

# **‘Adopting a Training Programme’**

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GB Rowing, Dec 9 2006

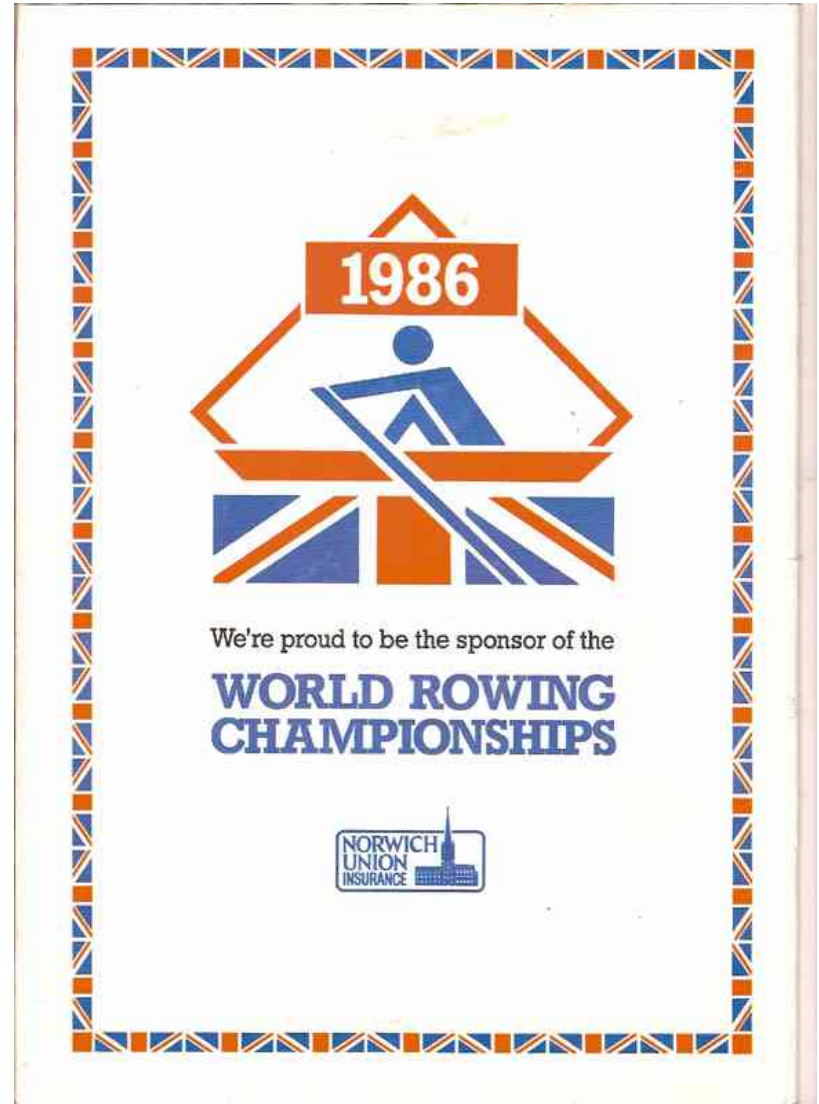
Cardiff

# Trends

- 1970's
- Intensity
- Club based
- No Ergs



- **1980's**
- Volume
- National Squads
- Ergs, HR Monitors & Science



- **1990's**
- Hybrid programmes
- Squad based
- Scientific testing



- **2000...**
- Professional athletes
- HPP's
- WCS
- Funding
- 2012 Olympics



# Where to Start ?

- Athletes
- Goals
- Time scale
- Broad plan
- Volume / Intensity
- Specific plan
- Resources



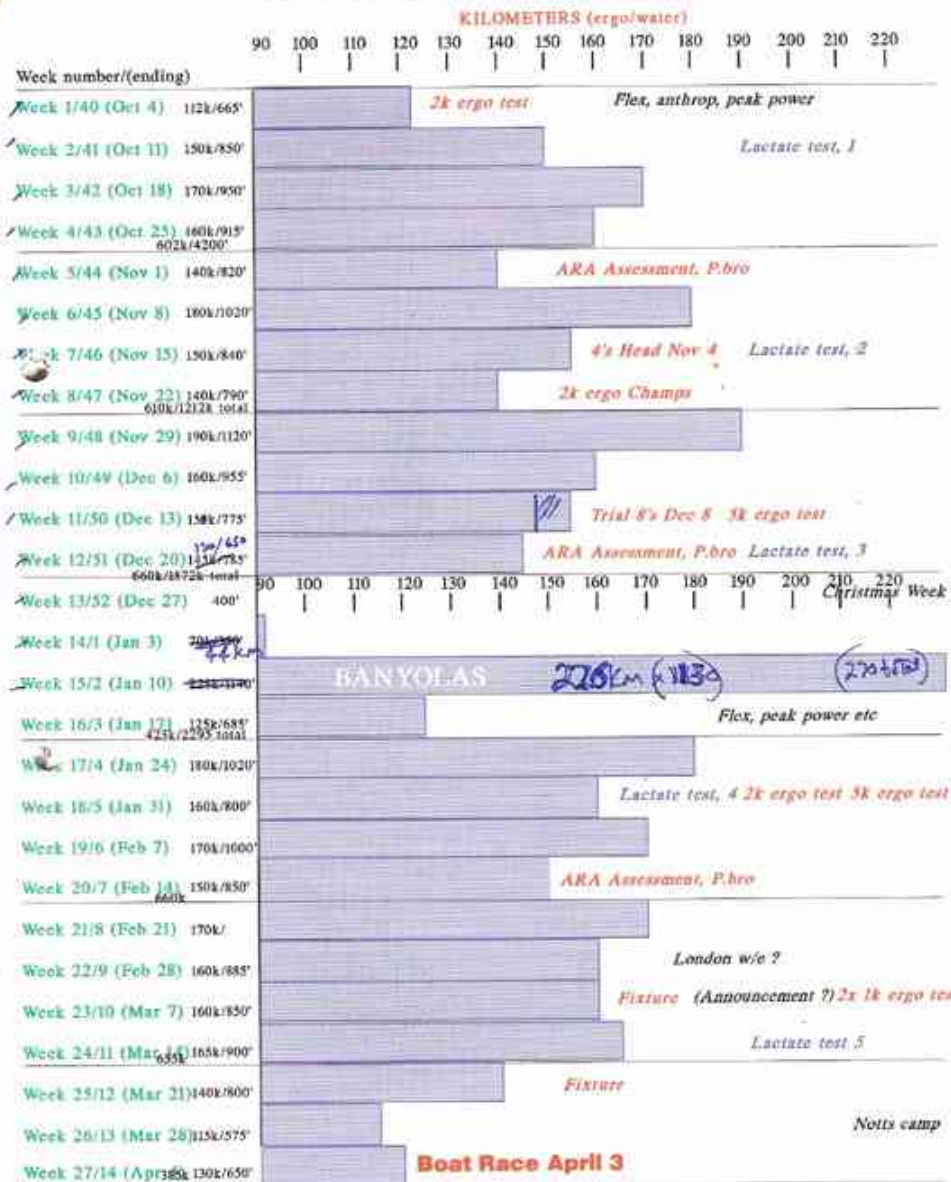
CUBC 1998/9 Programme overview

CUBC/ARA week			Event
1/40 Sep 28-4	Basic ENDURANCE	Integration of new group (32)	5 day camp
2/41 Oct 5-11		Establish common technique	
3/42 Oct 12-18		Train as a squad	
4/43 Oct 19-25		Training low intensity/ high volume	ARA 2- trial
5/44 Oct 26-1		Numbers lowering to 26	Fours Head
6/45 Nov 2-8			
7/46 Nov 9-15	STRENGTH (endurance)	Ranking developing	BIRC, 2k erg
8/47 Nov 16-22		Numbers to low 20's	Trial Eights, ARA 2- trial
9/48 Nov 23-29			
10/49 Nov 30-6			
11/50 Dec 7-13	Recovery period		Christmas
12/51 Dec 14-20			New Year
13/52 Dec 21-27	POWER (endurance)	Selection of final 18 plus coxes	Banyolas camp, Spain
14/53 Dec 28-3		Crew formation period	
15/1 Jan 4-10		Training intensity high/ vol lower	ARA trial
16/2 Jan 11-17		Select Blue Boat / Goldie crew	
17/3 Jan 18-24			
18/4 Jan 25-31			
19/5 Feb 1-7			
20/6 Feb 8-14			
21/7 Feb 15-21	RACE PHASE I	<i>Term ends 12 March</i> Final taper period	Fixture
22/8 Feb 22-28			Fixture
23/9 Mar 1-7			Camp NWSC
24/10 Mar 8-14			BOAT RACE
25/11 Mar 15-21			
26/12 Mar 22-28	Recovery period		ARA /u23 trials
27/13 Mar 29-4			
15 Apr 5-11	POWER (maintenance)	Summer programme begins	
16 Apr 12-18			
17 Apr 19-25			
18 Apr 26-2			
19 May 3-9			
20 May 10-16			
21 May 17-23			
22 May 24-30		(Exams)	
23 May 31-6		(Exams)	
24 Jun 7-13		RACE PHASE II	
25 Jun 14-20			HENLEY R.R.
26 Jun 21-27			LUCERNE
27 Jun 28-4			
28 Jul 5-11			
29 Jul 12-18			NATIONALS
30 Jul 19-25			

UBC 1999

# Boat Race Periodisation: Km/mins per week

Km includes all water & ergo work. Minutes includes ergo, water and land based strength work.



3995KM TOTAL  
140 +

BC 1998/9

Training Programme, weeks 6 - 10  
November 2 - December 6

SESSION # 1		Pulse	SESSION # 2		Pulse
Mon-2 Nov			Regeneration. Donald Ely, 8 pers		<b>WEEK 6</b> 180km/1020'
Tue 3	Weights 5x 20 reps		18k/90' UT2 r.18-20	70%	
Wed 4	Ergo 70' UT2	70%	22k/110' UT2 r.18-20	70%	
Thur 5	Weights 5x 20 reps		18k/90' UT2/1 alt 4x 1000/1000m r.20/24	80%	
Fri 6	Ergo 80' 20/20/20/20 UT2 r.20/24	70%			
SAT 7	22k/110' UT1/AT 2x 5'4"3"2"1' r.20-30 <i>or scull racing</i>	85%	22k/110' UT2 inc 10x 10 str r.24-34	75%	Fours Head Briefing
SUN 8	20k/100' UT2	70%	22k/110' inc Pww 6x 50 str r.22	90%	
Mon 9	off		off		<b>WEEK 7</b> 150km/840'
Tue 10	Lactate test #2		18k/90' inc Tr 2x 3k r.25-27	85%	
Wed 11	Weights 5x 20 reps		18k/90' inc Tr 4x 500m r.30-36	95%	
Thur 12	Ergo 50 inc Peak Power + speed wk	70%	16k/80' inc speed work, max rate, 150 str	65%	Load boats
Fr	off (Travel to London)		8-10k alactate work (Speed) 100 strokes	60%	Leave at 12.30
SAT 14	Warm up row 8-10k speed work	60%	<b>FOURS HEAD 12.30</b>		
SUN 15	20k UT2 r.18-22 <i>(row on flood tide over course)</i>	70%	16k UT2/1: 2x 4'3"2' rate 22-26	80%	
Mon 16			Regeneration 30-50' run/cycle/swim etc	60%	<b>WEEK 8</b> 140km/790'
Tue 17	Weights 10,7,4,7, reps		22k/110' UT2 r.18-20	70%	Row 4/8's
Wed 18	Ergo 80' 500/1000/500 race pace	90%	22k/110' UT2/1 alt 3'1" x 8 r.24/20	80%	
Thur 19	Weights 10,7,4,7, reps		18k/90' UT2/1 r.20-24	75%	
Fri 20	Ergo 70' inc 4x 1' race pace				
SAT 21	18k/90' UT2 r.18-22	75%	off		
SUN 22	<b>INDOOR HERO CHAMPIONSHIP</b>				
Mon-23			Regeneration 30-50' run/cycle/swim etc	60%	<b>WEEK 9</b> 190km/1120'
Tue-24	Weights 10,7,4,7, reps		22k/110' UT2 r.18-20	70%	Row in 8/4's
W	Ergo 80'		22k/110' inc AT/UT2 4'1" r.26/20x 6	85%	
Thur 26	Weights 10,7,4,7, reps		22k/110' UT2 r.20	70%	
Fri 27	Ergo 70' inc 20' at AT <i>back stroke</i>	85%			
SAT 28	22k/110' UT2 r.20	70%	22k/110' UT1/AT 4x 2k r.22,24,26,28	85%	
SUN-29	26k/110' inc Pww 50/70/90/70/50x 2	90%	16k/80' UT2 technique	65%	
Mon 30			Regeneration 30-50' run/cycle/swim etc	60%	<b>WEEK 10</b> 160km/955'
Tue-1 Dec	Weights 10,7,4,7, reps		22k/110' inc UT2/Tr 3'1"r.30/20x 5	90%	Row in 8/4's
Wed-2	Ergo 60' UT2	70%	22k/110' UT2 inc 100 str r. vary	75%	
Thur 3	Weights 10,7,4,7, reps		18k/90' inc Tr 4x 500m r.32-36	90%	
Fri 4			16k/80' inc UT1 2x 10' r.24	80%	Load boats
SAT 5	18k/90' UT2 over course	70%	18k/90' inc Tr 1'2"3"r.32-26, 3'2"1"r. 26-32	90%	Travel London
SUN-6	16k/80' inc 100 str rate play	70%	12k/60' inc speed work	65%	

coming up . . .

NOTES -

1. TRIAL EIGHTS DEC 7th
1. ARA 2- TRIAL DEC 19

# Training loads

- International: 18-30+ hrs/wk
- Elite Club: 14-18 hrs/wk
- Junior/Club: 7-12 hrs/wk
- Novice: 4-8 hrs/wk
- Recreational: 1-4 hrs/wk

Categorie: Senior e Pesì Leggeri  
Periodo: febbraio 1989

Giorno / Programma	Recupero	Pulsazioni		Palate	Km.
		Percento	Freq Card		
Lunedì (SOGLIA ANAEROBICA)					
A) Corsa Riscaldamento (2.11)	-	65-75%	130-150		4-6
B) Corsa Soglia Anaerobica (2.14) 3 x 12 min	4'-6'	85-90%	170-180		8-12
Martedì (PESÌ)					
A) Canottaggio Fondo Lento (1.12)*	-	65-75%	130-150	18-22	8-12
B) Pesì Forza Massima Specifica (4.21)					
Mercoledì (TRASPORTO)					
A) Corsa Riscaldamento (2.11)	-	65-75%	130-150		4-6
B) Corsa in Salita (2.15) 3 x 5 min o, se non e' possibile	3'-6'	90-95%	180-190		8-10
C) Corsa Veloce (2.17) 4 x 1000 mt	3'-4'	90-95%	180-190		8-10
C) Circuito 2 giri (4.31)					
Giovedì (UTILIZZAZIONE 2)					
A) Canottaggio Fondo Lento B (1.13) 2 x 10 km	** 20'-30'	70-80%	140-160	20-22	20
Venerdì (TRASPORTO)					
A) Corsa Riscaldamento (2.11)	-	65-75%	130-150		4-6
B) Corsa a Scatti (2.16) 20"/10" x 10-12 min - 2 serie	3'-6'	90-95%	180-190		8-12
C) Pesì Forza Massima Specifica (4.21)					
Sabato (UTILIZZAZIONE 2)					
A) Canottaggio Fondo Lento (1.12)	-	65-75%	130-150	18-22	16-20
Domenica (UTILIZZAZIONE 1)					
A) Canottaggio Fondo (1.14)	-	75-85%	150-170	22-26	20-24

108 - 120 P.M.

Note: 10-15 minuti di flessibilità e allungamento dovrebbero essere svolti prima e dopo ogni seduta d'allenamento.

\* Se non e' possibile eseguire il riscaldamento di canottaggio, fare 30 - 40 minuti di corsa a 130-150 pulsazioni.

\*\* Questo recupero deve essere effettuato a terra con esercizi di allungamento e flessibilità.

\* Categorie: Senior e Pesi Leggeri  
Periodo: giugno, luglio, agosto,  
settembre 1989 \*

Giorno / Programma	Recupero	Pulsazioni			Km.
		Percento	Freq Card	Palate	
Lunedì (UTILIZZAZIONE 2) A) Canottaggio Fondo Lento (1.12)	-	65-75%	130-150	18-22	16-20
Martedì (TRASPORTO)					
1) A) Canottaggio Riscaldamento (1.11) B) Canottaggio Interval Training Lungo 1: 4 x 5 min (1.31)	-	65-75%	130-150	18-22	4-6
2) (UTILIZZAZIONE 1) A) Canottaggio Fondo (1.15)	4'-6'	90-95%	180-190	28-32	12-14
Mercoledì (TRASPORTO)					
1) A) Canottaggio Riscaldamento (1.11) B) Canottaggio Interval Training 12 x 30/15 colpi (1.61)** 2 serie	-	65-75%	130-150	18-22	4-6
2) (UTILIZZAZIONE 1) A) Canottaggio Fondo (1.15)	6'-8'	90-95%	180-190	32-36	12-14
Giovedì (SOGLIA ANAEROBICA)					
1) A) Canottaggio Riscaldamento (1.11) B) Canottaggio Soglia Anaerobica 3 x 12 min (1.22)	-	65-75%	130-150	18-22	4-6
2) (UTILIZZAZIONE 1) A) Canottaggio Fondo (1.15)	8'-10'	85-90%	170-180	28-30	12-14
Venerdì (TRASPORTO)					
1) A) Canottaggio Riscaldamento (1.11) B) Canottaggio Variazioni di Ritmo Corto 1: 1 x 3'-2'-1'-1' (1.42)	-	65-75%	130-150	18-22	4-6
2) (UTILIZZAZIONE 1) A) Canottaggio Fondo (1.15)	8'-10'	85-95%	170-190	30-36	12-14
Sabato (TRASPORTO)					
1) A) Canottaggio Riscaldamento (1.11) B) Canottaggio Interval Training Corto 3: 20 x 17/5 colpi (1.63) 2 serie	-	65-75%	130-150	18-22	4-6
2) (UTILIZZAZIONE 1) A) Canottaggio Fondo (1.15)	6'-10'	90-95%	180-190	<34>	12-14
Domenica (TRASPORTO)					
A) Canottaggio Riscaldamento (1.11) B) Canottaggio Interval Training Resistente 2: 2 x 2000 mt (1.52)	-	65-75%	130-150	18-22	4-6
	10'-15'	90-95%	180-190	32-34	8-10

Note: 10-15 minuti di flessibilità e allungamento dovrebbero essere svolti prima e dopo ogni seduta d'allenamento. \*\* In stagione avanzata effettuare 10 x 30/10 (1.61) 2 serie.  
\* Dopo i Campionati Italiani nel programma devono essere inserite 2 settimane di recupero attivo.

FISA The International Rowing Federation

## Training Program: November

Day:	Program:	Rec:	Heart rate:	Stroke rate:	Km:
Monday	A) Warming up: Rowing/Gymnastic 30 min B) Weight training (Maximum strength training)** C) Flexibility - Gymnastic		130-150		
Tuesday	A) Warming up: Rowing/Running/Gymnastic 30 min B) Weight training (Volumetraining) C) Flexibility - Gymnastic		130-150		
Wednesday	A) Rowing/Running: Slow Distance B) Flexibility		130-150	[15-18]	10-12
Thursday	A) Warming up: Rowing/Running/Gymnastic 30 min B) Weight training (Volume-training) C) Flexibility - Gymnastic		130-150		
Friday	A) Running: Warming up B) Hillrunning: Ca. 5 min 3-5 rep. C) Flexibility	4'-6'	130-150 170-190		3-4 5-8
Saturday	A) Warming up: Rowing/Running/Gymnastic 30 min B) Weight training (Volumetraining) C) Flexibility		130-150		
Sunday	A) Rowing (or) Running (or) Cycling B) Flexibility		130-150 130-160 130-160	18-20	20 14-16 35-50

\*] See program for Weight training. \*\*] Lightweight should use "Toppyramid"

Day	NOTPD	Program	Rate	KM	Comment
Mon	I	20+20+20 min	22/24/26	18	
	II	St.St. Technique	22-24	16	
Tue	I	3 x (7+5+3 min) / 5 min	24/26/28	16	
	II	6 km on time	Freely	12	?
Wed	I	7 x (2/4 min) without rest total 42 min	22/26	16	
	II	Free			
Thu	I	3 x 4 km / 1 km	26	18	
	II	Technique	22-24	12	
Fri	I	2 x (8+6+4+2+1 min) / 10 min	24/26/28/30/32	18	
	II	3 x 10 min / 3 min	24	16	
Sat	I	5 x 5 min / 3 min	28	16	
	II	St.St.	22	12	
Sun		Free			
Total		Current training pr week		170	
Total					

# Know your Athletes

- Test base fitness
- Set Targets
- Undertake Training
- Re-Test
- Adjust Load
- Undertake training
- etc



# Testing & Monitoring

- Power tests
- 2000m ergometer
- 30' rate 20
- 18k rate 18
- Strength
- Flexibility
- Power/Weight ratio



# Testing & Monitoring

- Power tests
- 1) Weights tests (3 RM)
- 2) ergo: eg 10 strokes, 250m, 2 min r.34
- 3) Gym tests: eg Sergeant jump, pull ups

# Testing & Monitoring

2000m ergo test

Record average watts (eg 400w)

Use 55% for UT2

65% for UT1

75% for AT

80%+ for Tr

# Testing & Monitoring

- 30' rate 20 (4-6mmol) *[87-91% of 2k]*
- 18k rate 18 (<2 mmol) *[81-85% of 2k]*
- Running (set distance)
- Swimming (no. lengths)
- Cycling (ave speed)
- Gym tests ('Beep test')

# Know your athletes

- Daily monitoring:
- Body weight
- Waking HR
- Training diary
- Mood state
- Goal setting, individual
- Goal setting, group



# Training Principles

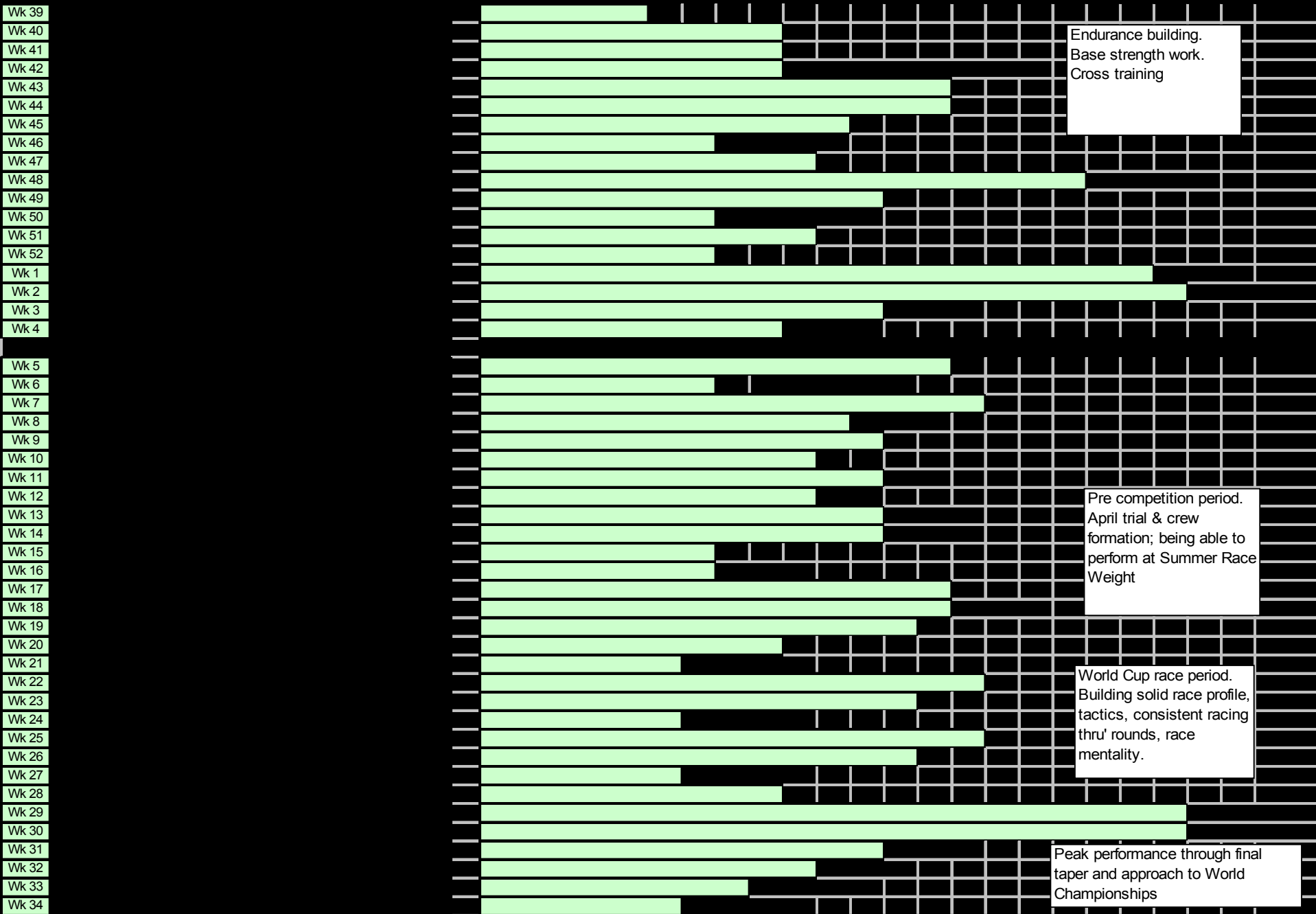
- Overload
- Recover
- Response
- Increase training
- (Reversibility)
- (Specificity)
- Volume v Intensity
  
- REST is crucial !



# Recovery

- UT: 1-2 hours
- AT/Tr: 24-48 hours
- Strength: 48hrs +
- Racing: 3-5 days

# GB Lightweight Men Year Plan 2006



**LIGHTWEIGHT MEN TRAINING PROGRAMME 2006. APRIL/MAY '06**

Minutes at each intensity Daily totals

CREW FORMATION PHASE													
Week 17	am	am/pm	pm	UT2	UT1	AT	Tx	Ac	Ap	sr	mins	km	
Mon 24	Ergo 24k, 18k r 18, 8k @ r 20-21 on sliders	Longridge: 100' UT inc tech ex. & some med rate bursts	Strength maintenance 3x 5 reps, 3-4 lifts	180							60	250	44
Tue 25	Ergo 60' including 30' Ruse 24 sliders in crew	100' UT2/T1 inc PWW session A, 270 strokes		118		30				10	160	35	
Wed 26	100' UT2/T1AT inc 3x 4' 3" 2' rates 22-32	Trunk Strength		70	12	18					100	200	20
Thur 27	100' UT2	80' Tech including bursts of 12 str rate 24-30	Run 40'	195			5					200	30
Fri 28	100' inc 4x 24k/ r 20 22 24 26	20' tech then PWW session A 270 strokes (60 total)		115	24	8				15	182	92	
SAT 29	100' PWW session B (20x 20str some bungee/climbs)	80' Technique, some starts	Caversham Opening Ceremony	138						22	160	30	
SUN 30	off												
<b>Total Minutes</b>				<b>628</b>	<b>36</b>	<b>56</b>	<b>5</b>	<b>9</b>	<b>49</b>	<b>160</b>	<b>1133</b>	<b>383</b>	

MAY													
Week 18	am	am/pm	pm	UT2	UT1	AT	Tx	Ac	Ap	sr	mins	km	
Mon 1	Longridge: 100' UT inc tech ex. & some med rate bursts	80' tech inc starts		150							60	190	30
Tue 2	60' ergo incl 30' rate 24		Strength maintenance 3x 5 reps, 3-4 lifts	30		30					60	120	15
Wed 3	Donney: 20k incl 4x 2000m rates: 22 24 26 28	Trunk Strength	Tech row 80'	80							90	150	30
Thur 4	Donney: 100' UT2 inc rehearse profile UT2 r 20 18 19 21 x 3	50' tech inc starts 6x 100m	Ergo 18k UT2	225		7	14	7				225	48
Fri 5	Donney: 100' inc 4x 24k/ r 24 26 28 30	20' tech then PWW session A 270 strokes (60 total)		113	8	16	8			15	160	30	
SAT 6	Longridge: 100' PWW session B (20x 20str some bungee/climbs)	80' Technique, some starts		138						22	160	30	
SUN 7	off												
<b>Total Minutes</b>				<b>798</b>	<b>16</b>	<b>60</b>	<b>18</b>	<b>37</b>	<b>160</b>	<b>1073</b>	<b>483</b>		

Week 19													
Week 19	am	am/pm	pm	UT2	UT1	AT	Tx	Ac	Ap	sr	mins	km	
Mon 8	Longridge: 100' UT inc tech ex. & some med rate bursts	80' tech incl Starts	Strength maintenance 3x 5 reps, 3-4 lifts	150							60	220	30
Tue 9	Longridge: 100' inc 10x 1', rest 30', rates 25-36	Balsam: Ergo 18k UT2		155					10		175	44	
Wed 10	18k inc 2x 2000m 30/29/30/32 1x 500m	Trunk Strength		84			18				90	170	16
Thur 11	14k/ 70' UT2 inc rehearse profile UT2 r 20 18 19 21 x 3	80' tech inc starts		118			2				120	24	
Fri 12	8km warm up & weigh-in (SRW) rehearse profile UT2 20 18 19 21	2000m Speed order	Seat Races 1000m	150						27	187	36	
SAT 13	8km warm up & weigh-in (SRW)	Seat Races 1500m		110						20	130	26	
SUN 14	off												
<b>Total Minutes</b>				<b>777</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>87</b>	<b>160</b>	<b>1002</b>	<b>376</b>		

Week 20													
Week 20	am	am/pm	pm	UT2	UT1	AT	Tx	Ac	Ap	sr	mins	km	
Mon 15	Longridge: 100' UT 2- 18	80' tech row		150							60	180	30
Tue 16	Longridge: 100' inc 2(5x 1', rest 30', rates 25-36	80' tech row incl Starts	Strength maintenance 3x 5 reps, 3-4 lifts	150					10		60	220	30
Wed 17	Caversham: 18k inc 3-4x 1000m 28 30 32 34	Trunk Strength		88			12				90	170	16
Thur 18	Caversham: 18k UT2 inc rehearse profile UT2 r 20 18 19 21 x 3	20' tech then PWW session A 270 strokes (60 total)		145						15	145	28	
Fri 19	Caversham: 8k UT warm up row	18k inc 2x 2000m r 29/30 30/32 1x 500m					15				15	24	
SAT 20	Caversham: 14k inc 6x 500m race pace	16k/ 80' UT2		138						12	150	30	
SUN 21	off												
<b>Total Minutes</b>				<b>681</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>150</b>	<b>873</b>	<b>184</b>		

joined  
here  
→  
the 2x

with!

Week 17 1000 750 500 Trunk  
 Week 18  
 → Thurs, E changed

# Psychology

- Keep it interesting
- Involve athletes in Process
- Ask for feedback



# Tapering

- If in doubt do less, not more
- Physical recovery
- Mental recovery
- Race sharpness, skills
- 1-2 days for minor competition
- 1-3 weeks for major competition

# Summary-Macro

- Year/Month
- Fill in key dates:  
tests/comp's/dates/events/hols/terms etc
- How many mins = Light/med/Hard week
- Decide weekly cycles (eg L/M/H/H/L)
- Fill in hard weeks & light/tapers
- *(Remember Phases, 'pre-comp/comp' etc)*
- Fill in remaining

# Summary-Micro

- Week/day/hour
- Decide cycles (eg 2/3/1/2/1/2/0)
- Fill in hard sessions (Str/AT etc)
- Fill in technical sessions
- Fill in remainder

# Over-training

- High resting pulse
- Lack of top end performance
- Disrupted sleep
- Erratic moods
- Stress
- Erratic body weight
- Loss of appetite
- Sweats

# Have Fun !

