

Periodisation Programmes Within Climbing

A framework for UK Coaches

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Format for today's session

- An Introduction to Periodisation Theory
 - A complex subject matter
- How to construct a training programme
 - Basic theory
- Practical session
 - Basic theory applied to a climber; how to do it yourselves

What is “Periodisation?”

- The dividing of training time into organised periods
- These periods can then be organised throughout a training season to create a long term plan.
- But.... Can be very complex if not careful!

The Annual Plan						
Phases of training	Preparatory		Competitive		Transition	
Sub-phases	General preparation	Specific preparation	Pre-competitive	Competitive	Transition	
Macro-cycles						
Micro-cycles						

The Building Blocks

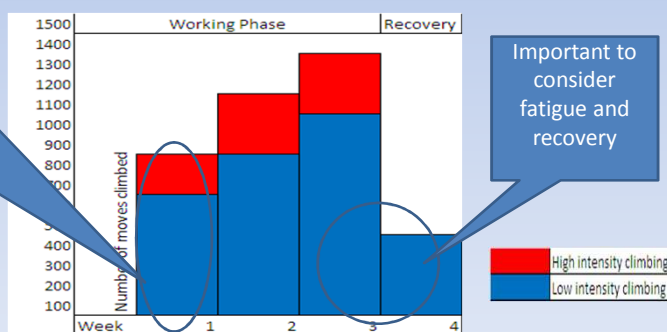
- The Microcycle
 - The smallest period of work
 - Typically uses a week for practical reasons
 - Format will vary hugely during the year

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Phys	AnCap	AerCap		AnCap	AnPow	AerPow	
	AerCap			AerCap		AerCap	
Tech	Footwork			Footwork		Footwork	
Mental	Falling	Falling			Aggression		

- The Mesocycle

- Represents a training period of between 2-6 weeks
- The wave cycle has been shown to be effective. Not critical though.

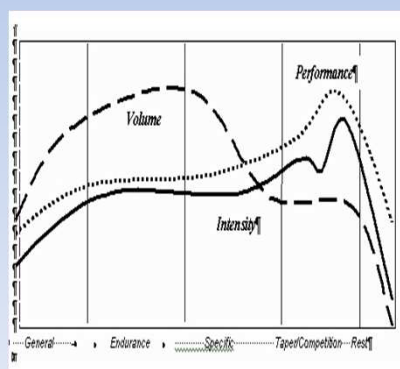
In almost all cases the volume of work will be underpinned by large amounts of lower intensity work



Important to consider fatigue and recovery

- The Macrocycle

- The largest training period, which covers the entire training season.
- Will encompass early preparation phases, all the way through to peaking for an event/climb and subsequent recovery periods.
- Single, double, multi-peak cycle?

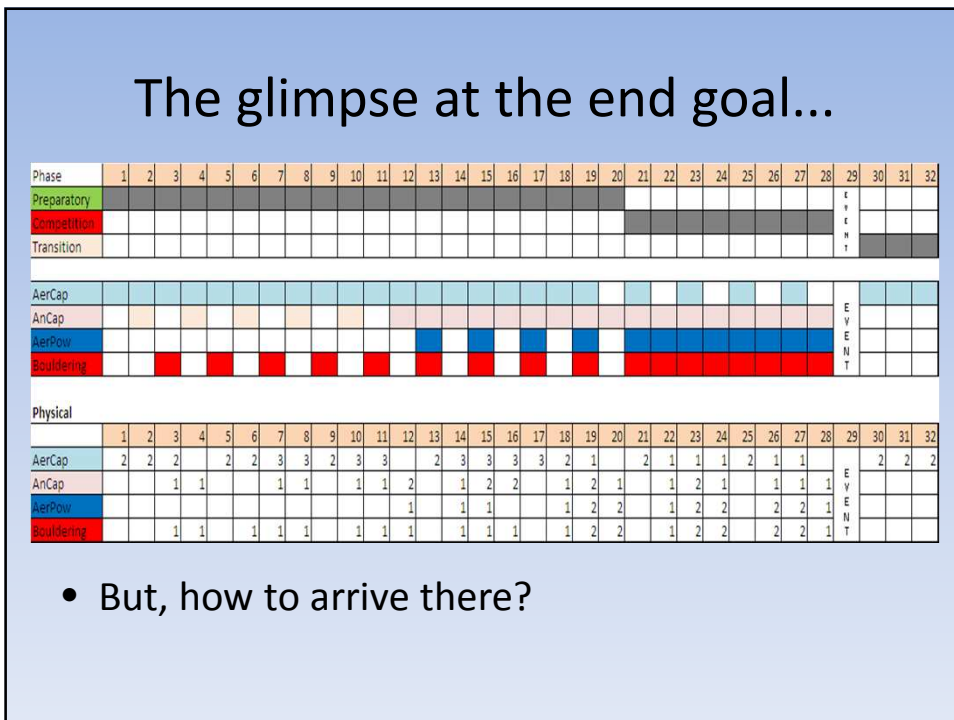
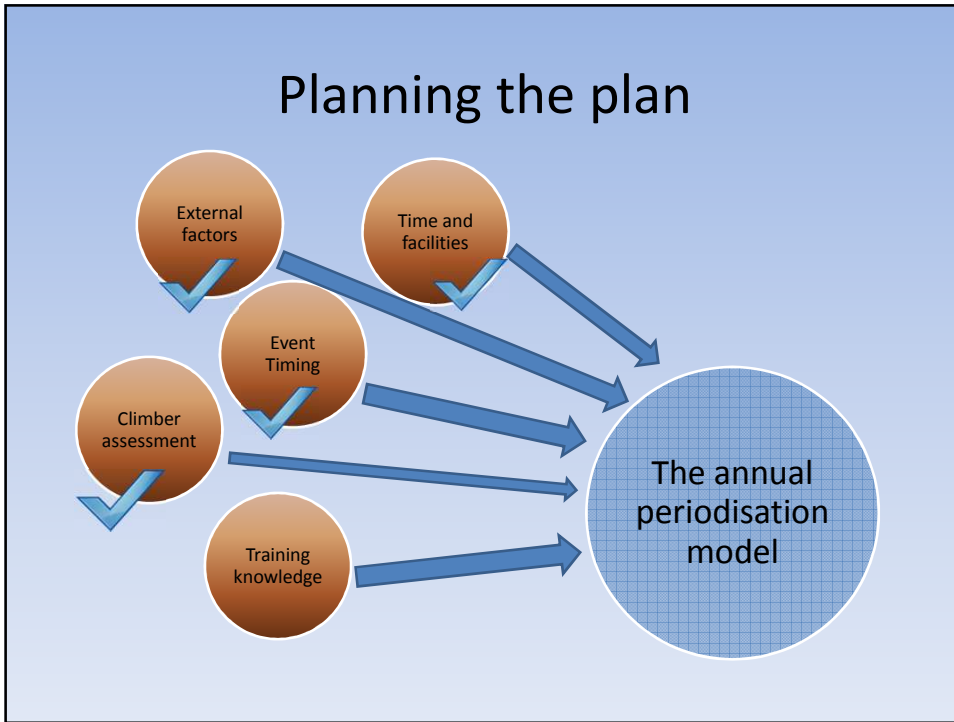


The Annual Plan - Macrocycle

- Preparatory Period (2-5 months)
 - General preparation & specific preparation
- Competitive Phase (1-3 months)
 - Specific preparation & peak performance
- Transition Phase (2-4 weeks)
 - Physiological and psychological recuperation

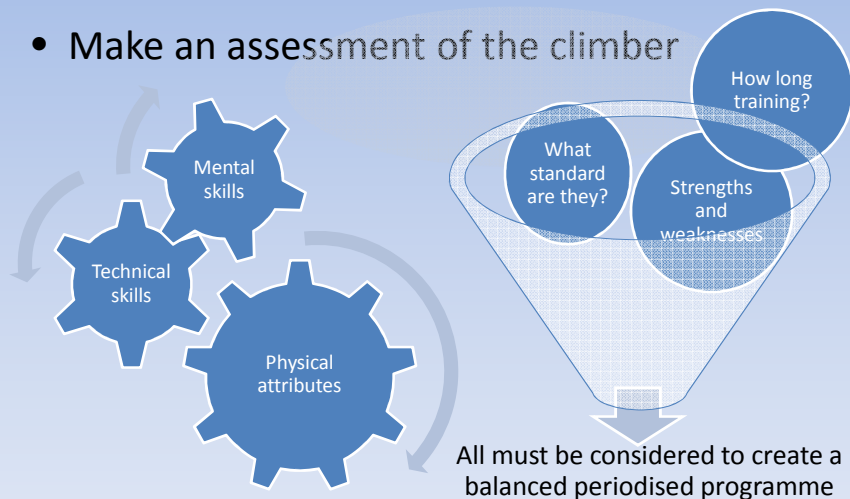
Some important ideas to consider

- Annual plans are very flexible – times for mesocycles can be adjusted.
- No particular plan **is** perfect, but no plan **can** be perfect if it isn't followed!
- Almost every part of the basic theory within this presentation has its counter-arguments. I will simply present from experience.
- Theory vs. real world application.



Where to Start?

- Make an assessment of the climber



The assessment process

- Create a basic framework for time & facility
 1. The working week & school week
 2. Number of hours and facilities available to train – implications

	Mon	Tues	Wed	Thur	Fri	Sat	Sun
Routes	No	Yes	No	No	Yes	No	No
Bouldering	No	Yes	No	No	No	Yes	No
Home	Yes	Yes	Yes	Yes	Yes	No	No

3. Any basic microcycle can now be constructed with these key statements of training availability

NB

1. External factors - holidays etc.
2. Event / goal timing – the crucial fact!

Mental and technical considerations within the assessment process

1. Technical aspects of climbing

- Movement skills/onsighting, clipping, resting, pace, passive/aggressive.

2. Mental aspects of climbing

- Mental state management, route reading, falling, mental commitment.

>>>> Order of specificity!!

Getting it down on Paper

- Using the Binney model
- 4 main energy systems to train
 - Aerobic Capacity (8 weeks +) [Preparatory]
 - Anaerobic Capacity (18 weeks +) [Prep & Competitive]
 - Aerobic Power (6-8 weeks) [Competitive]
 - Strength / bouldering [Prep & Competitive]

Basic Model

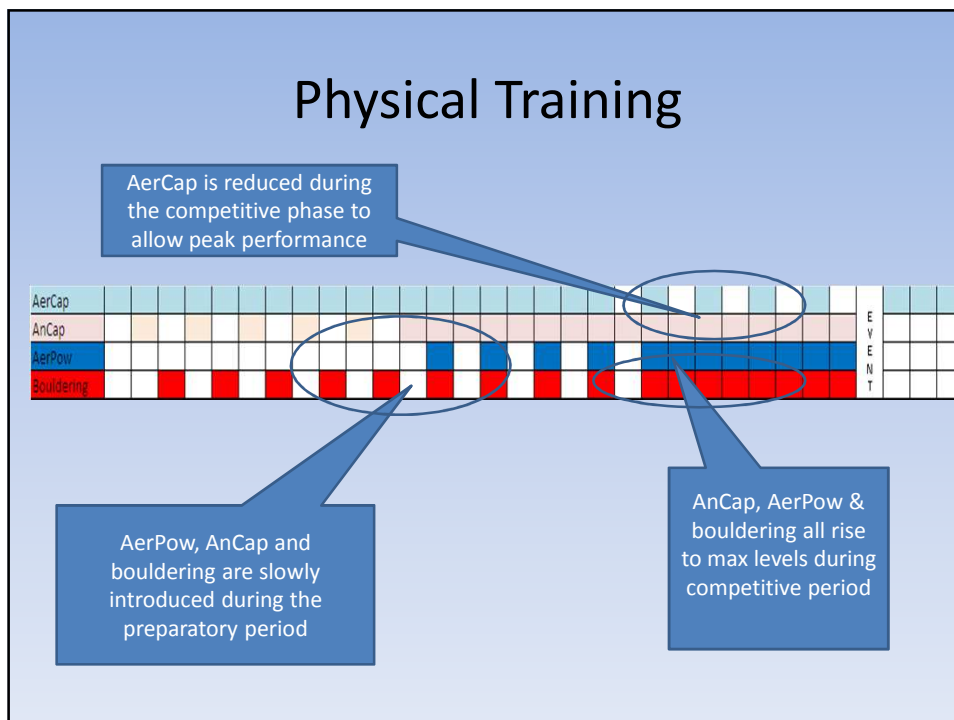
- Note the decrease in Aerobic Capacity towards the event goal
- decrease in volume of climbing
- Note the increase in Aerobic Power towards the event goal
- increase in intensity of climbing
- For simplicity bouldering and Anaerobic Capacity can be kept constant
- BUT tatic vs dynamic AnCap vs AeroPow

	Preparatory	Competitive	Transition
AerCap	70	40	100
AnCap	20	20	0
AerPow	0	30	0
Bouldering	10	10	0

Assigning the macrocycle

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
Preparatory																																	
Competition																																	
Transition																																	

- As you have a date for the event route then you are able to mark this at first
- Work backwards from this date marking out your competition peaking period
- Blocks act as a visual guidance for physical mental technical training periodisation



Creating a usable plan

- Once the building blocks are in place, we are then able to refer back to 2 main resources:
 1. Our basic microcycle constructed during the assessment
 - Number of sessions per week
 - Volume of training that may be handled
 2. The basic trainable energy systems:
 - AerCap, AnCap, AerPower,

Constructing microcycles

- Percentage split depends on model used
- Skill judgement and experience plays a big part.

	Preparatory	Competitive	Transition
AerCap	70	40	100
AnCap	20	20	0
AerPow	0	30	0
Bouldering	10	10	0
5 day climber			
	4	1	2
	1	1	0
	0	2	0
	1	1	0
2 day climber			
	2	1	1
	1	1	0
	0	1	0
	1	1	0

our example b climber

Filling in the details

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
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During the preparatory period this type of training should be introduced but not overemphasised. Again we adhere to a work rest ratio to allow recovery.

We know that during the competitive cycle both AerPow and bouldering explosive should be prioritised. Sessions are marked at a regular interval and with a work rest

Filling in the details

AerCap																																
AnCap																																
AerPow																																
Bouldering																																
Physical																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
AerCap	2	2	2		2	2	3	3	2	3	3		2	3	3		3	2	1	2	1	2	1	1	1	2	1	1	2	2	2	
AnCap		1	1				1	1		1	1	2				2	2		1	2	1		1	2	1	1	1	1	1	1	2	2
AerPow																1	1	1	1	1	1		1	2	2		2	2	1	1	1	1
Bouldering			1			1	1	1		1	1	1			1	1	1	1	1	1	1		1	1	1		1	1	1	1	1	1

AerCap can be worked for longer without systematic rest ??

As the intensity of AerCap is much lower this may be trained more frequently than any other climbing.

AnCap is maintained toward the event goal but care must be taken when combined with AerPow

The transition period will only contain light recovery training

A Completed Training Model

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Preparatory																																
Competitive																																
Transition																																
Physical																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
AerCap	2	2	2		2	2	3	3	2	3	3		2	3	3		3	2	1	2	1	2	1	1	1	2	1	1	2	2	2	
AnCap		1	1				1	1		1	1	2				2	2		1	2	1		1	2	1	1	1	1	1	1	2	2
AerPow																1	1	1	1	1	1		1	2	2		2	2	1	1	1	1
Bouldering			1			1	1	1		1	1	1			1	1	1	1	1	1	1		1	1	1		1	1	1	1	1	1

- Preparatory emphasis on easy climbing
- Competitive emphasis on harder climbing
- Transition total recovery

Is this really the end?

- The periodisation model is just the beginning
- The climber will need guidance for how different types of training will occur
- Constant re-assessment of plan as outside factors take effect. There is no magic bullet!

