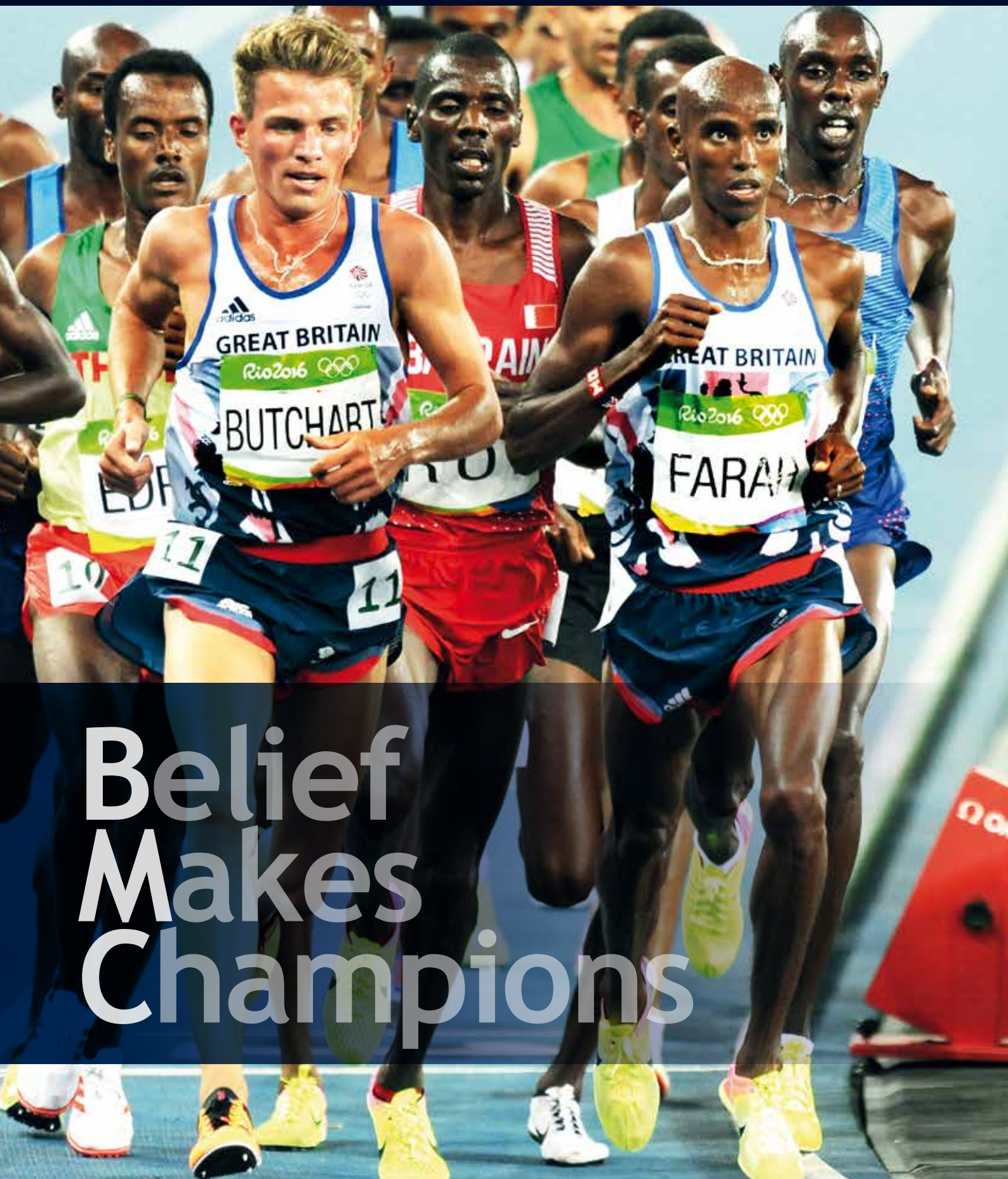




BMC News

OFFICIAL JOURNAL OF THE BRITISH MILERS' CLUB
VOLUME 13 ISSUE 2 – AUTUMN 2016

Sponsored by



Belief Makes Champions

CONTENTS

- p.3. Editor's Introduction. Matt Long.
p.4. Chairman's Notes. Tim Brennan.

Part 1. BMC Retro

- p. 5-6. Kirsty Wade interview. Stephen Green.
p.7-8. Steve Flint- 'The One That Got Away'. Simon Taylor.
p.9-10. Frank's Fables. Becky Selvey.
p.10. Retro BMC News. Chris Hollinshead.

Part 2. BMC Award Winners

- p.11 BMC Award Winners.
p.12-14. Horwill Scholarship Winner. Richard Blagrove.
p. 14-15. Laura Muir and Andy Young interview. Matt Long.

Part 3. BMC Stars

- p. 16. Andy Butchart interview. Matt Long.
p. 17-18. Sarah McDonald interview. Sally Straw.
p.19. Elliot Giles interview. Richard Massey.

Part 4. BMC Present

- p. 20. Volunteerism in the BMC. Paul Hayes.
p. 21-24. Season's Review. Tim Brennan and Kevin Fahey.
p.25. BMC in Pictures.

Part 5. BMC Future

- p. 26-28. Academy Review. David Lowes and Matt Long.
p.29. Athletics Weekly advertisement.

Part 6. BMC International

- p.30-31. New Zealand. Paul Coughlan and Geoff James.
p.32-33. France. Guillaume Adam.

Part 7. Coach Education

- p.34-36. Women in Coaching. Charlotte Fisher.
p. 37-38. Pacing. Andrew Renfree.
p. 39-41. Training with Zola Budd and Mary Decker. Jason Henderson.
p. 41-45. Winter Training with David Lowes and Steve Vernon. Matt Long.
p. 46. Book Reviews. Brendon Byrne.
p.47. David Cocksedge Obituary. Matt Fraser Moat.



BRITISH MILERS' CLUB

Founded 1963

BMC Officers and Roles

President	Dr. Norman Poole 23 Burnside, Hale Barns, Altrincham, WA15 0SG
Chairman	Tim Brennan Cannon Platt, Moorlands Drive, Pinkneys Green, Maidenhead, Berks. SL6 6 QG Tel 01628 415748 Email timbrennan@britishmilersclub.com
Vice Chairman	Steve Mosley 95 Beale Close, Danescourt, Cardiff, CF5 2RU Tel 029 224 11440 Email steve.mosley@lineone.net
Secretary	David Lowes 2 Eggleston Close, Newton Hall, Durham, DH1 5XR Tel 07930 318651 Email coachlowes@aol.com
Treasurer & Administrator	Pat Fitzgerald 47 Station Road, Cowley, Uxbridge Middlesex, UB8 3AB Tel 01895 811822 Email patfitzgerald@britishmilersclub.com
BMC News Editor	Dr Matthew Long 262 Rolleston Road, Burton on Trent, Staffs. DE13 0AY Tel 07983 864114 Email: matt@mattlong.wanadoo.co.uk
Statistician & Webmaster	Dr Tim Grose 17 Old Claygate Lane, Claygate, Esher, Surrey, KT10 0ER Email timgrose@britishmilersclub.com

Academy Contacts

Academy Chairman	David Lowes 2 Eggleston Close, Newton Hall, Durham, DH1 5XR Tel 07930 318651 Email coachlowes@aol.com
------------------	---

All official correspondence to the BMC should be addressed to the National Secretary at the above address. All matters so received will be addressed by the national committee at their next meeting. All other requests should be sent to the BMC Administrator Pat Fitzgerald and will be dealt with as soon as possible. Matters concerning specific areas of the club should be sent to the relevant person from the above list.

The BMC are always looking to expand its network of people and locations that host BMC races. If you feel that you can help or want to get involved then please contact the BMC Administrator Pat Fitzgerald.



EDITOR'S INTRODUCTION

BY **MATTHEW LONG**

As our front cover reveals, nothing whets the athletic appetite quite like an Olympic year. As we pause to take a deep breath and check our pulses after Rio, if the image of Mo Farah and last season's revelation, Andy Butchart, leading the world's finest endurance athletes into the latter stages of the Olympic 5000m final, does not inspire you, then nothing will. Close your eyes and visualise the capital letters **B-M-C**. Of course they stand for our club, but they are also a acronym to inspire you to reflect on the fact that **Belief Makes Champions**. It could be YOU who graces the cover of our magazine in one, two or even three years' time. I hear you laugh but why not? How many of you would have picked the aforementioned Butchart to be a cover star this time last year? Some of you might not even have heard of him. Point made!

Butchart is joined by fellow championship performers Elliot Giles and Sarah McDonald, who invite you to pull up a chair for a cosy chat in our BMC STARS section. We kick off, however, by rewinding our BMC stopwatch to yesteryear as we feature the fabulous career of Welsh wonder Kirsty Wade, in celebrating her magnificent Commonwealth Games double, exactly 30 years after Edinburgh, 1986. We then travel back a decade further still, as former England international and junior sensation, Steve Flint, opens his heart in sharing what the BMC meant to him back in the 1970s. We share a collective chuckle as founding father Frank is once again fabled before we casually flick

through some black and white issues of BMC News from decades gone by, in order to bring a bit of colour to proceedings.

Section Two gives our Award Winners the chance to take a collective bow and as we applaud their efforts, stepping up to the plate for a cracking interview is none other than our new British record holder for 1500m- Laura Muir, whose summer exploits against the clock in breaking Kelly Holmes' longstanding stats, made her an odds on favourite for our Athlete of the Year Award, which she recently received in London.

There is our obligatory Season's Review in Section Four, along with launch of a new series which will challenge you to think about the role of volunteerism in our club, before our BMC pictures paint you a thousand words at the half way point on p.25.

We look to the future in Part Five as we give you a guided tour of Mount Saint Mary's at Spinkhill, in demanding that you lace up your trainers to relive the recent record breaking training weekend.

We fly off with the Kiwi's in Section Six, in paying homage to New Zealand milers' both past and present before adding a little Gallic Flair with a Bonjour to the French history and legacy in middle distance terms.

We reach the bell with Section Seven, which continues our commitment to matters of diversity in our sport. Once again we focus on gender as Charlotte Fisher introduces you Joanne Day, Cath Muth and Bev Hartigan, with all four articulating how

barriers to the retention and progression of female endurance coaches can be broken down. After pacing yourself with Andrew Renfree, you risk tripping yourself up in the scramble to read an excellent feature on the training of Zola Budd and Mary Decker who collided in the Coliseum cauldron in Los Angeles thirty two summers ago. Steve Vernon and David Lowes drag you uphill and down dale with their training tips for the winter, before the bookish Brendon Byrne reviews the best of what's out there on the market for you.

Sadly, we cross the line by taking our hats off to a man whose recent death punctures not just the BMC but leaves a gaping hole in our sport – whilst one of our late Editors, has passed, both the words and encyclopaedic attention to statistical detail of David Cocksedge, will continue to be the present and future of our club.

BMC News Winter 2016 offers you a spectacle- so reach for your glasses and start reading right now!

Matt Long, Editor.



The Editor with our athlete of the year, Laura Muir.



Cover: Mo Farah and Andy Butchart head the Olympic 5000m final.

Printed by:
Headley Brothers Ltd,
The Invicta Press, Lower Queens
Road, Ashford, Kent TN24 8HH.

Photography:
Photographs by Mark Shearman unless
specified otherwise.
Email: mark@athleticsimages.com

CHAIRMAN'S NOTES - AUTUMN 2016

Welcome to this latest edition of the BMC News, a magazine sought by coaches throughout the world, but coming to you free as a BMC member.

We had some good racing during the season. The stand out event was the women's 800m where we had seven performances below the Olympic qualification standard. Given the strength of the event, it was a shame that we did not see three athletes selected for the games. Experience shows that those who run fast in a BMC race can go even faster in an international championship. It would have been good to see if one of the girls could have done this and progressed through the rounds.

Jenny Meadows achieved two of those Olympic qualifications but was then hit by injury and she has decided to retire. Jenny has been a fantastic support of BMC races and we wish her well. The good news is that Jenny has continued to support the BMC and was our guest at the popular Academy Training Camp at Spinkhill.

Double Olympic success for Mo Farah for the second time, was a superb highlight of the Rio games. Mo's races unwound with a certain inevitability that the speed he can show in the final laps would see off his rivals. Mo has world class performance to his name above and below his Olympic race distances, making him exceptionally hard to beat. It is having this range that makes him tactically so strong, as whatever the pace, he is going to be quick at the end. Few people can emulate this range completely but it should give pause for thought to those who only ever race at their main distance or do not follow a multi-paced



training regime. 'The Complete Middle Distance Runner' is a phrase that could be used for Mo, it is also the title of the book by Horwill, Watts and Wilson which sets out multi-pace training theory.

Through the season Laura Muir ran outstandingly, breaking Kelly Holmes' British 1500m record twice. Her bid for Gold at the Olympics showed an uncompromising attitude to go for gold rather than settling for a lower medal. Laura is a very fitting winner of our BMC athlete of the year.

BMC Race Program

We have had another successful year of competition and our events are more popular than ever. Thanks are due to all the BMC volunteers, our partner clubs, and to our sponsors Nike, UKA and England Athletics.

This year we had more finishers than ever before in our races. It is a huge task for volunteers to organise 47 meetings and 485 races across the country. Our priority when organising events is to use the venues which are best for fast times, to find dates meaningful for qualifications, and to provide well seeded and well-paced races. These are the fundamentals that make our races so popular and are where we prioritise our limited time and money. When these fundamentals are sorted out we can turn remaining time to the presentation of the meeting. This year at different meetings, we have allowed spectators on the outside lanes for the longer races, conducted interviews, held a coaching get together and even had a Samba Band. Presentation of the meetings is something we will work further on but the BMC will always prioritise the quality of races ahead of the

'extras'. If anyone has anything useful to offer to help the presentation of the meetings then I would be delighted to hear from you.

Your Club

Quite a few of our members are in their second, third, fourth or even fifth decade of membership. Thanks and congratulations to all of you. The length of membership I think shows a pride in the club and a desire to be identified with it long after the end of a competitive career. Some of these members will have become coaches but those who are not continue to see it as their club and are happy to renew subscriptions as a way of showing support. I hope all members do see us as a club and not just a competition provider. The idea of the club is that we are collectively stronger, this means taking the spirit of the club, by racing in a committed way, turning up for races you have accepted, and thinking about how you can contribute, such as by pacing a race.

Sad News

We are very sorry to report the passing of Dave Cocksedge. Dave played a major role in the BMC during the 60s and 70s as Secretary, News Editor and race organiser. He worked closely with Frank Horwill and his training group. More recently he has been helping again with the history of the BMC and its races. He also did great work documenting Surrey County records. An obituary appears in this magazine.

As we go to press we have also learned of the tragic accident that has ended the lives of Lucy Pygott and Stacey Burrows. Lucy and Stacey were hit by a car when doing the thing they loved, running from their home town track at Aldershot. Our deepest sympathy to their families, friends and AFD training partners.

I hope you enjoy the magazine.
Tim Brennan

DATES FOR THE DIARY

INDOOR MEETINGS 2016-2017

Wednesday December 14:
Sheffield EIS. 800m and 1500m
Wednesday January 4:
Glasgow. 3000m

Sunday January 8: Sheffield EIS.
800m, 1500m and 3000m.
Will include qualifying races for England teams

Wednesday February 1:
Lee Valley. 800m
Tuesday February 7:
Sheffield EIS. 800m and 1500m

Entries open soon at
www.britishmilersclub.com

GRAND PRIX DATES 2017

13 May, 27 May, 24 June, 8 July, 19 August.

Venues will be announced when all are confirmed.

More details will be on
www.britishmilersclub.com
when available.

ANNUAL GENERAL MEETING 2016 – NOVEMBER 27, 2PM

Holiday Inn Solihull, 61 Homer Road, Solihull B91 3QD. All members welcome. Please contact: David Lowes (Secretary) coachlowes@aol.com if attending.

RENEW SUBSCRIPTIONS

1st January 2017 £25, Overseas £30

To BMC Administrator 47 Station Road, Cowley, Uxbridge, Middlesex UB8 3AB.

or by BACS to:
British Milers Club,
Account 43685802,
Santander,
Sort Code 72-00-05
quoting Membership Number and Name

EIGHTIES LEGEND **KIRSTY WADE** SPENDS TIME WITH **STEPHEN GREEN:**

The 1980's represented possibly the height of popularity and also the most controversial era in our sport. Athletes competed amidst a volatile political background where 'Cold-War' politics and sport intertwined. The Berlin Wall still stood between East and West Germany, apartheid was still integral to South African society and boycotts diminished both the 1980 Moscow and 1984 LA Olympics.

Amidst this turmoil emerged some of our greatest athletes, led by Kirsty Wade (nee McDermott) Chris Boxer, Zola Budd, Wendy Sly and later Diane Modahl (nee Edwards). This trailblazing group of female athletes, took it to their East European counterparts, in a time when there was no lottery funding, or sponsored training camps.

Kirsty Wade (nee McDermott) was born in Girvan, Scotland and grew up in the small town of Llandrindod Wells in Wales, after her parents moved to Mid Wales, when she was three. They had initially lived in a village called Crossgates for 3 or 4 years.

The young McDermott enjoyed a standout, if not spectacular, career as a young athlete, at Brecon AC under Roy Jones, during a period which included winning the 1977 AAA's U17 800 title. One year later at the 1978 European Junior Championships in Poland she finished 6th (2:04.74). Wade announced her presence on the international scene in earnest, four years later in 1982 with 800m Gold in the Commonwealth games in Brisbane (2:01.31). She was the first Welsh woman winner of the 1982 games.

Kirsty was at the time studying at the esteemed Loughborough University with such luminaries as Seb Coe, Tim Hutchings, Wendy Sly plus former UK 1500m and 800m record holder Christina Boxer, whom she readily cites as a role model. She tells me earnestly, "Following graduation, I deferred my nursing place at Guys and St Thomas Hospital with the aim of getting to the 1984 LA Olympics, and spent the winter training with my partner, Tony, in Tallahassee, Florida". She adds with a laugh, "This was before it became a popular training destination!"

Sadly, Injuries cruelly intervened, and Wade failed to qualify for the final of the trials of the 800m that year. She recalls that her father had travelled down on the train from Wales to Crystal Palace solely for a final which she did not make, but apparently he embraced the entire episode with typical humour.

In 1985, Tony and Kirsty, were now married and moved to Whitley Bay and

linked with Harry Wilson, legendary BMC coach, who at the time was coaching Moscow Olympic 800m champion, Steve Overt. The visionary Wilson encouraged her to take a new approach to the sport. This link was what Kirsty needed and they embarked on a training programme that included interval sessions along the windy coastal roads, sand dune sessions for the development of strength endurance and intensive and varied track based sessions. Strength was integral to her development, with circuits and weights an integral part of the regime.

Wade thrived in the North East environment where of course luminaries such as Steve Cram, David Sharpe and Mike McLeod all resided. She also benefitted from Blaydon Harriers club training partners such as Jill Hunter, herself an Olympic finalist over 10,000m, who also benefitted from the 'Wisdom of Wilson.'

During this period, the Wades' also opened up a fitness centre, where many of the local group of athletes pushing for international status, would come and use as a training hub.

1985 was famously the year of Live Aid and it would be the young Welsh starlet, starting running to a new tune on the athletics stage. On a rainy night in Belfast on June 24th, she returned a British record for 800m (1:57.42) behind then world record holder Czech goliath, Jarmila Kratochvilova.

This mark stood until Kelly Holmes took it in 1995 and it still represents the second quickest ever by Brit and a long standing Welsh record. In the same year, Wade was fourth in the Moscow European Cup in a superb 1:57.48, the third of three sub 1.58 returns that year. (1:57.88 in Cork). I am keen to ask her what stands out the most and she replies, "Of all the races I ran, the British record in Belfast was the race that gave me the most satisfaction. It told me all the sacrifice, and training was worth it, and I'm proud of how long this record lasted". She confides with a sigh that, "I was never a confident athlete, so to become the holder of a British record, gave me a lot of motivation moving forward".

That summer also produced an unexpected British Record for the mile in



Welsh Wonder Wade.

Oslo (4:19.41) on 27th July. This time the record would only last a month or so before Zola Budd lowered it to 4:17.57.

1986 was another golden year for Wade, as she justified her tag of 'favourite' in marching on to achieve the 800/1500m Commonwealth double gold proudly in her Welsh vest in Edinburgh. This was followed by a strong 7th in the Stuttgart European Championships 1500m. 30 years on and the memories remain vivid. "I was tripped with 300m to go but felt some vindication in beating Zola Budd who had missed the Commonwealth Games", she recalls before adding, "I won the Grand Prix final at the Ivo Van Damme meeting in Brussels the following weekend, which showed I was in better shape than I had been able to show in Stuttgart".

Further plaudits followed in 1987 after she scored a vintage victory over then world record holder Tatyana Samolenko in the 1500m at the European Cup (4:09.03). She then went on to finish sixth in the World Championships in Rome (4:01.41). She recorded new bests over 1500m (4:00.73) and 3000m, run late at night in a local standards meeting. Wade recalls with amusement the "huge crowd" of possibly three people including the journalist Simon Turnbull, after she had competed a hard sand dune session in the morning. She reflects on an era in which it is widely acknowledged that state sponsored doping in Eastern Bloc countries occurred, and possibly deprived her and others of medals. "Chris Benning took an extremely principled stance on it and refused to go to the 1988 Olympic Games in Seoul, a stance I admired greatly", she asserts. How did she feel about the suspicions back then? "I tried not to think about it too much. We knew it went on, but we just trained and got on with it. Some athletes I would beat out of sight one day, and then at the championships I couldn't get near them, but there was nothing I could do about it, but just work harder," she sighs, before adding the insight that, "It must have been tough for athletes who grew up in state sponsored regimes to say no to what was being offered, so I do have some sympathy for some of the Eastern Bloc athletes but not for those who chose to cheat from western countries such as the UK and US who had a choice."

The Seoul Olympics of 1988 were to prove a disappointment, as Wade bowed out at the semi-final stages of both the 800m and 1500m. Kirsty had an unexpected change in her life, which came at a time when she was struggling with injury. She remembers with affection, "I had 2 Achilles tendon operations and did not plan to take a break from athletics, however the pregnancy was a

delight but unplanned"

There were times after the birth of daughter Rachel when Wade, already established in the pantheon of British athletics greats, may have wondered whether she would grace the track again. With renewed vigour, however, she qualified for the World Championships in Tokyo in 1991 where she finished a superb sixth in 4:05.16. In the twilight of her career she also made the team for the 1992 Olympics in Barcelona, where she bowed out in the semi-finals of the 1500m. It also signalled the end of a glittering track career of an athlete who helped to pave the way for the likes of Kelly Holmes and Paula Radcliffe.

Wade is quick to pay tribute to the part that the BMC played in her long term athletic development, in terms of racing opportunities, and the informative magazine run by the late, great BMC founder, Frank Horwill.

It is worth reflecting on the statistic that she remains one of only three British women, along with Christina Boxer and Hannah England to have run sub two-minutes for the 800 metres, and sub nine-minutes for the 3000 metres. "Apart from my championship wins finishing sixth in the world championships after starting a family was one of my best achievements. My Olympic performance wasn't what I wanted but I proved something to myself in making the Games," she adds with candour. In recalling the end of her career she points

to the realities of life, maintaining that, "I had to be realistic about the family finances and commitment. In my early thirties I just seemed to struggle from one injury and problem to the next".

Following her retirement from the sport after the Barcelona Olympics, the Wade family moved to the Scottish Island of Lewis on the edge of the Western Isles (population 22,000). The couple have three children- Rachel (26), Alex (21) and Megan (17). Both her and husband Tony have run a small B and B (Suainaval) for 18 years on the scenic Isle. Kirsty manages to balance this with work as a GP exercise referral and Aquafit instructor, plus finding time to be a part time school assistant.

Pleasingly she has been retained in our sport, in terms of advising some of the island's young athletic talents such as miler Eilidh MacKenzie and 800m runner Michael MacMillan. In 2012, fittingly she carried the Olympic torch on the island and has been formally recognised on the Isle of Lewis for her sports development work. In addition, 28 years after her own successes in Edinburgh, she also carried the 2014 Commonwealth baton through her former home town Llandrindod Wells, which she found very emotional because she was cheered on by her late father and her mother. This was a fitting tribute to an athlete who graced the Welsh and British vests with such style and panache in the halcyon eighties.



At the double!
Commonwealth Games,
Edinburgh, 1986.

STEVE FLINT – THE ONE THAT GOT AWAY

IN THIS PIECE, THE EXCELLENT **SIMON TAYLOR** SPENDS TIME WITH PROLIFIC JUNIOR INTERNATIONAL, **STEVE FLINT**, AND DISCOVERS THAT THERE IS NOTHING 'FISHY' ABOUT HIS AFFECTIONS FOR HIS BMC DAYS OF YESTERYEAR.

'The one that got away' is a lament oft used by frustrated anglers, but keen trout fisherman Steve Flint can genuinely be regarded as one of the golden era of British miling, who through no fault of his own, escaped the net.

Flint emerged from Thetford, a sleepy market town of 24,000 people on the A11 between Norwich and London, to win the 1980 Inter-Counties mile and become the third fastest British junior of all time, before his career was cruelly cut short just four years later due to an Achilles tendon problem caused not by over-training but by a 'botched' cortisone injection.

Flint credits the British Milers' Club for his breakthrough to international level, having first joined Thetford AC, then a fledgling outfit desperately trying to attract new members, in 1975. This was the very year the club was formed by Bill McKim, a 1964 Olympian and himself a fine 3:59.4 miler.

"Without doubt, if Bill McKim had not come to a school PE lesson all those years ago I would have gone to my grave unaware that I could have achieved any level of running," Flint recalls with fondness, before continuing that, "I believe the same is true of Darren Mead (another prolific junior in the 80s and 90s) who followed me from club to international level."

Flint's school PE teacher recommended he join Thetford after McKim's visit, and after overcoming his initial shyness, he took the proverbial plunge and signed up:

"The defining moment for me was my first cross-country race at 14 years old," he tells me with a twinkle of nostalgia in his eye. "As I recall, it was on a tough, muddy course in Stevenage and I managed to finish third, receiving a bronze medal for my efforts. From that day on running became my first choice, and although I had no idea how or why, my motivation was to represent England on the track, and this is where the BMC became a major influence on reaching my goal."

McKim, who himself had clinched Olympic selection on the back of winning a BMC race, the City Charity Mile at Motspur Park (New Malden), appreciated the benefits the club had to offer and recommended the 16-year old join to help take him to the next level. Touchingly, Flint still possesses the letter of introduction he received from club patriarch Frank Horwill upon submitting his application in 1976.



Lucky 13. Steve Flint mixed it with the very best, including Steve Cram (6). Photo courtesy of Steve Flint.

"It was quite clear as to what was required to be part of the British Milers' Club, and without doubt it was this that helped propel me towards my international goal," he says without hesitation. Three paragraphs stand out in particular:

'The motto of a B.M.C. member should be SERVICE BEFORE SELF, which means keeping your end of the bargain' - the letter screamed, before continuing in the inimitable words of Frank Horwill;

'If you are a runner who thinks that your £1 entitles you to £100 worth of race invites and a letter every month from your Regional Secretary asking how he can be your servant, forget it. The B.M.C is not for you.

If, on the other hand, you pay your £1 and appreciate our two magazines a year, like to know there is always someone you can write to for advice, attend our residential weekend, and realise that races will come your way eventually and are prepared to let your £1 do its work for some member somewhere, YOU ARE THE TYPE WE WANT'.

"I just loved his directness, laughs Flint. He recalls, "When you got an invite from Frank to take part in a BMC race it felt very much like you had achieved something, and you rarely turned it down because you knew you were going to face quality opposition at a fast pace."

Flint's big breakthrough came as an 18-year old in 1979 when Frank Horwill invited him to compete in a BMC organised 1500m race at the London Fire Brigade meeting at

Crystal Palace on August 8th. Future World championship steeplechase medallist Colin Reitz won the race from Julian Goater in 3:42.5 with Flint improving by nearly three seconds to finish fourth in 3:46.1. "On the back of that run I was invited to run for England in the Home International at Meadowbank on September 1st," he remembers, before adding with emotion, "thus achieving my childhood ambition of wearing an England vest."

Originally selected to make his international debut over 3000m, Flint was switched to the 1500m at the last minute, where he finished runner-up to, "my nemesis as a youth- Steve Cram". From a vanity point of view, on times I was quicker than Steve that summer, but this is where ego gets a reality check as I didn't beat him once on the track all season!"

Flint's career highlight came the following summer at Birmingham's Alexander Stadium when he lined up alongside a strong field for the Inter-Counties Mile. 3 minutes and 58.68 seconds later he was Inter-Counties champion and had leapfrogged a certain Steve Ovett to become the third fastest junior in British miling history, behind Scottish international Graham Williamson and the aforementioned Cram. It's worth pausing to reflect that since that day, only Charlie Grice in 2012 and 2013 has broken four minutes amongst British teenagers.

Having narrowly held off another teenager, Ian Stewart (3:58.94) and Barry

Smith (3:59.04) in a tight finish to take the title, Flint is typically forthright in his views on how middle-distance runners should progress. "Developing runners who can 'win' races, for me, is far more important than seeing athletes just running fast, like in a Diamond League", he emphasises. "In BMC races, sure, I think pacemakers are important, to ensure athletes know what it's like to have to run at a given pace that's faster than they've ever done before, but I feel winning can only be learned by pure racing". Drawing upon his considerable experiences, he adds the insight that, "Anyone, on a good day, can run fast, but fast runners don't always make good racers. To race well you have to react to what is happening around you as you approach the finish line. The best exponent of that during my career was Steve Ovett. No matter what the pace was, Steve was always in a position with 300m to go to give himself the opportunity to win." Rolling his eyes, and working up a head of steam, he exhorts that, "I've heard many an armchair critic on social media bleating on about how slow some gold medal winning times are, but for me the major games get us back to basics – winning. I can truly say the men's 1500m and 5000m in Rio were a reflection of the art of racing to win. 3:50 to win an Olympic 1500 title? I'd take that every day of the week!"

The Harry Wilson coached athlete never again scaled those heady heights of 1979 and '80, despite clocking some impressive personal bests such as 3:43.6 for 1500m and a knee trembling 23:58 for five miles on the road, but once the Achilles curse struck he was always struggling to perform at the level he felt he was capable of. "One of the best pieces of advice Harry ever gave me," he says, "was 'sport is important, but not important enough to make you a cripple'". With conviction he asserts that, "It's something I remember to this day and I continue to give young athletes the same advice myself."

Does he regret the way his career went? With candour he admits, "It was frustrating because I can honestly say I never over-trained during my career". Shrugging his shoulders he continues that, "I never got near the heights of the 100-miles a week club that some athletes did."

I press him on the sort of regime that the late, great Harry Wilson, who of course famously guided Ovett to Olympics glory in Moscow 1980, set for him. He points out that, "Under Harry Wilson the mainstay of a week's training in the winter was 6 x 1000m with 30 seconds recovery over undulating parkland when we trained at Crystal Palace. Throw

the likes of Ovett, Steve Harris, Phil Norgate and Billy Dee into the mix and you had some really tough sessions. Then afterwards, when you only wanted to lay down and sleep, Harry would take us indoors and insist we carry out all sorts of drills over 50m."

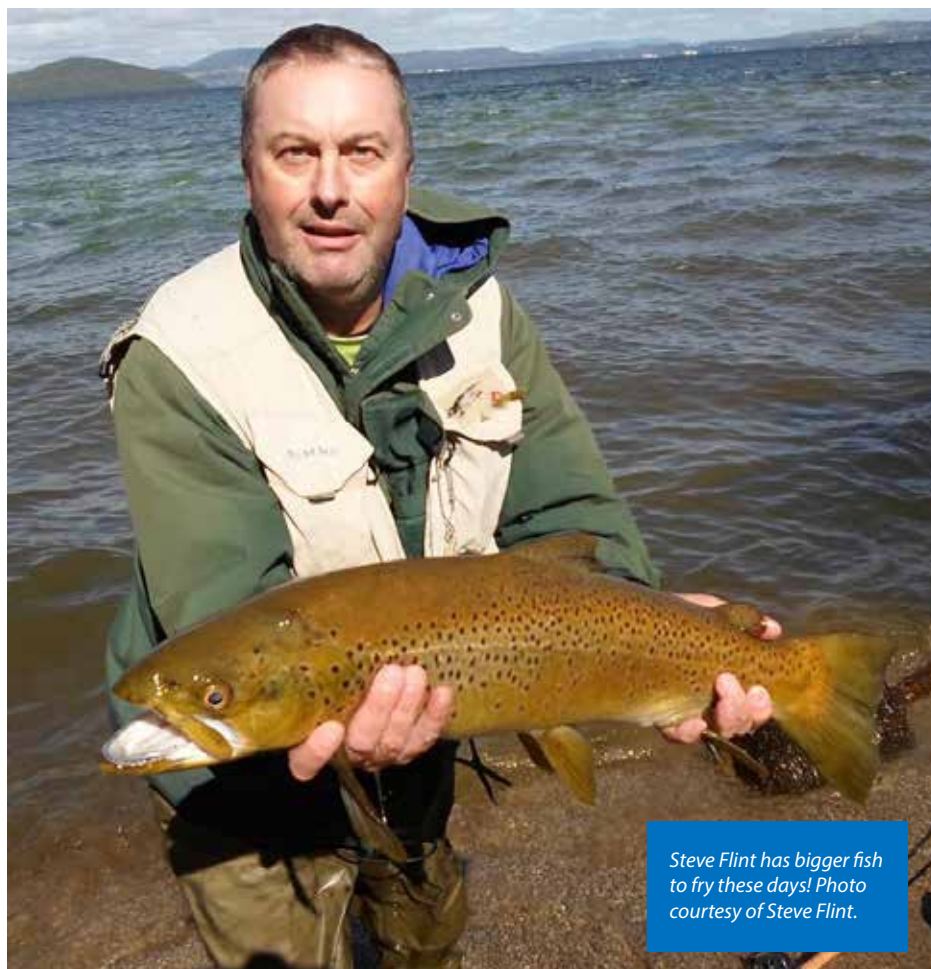
That it was that errant cortisone needle that cut short such a promising career is undoubtedly a source of huge frustration, but overall as our conversation draws to its close, I sense that Flint harbours few regrets. "If you ask me would I change anything, the simple answer is no," he says firmly. Allowing himself a smile, he encourages me to not forget that, "I was competing in probably the greatest era of middle distance running that the UK has ever experienced with regards to the depth of talent around. In the juniors I had Graham Williamson, who front ran 3:39 for 1500m along with a 3:53 mile, then Cram who ran 3:57 for the mile at just 17, plus the likes of Julian Spooner who ran 1:47 for two laps at 17. Add to that list Ovett, Coe, Robson, Moorcroft and Clement and it was indeed a tough era for any aspiring 800 or 1500m runner to get ahead. I think that's why when Ian Stewart and I both ran sub-four for the mile in that Inter-Counties final it hardly caused a ripple on the running scene. It was only when Charlie Grice ran 3:57 in 2012, to become the first teenager in 32 years to go sub-four, that I guess I realised

what an achievement it was."

Now happily settled in the land of the long white cloud with his wife Becky and their two daughters Gabrielle and Natasha, Steve grew somewhat disillusioned with a sport riven by drug allegations and scandal, but despite a lack of coverage he still follows the British scene from the other side of the world.

"Firstly, I would like to outline my huge respect for any GB athlete who is competing at international level in any event knowing they will be facing cheats. To wake up every morning with that knowledge and still get out and punish themselves day in day out is truly amazing. To see athletes like Laura Muir (featured in our BMC Awards section) perform so well this season is hugely encouraging".

In terms of advice for you teenage BMC athletes reading this, Flint feels one ingredient is key to unlocking the door to success. "To me it's a very simple process. At the end of the day, it's down to passion and wanting to achieve something personally within the sport. Now that has to be the driving force for the individual, which then needs to be channelled by good coaching and great support from the likes of the British Milers' Club. For me the ultimate was the England vest, and putting in whatever was required to achieve that goal."



Steve Flint has bigger fish to fry these days! Photo courtesy of Steve Flint.

FRANK'S FABLES

BECKY SELVEY RECOUNTS THE DAY THE SHERIFF WAS NEARLY SHOT!

I met the editor, Matt Long, recently on a coaching education course he was delivering as a tutor for England Athletics. Since then we have stayed in contact and as a coach, he's even sent me a few running tips! The running community is huge and does not discriminate, friendships bridge clubs, groups, gender, social class and language. We are a diverse bunch. I am a masters 40 athlete who competed in her very first BMC race this last season!

The following is a fascinating story of the relationship between athlete Brian Sheriff and BMC founder Frank Horwill and is further evidence of how coach and athlete work together to meet goals but also build long lasting friendships. Brian Sheriff was a road racer in the 1980s and 90s. Born in 1961 and raised in Zimbabwe he went to the USA in 1986 and studied at South Plains College and Texas Tech. He ran 28:07 for 10,000m and represented Zimbabwe in the 1987 World Championships in Rome, however his talent lay in road racing, where he won many prestigious titles. Brian later moved to Japan, where he still lives.

Brian's story in his own words...

"I am a nobody to you but to Frank Horwill, I was like a son and a best personal friend. 99% of our relationship will have you laughing your head off. Frank's relationship with me is vitally unknown in the UK, except to Mark Olden, the son of the late Andrew Ray and nephew of Sir Robin Day.

Frank coached me and had me do many tests on many of the training and biochemistry theories of the time. We got my wake up heart rate down to 28 bpm. In 1983, before the Tokyo marathon the doctor called for me to be taken out of the race citing that my heart rate was dangerously low - 33 bpm after my 10km run. I laughed and told the doctor my 'boss' - Frank - would slap him for being so ignorant about athletes' heart rates. In that race I finished third to Abebe Mekennon (Ethiopia) and Steve Moneghetti (Australia). Guess why I didn't win? The very same doctor ordered my team manager (Mazda Track Club) to refrain from putting anything in my drinks bottles - indicating that it would lead to my quitting the race early 'for my own safety'.

One of the race commentators made a demand for my drinks to be placed on the table - this particular commentator

had been training me in Japan for the last year and working on Frank's methods. The commentator was one of two twin brothers Japan had racing in the 1984 Olympic marathon. He noticed that I'd ran through 22km without a drink and had my drinks put out by the Mazda man at 25km. **PUTTING ALL MY DRINKS ON ONE TABLE!!!!** Would you believe it? However thanks to Frank's trials with me I knew that I could finish the race on virtually no drinks, but my chances of winning were somewhat reduced.

Frank was so academic with what he wrote, said and proposed for a runner's ability and to me was 100% credible. In fact it was with Frank's training advice by mail to me whilst we were in Boulder, Colorado that I helped my training partner Rob De Castella to knock more than a minute of his 10 mile time at the 1990 Bobby Crim 10 miler. We were at an altitude of 1600m above sea level and Frank had us run 25x400m at an average of 65 sec per lap with 33 seconds diagonal jog interval. Rob was, in general, so stiff in his legs that he never believed he could break 48 minutes for 10 miles. But thanks to Frank's advice he ran around 46:33 placing 3rd to my 46:23 and Rolando Vera from Ecuador, with Mark Plaatjes from RSA/USA in 4th.

What Frank really gripped me about was the fact that very few BMC runners committed to the necessity of becoming biochemists in their running careers. In Zimbabwe in around 1982 Frank had me run a VO2 max test. I scored one of the top three results he'd ever seen - Frank Shorter being one of the other two. I was still a teenager. My club coach, Ian Harries, who later coached the male South African 800m world champion, was basically using me as a training partner for his top athlete. Frank Horwill, who had been referred to Zimbabwe by Harry Wilson realised this and when he lectured us on biochemistry I was captivated. He called me aside and asked me to go jogging with him. This is how our comical relationship began!

I took Frank running through a field connected to the police academy where we were holding our two week training camp, as we diverted into a field we saw an elderly gentleman taking care of a bunch of chickens. I called out to him "Good afternoon Sir." Frank, in a joyous mood from running in Africa for the first time and running through beautiful green grass after arriving from a cold, grey British



Frank Horwill, MBE, BMC Founder.

winter, turned to the gentleman and added "Good afternoon and great looking chickens you've got.....they look appetising!"- while laughing his head off! The gentleman stood up straight and took his hat off and called back to us "Good afternoon to you too gentlemen, and run well. It is a beautiful day for jogging." Frank replied, "it sure is, why don't you dump the chickens and join us haha...." The man laughed and waved us on.

Twenty minutes later when Frank and I arrived back at the training camp where Ian Harries and the other trainers were waiting, Ian asked, "Had a good run, Frank?" Of course he'd had a good run and didn't hesitate to tell Ian all about it. "Superb run Ian. It has to be one of the most delightful jogs I have ever had. Brian showed me some of the most beautiful running trails I've ever run in an urban place. And the people were so kind.....one of them, an old native man was very charming indeed." Ian then asked, "Who was he?" Frank responded, "Oh just an old man working with some chickens in the far corner of what looked like a private park.....I asked him to join us but he said he had to wait for some people. Must have been talking about his employer....."

I poked Ian in the side and sniggered to him, "It was the President. I took him through the Presidential house!"

Ian was the national security advisor to Robert Mugabe and the last chief bodyguard for Ian Smith (Rhodesia). When I told him where I'd taken Frank jogging he almost collapsed, laughing like the world could end right there!! Frank sensed that something was going on and asked what Ian was laughing at. Of course Ian

explained it all to him, but Frank thought it was a cheap joke. It certainly wasn't and Ian held Frank by the shoulder and explained to him very slowly that he'd been jogging through the State House and had been talking with the President.

Frank's knees began to quiver and slowly he explained, "I have been imprisoned before you know, how could I be taken to such a place? Will it not cause a political fallout of some kind?"

Ian explained to him, that this is our country. Here you are a guest, but it wasn't easy to convince him! I ended up running back to the President's palace to inform him that my new friend from Britain was a great coach and a man that had suffered somewhat over most of his life. I asked the president if we could take him as police athletics coach either permanently or temporarily. I also said he'd been jailed for some months for refusing to talk about the notorious East End brothers during the 1960s. The President said, "I was imprisoned myself. If he wants to stay he can for as long as he wants. If he wants to join the police force he can - starting as inspector." I ran back to report to Ian and Frank. Ian simply said to Frank, "If in doubt go back to the president with Brian." HE WAS IN DOUBT SO I HAD TO TAKE HIM BACK!

The President greeted him first 'Hello Mr

Frank!' Frank nearly blew his nose off with laughter and for the next two weeks he ran twice a day through the back yard of the President of Zimbabwe's house!

I spent the summer of 1985 in London training with Frank. My best time for 10,000m was 30:32. I was raised at altitude, over a mile above sea level, Frank explained this to the folks at Francis House when he asked to have me tested at the AAA Championships. He told them about my testing of his training theories. They agreed to let me run the 10,000m although I was two minutes out of the qualifying time.

A strong objection was raised by the media and a few coaches, but it was explained I was being run to test training and biochemistry theories. Anyway I barely lost the race and I finished in 4th place in around 28:28 minutes, after being blocked off in the last two laps. Frank had proven himself right.

And for the next 10 years I carried out physical tests on all theories, while I was in Texas and Colorado. In both the Springs of 1989 and 1990, I won four top ten mile and half marathon road races. These races were won within two months of the year. To add to that in all these races the total time difference between myself and the 2nd place runner was less than 2 seconds - FOR ALL FOUR RACES COMBINED! This was

made possible by Frank's scientific training details. I am convinced his training manual is *the* secret training weapon that virtually guarantees victory to the conformist athlete.

Frank is the almanac of the British Milers' Club coaches. He brought together the training ideas and theories of all the great coaches - regardless of what he personally thought of them. If anybody ever wants to learn about middle and long distance running I strongly suggest that they read Frank's *Obsession for Running*.

Frank and I stayed in touch over the years since my running career. I have a number of letters that he wrote to me from 1986 up to his final confession that he sadly did not have long to live".

Thank you to Brian Sheriff for your amazing memories and also thank you to Matt Long for forwarding them to me.

Editor's note: Thanks to both Brian and Becky for keeping the memory of our founder alive in a piece which encapsulates both his mischievousness and pure genius as a coach.

As a Masters 40 athlete, Becky Selvey has competed in a BMC Regional event and is reigning Westminster mile champion in her age category.

IN THIS SERIES, **CHRIS HOLLINSHEAD** TAKES A LOOK BACK AT THE BMC NEWS, DECADE BY DECADE, FOR THE LAST 50 YEARS.

Chris tells us, "In looking back what springs to mind are some of the issues then are still prevalent now..."

1966

The North East branch of Milers Club report staging a parlauf on the pitch at half time during one of the days leading football matches. What would your local Premiership club say if you suggested it today? How times change!

1976

Oh the long hot summer, high temperature, no rain for 6 weeks, restricted water supply, and the Wurzels having a number one hit single singing about a piece of agricultural equipment (Combine Harvester!). That would not happen today. Meanwhile, the BMC News was asking members to suggest methods of improving the sport. Suggestions included improving the quality of coaching; creating better links between schools and clubs, and a suggestion

that central government should follow Canada through supporting sports with state funding. It would be over twenty years before the John Major Conservative Government introduced Lottery funding to support elite performers.

1986

BMC News provided some notes on what not to say to an athlete. This made me think that some things don't change. Examples included:

As Albert that dog jumps up at you during your run - "Don't be scared, he's only playing."

The morning after the night before a very hard track session - "You can't be tired you're supposed to be a runner!"

Any of this sound familiar to you?

1996

In reviewing the year, Anthony Whiteman broke Tim Hutchings' Mile record with a time of 3:56.35. Fast forward 19 years to the 2015 World Masters Athletics Championships in

France. Competing as an M40 Anthony did the double, winning both the 800 metres with a time of 1:51.01 and 1500 metres with 4:00.97 minutes, before running 3:43.99 mins at a BMC Grand Prix meeting in Solihull at the end of August.

2006

Article looks at the career of Emil Zatopek, 'The locomotive' and one of the greatest distance runners of all time. Emil is best remembered for winning the 5000m, 10,000m and the marathon at the Helsinki Olympics in 1952. The ultimate challenge for today's distance athletes!

Chris is a Level 4 endurance coach and a Flying Squad coach for England Athletics. He is a Lead Tutor on England Athletics Running and Fitness Courses and lead endurance coach on the Parallel Success Talent Development camps for British Athletics. He is also a self-employed coach for Castle Coaching Fitness.

LAURA MUIR IS OUR **ATHLETE OF THE YEAR**:

On 22 July, member 6531 ran 3:57.49 to break Kelly Holmes' longstanding British 1500m record. One month later at the Paris Diamond League, she lowered her own national record to 3:55.22. The Andy Young coached athlete has responded, "I am truly honoured to be voted BMC Athlete of the year and thanks to everyone".

GEORGE MILLS IS **BMC YOUNG ATHLETE OF THE YEAR**:

In July, the Joanne Day coached Harrogate athlete took gold over two laps in Tbilisi, at the European Athletics Youth Championships. An ecstatic member no.7015 has reacted: "I am delighted to have won this award as the BMC is such an important part of middle distance running in the UK and I am very thankful to then for selecting me for this award.

JON BIGG IS ANNOUNCED AS OUR **BMC COACH OF THE YEAR**:

Member number 5650 has developed athletes to international level including Rio Olympic 1500m finalist Charlie Grice. Jon has reacted has reacted:

"Wow. I'm delighted to receive this award. The BMC are at the very foundation of our sport and to be recognised by them for my coaching is fantastic. I would encourage others who are thinking of coaching to join the BMC as they help hugely in my coaching development from weekend courses to a great network of event coaches. It's a great resource for progressing yourself"

OUR **LIFETIME SERVICES TO COACHING AWARD** WINNER IS **DAVID LOWES**:

Not only has David guided 17 athletes to international status and superbly chaired the BMC Academy for several years, he has an international reputation as a coach educator given his former role as Coaching Editor of Athletics Weekly. Member no.3448 has reacted, "Any award is welcome, but to receive this from the BMC is indeed a great honour. I must stress that I accept this award on behalf of all coaches who spend countless hours in the pursuit of developing athletes of all abilities. I would encourage any coach to get involved with the BMC."

PHIL O'DELL HAS WON THE **FRANK HORWILL AWARD FOR OUTSTANDING SERVICES TO THE BMC**:

An emotional O'Dell has reacted: "I've been a member since 1973, when I ran the qualifying time in a 1500m, organised by Frank Horwill. I've coached many athletes over the last 20 years and most of them have benefited by being members of the BMC".

RUSSELL BEST HAS BEEN AWARDED THE 2016 FRANK HORWILL RESEARCH SCHOLARSHIP: Member 5553 is exploring menthol mouth-swilling on running economy at Teeside University. Russ anticipates that his findings may be particularly useful for those athletes that struggle in the heat during summer events, or have opportunities to race in hot conditions at short-notice, or without sufficient time for acclimation.

2016 BMC HORWILL RESEARCH SCHOLARSHIP

The BMC is looking for individuals to help us progress middle-distance running by conducting a creative and innovative piece of research. We believe that one way in which we can support this aim is to offer a scholarship of up to £2000 to help at least one individual pursue a selected topic. The scholarship has been in place now since 2008 and we are currently funding active research.

Coaches, research students, or lecturers may be interested and are welcome to apply. The Scholarship is open to all BMC members, but we are also opening the application process to non-members so that we can cast the net far and wide.

How to apply?

The application process is a simple two stage exercise. The first step is to complete an application form which is available from the BMC website. This is to be submitted to the BMC by the closing date. The second stage will involve short-listing the best applications and then holding short interviews. After this we will inform the successful candidate of our decision and support them to conduct the research in the months and years ahead. The findings will be widely distributed to all BMC members and if appropriate, beyond.

The late Frank Horwill MBE was the founding member of the BMC in 1963. As well as working tirelessly for the Club, Frank became extremely well known for his work on research and collating research from around the world on middle-distance and endurance running. In order to safeguard his tradition, this scholarship has been established.

Application forms and more information can be downloaded from the BMC website. If you have any questions please do not hesitate to contact David Reader at davidreader@britishmilersclub.com

The closing date for completed applications is 1st May, 2017.



BMC Young Athlete of the Year, George Mills, with coach Joanne Day. Photo courtesy of Joanne Day.



2015 FRANK HORWILL SCHOLARSHIP AWARD WINNER, RICHARD BLAGROVE, EXPLORES HOW STRENGTH TRAINING IMPROVES RUNNING ECONOMY AND SPRINT SPEED IN YOUNG MIDDLE-DISTANCE RUNNERS:

Strength training for distance runners

Including regular strength training in the programme of middle-distance runners isn't a new idea, legendary coaches such as Percy Cerruty, Peter Coe and even Frank Horwill himself advocated the use of supplementary resistance training. However, many coaches and athletes are understandably still skeptical of the benefits of strength training, preferring to spend more time running and avoid the inevitable soreness often associated with this type of activity.

There is a fairly convincing body of research that has shown lifting weights and performing plyometric (jumping and hopping) exercises improves some of the important physiological markers of middle-distance running performance. It is thought that stronger muscles and tendons which are capable of storing and returning more elastic energy improves a runner's ability to produce force effectively with each stride. This in turn provides boosts to important determinants of distance running performance such as running economy, speed at aerobic capacity (VO_{2max}), and maximal anaerobic speed. Most of the research studies in this area have used well-trained senior runners, which invariably have led many to conclude that strength training only benefits runners once their performance has plateaued and they look to other avenues to gain 'the edge' over their rivals.

The purpose of this research project was therefore to investigate whether 10-weeks of strength-training, added to the routine of competitive young middle-distance runners, provided any benefits above those seen from a programme of only running training.

Is strength training safe for young athletes?

There is fear amongst many parents and coaches of young athletes that initiating a routine of strength training carries a

Measure	Group	Pre-training	Post-training
Bodyweight (kg)	Intervention	57.4 ±6.3	58.1 ±6.2
	Control	58.5 ±9.5	58.6 ±8.9
Body fat skinfold (mm)	Intervention	36.6 ±13.2	37.9 ±14
	Control	29.8 ±8.6	28.3 ±6.5
O_{2max} (ml/kg/min)	Intervention	59.1 ±10.1	59.1 ±7.9
	Control	61.5 ±6.3	62.5 ±4.3
sO_{2max} (km/h)	Intervention	16.7 ±2.4	17.5 ±2.2*
	Control	17.5 ±1.2	17.8 ±1.8
Energy cost @LTP (kJ/kg/min)	Intervention	5.09 ±0.50	4.68 ±0.37*#
	Control	4.91 ±0.26	4.95 ±0.42
Energy cost @LTP-1km/h (kJ/kg/min)	Intervention	4.94 ±0.53	4.67 ±0.39*#
	Control	4.83 ±0.30	4.86 ±0.31
Energy cost @LTP-2km/h (kJ/kg/min)	Intervention	4.94 ±0.44	4.71 ±0.48*#
	Control	4.83 ±0.34	4.84 ±0.32
Speed @2mmol/L (km/h)	Intervention	13.0 ±2.6	13.6 ±2.6*
	Control	13.9 ±1.5	14.7 ±1.4*
Speed @3mmol/L (km/h)	Intervention	14.1 ±2.5	14.7 ±2.6*
	Control	15.1 ±1.2	15.7 ±1.4*
Speed @4mmol/L (km/h)	Intervention	14.9 ±2.4	15.4 ±2.5*
	Control	15.8 ±1.0	16.4 ±1.4*

sVO_{2max} = speed at VO_{2max} ; LTP=Lactate turnpoint

* significant difference to pre-training score

significantly greater change than control group

Table 1. Main findings from the physiology treadmill testing

high safety risk and may be detrimental to growth. These concerns are virtually unfounded; with scientific evidence actually indicating quite the opposite is true. In the last few years, position statements written by the British Medical Journal and the International Olympic Committee both advocate the use of strength training from a young age to build a foundation of athletic skills and capacities. Stronger young athletes are better able to cope with the

demands of training and competition, which is crucial as they progress their training into adulthood. Strength training is a safe and effective form of exercise for young runners if supervised and managed by an appropriately qualified coach.

Project overview

Between September and December last year, 25 young (15-18 years old; 12 male, 13 female) competitive middle-distance

Component	Weeks 1-3	Weeks 4-6	Weeks 7-10
Movement skill and mobility	Press-up touch, band crab walk, split squat, hamstring stretch with tap, knee hug, toe touch to squat, arabesque	Press-up touch, band forward-backward walk, reverse lunge, single leg glute bridge, prisoner squat, arabesque	Superman, inchworm, band jump and land, walking lunge, lying leg lift, reverse hurdle wall touch, overhead squat arabesque
Plyometrics	Box jump 3x6 reps A-skip 3x15m Hurdle jump and stick 3x6 reps	Single leg box jump 3x6 reps A-skip/Deadleg run/high-knees 3x15m Mini hurdle jumps 4x6-8 reps	Depth jumps (30cm to 45cm) 3x6 reps Sprints 3x30m Mini hurdle jumps 4x8 reps
Weight training	Back squat 3x8 reps Romanian deadlift 3x8 reps Single leg press 2x8 reps Calf raise 2x12 reps	Back squat 3x8 reps Rack pull 3x8 reps Single leg press 3x8 reps Calf raise 3x12 reps	Back squat 3x6 reps Deadlift 3x6 reps Step-ups 3x8 reps Calf raise 3x12 reps

Table 2. Exercises used in S&C sessions

runners volunteered to take part in the project. Twelve of the runners were allocated to a group that added two 1-hour strength-training sessions to their training routine. The other 13 runners acted as a comparison (or 'control') group and continued their normal running training. Before and after the 10-week training period, the runners attended two testing sessions. The first test involved measures of body composition followed by an incremental treadmill running test to determine lactate turnpoint (approximately equivalent to 'tempo' running speed), running economy at a range speeds, VO_{2max} , and predicted speed at VO_{2max} . The second testing session assessed: functional movement, 20m sprint time from a rolling start, vertical jump, quarter squat strength and hip strength.

What is running economy?

Running economy is essentially how much energy is required to maintain a steady sub-maximal running speed. It is widely recognised as an important physiological determinant of middle- and long-distance running performance, with elite runners displaying lower values compared to those lesser trained. An improvement in running economy means athletes can run at a faster speed for the same energy expenditure, therefore saving vital energy for later stages of a race and the sprint finish. Strength training has been shown to be a highly effective method for enhancing running economy.

Strength training programme

The runners assigned to the strength training group added a bi-weekly strength and conditioning (S&C) session to their training routine (on a Monday and Wednesday or Friday). Each session was split into three parts:

- movement skill and mobility based warm-up (10-15 min)
- plyometric training (15-20 min)
- weight training (30 min)

The exercises performed in each session are shown in Table 1. Intensity of the plyometrics and weight training exercises was progressed based upon each runners movement competency. Loads on the weight training exercises started with an empty Olympic lifting bar (15-20kg) and progressed by approximately 10% every 1-2 weeks.

Running training

All participants were asked to keep a training log of their weekly activity

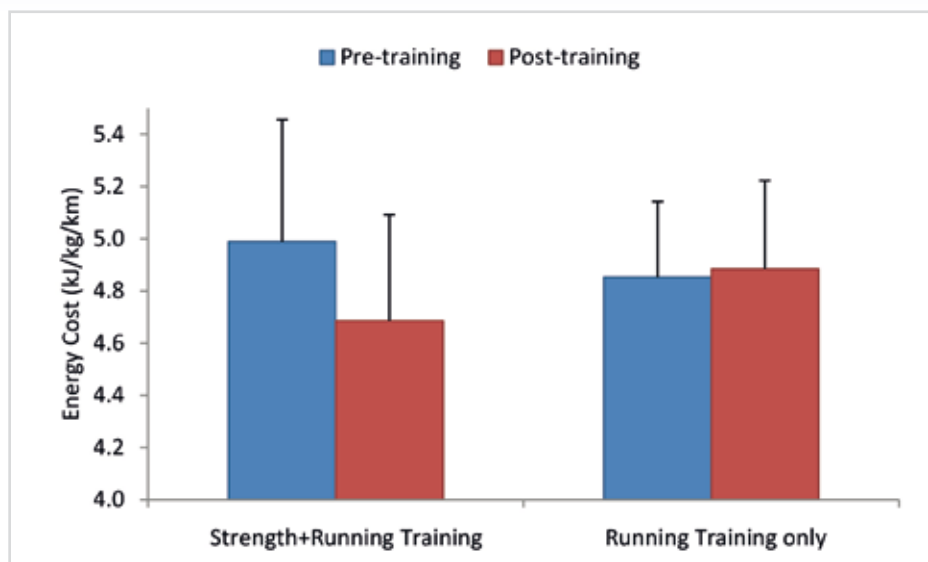


Fig 1. Changes in average energy cost of running across three speeds (lactate turnpoint, lactate turnpoint -1 km/h, lactate turnpoint -2 km/h)

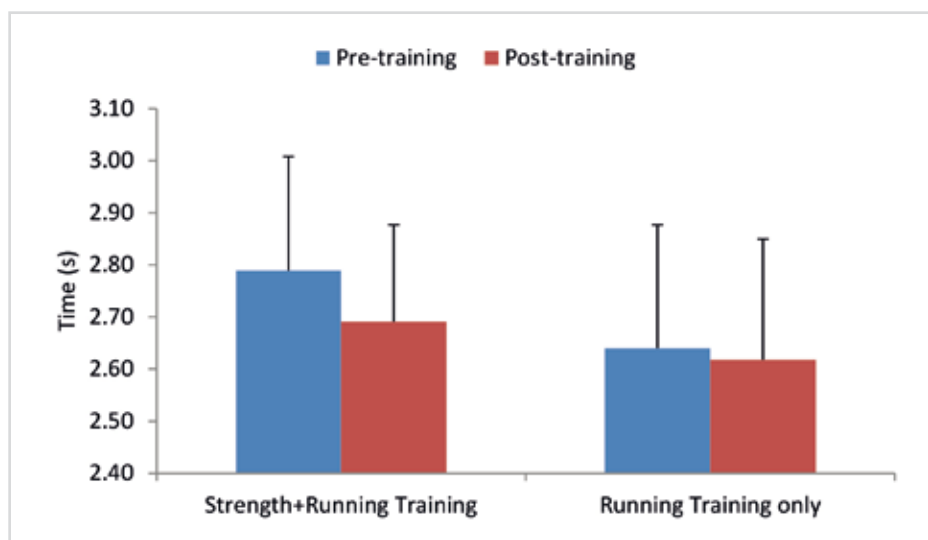


Fig 2. Changes in 20m sprint speed

and continue their normal programme of running. Several participants in the control group included a small amount of unstructured and unsupervised S&C in their routine. At the end of the 10-week period there was no difference between the total training volume (running+S&C+cross-training) completed between the groups, but the intervention group had completed a significantly greater amount of S&C.

Project findings

Eighteen of the runners successfully completed the project (9 in each group). As expected, the group who included the S&C improved their functional movement score (27%), maximum strength (21%), hip strength (18%) and explosive jump strength (10%) whereas the control group experienced no improvements in these measures. More importantly, the group who added strength training to their regimen

enhanced their running economy compared to the runners who only ran, at the speed corresponding to their lactate turnpoint, plus the speeds 1 km/h and 2 km/h slower than lactate turnpoint speed (see Table 2 and Fig 1). There was also an improvement in 20m sprint performance in the group who strength trained, whereas the other group recorded similar times (see Fig.2).

There were no changes in body composition scores or VO_{2max} in either group. The group who included strength training significantly improved their speed at VO_{2max} , however this improvement wasn't greater than the change observed in the control group. Similarly, both groups improved their running speeds at lactate values of 2, 3 and 4 mmol/L after 10-weeks of training.

Project outcomes

The main finding of the project is that the

addition of twice weekly strength-training sessions to the programme of young middle-distance runners is likely to result in improvements to running economy at a range of sub-maximal speeds. In practical terms, this means young runners will be able to complete their steady-tempo running with less energy, or run quicker for the same metabolic output. Based upon measurements of running technique taken during the treadmill testing, it is likely that strength-training improved leg stiffness, which is a function of being able to control and produce force against the ground more effectively.

Importantly for a middle-distance runner, strength-training also appears to improve 20m sprint speed, compared to a programme involving running-only. Given the improvements observed in maximum and explosive strength, it seems likely that strength-training enables runners to generate higher forces at a faster rate when sprinting.

Utilising a warm-up that aimed to develop movement skill, control and mobility provided large improvements to functional movement screen (FMS) score. The FMS assesses compensatory movements, imbalances and mobility, therefore is a helpful tool in determining potential risk of injury. Improving FMS score may therefore offset the risk of injury in the runners so it is advisable to include a purposeful warm-up prior to any training session.

Since the completion of the data

collection period, S&C sessions have continued for those involved in the research, with local young runners and student coaches benefitting from the provision. The project has also generated additional interest from around 20 other junior runners who are now involved with follow-up research and S&C. It is pleasing to see the benefits of the Frank Horwill scholarship stretching beyond the initial research project.

Recommendations

Based upon the findings of the project, the following recommendations for coaches of young middle-distance runners can be provided:

- A focused attempt should be made to improve the mobility, balance and co-ordination of young athletes across a range of basic movement skills in warm-ups. These should be coached to ensure movement quality is high. Activities should focus on improving: hip hinging movements, hip mobility, single leg control, squat patterns, trunk stability, lunging movements and activation of the gluteal muscles.
- Including two strength-training sessions per week is likely to benefit running economy and sprint speed in young middle-distance runners. Ideally the sessions should include 3-4 low-moderate intensity plyometric exercises and 3-4 resistance-training exercises.

- Plyometric exercises can be performed with minimal equipment such as box jumps, drop jumps (from a low step), pogo jumps and skipping. Regular use of top speed sprinting (over 30-50m) will ensure adaptations from plyometrics are transferred to high-speed running.
- Resistance training exercises should aim to develop and progressively overload basic movement skills such as squat, deadlift, lunge and step-up. The overload is best achieved with use of free weights (barbell and dumbbells), however many exercises can be completed which achieve similar outcomes without the need for gym-based equipment, eg dead leg step-up, single leg squat, glute bridges.
- If improvements in explosive and maximum strength are the goal (as they were for this project), repetition ranges should be kept relatively low (5-8 reps) with ample recovery between sets (2-3 min) to ensure form on each set is excellent.

Acknowledgements

I'd like to thank the members of the BMC who took part in the research project, and their parents and coaches, for their time, effort and commitment. Any junior members who are interested in S&C or getting involved with similar projects in the future, please email: richard.blagrove@stmrys.ac.uk

MATT LONG SPENDS TIME WITH BMC ATHLETE OF THE YEAR LAURA MUIR AND COACH ANDY YOUNG:

From the moment the 23 year old Scot breasted the tape in a staggering 3:55.22 for 1500m at the Diamond League in Paris to smash her own recently acquired British record, all bets were off as to who was likely to be named BMC athlete of the year.

Prior to this season, Laura Muir's PB of 3:58.66 had been achieved in July 2015 on the blisteringly fast track at the Monaco Diamond League and it is this very performance that the Dundee Hawkhill and Glasgow University student harks back to. With a modest grin she tells me, "Since running 3:58 in Monaco last year I knew I would have a good chance of breaking the British Record but it came as a complete surprise when I did so in London". She of course ran 3:57.49 at the Olympic Park on 22nd July to end the longstanding reign of double Olympic champion Kelly Holmes at the top of the UK all time rankings for the metric mile.

I had been aware that she had spent part of

the spring up in the popular altitude resort of Font Romeu. Was this a factor I want to know? She says with enthusiasm, "I had been training really hard in France in the weeks prior to the race but it's always difficult to tell exactly how well you are running as your times are slower at altitude". So what are the memories of that Diamond League race in London? She recalls vividly, "We went through 800m in 2:08 which is 4:00 1500m pace so I thought I might have a chance of dipping below 4 minutes. When I crossed the line and saw 3.57 I was so shocked as I managed to pick up the pace on the latter half of the race.

I knew straight away it was a record but to actually break it the way I did in our own London Olympic Stadium was so special for me". Was she cognizant of the atmosphere in the Olympic stadium and the affection which the crowd had for her as a Brit? With a nod of the head, she agrees that, "The crowd was amazing, they were so loud, I loved every minute of it and was just so glad I could pull

out a good performance on home soil. That race will definitely be a career highlight for me no matter how I perform in the future. She sighs, "It's not just any record its Kelly Holmes Olympic Gold winning time and I am so honoured to have the title of British Record

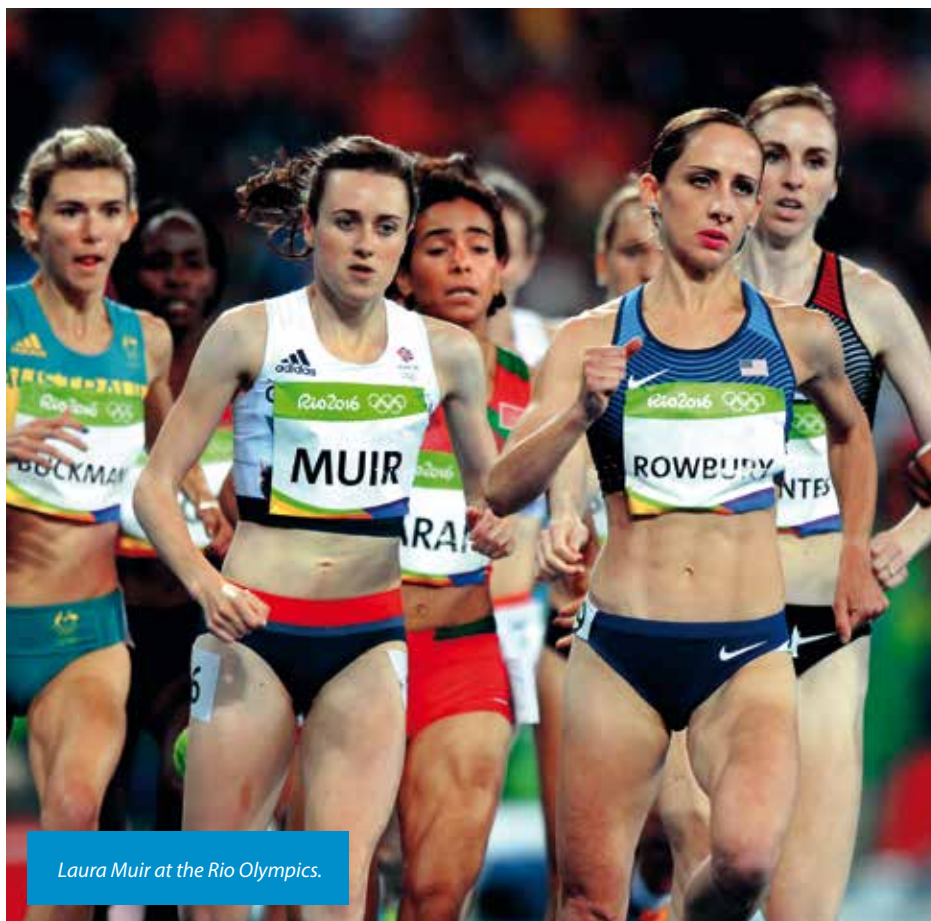


Old Head and Young Shoulders. Photo courtesy of Andy Young.

Holder." So how does it feel to be joining some great names from the past, in being named BMC Athlete of the Year? With typical modesty, she considers that, "It is a huge honour, so many of Great Britain's best distance runners have been awarded the title. It means so much to now join them".

At this point I bring in coach, Andy Young, who was himself a former member of the club, having run in no less than 22 BMC races according to Power of 10. The 1:49 800m man whose last victory in a club race came at Eton back in 2003, tells me enthusiastically, "I am a massive fan of the BMC and got enormous benefit from the club when I was an up and coming athlete. It's not just the obvious benefits like the pace-made races where you can get a PB but it's the opportunity to meet with like-minded individuals". Now in his 40th year and as coach to a budding squad predominantly based in Glasgow, his affection for the BMC seems undiminished but he stresses that our club is just one part of a healthy diet of competition needed for success. With wisdom he stresses that, "Athletes do need to focus on championship races as well as chasing fast times. My view is that the athlete should not use the BMC exclusively. Athletes need to learn tactics, so it's really a question of balance".

I then ask Laura what her abiding memories are of the BMC races which she has run in, the last of which was an 8:51 for 3000m, run indoors in January 2015. With a giggle she recalls, "I raced in 2012 in my first ever BMC at Sport City over 1500m and I got spiked! But it was the first time I had raced in a large competitive field over the distance so I learnt a lot from it and also managed to run a PB too, all be it 4.21 at the time". Laura was actually second to last that day, some 12 seconds adrift of Laura Weightman, who of course shared the track with her during last summer's Olympic Games. Whilst we are on the subject, she of course went for gold and received widespread acclamation for her positive 'win or bust' attitude. Three months on is she still disappointed? On the contrary she asserts that, "I thoroughly enjoyed the whole experience and I don't feel there was a huge amount of things I would do differently. If anything we learned my training and recovery strategy worked well and Andy and myself are getting more experienced win terms of getting me at my best for the championships". She appears contented in calmly attempting to scale the summit of global middle distance running and acknowledges that, "It's a steep learning curve for the 1500m and it's easy to forget that Kelly Holmes was 34 when she won gold and Mo Farah was 29, so I have plenty



time yet!".

Coach Andy will clearly help keep Laura to be both grounded and focused on the task which lies ahead in the years to come. As well as being able to offer his own experiential knowledge as a once promising athlete himself, make no mistake, he has put the leg work into acquiring a monumental amount of coach education knowledge. Some of this learning was acquired whilst competing as an athlete as he was involved in British junior, Scottish and BMC training squads. As a Loughborough based student himself in the 1990s, he had the benefit of the wisdom of famed guru, George Gandy, whose, "Sense of how to structure training", has clearly stayed with him over the years. He cites the opportunity to learn from our club President, Norman Poole, as being instrumental in his development. He laughs that, "By the time I was 19 or 20 I must have done more courses than most coaches do in their whole lifetime!" As well as the aforementioned Gandy, he cites the Birmingham based influence of Bud Baldaro and the late Bob Ashwood as aiding the development of his own philosophy of coaching. In addition he had experience of the American collegiate system whilst studying for an MBA at McNeese University in Louisiana, where he got to work with well-respected Craig Winrow. It's clear that these eclectic influences have made him the highly respected coach which he is

today. "It's about making the links to kind of building blocks which some of these people collectively advocate". Adding a word of caution, he points out, "I'm not big on learning from coaches that are overly prescriptive. It's the quieter and more reflective ones who you learn from and not necessarily those that shout the loudest!"

As we wrap up our conversation, final word goes to Laura on that unbelievable new British record in Paris. Having broken the record back in London, did she see this coming? She refutes my suggestion with the admission that, "To be honest I was not really expecting much! I had flown back from Rio that week, not slept very well and not had any therapy for a while but I knew I was still in really good shape so just wanted to go with the pacer to see what I could do and that turned out to be 3.55!". So when did she realise that her own record was in jeopardy during the race? She discloses that, "I saw the pace of 2.09 through 800m so knew it wasn't super quick but also knew from the London Diamond League I was capable of winding up the pace. So I just put the foot down and tried to maintain my speed and form to the finish as best I could and it worked". It most certainly did work and as I wind up the interview by saying goodbye to both Andy and Laura, I am left hoping that, this young affable Scott keeps winding up the pace so effectively, in what has become her trademark style, for years to come.

MATT LONG HAD FLASHBACKS SPEAKING TO RIO OLYMPIC SENSATION, ANDREW BUTCHART:

As a 13 year old schoolboy, I vividly remember being awoken by my father in the early hours of the morning on August 12th 1984. As I struggled to keep my eyes open with several strong cups of coffee, on went the television and the iconic voice of the late, great David Coleman was gearing up to commentate on a mouth-watering men's Olympic 1500m final, live from the iconic Los Angeles Coliseum. With three quarters of the race completed I sat up bolt upright as the bell rang and with Coe, Cram and Ovett at the head of the field, my old man froze and whispered quietly, "Enjoy it son, you won't ever see this in your lifetime again". My old man was rarely wrong, but fast forward to 20th August 2016 and in the closing stages of the Rio Olympic 5000m final, a 24 year old Scot drew level with Mo Farah and provided us with an image not seen since that of the iconic picture of Coe, Cram and Ovett, 32 summers previously (see our front cover).

His 13m08.61 in finishing 6th at Rio, rocketed Andrew Butchart to 3rd on the UK all-time list behind only Farah himself and the great David Moorcroft. It's worth reflecting just how far this likeable young man has come. Back in June 2010, as an 18 year old he ran 15m18s for 5000m in finishing 14th and last at the Aviva England

Under 20 world championship trials, some 30 seconds in arrears of the winner that day, Josh Gorecki, and a good 70 metres down on the man ahead of him who finished second to last. Just three years ago, as a 21 year old representing Central AC, he ran 5000m in a Scottish Athletics League Match in Kilmarnock and was only his club's 'B' runner, finishing in an unspectacular 15m14s, well behind team mate Alastair Hay. I simply have ask him if he has ever had to pinch himself of late. With a laugh he responds, "For sure! There are moments when I look back and I'm just like ... WOW! But when I ran those times back then, I wasn't particularly running that often. I have been working very, very hard since then".

Member number 5661 made a big breakthrough at Oxford in 2014 when he went sub 14 mins for 5000m for the very first time in clocking 13m58s. I am keen to ask his recollections of winning this race. "I remember Oxford very well", he recalls. "It was my first real go at a faster 5000m. I had always been obsessed with the clock and it was nice as I didn't know what any of the times meant. I just knew towards the end I might go under 14 minutes".

He has appeared in 7 BMC

races already in his career. So what role does he perceive the BMC has had in terms of his own long term athletic development? His answer is unequivocal. "The BMC's are by far the best events for middle distance athletes in the UK. Having the top guys in the country race against each other pushes everyone to their limits. For me it was massive in my development. I think I have almost always PB'd in every BMC I went to".

We then turn to Rio. So how did he feel when he came out of the tunnel onto the track for the Olympic final? "When I came out the tunnel it was relief if I'm being honest. We had been in the call room and in the hall for ages. I just wanted to get out and run. There were so many union jacks in the stadium and it made me feel right at home. During the race I was pretty relaxed. I just kept thinking I need to stay out of trouble and stay chilled. When they started to go with 2 laps I said to myself that it's not time for me to go. I had to be patient and know that I could pick off a few people on the last lap and luckily it worked".

How about his relationship with long term coach Derek Easton? With honesty he tells me, "Derek and I have a different relationship to most athlete and coaches. He is like a second father to me. We work together to make decisions and it just works. It's nice as we are learning new things every day and we both love it". On this note, I want to know how he is tackling his winter training at this point of the periodisation cycle. With a grin he enthuses, "I love winter training. My mileage will go up to near 100 miles per week and I stay off the track completely. It's all about building strength".

I then try and get him to focus on his objectives for the 2017 track season and unsurprisingly he asserts that, "The obvious answer is to perform at the World Championships in London and it's likely I will stay at the 5000m distance".

At this point, we've come full circle to his experience as a teenage athlete, struggling to make the grade. He has a message for you BMC teenagers who perhaps missed out on that county medal or English schools championship selection, and maintains, "I would advise you to keep doing what you love, enjoy it, smile and the results and times will come".

Having passed on in May, my old man didn't live to see that iconic image of Farah and Butchart leading the Rio field but for me, I felt a sense of privilege in witnessing athletic lightning strike twice in my lifetime. The Los Angeles Games were 32 years ago and let's all hope we don't have to wait another three decades for our next iconic image in British endurance history.



Rio Revelation, Andy Butchart.

EUROPEAN CHAMPIONSHIP 1500M FINALIST, **SARAH McDONALD**, ENJOYS A COFFEE AND A CHAT WITH BIRMINGHAM UNIVERSITY AC COACH, **SALLY STRAW**.

The Birchfield Athlete (formerly Jarrow and Heburn AC), Sarah McDonald, has had a superb year. Coached by Bud Baldaro and his team at Birmingham University where the twenty three year old is a fourth year medical student, Sarah has taken many by surprise this year with some sensational performances on the track. She opened her indoor season at the end of January in Bratislava with a 4:19 run over 1500m, and then progressively lowered that mark to a 4:07:18 win in the development race at the Birmingham Diamond league in June (an agonising eighteen hundredths of a second outside the Olympic qualifying mark). She has been equally impressive over the mile (4:38 to win the Westminster mile) and 2:01.10 for 800m at the Oxford BMC meet in July.

Many in the World of Athletics have been surprised by her seemingly, sudden entrance into the elite bracket of British middle distance running, and are curious to know the secret of Sarah's success...the answer is not rocket science...she states that, quite simply it has been the ability to maintain consistency in training, and a sustained illness and injury free twelve months. Sarah also acknowledges that she now has a more pragmatic attitude in her approach to her running; genuinely now loving what she does, focusing more on enjoying the 'process' of training instead of what may or may not be the result. She says with brutal honesty, "I spent too much time in 2015 expecting good performances to happen which never did. I'd suffered with

some abdominal issues prior to that which are now well managed. The sport ended up bringing me more sorrow than joy that I had to re-evaluate how I approached the sport and now I don't think I could love it any more!"

Sarah's development in sport began at school with the usual multi-sports approach. Her first real competitive sport was ice skating which she began at the age of twelve. She trained as a figure skater (which is the more athletic and explosive form with jumps and spins as opposed to the Torvill and Dean dance genre). At seventeen, following IT band problems and surgery, she quit skating and turned her talents to athletics. Her first discipline was Heptathlon, in which she competed at the English schools in 2010. It was during this period that her love of the 800m began. Sarah came to Birmingham University in 2011 and joined the Cross Country squad and gradually began to build her endurance base. That year her 800m time dropped from 2:12 to 2:09 and she came seventh in the BUCS championship, held in the Olympic stadium as a test event and is an experience she says she will never forget.

According to Sarah the highlight of her 2016 season, was her win at the Birmingham Diamond league event. She loved the entire experience of racing in the "big arena environment" and the win has left her hungry for more success. She went on to come fourth in the British Olympic trials for Rio, leading her to be selected to represent GB at the European Championships in Amsterdam where she came a creditable ninth in the final. She recalls with fondness, "Being at the European Championships was probably the steepest learning curve, yet the best experience of my entire career! Yes, I'd ran at domestic championships like the British Champs and BUCS but I'd never been in a call room where no one spoke very good English or squeezed next to someone on a golf buggy to the competition track and I'd never travelled to a race 6 days before I actually competed! Thankfully I was in a room with friend and training partner, Alison Leonard, so I had a familiar face around. There were so many things to learn, and that was before the final itself. The final was actually pretty similar to the Olympic final in terms of how it was raced, in terms of a slow start and a burn up and I think this almost acceleration style of racing will probably direct some of my training". She says that being part of the British team at a major International event was an invaluable experience, one that she



Sarah McDonald gets into the swing in winning the 800m at the Oxford Grand Prix. Photo courtesy of David Lowes.

wishes to repeat as soon as possible, and has undoubtedly enabled her to continue to grow as an athlete.

BMC member no 6171, Sarah, has always used BMC races during her track season as she finds that they are invaluable as a tool to enable her to practice the art of race pace, which is critical for the achievement of qualification times for major championships. This was highlighted by the Oxford BMC Grand Prix meet in July where she set her PB for the 800m. She is keen to credit the role of our club in her long term athletics development, stating categorically that, "The BMC is great! I've competed in BMC races for as long as I've been doing middle-distance running, and for PBs it's fantastic. You don't have to think about the early pace and everyone you're competing against is in a similar mindset – you are all there to run fast! It's a relaxed atmosphere as all you have to do is turn up on the start line – there is no awkward sitting in a call room staring at each other. The BMC staff have gone out of their way to help me when I have needed it, so I never think twice about helping pace make as and when required".

Whilst it has been a great year it has not all been plain sailing for Sarah, as she has had to adjust to attending international races in places like Poland and Italy where things have not always gone to plan. She has come to realise that travelling and competing abroad is not always as glamorous as one may think. Learning to always expect the unexpected, and deal with whatever is thrown at you, has added to her experience and has undoubtedly made her stronger for it.

The last twelve months has certainly seen Sarah become stronger athlete, both physically and mentally. This has been achieved through a good consistent winter base of solid endurance running, a supportive training group, facilitated by Head of Athletics Luke Gunn, and a great strength and conditioning programme. All this in addition to a period at altitude (Birmingham University and British Athletics joint camp in Font Romeu) and most importantly, an injury and illness free period.

So what next for Sarah McDonald? In her own words she says that, "I am back at placement for the winter months so I'm back to my dual medicine/athlete life but have a lot of support from the University scholarship team and TASS. I would love to make future GB teams. It's that goal which gets me through the hardest sessions. I also would love to make the podium at the British Championships, having come 4th in both indoors and outdoors this year". Firstly priority would appear to be another consistent block of winter work, to enable her

*Going Dutch. Sarah McDonald.
European championship
1500m finalist.*



to achieve her aims for the 2017 track season.

I have known Sarah for 5 years now, and have been privileged to work with her on the track as part of Bud's team. It was

a pleasure to take time out and sit down with her for a chat over coffee for a change! I wish her continued success for the forthcoming seasons.

EUROPEAN CHAMPIONSHIP 800m BRONZE MEDALLIST, **ELLIOT GILES**, TELLS RICHARD MASSEY ABOUT HIS BREAKTHROUGH SEASON:

Richard Massey: What got you into athletics and what made it the sport for you?

Elliot Giles: I played many sports prior to becoming a runner. These included a whole host of things such as Gaelic Football, Rugby, Basketball, Sailing, Hurling and Football. It was by chance that I fell into athletics. I took part in the bleep test at school and achieved the highest score my school had seen. At that point, my teachers and friends insisted I attend a training night at Birchfield Harriers.

Richard: Looking at your career you had three years away from racing between 2012 and 2015. Can you talk to me about that period?

Elliot: The bane of every athlete's career, injury, is what prevent me from competing during those three years off. Looking back, I was rather silly in the way I approached training and rushed back into training and each time I picked up a new injury related issue.

Richard: You were originally coached by Eddie Cockayne at Birchfield Harriers who obviously deserves much credit for your development and more recently by James Brewer. 2015 appears to have been a massive breakthrough year for you. What do you put this down to?

Elliot: Eddie was my first coach and played a huge role in keeping me in the sport during my three year injury period. He has always believed in and refused to let me lose sight during my difficult period. In 2015 I cannot emphasize enough how important James Brewer's role was. Without James I would almost certainly not have made it back into the sport and he was a vital stepping-stone in my journey to the Olympics! James took me under his wing after my bike accident, working with me on a daily basis to help strengthen my body, with no real intention of being competitive that year. James took me from a young lad whose knee collapsed every few steps and a gluteal, which barely functioned, to 1.47 and a British championship final in less than 8 months.

Richard: How has the BMC specifically helped in your athletic development?

Elliot: The BMC is a great platform to strategically learn how to run races and achieve quick times.

Richard: What did you do last winter to help make the further advances in 2016?

Elliot: Last winter I was unfortunately

subject to constant injury. It was difficult to stay on top of my issues due to a change in training/coaching circumstances. This was until I met Matt Yates in February 2016 and built on the foundations that had been laid the previous year.

Richard: How did this transition into your work through spring and summer?

Elliot: "The lack of winter training meant that I lacked initial strength for track sessions and was forced to play catch up.

Richard: When did you believe you could get to this year's major championships?

Elliot: Winning the British championships was a big moment. However I did not foresee that I would go on to medal at the Europeans, until I ran in the heats and realized all of these guys are human. At that point I knew I could be competitive!

Richard: So how were the Europeans and Olympics for you?

Elliot: The Europeans was an incredible, surreal experience. As I said before the games, I truly believed I could be competitive with the bigger names, however, I picked up an Achilles issue which led to a two week absence, that combined with weight gain and a bad day in the office led to an embarrassing performance.

Richard: Who inspires you from within our sport?

Elliot: I'll never forget watching Andrew Osagie in the 2012 Olympic final in running 1:43. This makes him arguably the best British 800m runner since Seb Coe and Steve Ovett. Osagie's performance and story behind it inspired me. Injury knows no bounds. If you believe, you will achieve!

Richard: What are your ambitions for the future?

Elliot: The future is the future, what will be, will be. This year has taught me that anything can happen; all I can do is train hard.

Richard: What advice would you give any young athlete wanting to get to international level?

Elliot: If you truly believe you have the ability, do not under any circumstances give up. Learn how your body works, do not over train

and most of all, be patient.

Richard: How do you view the support you have had over the years?

Elliot: Without James Brewer picking up the pieces to the puzzle and Matt Yates putting them together my achievements this year would not have been comparable to what they were. Though not listed on Po10, Matt is my coach and sets every aspect of my training. Matt works with a small group of people, Barry Ewell and Will Davies who also influence my training regime to ensure we see success. I would not have achieved this much and I'm very grateful for my recent achievements, after all I did go through hell to get to this point.

Editor's note: After having taken the British 800m title on 26th June, ahead of Jamie Webb and Michael Rimmer, Elliot Giles went on to earn a fantastic bronze medal in the European championships in clocking 1:45.64. BMC member no. 6154 has a Power of 10 recording of 7 BMC races to date, and has lost only one of those very races. His last participation in a BMC race was on 15th June 2016 in winning the BMC Gold Standard race at Watford.

Elliot Giles, European 800m bronze medallist.



MEMBER NO. 4358, **PAUL HAYES**, ARTICULATES THE JOYS OF BEING A BMC RACE ORGANISER.

Fortunately for me the drive home from the December committee/AGM meeting is not far as it is in Solihull rather than further south, nearer London. For me, the AGM marks the confirmation of the key dates for the coming summer season, particularly the date of the Solihull Grand Prix. After a quick discussion with Treasurer Pat Fitzgerald to establish what has been put in place already, I leave with a list of key jobs to do. First, and most important, is to start getting the officials needed to run the meeting so, over the coming days, I send out the invitation to the previous year's team with the date and approximate times of the meeting. We are going to be a little later this year so have decided to start the meeting earlier so as to get a full program in before we need flood lights. Key amongst these first bookings is the electronic timing team, so another email is sent off.

Throughout the winter months, officials respond to indicate their availability for the Grand Prix. On a training session over at Solihull with some of my squad, I take the opportunity to talk with the catering manager to organise the officials' refreshments. Again, we have worked well with the caterers there, so it is a case of making them aware of the date and then confirming numbers nearer the time. I also have an excellent medical crew who need to be confirmed and booked. One of the committee emails to ask if I would like him to book the PA system, another job ticked off the list. With the dates for the season set in stone, and published on the website, the first entries start to appear in my inbox as some athletes begin to plan their season and racing program. The system of online entry certainly eases the seeding and race planning part of the organisation. As March flows into April, the inbox starts to be pretty full.

Although the Solihull Grand Prix is still some way off, I start to work through the list of potential pacemakers for the meeting. Some athletes will be racing so will need an hour or so before they pace for us. With the competition at such a high level, even in the lower grade races, you need the pacemakers to do their job. I am already starting to answer questions about Solihull. A lot of overseas athletes are asking to enter. They are directed to the online entry system on the website. Some athletes have been given deferred entry and the website tells them they will be told in the next week if they have been accepted. I let these athletes know it will not be until the week before the



Paul Hayes (left) with our treasurer Pat Fitzgerald and wife Maureen.
Photo courtesy of Matt Fraser Moat.

meeting. For the overseas athletes this can raise the problem of booking flights at short notice so I assure them I will give them as much notice as possible. For most of these, I can change them from deferred to accepted pretty quickly when I look at their times and targets for the meeting. Many athletes can be over ambitious about their targets then complain that they are in the wrong race, especially when they do not achieve what they wanted.

Time is marching on with Solihull upon us. I work on a provisional timetable based on the numbers and pacemakers. Working with our Chair, Tim Brennan, we revise and refine this to make best use of the athletes helping. Lots of confirmations to national and overseas athletes. Deadline day and the activity is furious as we work on the seeding lists to get them out as soon as possible. A poor entry for the women's 5000m so we decide to drop it as the standard across those entered is wide. Contact all the athletes to explain the decision and offer them the chance to change races. Most decide to drop down a distance but some pull out. A GB International emails to say he would be happy to pace a 5000m race as several of his training partners are racing in this heat. Almost bite his hand off. The down side is a number of pacemakers pulling out so back to the drawing board and email list. Manage to pull in some extra pacemakers through a committee coach offering some of his squad. A brief sigh of relief. By Thursday, we have the start lists and

timetable published, the officials confirmed and the last minute jobs lined up.

Saturday arrives and communication lines are buzzing to check that all is in place with people arriving from around the country to help out and athletes flying in from across Europe to compete. I get to Solihull around 1.00pm. From then on, it is really nonstop. After checking with the caterers on the timetable for getting refreshments to officials, setting up the door table and team, making sure all the equipment is out, liaising with the ground's man over entrances, ensuring the photo finish is happily setting up as well as the PA system, then running through with the numbers team and the pacemaker coordinator, all seems just about set. In no time, athletes, coaches and parents/family are arriving and we are off. At some point in the afternoon, I manage to watch a couple of races. The pacemaker coordinator does a great job in switching some athletes around when a key athlete fails to show but no one in the race seems to notice the difference with the replacement doing an excellent job. By 7.30, we are into the last couple of races, both providing some interesting battles. As we near the end, I make a point of thanking the officials and remind them to collect their bottle of wine from the table as a way of a thank you for all their hard work. 9.30pm and we are wrapped up for another year. Fortunately, the results are sent automatically to Power of 10 and the BMC website so I have nothing to do when I get home.

TIM BRENNAN AND KEVIN FAHEY TAKE A DEEP BREATH IN LOOKING BACK AT OUR SEASON:

WOMEN 800M RUNNERS STAR IN 2016 GRAND PRIX SEASON

There is no better illustration of the success of the 2016 Grand Prix season than the story of Alexandra Bell. The gritty 23-year-old Yorkshire runner from Pudsey & Bramley has been a keen supporter of BMC races for the past seven years since racing her first Grand Prix at Sport City on May 30th 2009 and clocking 2:10.42 for second place in the C race.

Season after season she has made gradual improvement, overcoming the inevitable setbacks due to injury and illness, until arguably she enjoyed her best ever victory when winning the Grand Prix 800m A race at Solihull.

She did so not just in a then personal best time of 2mins 01.29secs – which she later improved to 2:00.53 - but also in a time that was inside the Olympic qualifying standard set by UK Athletics of 2:01.50. "I am so, so pleased with that," said a delighted Bell afterwards. "I wasn't going to run as I have been racing so much but decided to come down as I love the Grand Prix meetings and I am glad I did now! I have been so consistent running 2mins 01secs this season. "My hopes were up for the Europeans and I was left disappointed but I've got my fight back!"

That win also earned Bell some financial compensation winning the Grand Prix prize of £250.00 after dipping inside 2mins 02secs. Indeed Bell, who came fifth in the Olympic trials, eventually ran under 2mins 02secs six times during the summer and three times under the Olympic standard. Sadly in a season when standards were high it wasn't enough to get her a place on the team for Rio or more surprisingly, for the

Women's 800m Performance in BMC Races 2016 (Olympic qualification 2:01.5)

02:01.10	Sarah McDonald	1rA	Oxford	23-Jul-16
02:01.17	Shelayna Oskan-Clarke	1rA	Watford	15-Jun-16
02:01.24	Adelle Tracey	1rA	Watford	28-May-16
02:01.29	Jenny Meadows	1rA	Sports City	14-May-16
02:01.29	Alexandra Bell	1rA	Solihull	09-Jul-16
02:01.32	Alexandra Bell	2rA	Watford	28-May-16
02:01.39	Jenny Meadows	3rA	Watford	28-May-16



After winning the men's mile, Andy Baddeley salutes Hamza Kadir, Ricky Lutakone and Elliot Dee, who excelled in the Peter Coe mile for Under 17 year olds at Oxford. Photo courtesy of David Lowes.

European Championships in Amsterdam.

But Bell's success did illustrate the strength of the women's 800m races this season as the winner of the first four Grand Prix meetings all ran inside the Rio qualifying target.

In the opening fixture at Sport City it was British international Jenny Meadows who set the standard with victory in 2:01.29, with Bell runner-up in 2:02.22. The action

then moved to Watford with Adelle Tracey clocking 2:01.24 and dragging Bell (2:01.32) and Meadows (2:01.39) all under 2:01.50 in a terrific contest. Solihull was Bell's big moment while in Oxford it was the turn of Birchfield 22-year-old Sarah McDonald, who had already won the 1500m at Sport City in a stunning PB of 4:10.81 to lop five seconds off her best, to continue her improvement this summer with a PB of 2:01.10.

"The quality of the womens' 800m this summer has been impressive and it was great to see so many British women get the Olympic Games qualifying standard at one of the Grand Prix meetings," said BMC chairman Tim Brennan.

The only blot came in the fifth and final Grand Prix at Trafford when the wind and rain clearly affected times and McDonald could only manage 2:04.13 for her second 800m win of the summer. But for the likes of McDonald and, in particular, Bell the 2016 Grand Prix season was a great success and will hopefully prove to be a springboard for even greater glory in the next few years – which is what the BMC Grand Prix series is all about.

Watford saw many of the country's best young athletes in action and a total of nine qualifying times for three major championship – the Olympics, World



Bud Baldaro presents Khahisa Mhlanga, Anna Burt and Molly Canham with their spoils following the Frank Horwill mile for Under 17 year olds at Oxford. Photo courtesy of David Lowes.



Jake Wightman leads the 'A' 1500m at Sport City. Photo courtesy of David Lowes.

Juniors and the European Youth Olympics – were recorded. Teenager Sabrina Sinha ran PBs of 4:18.72 at Sport City and 2:05.48 at Watford which set her up nicely to win a silver over 1500m at the European Youth Olympics in Georgia. Erin Wallace won bronze behind Sinha in Georgia and she, too, ran her qualifying time at Watford. Those young runners, plus the likes of fellow junior internationals Daniel Rowden, Bobby Cay and Markhim Lonsdale, will all hopefully still be racing the GP series in five years' time.

If the above should need any inspiration in dedication and application then they could do worse than look at Andy Baddeley's heart-warming victory in the mile at Oxford. Eight years after victory in the prestigious Dream Mile in under 3mins 50secs the 34-year-old former Olympian and World Championships finalist couldn't have looked any happier than winning the Oxford mile in just under for minutes.

Baddeley's victory in 3mins 59.46secs was a real triumph for the 34-year-old after years of struggle with injury and suggests a renaissance is looming for the highly respected athlete. His sheer delight was understandable as he has struggled with a bad knee injury since reaching the semi-finals of the 1500m at the Olympics in London four years ago – and Oxford was only his fifth time on the track since then. "I really enjoyed that race and to win was brilliant," said Baddeley. "It was, arguably, the toughest and best thing

Mo Farah's BMC 5000m races

5000	14:05.72 PB	8		Solihull	BMC Grand Prix	19 Aug 00
5000	13:56.31 PB	12		Solihull	BMC	23 Jun 01
5000	14:00.5	3	A	Watford	BMC	14 Aug 02
5000	13:30.53 PB	3	A	Solihull	BMC Grand Prix	25 Jun 05

I have done in my career as the last four years have been so difficult for me. But I feel I am back now and I still have targets in my head that I want to achieve. I want to run for Great Britain and I look at what Jo Pavey is doing and that is inspiring. You never say never."

So Bell got her fight back and Baddeley got his mojo back! They are two of the abiding memories of another great Grand Prix summer.

Elite Meeting is just that!

We did not have a June BMC Grand Prix this year as all the weekend dates were taken by championship and league events. As we felt that June was a key month for qualifications and that athletes would benefit from a BMC fixture, we decided to upgrade the mid-week BMC Gold Standard at Watford to be an Elite Meeting. This proved very successful with the meeting producing some of the best BMC times of the season. Four UK athletes in that meeting went on to compete in the Rio Olympics.

The Watford Elite meeting on June 15th was very successful. Winners were:

- Men 800m Elliot Giles 1:47.21 - 3rd best in BMC rankings
- Women 800m Shelayna Oskan-Clarke 2:01.17- 2nd best in rankings
- Men 1500m Tom Farrell 3:39.4 - best in rankings
- Women 1500m Charlene Thomas 4:08.01- best in rankings
- Men 5000m Adam Hickey 13:53.97 – 3rd best in rankings

British Best

The BMC 1500m Steeplechase at Oxford saw a British Best from Jermaine Mays of 4:04.86 breaking a long standing record by nearly 3 seconds. Jermaine had targeted the record at the distance which is rarely run by seniors and thanks to his great run is now the proud owner of the fastest ever British time.

Regional Success

The BMC regional race program stretches from Exeter in the South via Tipton in the midlands to Glasgow in the North and is a vital part of what we do. Many of these meetings have come about to fulfil a local need where a particular geography lacks quality races. This can be seen at Exeter which provides a competitive outlet for the



Summer success. Alexandra Bell.

South West and in Scotland where pre-race entry and tightly seeded races did not exist. The meetings at Tipton, Eltham and Exeter are regularly attracting 100 athletes or more whilst the popularity of Glasgow is such that 200 plus is now the norm. These meetings cater for athletes of a high standard but also those yet to achieve the BMC membership standard. Their value is clear as part of the competition ladder to top level.

U15 Records Tumble

BMC races saw two UK U15 800m bests this year as first Ben Pattison at the BMC PB classic in Millfield broke the thirteen year old record and then at Chester Le Street, Max Burgin took over a second off that time. A day later Oliver Carvell went close to the old record to move forth on the all-time list. The re-written top 5 now looks like this:

BMC and the Olympics

- Olympic Games 6th placer Andrew Butchart and Gold Medalist Mo Farah have in common that they both first broke 14 minutes for 5000m in BMC races. In fact, Andrew broke 15 minutes and 14 minutes in the same race with a 13:58.05 winning performance in 2014 at Oxford. In 2001 Mo finished in 12th in the Solihull Grand Prix with 13:56.31, to take more than nine seconds of his PB set in the same meeting the previous year.
- Olympic 1500m winner Matt Centrowitz (USA) did not have such a great run in the BMC Grand Prix at Solihull in 2014. He came 8th and last in the A race in a time of 1:51.32
- Laura Muir's five BMC races all produced PB's starting with a 4:21.17 1500m best as a nineteen year old in Glasgow in 2012 and most recently with an 8:51.75 3000m time indoors at Glasgow. This was a BMC

UK 800m U15 Boys all time

1	1:53.1	Max Burgin	Halifax	BMC Regional Chester le Street	25 Jul 16
2	1:54.52	Ben Pattison	Basingstoke & Mid Hants	BMC PB Classic Street	2 May 16
3	1:54.72	Jordon West	Cornwall	Watford	23 Jul 03
4	1:55.36	Oliver Carvell	Bridgnorth	BMC Regional Exeter	26 Jul 16
5	1:55.56	Michael Rimmer	Liverpool Pembroke Sefton	BMC Gold Standard Trafford	25 Jul 00

best indoor or out.

REGIONAL FOCUS:

Here we dip into the regional scene by taking a look at events at Sutcliffe Park, Eltham, on Wednesday 17th August.

Great Britain under 23 and Guildford athlete Adelle Tracey secured victory in the final British Milers Club – Cambridge Harriers race series. Winning in a women's track record of 2:01.26, Adelle secured the BMC Women's Challenge title for the first time and in the process took home £400 in prize money.

Moments later, in the Sydney Wooderson Memorial Race (organised in conjunction with Blackheath Harriers) rising 800m star Kyle Langford took the title for the first time, winning in a time of 1:48.94. In a competitive race Langford surged

over the final 80 meters to take the title. Sadly Langford, who is coming back from injury, was a little short of the Wooderson's original 1938 world record of 1:48.4, despite perfect race conditions. In the race, there were also impressive runs from Nzimah Akpan (1:49.30) and James West (1:49.34) who finished second and third and at the same time both setting new personal bests.

The two races are the highlight of the four race meeting series, which has been held at Eltham for over a decade. The Sydney Memorial race was first run 2008 and has become a race with some notable athletes. Previous winners include Charlie Grice, Andrew Osagie and Darren St Clair who holds the record time of 1:47.23 set in 2009.

Earlier in the evening thirteen middle

distance races were staged, with performances from over 140 athletes. In the 800m B race, Tonbridge runner George Duggan won in a time of 1:51.94 and in the BMC Women's Challenge 800m, under 17 athlete Khahisa Mhlanga set a new personal best with 2:06.54.

In the 800m I race, South London under 20 athlete, Alex Lyne, knocked an amazing seven seconds off his PB, winning and setting a new time of 2:10.55. He assisted under 20 female, Jodie Judd, to set her new PB, coming in second with 2:12.56. Earlier in the evening in the 5000m, Dom Noland and Paul Navesey had great runs to finish first and second respectively and at the same time both setting new PBs. Both going inside 15 minutes, Dom set a new time of 14:52.9 and Paul 14:55.5.

THE NATIONAL PICTURE: ARE WE GETTING BETTER?

This analysis looks at the top three ranked performers in the country, men and women over 800m, 1500m, 5000m and 10,000m. We would hope to see three athletes selected for every major championship so this seems like a good basis to measure the elite end of endurance running. The aim is to see the long term trend in the events going all the way back to 1980.

For each year we take the average time of the first three. That in turn can be averaged across all the years. It is then possible to see how the average of the top three in 2016 compares across all the years.

From this we can see that 2016 performances were better than average in

all events except for the men's 800m which was marginally below average. 2016 could therefore be counted as a 'good year' or at the very least as better than the norm.

However, when considering long term trends, we need to allow that individual seasons fluctuate considerably and may be influenced by the absence due to illness or injury of an individual, it is easier to see trends by comparing rolling 3 year averages. This means taking the average of the best 3 in the current year plus the previous two giving a total of nine times to take an average from. By doing this it helps to smooth out the curves in the graphs below.

The graphs show the % variation of times

Average time of Best 3

Men	Overall average Between 1980 and 2016	Average In 2016
800m	01:45.32	01:45.33
1500m	03:34.55	03:33.57
5000m	13:21.15	13:10.61
10000m	28:05.93	27:42.71
Women		
800m	01:59.81	01:59.22
1500m	04:04.57	04:00.54
5000m	15:22.37	15:05.84
10000m	32:45.05	31:44.27



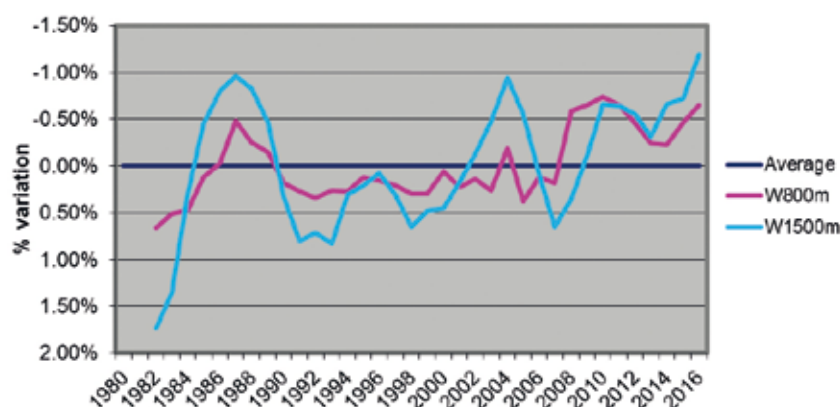
Adelle Tracey seals her first victory in the BMC Women's 800m Challenge Race. Photo courtesy of John Baldwin.

from the average. This is the difference in time between the current year and the overall average, divided by the overall average. Times above the average line are quicker than the norm and those below are slower. The best years will be the highest on the graph and the worse the lowest.

WHAT CAN WE CONCLUDE?**Women's 800m and 1500m**

The women's 1500m is at an all-time high

Progress Women 800m/1500m



with the rankings in the last three years led by Laura Muir and Laura Weightman surpassing previous peaks in 2004 (Kelly Holmes, Hayley Tullett, Helen Clitheroe) and 1987 (Kirsty Wade, Yvonne Murray, Zola Budd). The 800m is also close to being a best ever with the current ranking of Lynsey Sharp, Shelayna Oskan-Clarke, And Jenny Meadows being only just behind the historic high in 2010 (Meadows, Jemma Simpson, Marilyn Okoro).

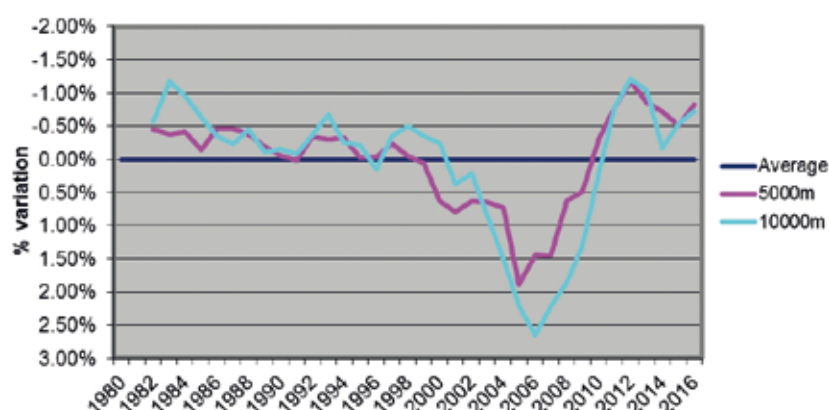
Men's 5000m and 10,000m

We can see in the graph of the 5000m and 10,000m that the events slumped in the first decade of this century compared to what was achieved in the 1980s and 1990s. Over the last few years it is back at high levels. Of course this has a lot to do with the super-fast times of Mo Farah but Andrew Butchart, Tom Farrell, Andy Vernon and Chris Thompson have all produced top 10 all-time ranking times in the current decade.

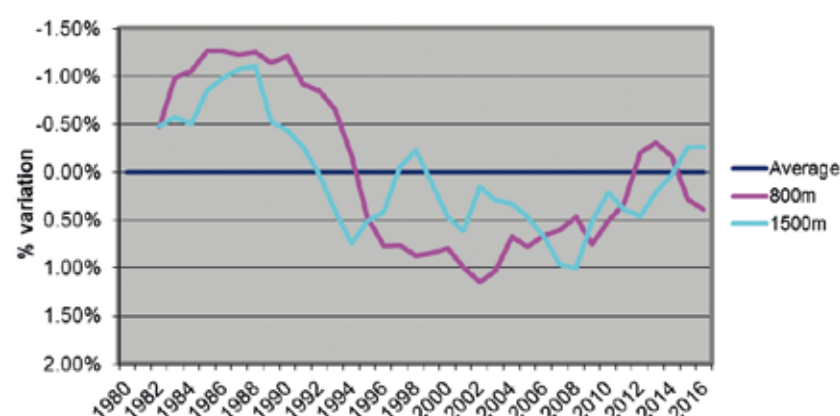
Men's 800m and 1500m

Both events have in common that the best years come in the 1980s and early 1990s however the signs are more encouraging for the 1500m where the rankings led by Mo Farah, Charlie Grice and Chris O'Hare better anything seen since 1990. The 800m is the only event currently below average.

Progress Men 5000m/10000m



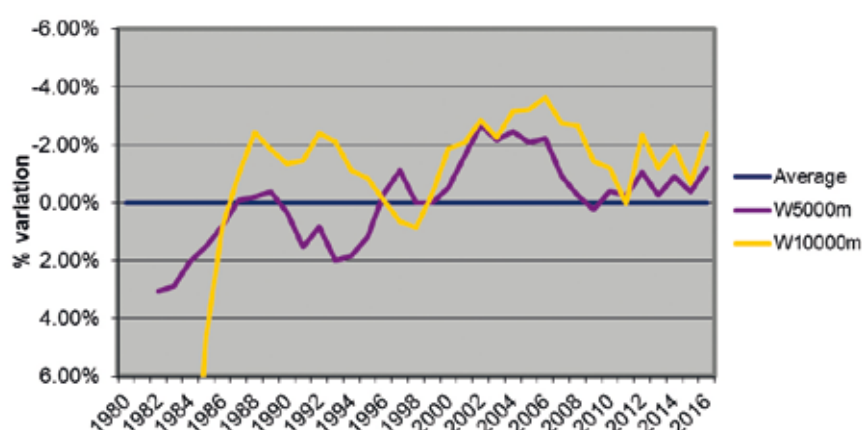
Progress Men 800m/1500m



Women's 5000m and 10,000m

These are events relatively recently included in major championships, so it is not surprising that the majority of fast times come in the last 20 years. Today the events show up pretty well, but they are somewhat below the peak of 2004-2006 when Jo Pavey and Paula Radcliffe featured prominently in the top three.

Progress Women 5000m/10000m



Jess Judd leads the 'A' 1500m at Trafford. Photo courtesy of David Greenwood.

BMC IN PICTURES



Top left. Women's 'A' 5000m at Trafford.

Top right. Making a splash at the Watford Grand Prix.

Middle left: Lyle Langford takes the 'A' 800m at Solihull.

Bottom left: The Solihull Grand Prix was a knockout!

Bottom right: The women's 'A' 800m at Trafford.

All photos courtesy of David Lowes.



ACADEMY CHAIR **DAVID LOWES** AND **MATT LONG** RELIVE THE RECENT TRAINING WEEKEND AT SPINKHILL.

A record 84 athletes descended on the picturesque Derbyshire village of Spinkhill, on the early evening of Friday, October 28, for three days at the ever popular independent, co-educational and boarding school. The school's website boasts a "momentous history", and like our club, numerous alumni have gone on to achieve international honours - but in holding an oval ball, rather than in running for Team GB.

With a synthetic athletics track, a ready-made cross country circuit which weaves around no less than nine rugby pitches, three cricket squares, plus an astro-turf, those present got a taste of what life may be like for some of them on a Team GB training camp in Font Romeu as an example, during the 48 hours of their stay, with the basic, but acceptable, living conditions and 'early to bed and early to rise' philosophy being as deeply engrained in our camps as the lettering in a stick of Blackpool rock.

The Friday night saw Academy Chair, David Lowes, kick the course off at pace with a thought provoking talk about whether cross country is a pre-requisite for track success. In articulating the physiological benefits of a winter spent on the mud, Lowes spoke about the physiological adaptations to training in terms of super compensation and how this may be effected

at this point in the periodisation cycle. A short quiz followed which engendered squad bonding before the athletes were introduced to their respective Squad Lead Coaches – namely Lowes, Lewes-based David Leach (who guided Rob Mullett to the Rio Olympics), Matt Long (Birmingham University and Birchfield Harriers) and star guest, Jenny Meadows (Wigan and District).

The Saturday early morning run started in near darkness at 7.30am with a gentle 20-25 minute light aerobic workout around the school fields setting up the athletes for a hearty breakfast. At 9am, 2009 world championship 800m bronze medallist, Jenny Meadows, was introduced with all the razzamatazz of a championship boxer entering the Las Vegas ring, as the Team GB stalwart received a rapturous ovation from an audience who were whipped into a frenzy. Jenny was then interviewed by David Lowes for the first of two occasions during the day - the first of which involved a forensic biographical examination of her illustrious career, which of course also reaped a world silver 800m on the indoor boards - and the second of which involved a more spontaneous 'shout from the floor' Q & A session which was owned by the athletes (see BMC News spring 2017 for full coverage).

Group sessions outdoors followed, with

most squad leads adopting sessions which made considerable demands of the aerobic energy system, while also working the lactate system. At this point the assistant coaches really earned their corn, with athletes benefiting from the wisdom of Simon King, Nicola Myers, Peter Torrance and Bill Winter. There was huge value for money added by Joanne Day (see p.34-36), Mark Vile, Phillip Kissi, Andrew Parmenter, Richard Davenport and Gerry Simpson.

For many, the highlight of the course was in Jenny Meadows' leading of the afternoon drills session. Not only were the drills demonstrated but critically the affectionately dubbed 'Pocket Rocket' took the time to explain exactly how and why each specific exercise would make a biomechanical intervention which is practised to the point of unconscious competence on the spectrum of skill acquisition, would result in improved running economy and efficiency (see postings on BMC Facebook page).

After an evening's entertainment back in the school assembly hall, the athletes went to bed tired but happy.

Following the benefit of a much needed extra hour in bed after the clocks went back, the attendees were back up bright and early and ready to attack their final day



No sloping off for these young athletes. All photos in this section courtesy of David Lowes.



Athletes had a knees up with Jenny Meadows.



Academy Coaching Team.



Drilled for success.



Jenny Meadows pointed the way on Saturday.



You will feel like you are flying at our Academy!



Powering through.



Go wild in the country.

Fartlek flyers.



with gusto. The early morning run was an opportunity to reinvigorate tired legs and to prime them for the more intense activity which lay ahead. A static stretching session led by Lowes followed breakfast, with athletes not only learning greater range of exercises but also being encouraged by the coaching staff to reflect on the differences between stretching to restore range of movement on one hand and to extend range of movement on the other.

The time honoured mass fartlek followed later that morning with athletes putting into effect Gosta Holmer's classic notion of 'speed play' over a challenging, undulating circuit.

The course closed with an address by Lowes being followed by a rousing round of applause for his year-long effort in putting the annual course together, before the coveted Athlete of the Course Awards were announced. Our well deserving winners were Thomas Brigder (Cambridge and Coleridge AC; Lead Coach Mark Vile) and Natasha Harrison (Stockport; Lead Coach Pete Torrance).

Charlie's Angels. Fun as well as Fitness is at the heart of the Academy.



Dressed for success courtesy of our sponsors Nike.



AW

EARLY BIRD SPECIAL OFFER FOR BRITISH MILERS CLUB MEMBERS!

ORDER YOUR COPY TODAY AND RECEIVE FREE POSTAGE!

For ONLY £9.99 you will receive this 112 page look back to 2016 and look ahead to 2017 and the World Championships in London.

The magazine will cover a review of all the major events of 2016 and a look ahead to the World Championships in 2017.

PLUS Exclusive interviews with some of the key names from the sport of athletics.

**SO SIGN UP NOW AND DON'T MISS OUT ON THIS
SPECIAL OFFER***

TO ORDER YOUR COPY SIMPLY GO TO

<https://subscribeme.to/athletics-weekly/BMCR16>

OR CALL: 01778- 392018 QUOTING BMCR16

*The magazine goes on sale on the 24th November

SUBSCRIPTION OFFER

AW

SPECIAL SUBSCRIPTION OFFER FOR BRITISH MILERS CLUB MEMBERS!

SUBSCRIBE TODAY AND BEAT THE PRICE RISE!

Receive the world's **ONLY** weekly athletics magazine direct to your door for **LESS THAN £2 A WEEK!**

- Results and in depth reports from the Winter's Events
- Product Reports and Reviews
- Regular statistics across the events and age groups all for **ONLY £7.99 A MONTH!**

SIMPLY GO TO:

<https://subscribeme.to/athletics-weekly/BMC1116>

OR CALL: 01778- 392018 QUOTING BMC1116

BMC News Autumn 2016 29

This offer is open to new subscribers only and only valid in the UK



GEOFF JAMES CHATS TO PAUL COUGHLAN IN HIS QUEST TO UNDERSTAND THE GREAT TRADITION OF NEW ZEALAND MILING:

In one way or another, New Zealand runners have been in the forefront of world athletics for over 80 years. For such a small country, at first glance it would appear to defy all the normal laws which dictate global sporting success. With a nation of only approximately 4.6 million to date, as a nation, its sporting prowess, in my opinion, unrivalled. We are all well aware that this great sporting nation continues to produce champions in sports as diverse as Rugby and Cricket- not bad for a country the same size as the region which I live in, namely the West Midlands.

At first glance, Athletics would appear not to be a major player in New Zealand with there being a limited number of registered active athletes and a small number of clubs, together with relatively poor funding from the state, to support its Federation. They do, however, have many recreational runners as we do in the United Kingdom. New Zealand won 4 individual track and field medals in Rio, compared to our five, so I maintain that we have much to learn from these mighty Kiwis.

Names like Jack Lovelock, Peter Snell, Murray Halberg, Rod Dixon, Dick Quax, John Walker and more recently, Nick Willis, roll off the tongue. This is not to mention the contribution which the country has made to coaching and coach education with the late, great Arthur Lydiard.

Looking to the great history and tradition of all things past is one thing but the signs are once again beginning to look encouraging in terms of the possibility of future successes. The next generation are firmly on the horizon and one man ideally placed to pass judgement on matters both past and present is Paul Coughlan, who I had the privilege to interview recently, and which now follows:

Geoff James: Tell us a little about your own athletic background and what got you into the promotion of athletic meetings and your own work in New Zealand?

Paul Coughlan: I've been a runner since I was 6 years old. As a senior I was a typical provincial level athlete on the fringes at a national level but never likely to go any higher. I also ran for Belgrave Harriers for a couple of years in the late 1990's, also without creating too many headlines! I was fortunate to get a chance to compete in the mid-90's in the international series events that John Davies and Dick Quax used to organise, and that inspired me to get involved as an organiser when the

opportunity arose in 2008. Nick Willis came back from Beijing and expressed the view that there were no international events being held in New Zealand to showcase the sport, so a bunch of us got together and the International Track Meet was born, at the QEII Stadium in Christchurch. This was, of course, where the Commonwealth Games had been held in 1974. We had some challenges with that, for instance when the February 2011 earthquake destroyed the stadium and a fair chunk of Christchurch four days before that year's event was to be held. Since then we've had to get a bit more innovative with our events. We held an international meet on a grass track in Christchurch's oldest high school grounds, a pole vault event in a central city shopping mall, a shot put event in an urban park, and

a street mile race around city streets - all featuring the best Kiwi athletes against international competition. I'm also involved in a little bit of athlete management, helping the likes of Tom Walsh and Angie Petty out with sponsorship and media commitments here in New Zealand.

Geoff: Your nation has given us a golden era of miling in the past and one famously thinks of John Walker as Montreal Olympic champion and the first man to go sub 3.50 for the mile. What is John up to nowadays?

Paul: Indeed - I read somewhere the other day that New Zealand has won 10.7% of all the men's Olympic 1500m titles (Lovelock, Snell, & Walker), and 8.3% of all the medals awarded in that event (those three plus



Nick Willis takes Commonwealth Games gold in Melbourne in 2006.



John Walker becomes Montreal Olympic 1500m champion in 1976.

Davies, Dixon, and Willis) - not bad for a nation of 4 million people!

Sir John Walker is now an Auckland city councillor, as is Dick Quax. Sir John doesn't keep the best of health, as has been well publicised, but still keeps pretty busy. He and his wife are still active in equestrian circles, and he is the head of a foundation to encourage youngsters to get involved in sport called the Find Your Field Of Dreams Foundation. They had an event back in August to commemorate the 40th anniversary of Walker winning the 1976 Olympic Gold, and Quax and Dixon finishing 2nd and 4th in the 5000m a few days earlier.

Geoff: Which other milers from New Zealand do you perceive to be most revered and why in terms of public affection?

Paul: Peter Snell is well regarded as one of our greatest ever Olympians, being one of the few to defend a title and the only man since 1920 to win the 800-1500 double. The fact that he did it in such imperious fashion, particularly the 1500m, is part of that also. Jack Lovelock is revered as well, but in a more mystical way, partly because it was so long ago, but also because he was something of a mysterious character. Nick Willis is extremely popular nowadays, he is very well regarded, as Walker was both in New Zealand and Europe, for a willingness to turn up, race and be accessible to the public at any given opportunity. Willis ran a superbly judged race in Rio to take the bronze, and can now justifiably be regarded as one of the most successful 1500m runners in history. At the age of 33, he is the oldest Olympic 1500m medallist ever, and is the only man ever to win two Olympic 1500m

medals eight years apart (seven others have won two medals, but always in consecutive Games). He's the only Oceania athlete ever to break 3:30, a 3-time Commonwealth Games medallist, and is one of only 9 men to win 1500m medals at both the world indoors and Olympics.

Geoff: As well as athletes, New Zealand has also produced some of the greatest coaches in history - none more so than Arthur Lydiard. Why do you think this is and what can we continue to learn from them?

Paul: I think the common thread between the successful coaches of our history such as Lydiard, Arch Jelley, and John Davies, is that they were all inspirational in their own way, and all came from fairly humble backgrounds. Lydiard was renowned as a fabulous motivator, after the briefest of one-on-one conversations you came away believing you could take on the world, but he was also incredibly generous with his time and ideas. The fact that so many people talk about "Lydiard-style programmes" and "Lydiard principles" is not just because his ideas were ground-breaking - they were, but he was by no means the only coach to advocate those theories - it's also because he was so willing to share his ideas with other coaches, and help them coach their athletes with his methods.

Geoff: Apart from the obvious success of Nick Willis, what are your perceptions of the current state of miling in New Zealand and are you optimistic for the future?

Paul: I think the fact that we had three men in the Olympic 1500m for the first time in history, with Julian Matthews and Hamish

Carson joining Willis, speaks for itself. Then we've got the likes of Zane Robertson and Eric Speakman also in the same sort of bracket, so at the sharp end our depth is better than it has ever been. Part of that is the young guys coming through who have seen Willis succeed, and have the belief that if he can do it so can they. Nick Willis has a strong sense of legacy and he invited Carson, Matthews, and Speakman to join his training group in Michigan and then in Arizona, and they have benefited from that with all three registering big PB's and Carson & Matthews qualifying for Rio. My only concern stems from the lack of depth at the next level underneath.

Geoff: What is the perception of the British Milers Club in New Zealand and which of our British milers do New Zealanders most remember?

Paul: My perception is that the BMC is a fantastic framework for building depth by providing a competitive race at all levels. As a kid growing up in the 70's and 80's two of the most famous names in athletics were Coe and Ovett, no matter what part of the world you were in, although we probably didn't have the same propensity to pick one or the other to support! Dave Moorcroft lived here for a while and competed in the Pan Am Games. Steve Cram, of course, was well known too, particularly for his win over Walker in the 1982 Commonwealth Games - if only Mike Boit had swung wide, that could have got interesting up the straight! Peter Elliott was also held in fine regard here for both his gutsy style of racing, and his magnanimous gesture towards Walker after the 1990 Commonwealth Games final in Auckland.

Geoff: So does New Zealand have an equivalent of the British Milers' Club and if so what is its ethos?

Paul: For a while there was something called the "Kiwi Milers Club", which I think was started by a couple of guys who had run BMC races in England and wanted to follow the same framework. There is a new initiative underway here that Athletics NZ are promoting to try and co-ordinate training and racing opportunities for middle and long distance runners, which I think will be positive for keeping athletes in the sport and developing that depth in numbers as well as quality. Geoff notes: Back in 1976, Ivan Agnew penned the book 'Kiwis can fly' - 40 years later it's clear that they still can!

Paul Coughlan is Trustee/Director of the International Track Meet and The Big Shot. For more information see thebigshot.co.nz and internationaltrackmeet.co.nz

HE WON A BMC GOLD STANDARD MILE IN WATFORD BACK IN 2014 IN 4:02 AND HERE **GUILLAUME ADAM** OFFERS A CULTURED PERSPECTIVE ON **FRENCH MILING**:

Back in the early 1960s, the British Milers' Club was being created and at the same time, on the other side of the Channel, French miling was at its apogee with the rivalry between Michel Jazy and Michel Bernard, in a dual not dissimilar to the one Great Britain came to know later with Sebastian Coe and Steve Ovett. Perhaps most famously, Michel Jazy became the second Frenchman to have beaten the mile world record, three decades after Jules Ladoumègue. More recently, younger readers may be aware that Mehdi Baala became the first French miler - and still the only one - to have broken the 3:30 barrier for the metric mile.

Jules Ladoumègue's life was a kind of tragedy. Before he was born in 1906, his father died at work in the docks of Bordeaux. Just two weeks after his birth, his mother would die in a house fire. Adopted by his uncle, Jules had to meet the material needs of his family and become a garden apprentice, aged 12, working near Talence's hippodrome: He once said, "Really often I was watching the trotters training. I liked the stride of the horses, I was peering at their leg movements. Perhaps, I owe them this knee elevation which gave me my way of running." He started running during his apprenticeship and quickly became a regional level runner. He wanted to imitate the Finn Paavo Nurmi and his sporting

exploits of 5 gold medals at the Paris 1924 Olympic Games. Jules wore the French vest for the first time aged 19, running the 5000m in the international match between his native France and Great Britain.

Still inexperienced at 22 and with only two or three international 1500 meters behind him, he made the tactical error of kicking too early during the final of the 1928 Olympic Games in Amsterdam and had to settle for second behind the Finn- Harri Larva. This mistake, however, would prove to be instrumental in terms of a learning curve. In 1930, Jules Ladoumègue became the first man to break the 3:50 barrier for the metric mile, in Paris. His 3:49.2, broke the world record by almost two seconds. It was the beginning of his quest for continually breaking world records. Two weeks later, he broke the 1000m world record with a stunning 2:23.6. The year after, the world mile world record would fall with his 4:09.2 surpassing the 4:10.4 achieved by the aforementioned Flying Finn, Paavo Nurmi. At this point, Jules Ladoumègue appeared to be unstoppable, breaking the world record for three quarters of a mile, the 2000 meters and the 2000 yards.

With his preparations for the 1932 Olympics clearly on track, during the winter of 1931/32, Ladoumègue suffered the blow of an investigation led by the Athletics French Federation, which concluded that he had

broken the rules of amateurism in getting money for a handful of appearances in France and abroad. The sanction was brutal- Jules Ladoumègue was banned for life for the censure that he was a 'professional' athlete. Before his passing in 1973, the Frenchman perceptively said, "The thought which obsessed me the most is about the short longevity of an athlete. A singer, a musician, a writer fill their entire life thanks to the heaven-sent gift they received. Athletes are like dogs, they don't live long enough."

As mentioned earlier, in France, we had our kind of Coe-Ovett rivalry with Michel Jazy and Michel Bernard. On one side, you had the pro-Jazy contingent, who loved his elegance and his talent, on the other side, you had the pro-Bernard lobby who adored him for his pride and his will. Bernard was four years older than Michel and the genesis of the rivalry began at the French Championships in 1956 when Jazy at just 20, became the new 1500m French champion. The selectors preferred to choose the talented Jazy for Melbourne Olympic Games even though many considered Bernard to be the more experienced. Their reservations about Jazy were confirmed when he was eliminated in the heats. Four years later, in the final of 1960 Rome Olympic Games, Bernard led the race at a good pace, clocking 1:57.8 for the 800m split. The Australian Herbert Elliott took the lead after that point and flew home to break his own world record in 3:35.6! Michel Jazy took the silver medal in 3:38.4, with Bernard finishing seventh. Disappointingly, the whole French delegation came back from Rome without any Olympic champion and with only 5 medals. In this context, Michel Jazy became a new national hero.

Whilst there was undoubted rivalry between the two Michel's, in 1961, the French relay team collectively broke the 4x1500m world record by 7 seconds, lowering it to 15:04.2, this being a record they would improve by further 15 seconds four years later. In 1962, Michel Jazy broke the first of his seven world records in individual events, in recording 5:01.6 over 2000m. Perhaps surprisingly, Bernard would even help Jazy to break the 1500m European record in pacing him for the second lap of the race, which may have been unthinkable a couple of years before.

Two years later, at the 1964 Tokyo Olympic Games, the 1500m and the 5000m schedule were to overlap with each other. Michel Jazy was desperate to become an Olympic champion and thought he had



Medhi Baala at the 2008 European Cup.
Photo courtesy of Guillaume Adam.

more chances over the 5000m. During the rainy final, Jazy kicked at the bell before dying in the home straight and he finished a disconsolate fourth, his dream of Olympic glory disappearing forever. Just one year later in 1965 however, he would prove his critics wrong. Beating 6 European records and 4 world records in a career would in itself be an unbelievable task but Jazy did it within 28 days- 3:53.6 for the mile, 7:49 for 3000m, 8:22.6 for 2 miles and 14:49 for the 4x1500m relay were the world records beaten by Jazy during a golden month of June. European records would follow too, with Jazy ending his career in October 1966 in Saint-Maur – a suburb of Paris – fittingly with a world record over 2000m.

After Michel Jazy hung up his spikes, talented French milers emerged but France had to wait for 35 years to get a new European or World medallist over the 1500m, Driss Maazouzi took a the bronze medal in the 2001 Edmonton World Championships and unbeknown to many, a young man would finish 12th in that very same final, would go on to great things – his name was Mehdi Baala. In more recent times, Baala has broken every single French middle distance record since, from 800 to 2000m, except the mile, held by Eric Dubus in 3:50.33. As alluded to in the introduction to this piece, Baala is above all the first – and still the only – French miler to have broken the 3:30 barrier for the metric mile, with 3:28.98.

At the Sydney Olympic Games, he finished fourth when still only 22 years of age. During his career, he would confirm to his fans that he was in many ways the second coming of Michel Jazy who had reigned some three decades before. Mehdi famously took the silver medal at the 2003 Paris World Championships, behind the great Hicham El Guerrouj. The retirement of the latter in 2004 gave the delirious French supporters hope that more success would come on the global stage. He would go on to bag a bronze at the 2008 Beijing Olympic Games after the disqualification of Rashid Ramzi for doping. In Europe, Mehdi Baala was a leading light for much of his career, with him taking European 1500m titles champion in Munich in 2002 and in Gothenburg in 2006.

In reflecting on the legacy left by Baala, Bastien Perraux, the coach of Bob Tahri when he ran 3:32 in 2013, has said, "Mehdi Baala's strength was his speed - Baala ran 1:43 over 800m – and his kick. He was very strong in racing in the world class meeting where the pace was perfectly controlled, to the extent that he chose to run in only very few races. He was more focussed on record breaking attempts than on racing against rivals." For instance, Baala won the French outdoor title

just 3 times, which is relatively sparse given his talent and dominance.

Jean-Michel Dirringer, the coach of Mehdi Baala during his whole career confided in Perraux, that he perhaps could have worked on developing the aerobic capacity of Baala a little further.

In terms of training volume, Baala ran mostly between 60 and 80 miles per week, with his training being balanced between aerobic and anaerobic workouts. Some believe that Baala's lack of races was probably why he made tactical mistakes on the global stage. He did not make the World or Olympic finals in 2004, 2005 and 2007, sometimes when he was among the favourites, he was eliminated in the heats or semi-finals. This being said, today, Mehdi Baala remains an inspiration for young, up and coming milers in France.

In France, we have an equivalent of BMC races with track races every Wednesday like the ones BMC organises in Bedford and Watford: les Soirées de Saint-Maur ("Saint-Maur's evenings" in English). In the suburb of Paris, it started in the 60's and it became quickly famous with the performances of Michel Jazy. All the national level runners came to Saint-Maur-des-Fossés to beat their PBs. The athletes organised themselves to find pacemakers and even without prizemoney, everybody was racing there. Sometimes, the last races finished at 2am! Unfortunately, these events lost some of their attraction with the development of all-event national meetings and it is really rare now to see sub 1:50 or 3:50 performances in Saint-Maur. The only exception was this year when the Algerian Olympic champion Taoufik Makhouloufi, coached by the middle distance manager for France, Philippe Dupont, ran 1:43.92.

Personally, I raced 3 times in BMC races when I was studying at the University of Birmingham in 2013-2014. I liked the friendly atmosphere of these events and I've learnt a lot about training when reading the archives on the BMC website. I have also been impressed by the huge strength in depth for the women races. For example, in 2015, only 3 French women ran sub 4:20 while 40 British women reached this target. I think it is thanks to the numerous races organised by the BMC and thanks to the female training groups within the universities.

BMC races are perfect for running regional or national level times. Nevertheless the occasions to run international standards are rare. In France, we do have international events but the French organisers almost never give chances to rising French athletes. For two athletes of the same level, they



Michel Jazy leads the 5000m at the 1964 Tokyo Olympics.

prefer to pick up the international one instead of the French one in order to make their event more prestigious. For a 3:38 1500m runner like I am, it is hard to get in international races in France, whereas in Spain or in Sweden the national organisers seem to prefer to give opportunities to their national runners even if they are 5 seconds slower than you. If you are not in the top 16 of the world rankings for your event (3:35 or less over 1500m), you barely have any support from the French federation and getting sponsorship is really tough. For instance, no national middle distance training camps are organised, like the ones British Athletics has held in Iten (Kenya) or in Font-Romeu (France). Nevertheless, a lot of clubs help the national level athletes with paying travel and training camp expenses. In this context only the most talented athletes reach the top level. Florian Carvalho and Mourad Amdouni, both at the top of the 1500m national ranking, were both really talented and both international medallists in junior championships. Baptiste Mischler, a 1:47 and 3:39 junior who finished fourth at the last junior world championships in the 1500m, is clearly the most talented young French miler at the moment and who knows, could be the next Mehdi Baala. Final word goes to Bastien Perraux, who sees in this new generation, "an incredible density with around ten U20 and U23 runners with a PB of sub 3:40 or near. They also have a very good cohesion between themselves and this good dynamic should lead to new world class runners soon in France".

Guillaume Adam runs a French speaking website <http://culture-athle.com/>

NATIONAL COACH MENTOR FOR YOUTH ENDURANCE, **CHARLOTTE FISHER**, ASSESSES THE ROLE OF WOMEN IN ENDURANCE COACHING:

'Coaching' is what us coaches are really passionate about. 'Women in coaching' and depending on your perspective and quite likely your gender, is either a state of being or possibly a tedious subject matter. Not that old chestnut I hear you all cry! However, the simple fact is that women are under-represented at 'event group' and 'performance' coaching levels. 38% of the total number of coaches who qualify through the EA Athletics Coach Award or women and in Rio this summer, of the 27 Great Britain and Northern Ireland athletes competing in endurance events, only one was coached by a woman.

But why does it even matter? One of the things I love most is its diversity, attracting male and female participants from all sections of society. However, that diversity is not matched by the coaching workforce and that limits opportunity and choice for athletes. The profile of our sport and the success of our sport at elite level are enhanced by the equal involvement of female athletes and Rio was a great example of this. By the same token having more female coaches involved in our sport can surely only be a positive thing.

The barriers to women participating in coaching are well documented, some of which are also experienced by men too – namely time, child care versus traditional club coaching timings; time away from family; financial pressures and lack of role models and so on. For me, however, the more interesting subject is not what the barriers are – but what we can do to overcome them. I believe it is the responsibility of male and female coaches alike, athletes and the administrators and governance in our sport to continue to work towards getting greater parity.

England Athletics are working to try to address the lack of female coaches and there are small but encouraging signs that things are moving forward. At an Event Group Integration Day for Endurance back in May, 50% of attendees were female. The session was delivered by myself and Head of Coaching and Athlete Development, Martin Rush and so a 50% male female balance was a hit at both participant and deliverer level. Research carried out by organizations like Sports Coach UK, suggest that aiming for mixed tutoring teams is one way of helping to create better learning environments for female participants.

I remember attending my first BMC Coaching Conference on my own about 15 years ago. I was nervous about going as

at the time I knew very few people in the coaching fraternity and was horrified when I walked into the main conference room to discover that out of around 80 attendees I was just one of three women. Without a doubt there are definitely more women attending these kind of events now, BUT the percentage is still very low and female attendees are often acutely aware they are a minority and this can be off putting to newer coaches in particular.

It's definitely not the case that female coaches want all women environments and at a 'Women in Coaching' event staged by England Athletics back in April this came out very strongly. However, it does take a more targeted approach to get women to attend these events. Marketing, language and imagery all play a part. Have you got any female speakers? Does your marketing include images of female athletes and female coaches? Could you personalize invites? When faced with a shortage of female speakers in endurance have you looked outside of your event group or even your sport for female speakers. Great new role models like Mel Marshall, coach to gold medalist Adam Peaty, do exist.

Various global business coaching studies have shown that when it comes to job applications men can feel confident in submitting an application if they meet just 60% of the criteria, whereas women only think about applying if they believe they meet nearly all of the criteria. This kind of thinking is relevant when it comes to encouraging women to attend conferences, workshops, coach education courses and even just getting involved in taking on more responsibility in their coaching environments. Communicating and breaking down the criteria to attend or get involved through the right kind of messaging could simply be all it takes to get more women involved.

HEALTHY AND DIVERSE COACHING ENVIRONMENTS:

Creating coaching environments where women can have some autonomy to practice and make mistakes without fear of judgement is important. Many of the female coaches I speak to report their own club environment being the most challenging of all and given that for many is where the passion for coaching first develops it's not good to hear. Sometimes the interference is born out of good intentions, with the male coach rushing into fix everything, like a knight in shining armour. At other



Athlete Centred. Cath Muth. Photo courtesy of Cath Muth.

times its more destructive, with common problems such as closed coaching teams, lack of opportunity to establish their own group or losing their best athletes to more 'established' male coaches. The responsibility lies with us all to try and address this for male and female coaches alike.

The England Athletics National Coach Mentoring Programme has been a godsend for many coaches. I say that as a mentee first and foremost. I had been coaching in a club setting for 10 years before anyone outside of the club acknowledged my existence. From the outside the male coaches on the circuit looked like an intimidating bunch and the culture of secrecy and suspicion when it came to sharing coaching knowledge was off-putting to say the least. Embarking on the mentoring programme was a leap into the unknown, but I have been hugely fortunate to have benefited from the wisdom, guidance and support of two great coaches, the late Dave Sunderland and NCM for the South, Neville Taylor. Meeting Dave for the first time, was both scary and a revelation. His gruff Yorkshire, no nonsense reputation went before him, but I couldn't have been more wrong. Going to my first NCDP gathering was a bit like being invited to a party where you don't know anybody. Dave was the perfect host, quickly putting you at your ease, making you feel good about yourself and introducing you to the other guests. Women are generally fairly sociable beings, maybe we just need to be invited to the party....

Like all coaches I'm learning every day in different ways and from different people. My experiences as a female coach, but also a mentor and working in Sport in a variety of different roles over the years has led me to a few personal conclusions of how we can

see more women coaching at performance levels in the future. Here's a few.

Challenge

Challenge your own perception of what performance coaching looks like. Don't mistake a quiet style or softer skills in a female coach for being a soft touch or better suited to the nurturing or pastoral recreational or participation coaching role. Women can still be performance-focused with a different style. Let's not continue to make the mistaken assumption that a quiet style in a woman is a sign of weakness.

Role Models

Look out for and champion female role models in other sports or walks of life. A few years back, whilst working for a County Sports Partnership I was once poorly advised to be a bit more like a young, high octane, basketball coach called Matty. Apparently his sessions were fun! Had I tried to be more like Matty I'd have needed a lie down every hour to recuperate, plus I found the youngsters got just as much out of my coaching sessions without the endless high fiving! Find YOUR style then aim to be the best coaching version of you, that you can be.

Socialise

Get in the huddle. The fact is that currently most coaches are male and the huddles, whether at the bar after a conference, or track side are where learning takes place. One of my male mentees admitted to feeling somewhat intimidated by some of the male coaches on the circuit. Bravo to my mentee for admitting that! It was refreshing

to hear a male coach say it and a reminder to me that women don't have a monopoly on feeling like this. I liken getting in the huddle as commanding your place on a cross-country start line, you might just have to politely stick your elbows out a little to get your spot!

Pick which battles to fight

Pick your battles carefully. Sexism does exist and when it does rear its ugly head it often takes you by surprise. Sometimes it's unintentional or generational, very occasionally its more deliberate. Do challenge when you think its most important to do so. Male and female coaches who challenge sexism in the right way and at the right time contribute to making our community a happier place for everyone.

Communication is key

You must try to communicate your needs as a coach clearly. The reason the highest ranked non-fiction book of the 1990s *'Men are from Mars, Women are from Venus'* was so popular is that it helped to explain in a humorous and light-hearted way exactly what many of us experience day in day out when it comes to communication or at times miscommunication between the sexes. Watching the BBC documentary *'Jessica Ennis-Hill: A Coach's Journey'* there was a point in the programme when Jess is mid training-session and she says "I'm rubbish, I can't do it." I couldn't believe my ears, Jess Ennis-Hill, is an Olympic gold and silver medalist describing herself so casually as 'rubbish'. Of course what she meant was at this moment in time, post pregnancy, when my body won't quite let me do the

things I want to do at the level I want, I 'feel' a bit rubbish. As coaches we are practiced at hearing these kinds of statements and saying the right things to lift our athletes when they need it, but how good are we at picking ourselves up or recognizing these kinds of statements by fellow coaches?

Find a mentor

Whether formal or informal, mentors are trusted people to bounce ideas off and learn from. People who value you, champion you, challenge you and put you back on track when you start making sweeping statements like "I'm rubbish."

Get yourself out there!

Go to conferences, workshops and seminars, even if you might be the only female there. If the few female coaches who are actively involved in coaching don't go to stuff, then how can we possibly expect other or newer coaches to follow?

Let you coaching define you

A big step forward for me personally was when I stopped defining myself as a female coach and started defining myself as a coach. I found other people started to take me more seriously and the gender issue became less of an issue.

Yes, there is work to be done, but things are definitely moving in the right direction.

EDITORIAL ADDITION:

We spoke to three well respected female endurance coaches, all at different points of their coaching careers, in order to gain an insight into perceived barriers for women in coaching; how these barriers can be overcome and how their philosophy of coaching has developed.

BARRIERS

Harrogate based Joanne Day, who will feature more extensively in the next edition of BMC News for her work with our young athlete of the year – George Mills – offers the insight that, "women coaches are still a minority and as such women often are asked to work with younger athletes in a club environment and do not get encouragement to coach top level athletes or at least join in with the male coaches". Having enjoyed considerable success of late, Day adds, "Now having to mix in a very male environment is something I'm getting used to".

Birchfield Harriers club coach, Cath Muth, credits the late Dave Newnham, Peter Stewart and Keith Holt with her development and points out that, "I think any coach who finds barriers do exist needs



Drilled for success. Joanne Day squad. Photo courtesy of Joanne Day.



Charlotte Fisher with the late Dave Sunderland (former editor of BMC News). Photo courtesy of Chris Fisher.

to seek out a good mentor whether that is male or female who will help them progress and develop. By doing this they will be able to develop their coaching methods which will ultimately help their athletes”.

One up and coming female coach is Bev Hartigan (formerly Nicholson), who took a bronze medal over 1500m at the 1990 Commonwealth Games, held in Auckland. Her and husband John, himself a former international athlete, have in the last couple of years become part of Luke Gunn and Bud Baldaro’s endurance coaching team based at Birmingham University. Hartigan concurs with Charlotte Fisher (above) that, “more female coaches are needed to break down these barriers.” Her own illustrious career saw her return to competition several years after giving birth to daughter Georgie, placing an incredible 6th over the marathon at the Manchester Commonwealth Games in 2002. Memories of BMC races are bittersweet as she confides with a laugh, “I do recall an attempt to run sub 4.20 as an 18 year old in a BMC race being a total disaster but on the other hand I also recall a really good 600m race in a BMC. I used the BMC to come back to track racing after pregnancy”.

Overcoming barriers

I turn back to Joanne Day and ask her what more can be done to break down barriers for women entering endurance coaching. She says with authority, “We need to focus women on easy tasks to begin with and gradually develop their own style of coaching. In particular I lacked belief in my own abilities, but once I started getting results I learned to trust my own judgement and believe what I was doing is working. The

more experience you get, the more intuitive you become”.

Cath Muth credits her membership of the England Athletics National Coach Development Programme for Youth Endurance (under the aforementioned Charlotte Fisher), as aiding the breaking down of barriers. The readily available access to coach education, “has given me access to other coaches and also additional education which has been of great benefit and I am putting a lot of this into my coaching programme”.

I am keen to know from Bev Hartigan if her considerable experience at England and Team GB level as an athlete is a help or a hindrance to her coaching. She tells that, “I hope that my experiences as an athlete helps, however I am also aware that just because I felt certain things it can’t be assumed everyone functions in the same way”.

A PHILOSOPHY OF COACHING

In terms of developing a philosophy of coaching, in asserting the motto of ‘Know Your Athlete’, Day advises that, “My philosophy is ‘quality over volume’ and I will stick with that always! I believe an athlete should feel energised but worked when they’ve finished. Better than being fatigued and in a state of disinterest. Less is more will always be my way of thinking. Especially in younger athletes!”.

For Cath Muth, her approach would seem to be underpinned to an acknowledgement that coaching is a process and can involve a team of people. She explains, “My philosophy is to enable each athlete to develop to their full potential and provide an environment which is also enjoyable to ensure these

young athletes stay in the sport. I also believe in bringing in outside help in areas in which my knowledge is limited”.

Former head teacher Bev Hartigan wraps up the conversation by saying of her own philosophy that, “It is still very much emerging! I am lucky to have worked with some outstanding coaches and much of what I believe is based on their methods - I had an excellent early coach in Mike Griffiths from Crewe and Nantwich. I then moved to Norman Poole during my key junior years, onto Bud Baldaro whilst at university and during my most successful track years and finally to Joe Lewis who supported me in regaining fitness after some difficult years.. All had an impact on me as an athlete and what I now use in my emerging coaching. All athletes are very different and the skill is working out what best works for an individual - hopefully I don’t just impose what worked for me as that is the risk with former athletes. For me there are a few key things: know the athlete - all aspects - look at the whole person - and remember that training needs to be individually tailored”.



Bev Hartigan. 1990 Commonwealth Games 1500m bronze medallist and now a coach.

ANDREW RENFREE ASSESSES WHETHER **EFFECTIVE PACING** IS AN OVERLOOKED COMPONENT OF ENDURANCE PERFORMANCE:

Endurance athletes spend many hours engaged in training in order to ensure they maximise their physiological abilities, optimise their technique, and develop the psychological skills required to run fast times or place highly in competitions. However, it is possible to fail to realise the benefits of all this work through simple pacing errors during competition. 'Pacing' has been a topic of much debate in the sport science community in recent years and this article aims to provide an overview of the key issues before concluding with some practical strategies for both coaches and athletes.

Exercise physiology, as is often understood, would suggest that during maximal exercise of any duration, an athlete starts running and then various 'bad things' physiologically occur until eventually fatigue is experienced and the athlete needs to slow down or stop. Although the exact 'bad things' will vary based on the duration and intensity of exercise, they could, for example, include changes in muscle pH, depletion of energy stores, or increases in core temperature. These potential causes of fatigue all appear very plausible, but much of our understanding of exercise fatigue is based on time to failure type experimental protocols where an unfortunate individual is asked to run on a continually accelerating treadmill until they fall over. If (for example) everybody stops at the same core temperature, then this might imply that core temperature is a 'cause' of fatigue. However, there isn't a single athletic competition where you run at a gradually increasing speed until you stop. Real athletic competition is characterised by races over set distances, and rather than running until they can't continue, athletes are able to freely vary their speed at will. If you measure neuromuscular activity throughout a self-paced exercise bout, you will see that it almost exactly tracks changes in speed (or power during cycling). This is very important, as it means that changes in pace are not necessarily the result of direct changes in the muscles themselves, but rather of changes in the amount of muscle mass activated by the brain.

It is how this recruitment of muscle mass is regulated that has provoked much interest. In 1996, physiologist H-V Ulmer proposed it was achieved through the process of 'teleoanticipation'. This sounds very complex, but is actually quite simple, and is based on knowledge of the endpoint of exercise. To put this into an athletic context, imagine I challenged you to a

race; the first question to come to your mind would likely be 'How far?' Without this knowledge it is impossible for you to distribute your effort effectively over the distance. However, once you know how long the race is, then you are able to develop the ability to do this properly. Simple experience is extremely important, but there is a bit more to it than this. As you race your brain will continually receive information (via afferent feedback) from the muscles on all sorts of physiological factors. This is then interpreted in light of knowledge of the known endpoint. So, if this information suggests some kind of catastrophic physiological failure is likely before the finish line, the brain will reduce the amount of muscle mass recruited (through reducing efferent neural drive) which will have the effect of reducing running speed, but also bringing physiological variables back to within a 'safe' range. Towards the end of the race, the brain may calculate that you are unlikely to do yourself much harm in the short period remaining, and therefore allow you to increase muscle recruitment

and accelerate.

Although this theory provides an explanation of the mechanisms underpinning regulation of pacing, there is still disagreement over how this is actually achieved by the athlete. The perception of exertion looks likely to be important in time trial type situations, and the emotional state of the athlete is also likely to be involved. With regards to the perception of exertion, the scientific literature consistently appears to demonstrate that this increases gradually throughout exercise and only reaches maximum at the end. Intuitively this appears logical, as it would seem implausible that an athlete would choose to be exerting themselves maximally halfway through a race. However, from a practical perspective, a problem we face is that athletes do appear to pace themselves badly during actual competitions, especially if they are not actually winning the races. If we look at just about every laboratory endurance time trial study, athletes display a relatively even pace throughout and then an acceleration at the end, and an analysis of previous world



*Can you do the splits?!
Photo courtesy of
David Lowes.*

record runs over 5000m and 10,000m by Tucker et al (2006) demonstrated that all were characterised by a similar strategy. Likewise, Noakes et al (2009) analysed 32 world record runs over the mile, and produced similar results. However, not many races result in world records, which are by definition always 'successful' and achieved by athletes who win the race. What happens when individuals of different performance levels line up on a start line?

This was the question we addressed in an analysis of the women's marathon race at the 2009 World championships (Renfree & St Clair Gibson 2013). When the athletes were split into four groups dependent on finishing position (Group 1 – first 25% of finishers, Group 2 – 2nd 25% of finishers etc.) we not surprisingly found that athletes with better pb's finished in higher positions. However, we also found that athletes in groups 2, 3, and 4 finished further behind group 1 than they 'should' have based on pbs. In fact, the further down the field athletes finished, the greater was the degree of underperformance. The reasons for this became clear when pacing in each group was analysed. Effectively everybody, regardless of pb, started at almost exactly the same speed! These starting speeds were unsustainable for athletes outside of Group 1 who progressively slowed down, presumably because of excessive physiological disruption. To make things worse, the emotional response to this forced slow down would likely only have been negative, and perception of effort (which can be dissociated from physiological processes by psychological phenomena)

would possibly have increased too. Since our initial analysis, similar findings in a number of different events have been reported by other researchers.

So what caused most athletes to start too fast? A growing body of literature suggests that decisions relating to pacing during competition are heavily influenced by what competitors are doing. It may even be the case that humans are hardwired to engage in collective 'herd' behaviour. This basic idea is that the easiest decision to make in any situation is to simply do the same as everyone else, presumably because they know something you don't. If so, then the likely result in athletic competition is that everyone decides on similar starting speeds, and whilst these may be fine for the fastest athletes, they are completely unsustainable for the rest and underperformance is the inevitable result.

The ideas presented above, would appear to imply some very simple practical advice – 'run your own race'. Whilst this is not a bad suggestion at all, it is not easy to do in practice when the competitive juices are flowing. However, knowing that your competitors are likely to do foolish things when the gun goes can be to your advantage and you can prepare yourself for it in advance. The strategies below may be helpful in developing the ability to pace better in the heat of competition, and thereby run as fast as YOUR physiology is capable:

Rather than just practicing 'goal pace' in training, ensure you become very familiar with running the full race distance under varying conditions of fatigue. There are good physiological and biomechanical

reasons for training at a range of paces, but the concept of teleoanticipation emphasises the need to learn to effectively distribute effort over a known duration.

The above, may also have implications for how the stopwatch is used in training. Rather than using prescribed split times, athletes could occasionally run long repetitions with no intermediate splits specified or provided. Afterwards, a coach can provide feedback on *pacing* during each repetition, thereby enhancing the athlete's ability to distribute effort regardless of the actual speed.

Mentally prepare. The practice of visualisation is well established, but ensure you fully prepare yourself for what is likely to happen. If your optimal strategy is likely to leave you some way behind your rivals at some point early in the race, then make sure you are ready for this exact scenario.

Rehearse in training. Rather than have a squad all doing the same session, you could have some athletes attempting to maintain their desired training paces whilst other athletes do their best to disrupt things. For example, some athletes could be running 800's while others jump in at some point to run a faster 400. The challenge is to avoid 'going with the herd' and maintain the appropriate individual pace.

References:

- Noakes, T.D., Lambert, M.I. and Hauman, R., 2009. Which lap is the slowest? An analysis of 32 world mile record performances. *British journal of sports medicine*, 43(10), pp.760-764.
- Renfree, A. and St Clair Gibson, A., 2013. Influence of Different Performance Levels on Pacing Strategy During the Female World Championship Marathon Race. *International journal of sports physiology and performance*, 8(3), pp.279-285.
- Renfree, A., do Carmo, E.C., Martin, L. and Peters, D.M., 2015. The Influence of Collective Behavior on Pacing in Endurance Competitions. *Frontiers in physiology*, 6.
- Tucker, R., Lambert, M.I. and Noakes, T.D., 2006. An analysis of pacing strategies during men's world-record performances in track athletics. *International journal of sports physiology and performance*, 1(3), p.233.
- Ulmer, H.V., 1996. Concept of an extracellular regulation of muscular metabolic rate during heavy exercise in humans by psychophysiological feedback. *Experientia*, 52(5), pp.416-420.
- Andrew Renfree is Principal Lecturer in Sport and Exercise Science within the Institute of Sport and Exercise Science, at the University of Worcester.



Photo courtesy of David Lowes.

JASON HENDERSON TAKES A TRIP BACK IN TIME TO RECALL ONE OF SPORT'S MOST INFAMOUS CLASHES BETWEEN ZOLA BUDD AND MARY SLANEY:

As you will see in the book reviews section of this magazine (pages 45-46), Zola Budd Pieterse and Mary Decker Slaney are best known for their collision in the LA Coliseum at the 1984 Olympics but they deserve to be remembered for more than their famous fall in a race which saw our own Wendy Sly (featured in Spring 2015 BMC News) take a fantastic silver medal. The duo's performances have stood the test of time and the training that led to these results is still worth studying today.

Zola and Mary still hold their respective national records for the mile, for example, more than 30 years after they were set. For Zola, this involves the all-time leading marks in two countries – South Africa and Britain – and a measure of the durability of these times was seen this Oslo this year when Zola's UK mark of 4:17.57 withstood an assault from Laura Muir, with the UK 1500m record-holder falling a second-a-half short of Zola's time.

As well as her mile mark of 4:16.71, Mary still holds the American record for 3000m with 8:25.83, while her US 1500m record of 3:57.12 stood for 32 years until Shannon Rowbury beat it in 2015. Famously, Mary also won 1500m and 3000m world titles in 1983 – the 'Decker double' as it became known – in addition to setting a total of 36 US records and 17 official and unofficial world records.

Zola was not quite so prolific but nevertheless set world records at 2000m and 5000m, won two world cross country titles in 1985-86 and continues to hold world junior records for 2000m, 3000m and the mile.

So how did these two runners achieve such fast times during an era where women's endurance running was in its infancy? Remember, of course, the longest race for women on the track at major championships during Zola's and Mary's peak period in the mid-1980s was only 3000m. The answer is that they arrived at these performances from different angles. Both were childhood prodigies who trained and raced vigorously as teenagers but there the similarities end. When training, Mary's early years were dominated by interval work-outs under a US coach called Don DeNoon in California, while Zola was fed a diet of steady mileage under her coach Pieter Labuschagne as she grew up at mild altitude in Bloemfontein, South Africa.

Later, though, Mary began to increase her mileage as she moved into the senior ranks under the guidance of New Zealand's Dick Quax and then enjoyed her best period



when coached more delicately by Dick Brown in Oregon. During this period with Brown, Mary had plenty of recovery days and never ran further than 10 miles in an effort to avoid the injuries that had plagued her during her mid to late-teens.

Here is an example of Mary's training in 1974 when she was 15 (courtesy of Track Technique)...

Sun: Easy 30min run
 Mon: 20x440 yards in 65sec with 2min recovery
 Tue: 110, 220, 330, 440, 550, 660, 550, 440, 330, 220, 110yds ladder with a rest of 1-2min between each effort
 Wed: 10x110yds (13sec); 10x220yds (strides in 36sec); 10x110yds with 2min rest
 Thu: 15x660yds in 107sec with 2min recovery

Fri: Rest

Sat: Competition (Mary would often race several distances in one day)

DeNoon always denied he pushed his athletes too hard and in fact Mary says no one forced her to do more than she wanted. Sometimes this involved frightening workloads, though. In May 1971, for example, aged just 12 she tackled the Palos Verdes Marathon and clocked 3hr 9min 27sec for the hilly, 26.2-mile course despite her previous longest training run having been only 12 miles.

Much later, in 1982 when she was aged 23-24, Mary's training had evolved under coach Brown to the following (courtesy of The Runner magazine) during the track season...



Sun: am: 5 miles; pm: 3 miles
 Mon: 2600m broken into intervals of varying lengths, not more than 1000m, with 3-mile warm-up and 3-mile warm-down
 Tue: am: 3 miles; pm: 4 miles
 Wed: 5 miles
 Thu: 3000m broken into intervals of varying lengths, not exceeding 1000m, with 3-mile warm-up and 3-mile warm-down
 Fri: am: 3 miles; pm: 4 miles
 Sat: 10 miles

Such a diet led to Mary breaking US records from 800m through to 10,000m, becoming arguably the greatest American middle-distance runner in history (male or female), and her training saw her err on the side of caution with alternate hard-easy days and track sessions that

attempted to nurture the 53.8 400m speed she had shown aged 14. In winter, Mary ran up to 60 miles per week mainly consisting of steady running. At the start of her 1983 season, a sample training week was (courtesy of The Runner)...

Mon: am: 4 miles (23:00); pm: 3 miles and 4x100m warm-up then 2x200m (31, 29sec); 3x400m (67, 65, 65); 1x300m (45); 1x600m (1:37); 1x400m (65); 2x200m (29, 28) with recovery the same as the reps and two-mile warm-down

Tue: am: 4 miles (23:30); pm: 5 miles at 5:40/mile pace

Wed: am: 5 miles (30:00); pm: 2 miles easy then 3 miles fartlek with 3min surges and two-mile warm-down

Thu: 10 miles at sub-6min/mile pace

Fri: am: 5 miles (30:00); pm: 2 miles and

4x100m warm-up then 2x200m (31, 30sec); 4x300m (48, 47, 45, 45); 2x600m (1:40, 1:38); 4x200m (30, 29, 28, 30) with recovery the same as the reps and 2 miles warm-down

Sat: am: 4 miles easy; pm: 4 miles easy
 Sun: 8 miles at 5:40/mile pace

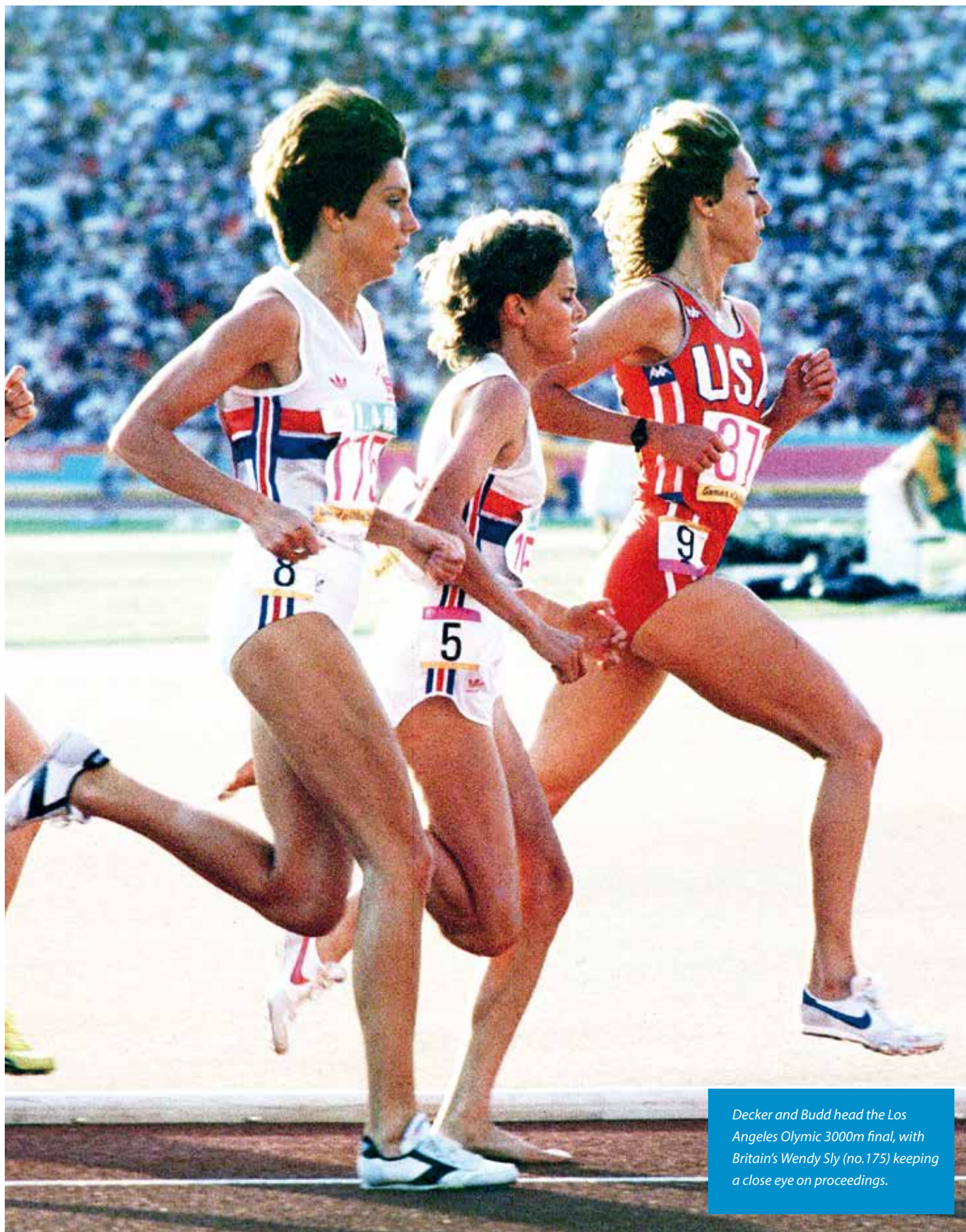
In addition, Mary increasingly embraced cross-training and was a pioneer when it came to using aqua jogging, plus regular and intensive physical therapy.

For Zola, her training in 1984 looked like this (courtesy of Athletics Weekly)...

Mon: am: 10km in under 40min; pm: 3x3km on road (3min recovery)
 Tue: am: 10km hard (under 37min); pm: circuit training and 2x2x(400m easy, 400m hard) with 15sec rest between 400s and 8min between sets
 Wed: am: 60min easy; pm: 3.5km hard, 3x1.2km hard, 3.5km hard
 Thu: am: 10km in under 38min; pm: fartlek (4min hard, 4min easy, 3min hard, 3min easy, 3min hard, 2min easy, 1min hard, 1min easy etc) and circuit training
 Fri: am: 8x5min hard with 2min recovery jog; pm: 10km quite hard
 Sat: am: 10km quite hard (under 38min); 50min (middle part quite hard)

Later, in 1999, Zola's training evolved to include sessions such as (again printed in Athletics Weekly) 8x1000m (2min recovery) and 4-6x800m (3min recovery), while in recent years she has matured into a good masters marathon and ultra runner, whereas Mary keeps fit and races seriously on an ElliptiGO machine because she is unable to run normally any more due to the 30-plus surgeries she has endured.

This information is intended to provide an insight into the training of two of the strongest female middle-distance runners in history. As with any schedule, it is not here to be merely 'copied', but for the reader's amusement I will finish by saying that during my teenage years in the 1980s I read that Zola did a session of 3x3x400m with 45sec rest and 5min between sets and I could not resist copying it a few times. Ironically, I had similar PBs so the session suited me and, who knows, maybe replicating some of Zola's training habits contributed to the handful of modest wins I had in the lower leagues of the Southern Men's League.



Decker and Budd head the Los Angeles Olympic 3000m final, with Britain's Wendy Sly (no.175) keeping a close eye on proceedings.

Editor's note: This piece encourages both coach and athlete to ask some serious questions about how long term athlete development is planned for. Asking how 'old' an athlete should be when undertaking any specific volume or

intensity of training is not just dependent on their chronological age. For a greater consideration of the significance of biological, training, developmental, relative and competition ages see Long, M. and French, J. (2013) *The 6 Ages of Athletics*.

Athletics Weekly, 25th July, p. 60-61.

Jason Henderson edits *Athletics Weekly*, is a former 1:54 800m runner and is the author of *Collision Course, the Olympic Tragedy of Mary Decker and Zola Budd*.

See birlinn.co.uk/collision-course

MATT LONG ATTENDED A RECENT WORKSHOP FACILITATED BY ENGLAND ATHLETICS MENTOR, **JIM BENNETT**, AS PART OF THE **NATIONAL COACH DEVELOPMENT PROGRAMME**:

At a recent workshop in September in Newport Pagnell, both **David Lowes** and **Steve Vernon** imparted some pearls of wisdom to assist with winter training.

England Athletics National Coach Mentor for Endurance, **David Lowes**, asked the question about whether cross country running and racing was a pre-requisite for success on the track. David opened his presentation by pointing out that, "Traditionalists will say it is impossible to run well on the track without mud, but one should remember that there are always many different routes to success and what suits one runner, most certainly won't agree with another". In remaining faithful to the principle of athlete-centredness, the man who has guided no less than 17 athletes to international status stressed, "Training adds the ingredients for success, but the recipe is not always the same or done in any particular order."

Is cross country for you?

Lowes emphasised that young athletes in particular, "should give cross country a go", but be prepared to focus more on the process rather than being goal-driven, because not all athletes can enjoy

success on this surface. The former GB international, who sports PBs ranging from 7min 52sec for 3000m to 2hr 15m for the marathon, pointed out the characteristic demographic of cross country runners in that, "5000m/10,000m specialists tend to use cross country as part of their summer preparation, 1500m runners use it, but to a lesser extent and 800m runners are a rare sight on the mud - but there are exceptions." So why might some middle distance runners consciously avoid working over the country? Lowes believes, "800m runners in particular tend to avoid the mud because of the unnatural foot plant that is produced in the landing and driving phase in deep mud. This can elevate the chances of injury higher up the chain from the foot to the knee."

The former Coaching Editor of *Athletics Weekly* magazine reflected, "Cross country has fast starts and even speedier descents along with sharp turns. The best racers are adept at vast changes in pace and adapting to differing terrain." These sentiments should leave us as coaches and athletes to reflect that racing over the country is a great way of making sure all three energy systems (aerobic, lactate and alactic) are utilised throughout the winter months.

If you aim to be goal-based in your approach to racing over the country this winter, Lowes emphasised that, "Mud running, uphill and downhill sessions will need to be practised regularly along with some twisting rep routes." This being said, if you are more of a track specialist and are looking to do well in championships and our BMC races, "you have to think hard if cross country is beneficial and that firstly, you enjoy it; secondly, you think it is worthwhile and thirdly, consider where it fits into the periodised plan."

Preparing to race over the country

The BMC Academy Chair had words of advice about the variability of conditions in stressing, "If you struggle with muddy underfoot conditions some rep sessions need to be done on a similar surface to a forthcoming race. If you only ever train on roads and track and struggle with mud, then don't expect miracles come race day." In addition, Lowes stressed the different biomechanical demands of running over the country compared to road or track, noting that, "The foot plant on a track is virtually the same with every stride and the associated muscles working in tandem, the



Cross country facilitates the development of strength endurance.

roads are virtually the same, although hills and the camber of the roads/pavement can accentuate the stability and usage of the ankle and lower leg muscles." Of course, cross country helps to facilitate leg strength and Lowes said, "Those with poor lower leg/ankle strength and stability may not be aware of this weakness until running in mud. Training continually on pavements will not help with cross country efficiency. Some soft sand running can help, although the foot plant release is generally much quicker than in thick deep and sticky mud." In order to make the body robust enough to deal with the biomechanical demands of the country, Lowes has advised that weak lower leg and ankle strength and stability can be improved with some wobble board or bosu ball work. He did stress however, that there are many more ways to improve stability, strength and flexibility through such outlets as weight training, bodyweight exercises, Swiss ball work, medicine ball work, general circuit training, strength and conditioning and of course a myriad of drills that focus on strength and stability in a dynamic range across many targeted body areas. Lowes explained further that he liked to divide the body into different parts: lower leg (below knee), upper leg (below hips), hips and glutes area, core (back and front) and also upper body and arms.

While interval training during the winter months will be part of the staple diet for almost all athletes and coaches reading this, Lowes asserted that, "Reps that include very fast starts and a maintenance of a cross country rhythm are essential as is 'over-the-top' hill sessions where the incline is attacked with gusto with good pace for increasing distances once at the summit." In addition, he felt that one particular kind of hill session would help achieve the kind of physiological adaptations needed for successful racing over the country, adding that, "One of the best sessions for cross country adaption is the renowned 'Kenyan Hills' or continuous hill running circuit and depending on the course you have set up, it can be one of the most beneficial things that an athlete can do." In terms of the practicalities of how to effect this kind of session, he noted that, "Uphill's should be attacked, the flat sections maintained at a good 'tempo' pace, while the downhill sections are generally where the recovery takes place, although certain downhill sections (on grass only) can be used to practice fast downhill running and the flat sections are where the recovery then takes place." In terms of his own coaching practice, Lowes has finished off this type of workout with 3-4x1min efforts at 100% effort on the flat, maintaining that, "Although deemed a



Bosu balls can be an integral part of conditioning.

winter session, this has undeniable gains for the track specialist."

The future of cross country as a precursor to track running

In answering his own rhetorical question of, 'Are the days of using the winter solely for endurance through long runs, hill work and tempo running now becoming less common?', the Durham-based coach who has taken our Lifetime Services to Coaching award (see page 11) commented that, "Perhaps more specific *date speed* with an increasing impetus towards the spring is the way forward. This speed can be included in the middle of a winter session or at the end, but needs to be done on a regular basis. This



*Muddy Marvellous. Are you making a splash this winter?
Photo courtesy of David Lowes.*

makes the transition from winter to spring easier and also reduces the risk of injury through trying to increase speed levels too quickly as soon as the lighter evenings eventually emerge."

Lowe's parting shot was very much a word of caution with his conviction that, "Although cross country can improve summer success, track can also enhance cross country form - you need to be fast over mud too and extremely fast if you want to challenge the African domination!"

Eight times English national cross country medallist **Steve Vernon**, told a National Coach Development Programme audience of a Dave Brailsford formula for success. The general manager of Team Sky is reputed to have once said the following:

Commitment x Hunger – distraction = performance.

The two time national cross country champion (2011 and 2014) spoke with authority about the difference between 'motivation' and 'commitment'. The former is dependent on mood and is transient whereas for Vernon, the latter is more stable and indicative of a disposition which is willing to proverbially 'stick with it, when the going gets tough'.

Aerobic development

The 36 year old who works for New Balance, in both marketing and coaching (Team New Balance Manchester), centred his address on his conviction that the creation of what he termed "aerobic monsters", should underpin endurance coaching and practice. The man with a degree from Loughborough and academic background in health and nutrition went on to stress that coaches and athletes take note of the specificity of event demands in their setting of training programmes. He told that the aim is to be as efficient as possible over any given distance and for senior athletes who are mature both in terms of their biology and training age, that as, "large a volume of work should be undertaken without them breaking down and getting injured".

Long runs

With regards to the role of long runs in facilitating aerobic development, then man who finished 10th European Cross Country Championships back in 2012, maintained that "Consistency is key", in advocating their use all year round. In terms of achieving a physiological response, long runs engender development in both the Mitochondria and capillaries, thus increasing the amount of red blood cells which we have, making us more efficient transporters of oxygen. Vernon encouraged people to, "Go for

varied terrain- soft and hilly, especially in the second part of the long run", before adding that, "Off road work builds strength endurance. Use canals and country parks if you can. Remember too that uneven ground will help develop strong feet". He explained that these type of runs meant a depletion in glycogen stores, aiding the recruitment of different fibres in the body, thus facilitating improved running economy.

On this note he urged the attendees to self-reflect as to, "What is the best that you can get out of environment where you live?" and recounted how some of his athletes were keen to 'host' Sunday runs in different locations, as had the likes of former world cross country champion Ian Stewart, done way back in the 1970s.

Threshold/ tempo running

Stockport based Vernon was keen to emphasize the interplay between Lactate Threshold and Lactate Turnpoint. The former is indicative of the first increase in blood lactate at baseline levels, whereas the latter is representative of a distinct sudden change in blood lactate. This normally occurs when the athlete operates at 1-2k per hour faster than their lactate threshold pace. Vernon's athletes include the likes of Ross Millington, Jonny Mellor, and Elle Vernon and they will embark upon tempo work at least once every in every ten days. This is often integrated and mixed with track training and Vernon believes that progression runs can mean starting off at threshold pace and then working onwards and upwards towards lactate turnpoint. Vernon said quite simply, "The whole idea is to be faster at a lower level of lactate so you can become more efficient". He told the story of Nick Bideau who had once told him that there were around 20 athletes in Australia who could keep with 12m55s 5000m man Craig Mottram on a session of 10x400m, but that nobody could keep with him on a 4k tempo run, simply because he was aerobically fitter than they. For Vernon, tempo running will always be a way of making sure one retains a sense of "global volume" in aerobic terms.

He then shared a humorous tale of how a visit to a Kenyan training camp to enquire about how the use of training data recorded on heart rate monitors, was met by the sight of those very heart rate monitors being unused and simply hung up on an outside washing line!

Intervals

The man who finished 5th in the European Mountain Running Championships back in 2013, asserted that, "Interval training is all about spending time is specific energy

systems". He will not be alone in making the call of 'stay close to speed' but insisted, "You've got to get the feel for race speed". He urged restraint when talking about this mode of training by adding, "Be careful how you build into this after winter". His most pertinent piece of advice in this context was to, "Be creative. As long as you can justify in your head why you are doing it and what physiological response you are getting". When elaborating it became evident that he was clearly a fan of working different energy systems within one session. An example of Vernon's creativity in the context of his once a week interval training with his elite squad, was his advocacy of pace changers e.g. 4 x 1 mile with a fast 3rd lap in.

Hills

Clearly a fan of hills, Vernon enthused about their ability to engender a focus on process rather than any goal or target pace, maintaining that, "You can work hard and not be too worried about pace", before adding that he used these all year round.

In emphasizing the value of short hills of between 8-20s as a facilitator of power, he recalled the work of Chris Jones with 2011 and 2012 European cross country champion Fionnuala Britton. He stressed that, "If you maintain good form, it's a way of safe speed development too, because there is less injury risk. He acknowledged that longer hills were more appropriate e.g. those of 3 minutes or so in duration, for the development of V02 max. When questioned as to whether he felt that hill work risked speed loss, he was dismissive of this concern in pointing out that this could be maintained, "as long as other ways of achieving leg turnover were utilised". He acknowledged a degree of intellectual debt to the great New Zealander Arthur Lydiard (see our International section p.30-31) in his work with three time Olympic champion, Peter Snell, in developing his own philosophy in this respect.

Regular strides

The man who finished a highly creditable 39th in the world cross country championships back in 2013, endorsed strides as a way of, "Keeping leg turnover". He did however raise the pertinent question of, "What is the relevance of speed if you can't use it?", before adding that it was no point simply being fast without having a sufficiently developed aerobic energy system simply because, "You have got to be 'aerobic' at the bell to be able to use it.

Recovery runs

Vernon said he was aware of endurance

athletes that perform this mode of training by simply running, "Too slow mechanically". He admitted that at slower paces, "Some athletes look poor", before joking that, "I don't think David Rudisha would look good running 7 and half min miling!" He was emphatic that recovery running was not to be confused with the notion of so-called 'junk mileage', in stressing that, "Junk mileage is where you are not recovering or adapting". As a general rule he counselled the audience to advice their athletes that by, "running recoveries at conversation pace, you can make the hard days really count".

Gym sessions

The holy trinity of gym work for Vernon was (1) The General core, in order to absorb loading; (2) Glute activation- in order to facilitate an appropriate triple extension; and (3) shoulder strength and posture- in order to compensate for the sedentary positions we adapt in daily life. "Symmetry is so important," he exhorted, before demanding that the coaches present consent to building, "Strong, robust 'bullet proof' athletes". Once again he shared a tale from an encounter with the ever popular high jump coach Fuzz Ahmed, who questioned him as to why endurance athletes seemed to constantly break down compared to high jumpers who sprinted sideways at a bar and seemed a little more robust!

Drills

Vernon was convinced that the use of drills as both a stand-alone session and as part of pre-session or pre-competition warm up, helped enormously with facilitating improved running economy. He felt that running form could be addressed with issues like pronation and supination being kept in order through the use of appropriate drills as a mode of biomechanical intervention. Appropriate drills for him can increase the flight phase of the gait cycle by minimising ground contact time as ultimately, "The aim of game is to spend as less time on ground as possible". He brought to life the words of Toni Minichello, who had once told him, "A lot of runners are not athletic enough". "A lot of runners are just not athletic". So drills were thought to be pivotal by Vernon as a way of increasing one's range of motion". When making reference specifically to the warm up, Vernon made time for one final anecdote in making reference to the views of former 800m world record holder, Wilson Kipketer, who reputedly would take between one and one and a half hours to warm up properly. Kipketer had reportedly added, without any sense of irony, that "And remember if you are not ready after all that, then you go home!"



Winter Wonder. Steve Vernon.

BRENDON BYRNE TAKES A LOOK AT SOME BELTING BOOKS OUT ON THE MARKET:

ANATOMY FOR RUNNERS (2012) BY JAY DICHARRY SKYHORSE PUBLISHING

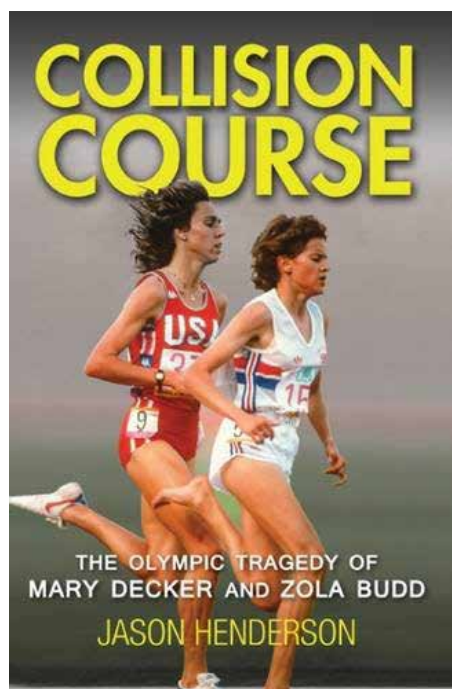
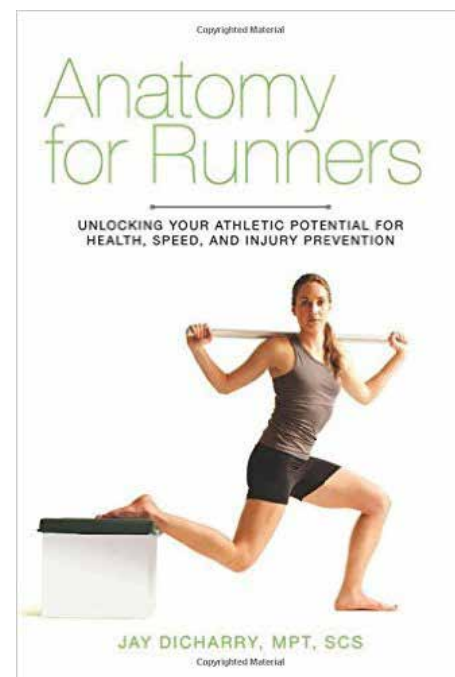
At first look you may think that this is just another book with lots of pictures of muscles and bones, and there are several books of that type. This book is very much more than that. As the author maintains it is about, "unlocking your athletic potential for health, speed and injury prevention". This book was aimed originally at the American market and as such has slipped under the radar a bit, particularly as it isn't readily available.

Dicharry likens the athlete to a car and maintains that the cardio vascular system is the engine and we spend a lot of time developing that. There are problems if we don't look after the chassis, meaning the rest of the body. A key factor is that 82% of runners get injured. Balance is very important and most runners aren't very good at this and Dicharry emphasises that running is a skill that can be improved. 'Correct' running form is dependent on the athlete's mobility, stability and power. These are essential to preserving alignment, minimising fatigue and to ensuring that high levels of force are generated. Runners may move in one direction but are challenged by forces in all directions.

This is essentially a practical book for runners, coaches and health professionals. There are mobility and stability tests to assess the runners form and then corrective exercises to improve things. There is a section about running footwear and barefoot running as well as the truth about stretching. The illustrative photographs make this all very clear.

Athletes are given careful instructions about self-massage. There is an interesting quote about training too: "Simply adding more volume, more intensity and more challenge to the runner is about as effective as drunk driving". Athletes should only progress to strengthening activities when they know they are moving correctly.

This excellent book could well be used in conjunction with Richard Blagrove's *Strength and Conditioning For Endurance Runners* reviewed in the last edition of BMC News.



COLLISION COURSE COLLISION COURSE: THE OLYMPIC TRAGEDY OF MARY DECKER AND ZOLA BUDD (2016) BY JASON HENDERSON. ARENA SPORT.

As you will be aware, Jason Henderson is the editor of Athletics Weekly and he has produced a book about the high profile clash between Mary Decker and Zola Budd at the 1984 Olympics when Decker was tripped and fell. Indeed you will have read about their respective approaches to training in the earlier in the magazine. The first section of the book deals with the early careers of the two athletes from different parts of the world. Both did so much through their exploits to promote women's running.

Mary Decker (now Slaney) was a phenomenon. She ran a marathon at the age of 12 and ran 2 mins 2.43 seconds for 800m at the age of 14 as well as a 53.84 for 400m. She had a huge range of racing distances from 800m to 10,000 metres. She was also fragile and had thirty operations during her long running career.

After breaking the world 5000m record in South Africa, Zola Budd was sent over to England and given British citizenship in double quick time so that she could run in the 1984 Olympics at the age of 18. The clash between Budd and Slaney at the Los Angeles Olympics became world news. This is a fascinating section of the book too.

Jason Henderson, through very diligent research, has written a fascinating book that puts the careers of these two outstanding athletes in the context of the time. The issues of apartheid, trust funds and athletics in the Cold War period are covered. Trust funds were a kind of half-way house between amateur and professional athletics. Don't forget that this was also the golden age of British middle distance running too when Coe, Ovett and Cram were setting world records and winning major titles. Athletics really was a high profile sport at that time.

As well as the collision which is the focal point of the book there are some more points that are worth bearing in mind. Decker set a number of world records and found fame as the teenager who took on and beat many of the Russian athletes who dominated distance running. Budd set many British records and won the World Cross Country twice.

This is a fascinating read that will appeal to running fans even though the 'Collision' of the book title was back in 1984. Both of the subjects of the book had long athletics careers and Jason Henderson brings you up to date with their current status.

OBITUARY

THE ENORMOUS CONTRIBUTION OF **DAVID COCKSEGE (1947-2016)** IS ACKNOWLEDGED BY **MATT FRASER MOAT**.

The British Milers' Club was saddened to hear of the death of David Cockledge in October, aged 69. Born in Shillong, India, on 9th April 1947, and educated at Croydon Technical College, David was the youngest of eight children.

He joined the BMC in 1970, member number 754, as someone able to help the club in an administrative capacity. He had been a member of NUTS since 1967, the year he first met Frank Horwill at Crystal Palace, where he had been introduced by his old friend, Alf Wilkins.

At the time David was working as deputy Editor of *Athletics Weekly* in Rochester, Kent, a post he held from 1969 to 1973 when the magazine was owned by Jimmy Green and Kent Art Printers, with Mel Watman the Editor. He was noted for his regular 'Spotlight on Youth' series for the publication. Alongside Frank, David became a regular presence at BMC races at Crystal Palace, and elsewhere, for almost two decades. In 1979 he was appointed Editor of *BMC News*, a role he held for eleven years.

David went on to work for IPC, *Amateur Photographer*, the now defunct *Athletics Monthly*, before returning to *Athletics Weekly* compiling overseas results. In 1999 he emigrated to Thailand, only to return in 2010.

In 2011, over a series of several meetings in south London, David conducted the definitive interview of Frank Horwill for later publication in the *BMC News* and in 2014

David was awarded the Frank Horwill award for outstanding contribution to the BMC, after which he continued to contribute to the *BMC News* and assist at BMC races.

In addition to his BMC work, David was a member of Herne Hill Harriers and meticulously compiled the Surrey county ranking lists for many years. He will be greatly missed.

Peter Thompson writes:

Dave, and I always knew him as Dave, from the first time I met him in the very early 1970s, was always by Frank Horwill's side, even when not physically present, and they enjoyed a loyal friendship over their lives. What days were shared at Crystal Palace and at times it was almost as if Frank was the King and Dave, the Court Jester, with the athletes, as loyal subjects.

Those who didn't know Dave well did not understand his acerbic, sometimes cynical demeanour but as Frank would say, "Dave does not suffer fools gladly." With great journalistic skill he would peel back the layers surrounding any issue and lay bare the inherent truth - many times with a wicked sense of humour and satire. But his relationships with the athletes were always close, honest, accepting, encouraging and supporting - they knew a different Dave.

He was a stickler for accuracy and Surrey County and the NUTS have benefited from his love of statistics and contribution to and creation of many 'lists'. The final note I must



David Cockledge is presented with his lifetime services award by BMC Chair, Tim Brennan.

say is that the British Milers' Club would definitely not be what it is today without the contribution over two eras from David Cockledge. It is difficult today to appreciate just how influential Dave was in the 60s and 70s in shaping the ethos, culture and success of the BMC.

Matthew Fraser Moat continues:

Dave was a real grumpy old man with lots and lots of stories about Steve Ovett, Seb Coe, Harry Wilson and all the great athletes and coaches of the 1970s and 1980s. He had strong opinions and was never afraid to state them.

I attended a BMC training day at Ealing in 1990 and whilst there I picked up a copy of the most recent *BMC News*. I was immediately drawn to the writing style of the Editor, David Cockledge, and I realised that this was the athletics magazine I wanted to read.

A great statistician and race organiser in his own right, perhaps Dave's greatest legacy was recording the wit and wisdom of the late great Frank Horwill MBE for over 40 years from the 1960s until Frank's death in 2012.

In 2014 I persuaded Dave to join Facebook and this brought him great pleasure reconnecting with long lost running friends and also introduced a whole new generation of athletes to his wit and humour via his posts in the Facebook group 'I Was, Or Am, A Runner'.

The only time I remember him stumped for words was when we surprised him at the 2014 BAWA lunch with the Frank Horwill lifetime achievement award for services to the BMC. I last saw him at the BMC indoor races at Lee Valley earlier this year and afterwards I gave him a lift home to his flat in Wanstead. Farewell Dave, I will miss you.



Dave Cockledge (left) with BMC stalwarts Matt Fraser Moat (centre) and Peter Scott (right). Photo courtesy of Sandra Moseley.

A REVOLUTION IN MOTION



INTRODUCING THE REVOLUTIONARY
NIKE FREE RN FLYKNIT

[NIKE.COM/FREE](https://nike.com/free)

