



“Coaching Mountain Running”

Coaching Conference
26-27 September 2015

Who am I?

- Malcolm Patterson
- Coach Mentor: Mountain and Hill
- Hillrunner – competitor, coach, organiser
- Orienteer – competitor, coach, organiser

What is hill running?

- A hill race should:
- Have at least 20m climb per kilometre
- Have at least 60% of the route off-road
- Contain “some genuine hill terrain”

- = quite ill-defined !

Typical hill race?

- At least 50m climb per km
- At least 80% off-road - but can then range from all on good path (eg Tinto) to pathless (eg Chapelgill)
- Involves both climb and descent, usually starting and finishing at same point
- Length can vary from “Short” (under 10km) to “Long” (over 20km) 1.5km up to 40km.

What is mountain running?

- “Mountain Running” is term used for International hill races
- Often uphill only races, rather than up and down
- Usually marked throughout – no route choice
- Majority of route is on road, track or good path, downhill not usually technical

IAAF Definition

altitude.

- (g) The entire course shall be clearly marked and include kilometre marks.
- (h) Natural obstacles or challenging points along the course should be additionally marked.
- (i) A detailed course map must be provided along with a profile using the following scales:

Altitude: 1/10,000 (10mm = 100m)

Distance: 1/50,000 (10mm = 500m)

Types of Mountain Races

2. (a) Classic Mountain Races

For Championships, the recommended distances and total amount of ascent should be approximately:

	Mainly Uphill		Up and down races	
	Distance	Ascent	Distance	Ascent
Senior Men	12km	1200m	12km	600m/750m
Senior Women	8km	800m	8km	400m/500m
Junior Men	8km	800m	8km	400m/500m
Junior Women	4km	400m	4km	200m/250m
Youth Boys	5km	500m	5km	250m/300m
Youth Girls	3km	300m	3km	150m/200m

Mountain vs Endurance

- MR needs minimum of 15-20% of specialist training
- Ideal would be higher, 25-40%
- So 1 or 2 days training in each week
- Comparisons: XC might be 15-20%, orienteering 35-50%

Mountain vs Endurance 2

BOTH need:

- Endurance
- Speed
- Strength
- Flexibility
- Co-ordination

Mountain vs Endurance 3

Training plan key phases are:

- Basic
- Specific Preparation
- Competition (can be as little as 2 races!)
- Post Competition Recovery

Mountain vs Endurance 4

- So whats the difference?
- Answer = NOT VERY MUCH!
- It follows that a good endurance coach can, with some homework, cater for ALL of a mountain runner's needs

Endurance runner's week

- Slow (recovery run)
- Intervals - longer
- Medium (steady) paced run
- Intervals – shorter
- Slow run/other training/rest
- Race – or Threshold (tempo) run
- Long slow run

Mountain runner's week (25%)

- Slow (recovery run)
- Intervals – hill reps
- Medium (steady) paced run
- Intervals – shorter
- Slow run/other training/rest
- Race – or Threshold (tempo) run
- Long slow hilly run

Advanced MR week (40%)

- Slow (recovery run)
- Intervals – hill reps
- Medium (steady) paced run
- Intervals – shorter
- Slow run/other training/rest
- Mountain Race – or Threshold (tempo)
hilly run
- Long slow hilly run

Strength and Conditioning

- = Mechanical Efficiency
- = Putting your body in the right position at the right time

Strength and Conditioning

- Develop it through:
 - Exercises / Circuit Training
 - Plyometrics
 - Proprioception
 - Weight training
 - Drills and warm up
 - Stretching and warm down

Exercises

- Front Bridge – the Plank
- Side Bridge
- Double Leg Squat
- Lunge (forward & return)
- Standing Long Jump
- Push Up
- Single Leg Box Squat
- Chin Ups

Plyometrics

- Hopping
- Bounding
- Jumping over obstacles – front and side
- Medicine Ball catch/throw

Proprioception

- Wobble Board
- Standing on one leg (shut eyes!)
- Standing on Stairs
- Walk the tightrope

Some training adaptations to MR

- Hill reps: but NB all benefit from these!
- Make fartlek sessions hillier
- Make tempo runs hillier, eg “Kenyan Hills”
- Strength training : increase emphasis on key muscle groups – eg calves, quads, glutes, abs. + key skills: high knee lift, balance, “fast feet”, agility

Training adaptations 2

- Treadmill training – allows for fine control of duration of efforts, gradient (and no bad weather!)
- Biking – make it hilly, whether on road bike or mountain bike or combination
- XC skiing, or ski-mountaineering (usually in off-season)

Training adaptations 3

- Terrain-specific running, eg: marsh, mud, sand, tree-roots, steps or rock steps, contouring...
- Rehearsal runs or races :
ie tempo runs or races of similar distance, climb, profile, duration to target race

Can you convert from LD to MR?

- “Any decent 10km runner can race uphill”
- Need to have 4-6weeks of specific training
- Need 1-3 rehearsal runs or races
- Need to “bring” your coach with you
- Exemplars: Bobby Quinn, Steve Vernon, Martin Jones, Tommy Murray and
- Andrew Douglas!
- *** YES is the answer ***

