Beacon Hill Striders (Performance Running)

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The Mona-Fartlek: A Great ‘All-Rounder’ Run Session

If asked to prescribe a single training session that any competitive runner could include in their training programme at any time of the year my answer would unequivocally be … the ‘Mona-Fartlek.’

The Mona-Fartlek offers the athlete: a means of developing both aerobic and anaerobic capabilities simultaneously; the flexibility to focus on either ‘speed’ or ‘stamina’ in preparation for upcoming competition; the versatility to do the session wherever convenient (with or without a coach on hand); and the opportunity to ‘train by feel.’ … Moreover, the session can be squeezed into a convenient lunch hour as it takes a mere 20 minutes to complete (excluding warm-up & cool-down). … In short, it offers a considerable ‘bang for your buck.’

The Mona-Fartlek is named after the Australian distance running legend of the 1980s & 1990s, Steve Moneghetti. … Moneghetti was predominantly a Marathon runner (Commonwealth Games Gold, 1994), but was also highly proficient at cross-country (World Cross-Country 4th placer, Stavanger 1989) and on the track (bests of: 3000m: 8-09; 5000m: 13-25; & 10000m: 27-47). In addition to his past successes, Moneghetti recently (December, 2022) set a World Masters’ best of 15-52.9 for 5000m. … Moneghetti’s training was typical of the Australian training model, emphasising high volumes of aerobic running coupled with 2-3 focused ‘speed’ sessions per week, of which the Mona-Fartlek was a regular weekly feature. … Before looking at the Mona-Fartlek in detail, let us look briefly at the history of Fartlek running in general.

Fartlek: A Brief history

Fartlek (as a method of training) was initially developed in Sweden in the late 1930s by the coach Gosta Holmer. In response to the lack of track venues for his athletes to train on Holmer developed a system of training combining both speed and endurance that could be done in natural environments (trail, woods etc) making use of the topography of the terrain. Unlike Interval Training (developed more or less concurrently in Germany in the 1930s) which placed a strong emphasis on specified work & recovery periods, Fartlek gave the athlete the autonomy to construct their own workouts responding to the challenges of the terrain they faced. Athletes could choose when to run faster and slower, for how long, and at what intensity. The term ‘Fartlek’ loosely translates from the Swedish to mean ‘speed play.’

Holmer’s training method gained popularity and acceptance on the success of his most noted athletes Gundar Hagg and Arne Andersson, who between them improved the Mile World Record from 4-06.1 to 4-01.3 between July 1942 and July 1945. (Hagg also became the first man to run inside 14 minutes for 5000m.) … Paradoxically, despite these successes European and American training methods of the post-war era focused on the more mechanistic Interval Training system developed in pre-war Germany.

One part of the world that did embrace the Fartlek training method was Oceania (Australia and New Zealand). Both Percy Cerutty (Australian coach to World Mile Record holder Herb Elliott) and Arthur Lydiard - New Zealand coach to Olympic Champions Peter Snell (at 800m & 1500m) and Murray Halberg (at 5000m) - incorporated Fartlek running within their training programmes. As such, Fartlek running became part of the mix of training that Australian and New Zealand athletes used into the 1970s and beyond. Chris Wardlaw, both as an International distance runner and coach to Steve Moneghetti, used Fartlek Running as a key component, with a preference for a 20 minute limit on specific sessions. … From this Moneghetti (in partnership with Wardlaw) developed his famed Mona-Fartlek, that became a staple weekly feature of his training.

The Mona-Fartlek: Structure

The structure of the Mona-Fartlek is fairly simple being a 20 minutes continuous run with ‘faster’ and ‘slower’ sections of designated lengths (measured by time). Following a warm-up jog, the session involves the following efforts:

# 2 x 90 seconds

# 4 x 60 seconds

# 4 x 30 seconds, &

# 4 x 15 seconds

Each effort is followed by a recovery jog/run of the equivalent period … So a 90 seconds effort is followed by 90 seconds recovery, and so on. … The total time (efforts & recoveries) comes to 20 minutes.

Steve Moneghetti ran this session regularly on a path/trail around Lake Wendouree, in his home town of Ballarat. At his prime Moneghetti covered in excess of 7K during the session, though distance covered is not considered a key aim for this particular session.

The Mona-Fartlek: Variations

One of the reasons that the Mona-Fartlek has proved so popular is its adaptability. Both track specialists (800m/1500m) (seeking a more stamina-focused session) and Marathon runners (seeking an opportunity to add a little ‘speed-work’) can gain from the session. More crucially, the same athlete can approach the session differently based on the key quality (speed or stamina) that he/she wishes to develop at a given time. … This flexibility of this approach helps the athlete to develop a more nuanced appreciation or perception of effort and pace control as he/she becomes more accustomed to his/her capacity to run at quicker paces. Moreover, the athlete becomes more able to both produce surges in pace during races and to respond to surges (or change of pace) from their immediate competitors.

For Moneghetti (who used this particular session year round) this was critical. If preparing for cross-country or a marathon race, he would temper the speed of the faster section and run the recovery as a ‘float’ (i.e. at a very respectable - often sub 5-30 per mile - pace). … If preparing for track races (3000m to 10000m), Moneghetti would run the faster efforts at a quicker pace followed by a more relaxed (jog) recovery. … In this way the session served different purposes at different times of the year.

An additional ‘variation’ in terms of the Mona-Fartlek is to remain true to the principles of the session but structuring the session differently, using more or less repeats of a given duration of effort, for instance, running more 90 seconds efforts and less shorter efforts. This is the approach that we at Beacon Hill Striders use with our runners. … Our version is structured as follows:

# 4 x 90 seconds

# 3 x 60 seconds

# 2 x 30 seconds, &

# 1 x 15 seconds

This structure tends to lean more towards the aerobic end of the training spectrum but with increases of pace built in as the athlete nears the end of the 20 minute session.

Other potential ‘variations’ that could be employed include:

# A 10 minute ‘half-version’ with 1 x 90 / 2 x 60 / 2 x 30 / & 2 x 15 seconds efforts. … this being a suitable option for adult 800m runners or younger age-group athletes who might find the full 20 minute version too taxing.

# Adding an additional ‘stamina’ component (e.g. a 20 minute ‘tempo’ run) prior to the session itself. ... This would be suitable for very experienced adult runners or those preparing for Marathon and Half-Marathon races.

# If preparing for cross-country or races on hilly terrain, doing the session on a similarly mixed elevation profile to accustom oneself to running at race pace both up & down hill.

The key here is that ALL middle/long distance runners can find a way to make the Mona-Fartlek a meaningful and fruitful training input.

The Mona-Fartlek: Physiological Benefits

Before concluding, let us examine the physiological benefits of the Mona-Fartlek.

To improve distance runners need to develop:

# Their aerobic capacity/power (critical in all races from 1500m upwards)

# Their anaerobic capacity/power (critical to handle faster race paces)

# Their anaerobic/lactate threshold (critical to sustaining a strong pace for the duration of a race).

Most prescribed run sessions tend to focus on the development of just one of these key variables. … The Mona-Fartlek develops them all simultaneously!

In terms of aerobic development this is covered by both the duration of the running (20 minutes) and the continuous nature of that running. Aerobic development would be strongest where the recoveries are run at a relatively strong pace such as with a ‘float’ recovery. For Moneghetti, at his prime he could cover over 7K of running within the 20 minutes allocated, indicating an average pace (efforts & recoveries) well below 3 minutes per kilometre.

The faster paced ‘efforts’ would - for most athletes doing this session - be run at 5K pace (or faster), thus providing a strong anaerobic stimulus. … With recoveries between efforts never being ‘complete’ one would anticipate that towards the end of the allotted session the athlete would be operating under a fair degree of acidosis (as lactate levels would rise to well above the anaerobic/lactate threshold).

But, perhaps the greatest physiological stimulus for this session would be in terms of developing the anaerobic/lactate threshold itself. This is the point (or pace) at which the body can no longer use up the lactate produced at the same rate as it is being produced. The result is that lactate levels build, forcing the runner to fatigue and slow-down. This point (which tends to correspond with a lactate level of 3.5 to 4 mmol/L (millimoles of lactate per litre of blood) arrives at a pace roughly equivalent with the best pace that a runner can maintain for around 60 minutes (10 mile to Half-Marathon pace for a good quality male distance runner). By improving this particular ‘threshold’ pace the runner becomes more efficient at using oxygen across a range of paces. … In short, he/she becomes faster at all race distances.

To improve his/her anaerobic/lactate threshold the traditional method is for a runner to run for a fairly prolonged period (20-40 minutes) at or just under their current threshold pace. This is known as ‘Tempo’ or ‘Threshold’ running. Arguably, a more effective means of doing this is to activate and develop the ‘lactate shuttle’. … This is achieved by alternating between: a) running at faster than anaerobic/lactate threshold, and b) marginally slower than anaerobic/lactate threshold in a wave-like sequence. (This is another way of describing Fartlek training!). Done regularly this form of training over time teaches the body to more effectively use the lactate produced as a fuel and to clear lactate from the muscles. The result being that the anaerobic/lactate threshold pace (& race performance!) improves.

Some additional sources that explore this further:

# <https://www.newintervaltraining.com/fartlek-training.php#ha>

# <https://www.runnerstribe.com/features/the-mona-fartlek-a-classic-session-article-by-sub-230-minute-1km-runner-mark-tucker/>

# <https://www.outsideonline.com/health/running/training-advice/workouts/rethinking-recovery-intervals/>

To conclude … The Mona-Fartlek is an extremely versatile and adaptable training input that offers the athlete a comprehensive and fun means of developing all the key physiological variables that lead to improved running performance.

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Please see: <https://beaconhillstriders.co.uk/> for further training articles on running performance that may be of interest.