**Beacon Hill Striders: Performance Running**

Beacon Hill Striders Performance Running - <https://beaconhillstriders.co.uk/> - aims to advise, guide, encourage, & inspire aspirational runners to adopt good/best training practice. To further this goal, I shall produce each month a short article offering both some insight and practical guidance. This month’s article examines whether current training practice aims for too much volume of faster work in our Interval Sessions.

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**Interval Training Volume: Is Less More?**

*For the purposes of this article I am using the term ‘Interval Training’ to encompass both the classical definition (a set number of repeats with an active jog/walk recovery of a specified distance/time between efforts) and what may also be termed ‘Repetition Training’ (a set number of repeats at near maximum pace with a relatively longer, often inactive, recovery between efforts)*.

**Current Practice**

In the UK, the current norm for most coaches in setting an Interval Session is to aim for around 6000m (or 16-20 minutes) of faster running per session. Senior athletes may well do a larger volume in a single session but 6000m appears the norm for most teenage & young adult training groups at club level. Indeed, it’s not uncommon to find young 13 and 14-year old athletes facing volumes of this nature in a single session.

The reasons as to why this norm has come about are unclear. There appears to be little evidence from the sports and exercise science literature to support this volume as a ‘golden’ figure to aspire to. So, why has this norm come about?

I suspect that it has much to do with filling the length of time that athletes might be expected to be present on a given training night, namely around 90 minutes. Parents often expect coaches to keep their youngsters active for most of this time, and given time for warm-up, cool-down, and recoveries around 20 minutes or so of ‘faster’ running fits the bill. Moreover, this amount of faster running is not that far removed from Winter (X-Country) race distance/time for those in the U15, U17, & U20 age groups.

My understanding is that the interval training practice at most of the successful clubs within these age groups at national level corresponds with this norm. But, one needs to ask whether this specific volume of faster running within individual interval sessions is done at the expense of training ‘intensity,’ and long-term athlete development.

Now, allow me to declare my hand.

At Beacon Hill Striders we have had considerable success with teenage runners at regional, national, and international levels. Our Interval Training practice - for our most talented runners - has centred around total faster work of 6000m (or typically 15-20 minutes) per session. Our key interval sessions of 5 x 1200m, or 8 x 2 minutes, have proved to be instrumental in the success of our leading athletes. But, but, but, have we been missing a trick?

**‘Golden Age’ Training Practice**

Without question the ‘golden age’ of UK middle and long-distance running was the 1970s and 1980s. Athletes of the calibre of Sebastian Coe, Steve Cram, Steve Ovett, Dave Moorcroft, Brendan Foster, Ian Stewart, Mike McLeod, Nick Rose, Julian Goater, Eammon Martin, and Steve Jones (to name but a few) elevated the standard to a level that has been largely unsurpassed in the years that have followed. Moreover, it was not just the presence of an elite, but the strength in depth of UK middle and long-distance running that was so apparent during this period.

So, what was the training practice - and specifically practice relating to interval training volumes - dominant throughout this period? - The answer may well surprise you.

Let’s look at some of the typical interval sessions practiced by three of these athletes:

Gateshead Harrier **Brendan Foster** (coach: Stan Long) was the UK’s most successful 5000m/10000m runner of the 1970s. Foster won European Gold at 5000m (1974) and took Olympic Bronze in the 10000m (1976). He also set World Records for 3000m (7-35.2) and 10000m (27-30.3). Examples of his Interval Training practice are as follows:

*April 1976:* (end of his Winter Training period, & immediately prior to his 3M course record at the National Road Relays, Sutton Park, Birmingham on 24/04)

\* 10/04: 10 x 400m (90 seconds rest) (average: 61.26) (total volume: 4000m)

\* 17/04: 5 x 600m (2 minutes rest) (average: 1-31.9) (total volume 3000m)

*July/August 1975:* (leading to his 3000m WR on 03/08, & a month prior to his European 5000m triumph)

\* 23/07: 3 x 800m (4 minutes rest) (average: 2-01.3) (total volume: 2400m)

\* 24/07: 2 sets of 8 x 200m (20 seconds) & 4 x 100m (total volume: 3600m)

\* 28/07: 3 x 1600m (average: 4-10.18) (total volume: 4800m)

\* 30/07: 10 x 400m (90 seconds) (average: 58.49) (total volume: 4000m)

Foster’s interval sessions may not have been extensive (in terms of volume) but the quality/intensity of his efforts was invariably extremely high. Foster would typically run more than 100 miles a week throughout the year.

Coventry Godiva Harrier **Dave Moorcroft** (coach: John Anderson) excelled at both 1500m/1 Mile and 5000m. Beset by injuries for much of his career, his finest year came in 1982 when he set a 5000m World Record (running solo) of 13-00.41, and followed it up ten days later with a European Record of 7-32.8 for 3000m.

Throughout his career Moorcroft ran the same key interval sessions (Winter & Summer) at high intensity. These sessions were:

\* 8 x 300m (3 minutes recovery) (total volume: 2400m)

\* 4 x 600m (5 minutes recovery) (total volume: 2400m)

As a mature athlete, Moorcroft was running his 600m efforts in an average of 1-22, at which point his coach introduced another session of 4 x 1000m (6-7 minutes recovery). On occasions Moorcroft, as a senior athlete, ran 5-6 repetitions of 1000m.

**Steve Ovett** (coach: Harry Wilson) was one of our greatest ever athletes, winning Olympic Gold at 800m in 1980, and recording 1500m & Mile World records in a wonderful tit-for-tat period of record chasing with his greatest rival, Sebastian Coe. Ovett’s range was phenomenal, having been an English Schools’ 400m Champion at age 13, and taking Commonwealth Gold at 5000m in 1986. The following are interval sessions that the 19-year-old Steve Ovett included in his preparation prior to taking the Silver Medal in the Men’s 800m at the 1974 European Championships:

\* 4 x 1000m (recovery not specified) (total volume: 4000m)

\* 6 x 600m (4 minutes recovery) (total volume: 3600m)

\* 4 sets of 300m (30 seconds) / 200m (8 minutes) (total volume: 2000m)

\* 6 x 300m (3 minutes recovery) (total volume: 1800m)

\* 8 x 200m (3 minutes recovery) (total volume: 1600m)

There is little detail available as to what training Ovett did as a senior athlete, and it is safe to say that volume of off-track grass interval sessions in the Winter may well have exceeded 6000m based on Harry Wilson’s training practice. Nevertheless, it is clear that leading towards the Summer competition period Ovett focused very much on quality over quantity in terms of his interval training practice.

The interval training practice of the other leading UK athletes mentioned earlier for the most part mirrored the examples provided, with quality emphasised over quantity.

The sources I have used for the above examples are:

\* Brendan Foster: *‘Brendan Foster’ by Brendan Foster & Cliff Temple (1980)*

\* Dave Moorcroft: ‘*The IAAF Symposium on Middle & Long-Distance Events’ (1983)*

\* Steve Ovett: ‘*Middle & Long-Distance Marathon & Steeplechase’ (BAAB) (1975)*

**International Comparisons**

The training practice of world class non-British athletes during this same period (1970s & 1980s) shows a similar tendency to focus on quality over quantity in terms of interval training. The following examples illustrate this fact.

**Frank Shorter** was a self-coached world-class 5000/10000m track runner. His enduring fame is based on his victory in the 1972 Olympic Marathon, a feat that has been ascribed as the catalyst for the US ‘running boom’ of the 1970s. Shorter used interval training extensively following (more or less) the same weekly training pattern throughout the year. The sessions that Shorter favoured were:

\* 3 Miles of 400m or 800m reps (total volume: 4800m)

\* Cut-down intervals (1600/1200/800/2x400/4x200) (total volume: 5200m)

\* 16 x 200m (total volume: 3200m)

For Shorter, the above intervals would be run at fast paces with short recoveries.

**Rob de Castella** (coach: Pat Clohessy) won Marathon Gold at the 1983 World Athletics Championships and was twice Commonwealth Games Marathon Champion (1982 & 1986). Like Shorter, de Castella followed the same weekly training pattern throughout the year, with a weekly ‘float’ interval session of 8 x 400m (200m recovery). An alternative interval session he was fond of was 16 x 200m.

In each case, the total volume of faster running amounted to only 3200m.

**John Walker** (coach: Arch Jelley) was a World Record holder for the Mile, and was the 1976 Olympic 1500m Champion. He was another whose interval sessions involved a modest total of faster running. Amongst his favourite sessions were:

\* 2M (3200m) in 8-40, followed by 3 x 200m in 24-25 seconds (3800m total)

\* 10 x 400m (in 60-61 seconds) (4000m total)

\* 6 x 400m (in 56-57 seconds) (2400m total)

\* 8 x 300m (in 39-40 seconds) (2400m total)

\* 15 x 200m (in 25-26 seconds) (3000m total)

Again, we witness a modest volume of faster running (typically 2400m to 4000m) at, or faster than, intended race pace per training session.

The sources I have used for the above examples are:

\* Frank Shorter: *‘Running with the Legends’ by Michael Sandrock (1996)*

\* Rob de Castella: *‘Runner’s World’ article* *(August 1983)*

\* John Walker*: ‘Athletics Weekly’ article (Date unknown)*

Rob de Castella & John Walker articles are also available at:

<https://beaconhillstriders.co.uk/resource-centre/online-resources/>

**General Overview/Analysis of 1970s & 1980s Practice**

Whilst there would have been many athletes through the period in question, who would have included interval sessions whose total volume of faster running would exceed totals in the 2400m to 4800m range, it is notable that many of the greatest athletes of their generation did not. Moreover, the times achieved by the athletes discussed above compare extremely favourably with the best of non-African descended athletes competing today.

In addition, the interval training practice from the 1970s and 1980s that we have highlighted did not differ whether the athletes in question followed a distinct periodised approach (i.e. clearly defined aerobic-base, pre-competition, & competition periods) (Foster, Ovett, & Walker), or followed a far more subtle periodised approach with weekly programmes that were very similar during all phases of training/competition (Moorcroft, Shorter, & de Castella).

The picture that emerges is that whatever the method of periodisation used, the leading athletes of the day - across a range of race distances from 800m to the Marathon – practised a highly polarized training model. This model saw high volumes of low intensity continuous aerobic running balanced by a small amount of very intense interval-based anaerobic running.

**The Interval Training Conundrum**

So, the question that needs to be asked is:

Whether it is right and proper for young athletes (some as young as 13-14 years of age) to be set weekly interval sessions involving faster running of around 6000m, when some of the greatest champions in the history of middle and long-distance running did considerably less as senior athletes.

Clearly, there are many issues tied into this conundrum including: runner training age/experience; run pace; pace judgement; training surface (road, grass, or track); competition season (Winter or Summer); and desired exposure to anaerobic training inputs, to name but a few. But, surely, we should be asking questions of ourselves. Moreover, we should also be looking for the most effective means of gaining the best possible performance outcomes in both the short and medium to long term.

**Moving Forward**

So, what should we as athletes or coaches do?

I cannot answer for others, but I can outline the changes to training practice that I shall be employing moving forwards.

Our success (at Beacon Hill Striders) with interval training sessions involving 6000m of faster running dictates that we shall not drop this kind of session from our training programme altogether. Our key interval sessions (5 x 1200m & 8 x 2 minutes, both on trails) - usually done 10 days prior to a key race - will remain a key component. They will undoubtedly remain our ‘signature’ workouts.

Moving forward, however, we shall balance such sessions with sessions that are shorter and sharper, with total volumes of faster running set within the 2400m to 3600m range. Indeed, we already use a session of 5 x 200m (3 minutes recovery) as a regular feature during the track season; but over the coming Winter months, we shall now experiment with shorter, sharper sessions such as: 3 x 1000m, & 4-5 x 600m.

The challenge for us now will be to find the right balance between 6000m volume interval sessions and 3000m volume interval sessions to enhance the performance of all of our group members.

**About the Author**:

Alan Maddocks was a successful runner, competing from the mid 1970s to the early 2000s. He represented Wales, British Students, and Leicestershire, winning several local/regional races. Over the past decade Alan has advised and guided a small group of talented young runners/triathletes on to success at local, regional, national, and international level. In addition, he offers consultancy services, and is a regular contributor to the ‘Left Spike’ Fanzine.

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