HEAT			15.00	ARRIVE AT TRACK	14.00	6
	WARM DOWN, FOOD, MASSA	GE				14.30	6
15.40	WARM UP	15.00	4	15.40	WARM UP	15.00	4
16.40	CALL ROOM			16.40	CALL ROOM	15.30	3
17.00	RACE - SEMI FINAL			17.00	FINAL		
	WARM DOWN, FOOD, MASSA	GE					
18.00	TRAVEL BACK TO HOTEL			PLANS	S FOR NEXT COMP M	IAY INFLU	ENCE
19.00	EVENING MEAL			POST	RACE PLAN, ALONG	WITH TRA	AVEL,
MASSAGE/BATH/ 20.00 POOL MENTAL STATE, DOPING CONTRO							OL ,