BMC NEWS

Official Journal of the British Milers' Club

VOLUME 2 ISSUE 8

AUTUMN 1994 £6.00

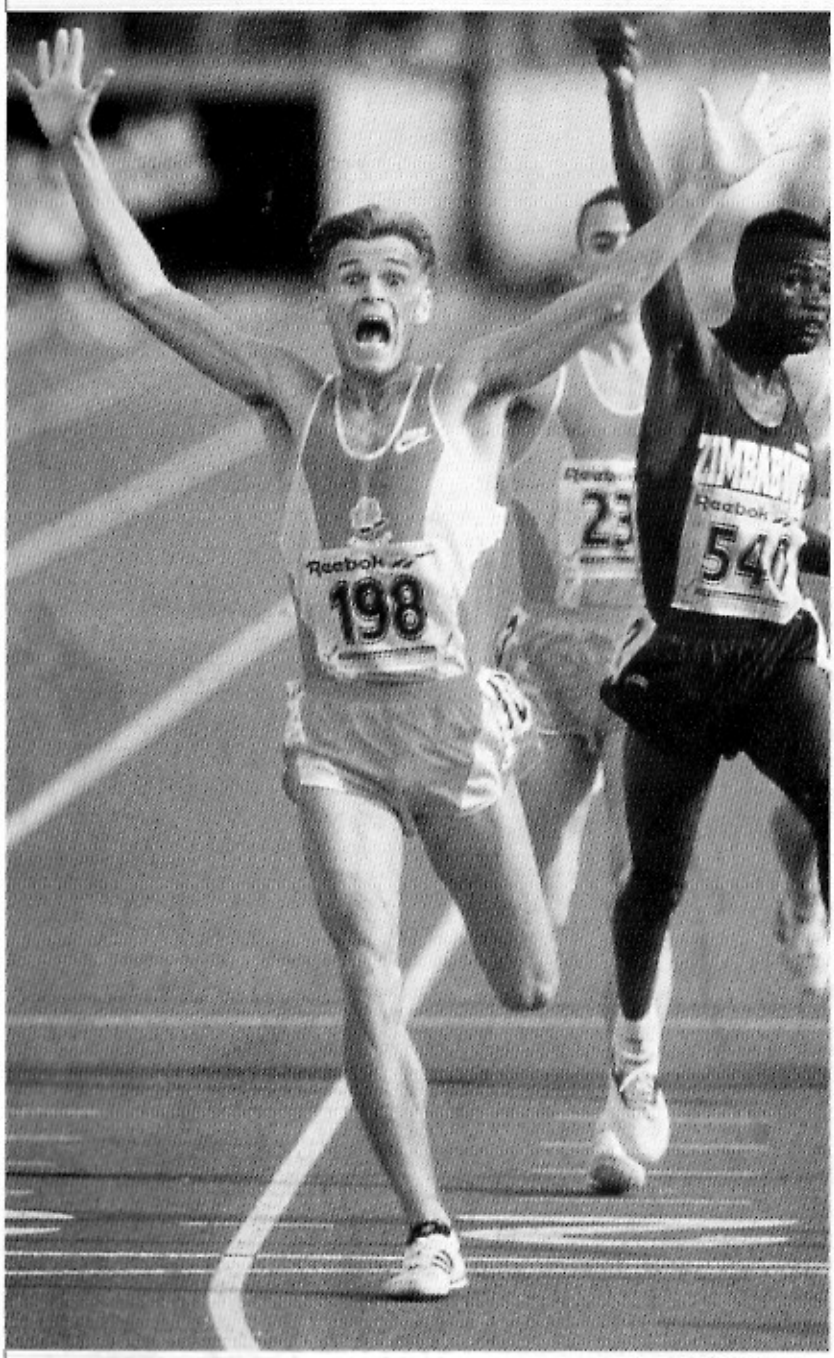


Photo by Mark Shearman

Rob Denmark, BMC member since 1986, wins the Commonwealth Games 5,000m Gold Medal.

The British Milers' Club

Founded 1963

JOURNAL

BMC News is published twice yearly in March and November by the British Milers' Club. *BMC News* is distributed free to all members. Non-members can subscribe for £12 per annum.

BMC News Editor	Matthew H Fraser Moat Ripple Court, Ripple, Deal, Kent CT14 8HX
Deputy Editor	Frank Horwill, BMC Founder 1963

MEMBERSHIP

Membership is limited to those athletes who have achieved the required qualifying times, and to Senior BAF Coaches. Associate membership is granted to those possessing special qualifications likely to benefit the club.

Members receive the *BMC News* twice a year. They are eligible for reduced entry fees to BMC races and courses, as well as receiving travelling expenses to some sponsored BMC races.

Annual subscriptions of £10 (overseas £15) are due 1st January each year. All applications to join the BMC should be sent to the Membership Secretary enclosing a large SAE.

MERCHANDISE

BMC vests (gold/white - S/M/L/XL - £10) and BMC ties (£5) are available from Runnersworld, 333 Rayners Lane, Pinner, Middlesex (Tel 0181 868 6997). Please make all cheques payable to 'Runnersworld'.

Back issues of *BMC News* (£2 each) and the *BMC Fitness Testing Booklet* (£1) are available from the Treasurer, Pat Fitzgerald. Please make all cheques payable to 'The British Milers' Club' and enclose a large SAE.

Contents .....

BMC QUALIFYING TIMES
(from 1st January 1995)

	MEMBERSHIP		GOLD Standard	
	800m	1,500m	800m	1,500m
Senior Men	1:56.0	3:56.0	1:52.0	3:49.0
Under 17	2:10.0	4:30.0	1:55.0	4:00.0
Veterans	2:10.0	4:30.0	2:00.0	4:10.0
Senior Women	2:20.0	4:45.0	2:12.0	4:30.0
Under 17	2:25.0	5:00.0	2:16.0	4:45.0
Veterans	2:25.0	5:00.0	2:20.0	5:00.0

BMC *News....News....News....*

1994 RACE PROGRAMME

The standards of the BMC 1994 race programme, held in conjunction with the Reebok Challenge, exceeded all expectations. A total of 27 athletes used the races as part of their build up to the major championships in Helsinki and Victoria. Some of the outstanding performances included:

i Benson Koech running 1:46 at Crawley, finally breaking Seb Coe's BMC 800m record of 1:47. Benson went on to run 1:43 at Rieti and top the 1994 world rankings.

ii Craig Winrow winning the 800m at Wythenshawe, rather unexpectedly at the time beating his domestic rivals, but it was just a stepping stone on his way to securing the undisputed UK 800m No 1 ranking.

iii Steve Cram running perhaps his last great race, a very courageous 1,500m at Wythenshawe, paced through 800m in 1:56 by Kevin McKay, struggling on the third lap but still having enough to hold off all of the young pretenders except Gary Lough. Gary went on to become arguably Britain's No 1 over 1,500m in 1994.

iv By the AAA's in early June, 16 out of the national top 20 performances at the women's 1,500m had been set in the BMC / HSA Reebok Challenge events. In other events our races achieved on average about nine out of the top 20 rankings.

v Lynne Robinson and Cathy Dawson both running 2:04 for 800m in regional races in successive weeks in July.

vi Quality races taking place in Scotland, Wales and Northern Ireland, the highlight being Bobby Farren's 4:00 mile.

vii Whilst our top athletes were in Victoria, three BMC records were set at Solihull. Ian Grime ran 3:40 for 1,500m, sprinting away from four other men running 3:41; Bobby Farren flew over from Northern Ireland and to run 7:56 for 3,000m, and Angela Davies ran 2:03 for 800m.

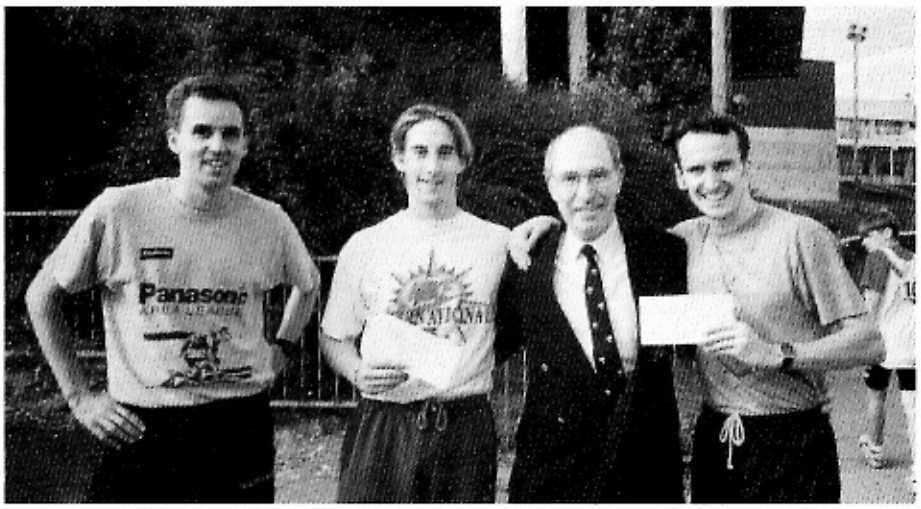
viii Jason Lobo led six men under 1:50.6 in an 800m at Stretford in late August.

ix Matt Hibberd running 3:42 at Loughborough in September, in a 1,500m in which five athletes set pbs.

x Larry Mangleshot winning the inaugural Eastern Region Grand Prix.

xi Ian Gillespie winning the Post Office Counters SW Grand Prix for the third time and winning the Reebok Challenge.

xii The National Junior Squad narrowly missing a world junior record and the Welsh Squad setting a Welsh record in the 4 x 800m relay at Oxford.



The presentation of the awards at the inaugural Eastern Region Grand Prix. Pictured are (l-r): Ian Chalk, Matthew Davies (3rd), David Iszatt and Larry Mangleshot (1st). Photo by Rosemary Iszatt

NATIONAL ENDURANCE WEEKEND

National Event Coach and BMC President Norman Poole is arranging the second BAF / BMC National Endurance Weekend at the Garth Hotel, Stafford on November 19th / 20th, 1 mile off J13 on the M6. The course is open to 'top 50' senior athletes, next year's U23 contenders and coaches. Prices start from £42.50; for further details please contact Matthew Fraser Moat.

1995 RACE PROGRAMME

The dates of the major championships next year are: UK's 10 - 11th June; AAA's 15th - 16th July; World 4th - 13th August. We hope to be able to maintain our link with the Reebok Challenge, and we already have some very provisional dates for next year's National Squad races:

Wed 17th May	Wythenshawe
Sat 27th May	Crawley
Sat 24th June	Cardiff / Gateshead
Tues 18th July	Stretford
Wed 2nd August	Watford
Sun 20th August	Solihull
Sat 2nd September	Oxford Relays

Our fixtures at Stretford have already been decided: 25th April, 16th May, 6th June, 27th June, 18th July (as above), 1st August, 22nd August and 5th September. Other regional fixtures will be determined in the New Year.

MEDALS IN VICTORIA

Congratulations to BMC members Rob Denmark (gold) and John Mayock (bronze) for their superb performances in the Commonwealth Games

1994 ANNUAL GENERAL MEETING

A new constitution was approved at the AGM; for details see page 25. Also approved was the creation of a two-tier membership standard to allow more athletes with much to contribute to join, whilst maintaining existing standards by bringing in new gold vests to recognise superior achievement. The AGM approved the increase of subscriptions to £10 (£15 overseas) and introduced a joining fee of £10, to cover the cost of a BMC vest.

1994 NATIONAL TRAINING DAY

This took place at Welwyn Garden City on Saturday 22nd October. The speakers were Harry Wilson and David Iszatt; coaching was taken by Glen Grant, Phil Banning, Pat Fitzgerald and Norman Poole. A full report will be published in the spring issue of the *BMC News*.

COACH OF THE YEAR AWARD

This was awarded to **George Gandy** in recognition of his work with John Nuttall, Gary Lough, Ian Grime, Jon Brown, Angela Davies, Sonia Bowyer and Sonia McGeorge. Also short-listed were **Jack Bayliss**, coach to Cathy Dawson; **David Denmark**, coach to Rob Denmark; and **Tommy Boyle**, coach to Yvonne Murray.

DEVELOPMENT OFFICER'S AWARD

Sixteen athletes have been short-listed for this award, which recognises outstanding contribution to the BMC during the year. The award will be made at the National Endurance Weekend.

BMC *News....News....News....*

FSA JUNIOR DEVELOPMENT PROGRAMME 1994

In May, we received word that we had been successful in our application for further support from the Foundation for Sport and the Arts (FSA). Most of the expenditure will take place in 1995, but we were able to put on quality junior development races, generally for the neglected U18 group, at Manchester, Belfast, Solihull, Welwyn Garden City and Oxford. The series produced some outstanding performances and many personal bests.

Less successful were our attempts on the various 4 x 1 mile and 4 x 800m relay records, although we did set a Welsh record and only missed the world junior men's 4 x 800m record by a couple of seconds. Changes in the national fixture list had forced our meeting to the end of a very long season.

The National Training Day at Welwyn Garden City, supported by the UK's top coaches, attracted a good response from the younger juniors that we are focusing on. The follow-up training camp in March 1995 will be a joint venture with BAF as will be the altitude training initiative. The BAF will be responsible for those likely to be selected as Junior internationals in 1995 and the BMC for those who represent a longer term investment.

The extent of our junior competition programme would be severely curtailed without the slots the Reebok Challenge give us in their meetings. The training programme would probably be impossible to sustain without our grant from the Foundation for Sport and the Arts. Our indebtedness to both cannot be overstated.

BMC IN LANZAROTE - 1995

Our warm-weather training trip gets more successful each year, and next year's dates have been set as 9th - 23rd March 1995.

Last year 45 people went with the BMC, including GB internationals Michelle Faherty and Matt de Freitas. Training takes place twice daily, sometimes on the beach, sometimes on the track, or even in the gym or the pool. You are encouraged to take part in the organised 10k road races, aquathons and triathlons, and you will find that the group gets bigger as the fortnight progresses. At the end of the fortnight, the 1995 BMC Race Programme will commence with three races in three days, over 5,000m, 800m and 1 mile. Last year the Reebok Racing Club kindly sponsored prizes for the Grand Prix.

For 1995, prices start from £242 per person for one week, £365 for two weeks. For further details please contact Matthew Fraser Moat on 01304 379777 before Christmas.

1994 DEVELOPMENT OFFICER'S AWARD

The following have been nominated for their outstanding contribution to the BMC in 1994 :
Spencer Barden for running in all five National Squad Meetings, and for the fastest 4x1 Mile relay leg at Oxford; **Chris Blount** for running the fastest 4 x 800m relay leg; **Tom Buckner** for running in five BMC races after his return from the Commonwealth Games and praising the BMC on national radio; **Richard Bunn** for travelling all over the country to just about every early season BMC race before injury curtailed his season; **Neil Caddy**, Britain's fastest Junior over 1,500m in 1994 set all his season's bests in BMC races; **Alistair Currie** for organising the Reebok Challenge; **Cathy Dawson**, Britain's most improved female 800m runner used BMC races to build up to her breakthrough at Victoria; **Bobby Farren** for running the fastest BMC mile of the year in virtually solo conditions in Ireland, and then flying to Solihull to run a superb 7:56 in the 3,000m; **Wendy Farrow** for being just about the only ranked senior lady who wanted to run the mile relay at Oxford; **Paul Freary**, long-time member used BMC races to reach some of the best form of his life; **Ian Gillespie** for eight sub 3:49 performances in the BMC Reebok races, and for keeping the trophy in such immaculate condition during the year; **Michael Gooch** for running in every BMC race in the country; **Ian Grime** for the fastest BMC 1,500m ever; **Paul Larkins** for writing good things in *Athletics Weekly*; **John Lisiewicz** for travelling all the way from Newcastle to run in several southern BMC races and **Wendy Sutherland** for using BMC races prior to breaking through at the AAA's. The Award will be presented at the 1994 National Endurance Weekend.

NEW REGIONAL SECRETARIES

We have strengthened our team of regional secretaries and race organisers with Mark Bryant (Wales), Mike Harris (North), Ray Thompson and Tim Brennan (Southern Counties). We are still seeking a regional secretary for the North East.

NEW VICE PRESIDENT

Alan Freer has been elected a Vice President in recognition of his services to the club over many years as Northern Regional Secretary. Eric Nash was elected an Honorary Member in recognition of all his assistance at the SEAA.

BMC VESTS

All BMC kit is sold via mail order at Runnersworld, 333 Rayners Lane, Pinner, Middlesex (Tel 0181 868 6997). Vests (gold and white - S/M/L/XL) are available for £10. Please make cheques payable to 'Runnersworld'.

BMC DATABASE

We are creating a database of active athletes and their coaches to assist race organisers in compiling their fields. For each member, with this issue of the *BMC News* we enclose a print-out of the information that we currently have on file for you. Please could each member check their own information and return any corrections to Pat Fitzgerald. Please note that if we don't have a telephone number for you, you are less likely to get race invitations!

1995 SUBSCRIPTIONS

Your 1995 subscriptions are due on January 1st. Please could you send your cheque for £10 (£15 overseas), made payable to the BMC, together with any change of address, to the Treasurer, Pat Fitzgerald. If you do not already pay by direct debit, a form is enclosed with this magazine.

COMMITTEE MEETINGS

The dates of the next meetings are : Sunday November 13th - West London; Sunday January 15th - Manchester. Venues for Sunday April 9th, and Sunday July 2nd are to be advised.

DONATIONS

We gratefully acknowledge the following donations: N Bellis, Jack Buckner, Vicki Buckner, David Cocksedge, Peter Coe, Janet Cole, David Dix, Alan Freer, J Harris, Tim Hutchings, Derek Ibbotson, Suzanne Lee-Barnes, John Kirkbride, Alex Rosen and Douglas Stott.

NEXT ISSUE

It is planned to publish the next issue in March 1995. All members who wish to contribute articles should send them to the editor by 31st December 1994.

BMC *News....News....News....*

at Sir Roger Bannister's 40th Anniversary Celebrations

Sydney Wooderson and Jim Ryun

From left to right: Anderson, Wooderson, Landy, Bannister, Ibbotson, Snell, Jazy, Bayi, Ryun, Walker, Cram, Coe and Morceli.

All pictures by MFM

Sir Roger, Lady Bannister and their family.

Steve Cram and Nourredine Morceli

NEW MEMBERS

Congratulations to the following who have been elected to the BMC since the last issue:

2386	Patrick Davoren	2407	Ruth Love	2428	Robert Cole
2387	Colin Goater	2408	Ramsay Sloss	2429	Andrew Renfree
2388	Dorothea Lee	2409	Mark Sesay	2430	David Pamah
2389	Ian Thompson	2410	Kathryn Bright	2431	Aaron Rea
2390	Andrew Young	2411	Alyson Layzell	2432	Nicholas Comerford
2391	Matthew Roberts	2412	Charlotte Goff	2433	Hayley Mittelberger
2392	Ewan Calvert	2413	Paul Mullany	2434	Martyn Jones
2393	Philip Mowbray	2414	Carol Gray	2435	Ross Fittall
2394	Stuart Niven	2415	Jane Moss	2436	Ian Mills
2395	Emma Graysmark	2416	Wendy Sutherland	2437	Tom Cordy
2396	Alex Stanton	2417	Richard Taylor	2438	Alan McDougall
2397	Rosemary Stanton	2418	Gavin McPherson	2439	Robert Morris
2398	David McCreanney	2419	Helen Pattinson	2440	Neil Caddy
2399	Daniel Hyde	2420	Peter Jones	2441	Shane Snow
2400	Kimberley Robinson	2421	Sarah Jackson	2442	Clair Enthwistle
2401	Mark Barrow	2422	Matthew Kloiber	2443	Ian Robinson
2402	Gordon Crawford	2423	William McGuirk	2444	Jerome Brooks
2403	Matthew Smith	2424	Philip Morrison	2445	Andrew Fowler
2404	Ian Bowden	2425	Lisa Carthew	2446	David Povall
2405	John Lisiewicz	2426	Roger Morley	2447	John Goodridge
2406	Alan Tatham	2427	Nick Hoyle		

The Road to Barcelona 1992

by Peter Labuschagne

Peter Labuschagne coached Elana Meyer to a 10,000m silver medal at the 1992 Barcelona Olympics, previously he was coach to Zola Budd.

1 Introduction

The first coaching manual that I ever read was the Afrikaans book by Potgeiter and Botha called *Atleet en Afrigter* (Athlete and Coach). I was fifteen years old, raised in the Orange Free State in the rural town of Theunissen, and stubbornly tried to follow Lydiard's schedule of 100 miles a week which was included in the manual - it didn't last long!

Ten years later, at university, I was surprised to notice that Lydiard's principles were still alive and, although disguised in many forms, were used by the majority of coaches. It follows naturally that I also started off as a coach using the conventional system of three phases; winter phase, pre-seasonal phase and the competitive phase. It was difficult to implement this system with school kids, so I adopted my own modification of the system and later altered it completely.

The purpose of this paper will be firstly to look briefly at the evolution of distance coaching, and I will argue that the influence of Lydiard is still very dominant as part of a basic structure. I also believe that the progression in performance during the last decade is mainly the result of intensifying professionalism rather than innovative thinking in middle-distance coaching in developing a new approach to middle distances. The present methods are much more scientific, and applied with professional intensity, but I am still awaiting the Lydiard of the nineties.

The second point I wish to make is that international competition requires a more versatile approach that the old pyramid-type approach consisting of three phases. In this regard I would like to present my own modified version of a four-week cycle, which I have been using to good effect. It is not a new paradigm of thinking, but is much more flexible than the old three phases inspired by Lydiard in the sixties.

Firstly, however, as background, I briefly want to outline the development and evolution of coaching, mainly to indicate why I believe that we need a new approach to coaching - what was good for the sixties is not sufficient for the nineties.

2 The Evolution of Coaching

It is just over a century since the first real impact on distance coaching was made. Before that, distance was too sporadic and informal to produce any major successes. It was the great amateur Walter George in the 1880s who brought a sense of purpose to athletics. George, with his disciplined way of training, incorporated the basic principles into athletics that are still true to this day.

George trained intelligently, varying the speed and distances of his training. Each day's programme was composed with an emphasis on variety with the aim of gaining stamina and speed. He was the first person who applied thought to training and coaching; the history books will hail him as the first pioneer of athletics - and in my book the father of coaching.

Since the days of Walter George, many coaching scholars of distance training have contributed to the methods of training. These individual methods, however, were more in the nature of single inputs altering certain aspects of George's original ideas, e.g. fartlek, the variety of training that Gosta Holmër developed in Sweden - allegedly inspired by the principles of Walter George. Fartlek also seemed to add little mental stimulation to what we know of Nurmi's methods of twenty years earlier.

The German psychologist Gerschler introduced a further important training principle to the science of coaching - interval training. The system of interval training produced the famous German Rudolf Harbig, and quickly spread over Europe to be adopted by most of the coaches. Interval training was also adopted by Zatopek, and although he was not the inventor of interval training, he was one of the greatest exponents of this training method.

Other coaches followed with short term successes. Michael Igloi dominated the fifties and introduced the idea of 'Sets' to coaching with variations in terms of resting in-between different sets.

Middle-distance training and coaching, however, was still on very uncertain terrain. The significant contributions to coaching was mostly individual, focusing on different aspects of training, and not supplying a universal system of coaching - a paradigm that covers all aspects of training and a holistic approach that can combine all the aspects of coaching of the past decades.

The breakthrough occurred in the early sixties when the famous New Zealand coach Arthur Lydiard hit the scene. Almost unknown outside his native country, Lydiard coached Snell, McGee, Halberg and Davis to medal successes in Tokyo and the world had to sit up and take notice. Lydiard's system of long distances, hill repetitions and track work supplied middle-distance coaches with the first exhaustive training paradigm of training, as opposed to the original contributions of his predecessors.

Lydiard sparked a running revolution which quickly spread to Europe. Soon every middle-distance athlete seemed to be clocking "a hundred miles a week", bouncing up steel hills and following Lydiard's strict schedules. The significance of Lydiard's methodology was that his training principles were exhaustive, a comprehensive paradigm of training covering all the facets of training. For the first time, one man had provided the 'whole story' for coaches.

3 The Post-Lydiard Phase

Lydiard hit the scene in the sixties, and the middle distance world is still waiting for his successor. A new generation of excellent coaches did emerge in the seventies and eighties and the progression of times in the middle distances were awesome. However, I believe that the improvement of records and individual times, however, was not the result of a new paradigm of thinking in the coaching establishment. *[Ed: Peter Coe might disagree!]*

It was more a situation where athletes training consisted of individually tailored segments of Lydiard's methodology. In my opinion, even today, the vast majority of coaches use either the Lydiard system or near imitations of it. The three rigid phases of long distances (winter phase), hill training (pre-seasonal phase) and track work (competition phase) form the basic structure of the great majority of coaches.

Most coaches will protest on these assumptions but, disguised behind different imitations, Lydiard's methods are still alive and well. The basic principle of a winter phase consisting of high mileage, a pre-season phase with the emphasis on strength and anaerobic work, and fast anaerobic work during a competition phase,

The Road to Barcelona 1992 (2)

are still the bread and butter of leading coaches.

Trusted principles, yes; but nothing innovative. Let's analyse Lydiard's methodology for a moment. The sixties formed the backdrop to his approach to athletics and this was a period when athlete's training was tailored to prepare for a major meeting a year or two ahead. The international athletic scene in the sixties was more restricted in terms of athletic meetings and consisted of the two big ones: the Olympic Games and the Commonwealth Games, as well as a few international meetings. The underlying principle was to prepare on a long-term basis focusing on a meeting or series of meetings in a six- to eight-month period.

The present situation in world athletics is much more hectic. Three disciplines - track, road running and cross-country - overlap and the demands on middle distance athletes are tough. To withdraw from competition to prepare for two to three months is just not compatible with the present modern way in which athletics is conducted. A much more subtle and versatile approach is necessary to negotiate the tough demands on athlete in the nineties.

However, this does not deal with the question of why athletic performances are still improving. My argument is not that athletic coaching has not improved during the last fifteen years. The contrary: it did! My viewpoint, however, is that it is mainly the result of professionalism in sport and the intensity in which training is applied during the last decade. More money is also available to train full-time.

The improvements that have been made are modifications and alterations to Lydiard's original three tier system, and not a new approach to coaching. Just page through coaching manuals in your own library. However, I fear stagnation is imminent. The majority of middle-distance world records date from the early eighties. The athletics community is eagerly awaiting the Lydiard of the nineties; someone who could supply us with the know-how to propel us into the new century.

Before discussing in detail my approach to distance coaching, I would like to out-line some general thoughts about the conventional system consisting of the three phases used by the majority of coaches:

4 The conventional system - some critical ideas

By the term conventional system I mean the traditional system of winter phase, pre-seasonal phase and ultimately the competition phase, which in my book are modifications of Lydiard's three phases.

There are a lot of positive things to say about this conventional approach and the great majority of coaches still move safely inside the parameters of this system - tried and tested since the days of Lydiard. Anybody who dared criticise this system moved on thin ice, and I know I am at the moment.

However, my major criticism and the reason why I became disillusioned with the system is it is so inflexible in structure and rigid in application. To deal with this issue I would like to structure my ideas under the following subheadings:

4.1 Too formalistic, too rigid

The first aspect which does not appeal to me is that the conventional approach does not make any provision for year-round racing in all three disciplines. During the first phase the athlete is required to focus on quantity: anaerobic training and speed are mostly secondary or not even included in the training programme at all. The last phase is the complete reverse: speed anaerobic training with little attention to background.

Each phase is very limited for this sort of racing - just compare the racing and performances of the overseas athletes in the first few weeks of the South African athletic season. The international scene requires much more than to be in peak form only during the last six to eight weeks of a programme. A much more versatile approach is required - an approach where athletes cover all the basic elements of training during short phases, would be much more suitable for all year round racing. For example, the advocates of the conventional approach will underline the need during the fast phase (the competition phase) to focus on high anaerobic work and speed. How you deal with the reality of four races during the Olympic Games over 1,500m? More than twelve weeks will have elapsed since the winter phase, so the athlete's aerobic capabilities are on the decline. Heats and finals are a risk in many ways, having an aerobic background on the decline only adds to a dangerous situation.

Most disciples of the conventional approach will prescribe morning runs in order to deal with the decline in aerobic capability, but thirty minutes or so are not sufficient to deal with this problem.

Additionally, if you postpone your high anaerobic work to the last 8-10 weeks, how do you deal with something like the US Trials? - ask James Robinson what I mean.

4.2 The problem of peaking

The next problem area or shortcoming of the conventional approach is that the system makes provision for peak fitness in a very limited time bracket - normally 8 - 10 weeks - and hopefully this peak fitness will correspond with the final phase of the athletic season.

I believe that good form is something that an athlete must enjoy for more sustained periods of time. Anyway the international requirements are such that it is not possible to be below par during the pre-seasonal phase. For example, the American trials require good form more than twelve weeks before the Olympic Games. The athlete conditioned by the conventional approach is running dangerously and is taking unnecessary risks. The same applies to an athlete who must peak for the World Cross Country Championships and sixteen weeks later peak again for the Olympic Games. The rigid structure is not flexible enough to make provision for this.

4.3 No turning back

With the conventional approach, the underlying principle is to move from quantity to quality; from slow to fast in a pyramidal way. In practice it represents a gradual move during the winter phase from aerobic training to the anaerobic phases of the competition season.

Planning and implementation of this is not easy. In coaching conversations after an athletic season, remarks like the following are often heard: "Next time we need to introduce speed a bit earlier in our schedule" or "so-and-so was lacking background during the last few weeks".

The conventional system is based on the principle of moving slowly in tandem with the season from aerobic work to anaerobic work: from distance to speed. The loss of aerobic background is directly related to the process of shifting of emphasis. There is no turning back once the process is underway.

The Road to Barcelona 1992 (3)

If a coach discovers during the start of the third phase that his athlete is lacking aerobic background, there is no turning back to aerobic work; he must press on with high intensity work.

In the same vein: if the coach discovered that 6 - 8 weeks are not enough to finish his speed and anaerobic training during the third phase and that he needs another three weeks, he could try to delay the Olympic Games for that time!

My argument is that the formalistic features of the conventional approach makes it impossible for this system to adapt to situations that occur from time to time. The rigid structure does not respond well if everything is not going according to plan.

4.4 Injuries

Following the conventional approach is the compartmental structure forced on athletes to emphasise a specific aspect of training during a specific phase. During the long weeks of the winter phase, top middle-distance athletes clock more than 140km per week - week after week. The risk of injury is twofold:

i The monotonous effect of overemphasising one aspect of training puts a lot of stress on specific groups of muscles. Variations on training methods are limited.

ii The switch from one phase to the next is even more risky than continuous hammering on the same muscle group.

The introduction of faster and higher intensity work after months of slow aerobic work is well known. The small twitch behind the knee, sore achilles tendon and the sudden loss of form are all well-known side effects of the switch from one phase to another.

4.5 Rest

The next obvious shortcoming of the conventional approach is the lack of a built-in rest structure. It is obvious that Lydiard did not make any structural provision for rest in his three-tier system, and neither has any coach in the available literature which I have read. The basic structure of the conventional approach is not compatible with structural rest. It mainly consists of on-the-spot evaluation by the coach after a bad training session and obvious signs of depletion of muscle glycogen. This very dependent on the coach's own level of experience and the scientific methods available locally.

I believe that rest is much more important and that the approach must be much more prognostic; i.e. in the format of structural rest built into a system well in advance. This would force the athlete to rest before he experiences any obvious signs. Later I am going to deal with this issue under a different subheading.

I could continue on this topic, but to be more positive I would like to suggest an alternative; not in any way to try to prescribe a new paradigm of thinking, but to introduce a different approach which is by comparison more flexible, more versatile and provides a less demanding way to prepare for the rigours of international athletics.

5 My Four-Tier system - a new approach to coaching

Since 1987 I have decided to alter my approach to coaching, and recognise the need to adopt a different approach to negotiate the varying demands of international athletics.

Following the conventional approach in the early eighties with my athletes, I made the common mistake of over-training. It was thought that to miss one session is to devalue the previous weeks of running and training. So, to maintain the tempo, we pushed on - something that I did during my own running career.

Then two things happened. Firstly, after Zola followed a schedule of a few weeks of high mileage (140 km per week), an injury forced a low mileage week right in the middle of the phase. The following week was back to normal mileage but she was much more energetic and on her toes. I suddenly realised that a variation in mileage is not such a bad idea, so one week we pushed to a mileage of about 140 km and then dropped it the next week to below 100 km for an easy rest week.

In conjunction I also read the article on over-training by Poole and it struck me that a diagnostic approach to rest is not efficient because it normally happened after the damage had been done. The obvious answer was to be prognostic and to structure rest in advance and for longer periods. The longer periods of rest is something that we are all afraid of, but as Poole put it: "The mileage conscience of the over-zealous distance athlete can lead to problems, as can the fear that *a short-term reduction in training will lead to great loss of fitness*".

My evaluation of the situation was that an athlete could allow himself more rest than the one odd day during a week that I had used until then, so I introduced a rest week in every four weeks. It worked well.

Before elaborating much further on this issue, I want to remain for a little while at the notion of rest - structural rest in particular - and the importance of rest in a training programme.

6 The role and value of Rest

I would like to make a statement about the training intensity of most international athletes and that is that they tend to over-train rather than under-train; mainly because they don't want to devalue the whole build-up phase.

There is also a tendency to train even harder when racing is going well, instead of easing down a bit. When one uses the conventional type of schedule, athletes reappear after a good and firm winter phase and go straight on to the pre-seasonal phase. Instead of easing off a bit (for a week or so), they continue straight on to the next phase of hard training.

As indicated earlier, this is a side-effect of the conventional approach - the training schedule dictates high mileage followed by a pre-seasonal phase. With no structural rest forming an integral part of the schedule, the athlete continues straight-on to the next phase with the inevitable loss of form. Coupled with the idea that the short-term reduction in training will lead to a great loss of fitness, the athlete is faced with a dilemma.

What happens when a distance athlete over-trains? According to Costill (1971) and Poole (1987), consecutive days of hard training result in a continuous depletion of muscle glycogen. Skeletal muscle and liver glycogen take time to replace muscle glycogen and the continuation of exercise depletes the glycogen even further. Costill found that, after reducing muscle glycogen to near zero, even a diet containing roughly 50-55% carbohydrates was found to be inadequate for restoring pre-training glycogen levels for 50% of athletes. He went on to show that some individuals may not replenish their muscle glycogen despite five days of rest and 80% carbohydrate ingestion after total depletion. Poole (1987) pointed out that the consequences for such athletes are obvious.

After a hard workout, muscle glycogen is reduced to about 60% and the level

The Road to Barcelona 1992 (4)

recovers to about 80% before the next training session on the following day. A hard training session on the next day will reduce the muscle glycogen to about 50% with almost no recovery by the third day when a third hard session will reduce the muscle glycogen to below 40%. If this athlete rests for two days, the muscle glycogen level will return to about 90%.

The point that I am aiming at is that most athletes start the weeks of training with much lower muscle glycogen levels than the theoretical 100% in the above mentioned example. The first reduction of muscle glycogen during the first training session reduces the level of muscle glycogen to well below 40%, which puts the athlete on a collision course early on.

I believe that it is advisable to structure the training programme in such a way that the athlete has recovered 100% before starting with the hard anaerobic training phase, and then to spread three anaerobic sessions with a day's rest in between. I will explain this under the next subheading.

7 Preparations for the 1992 Olympic Games

Earlier I referred to the fact that I used alternative high and low mileage weeks when coaching Zola in 1985. I also elaborated on this approach by including one anaerobic training in the low-mileage week.

The result was that we could delay switching over to the pre-seasonal phase because the progression in the anaerobic session once every two weeks was going well. It had the advantage that Zola could continue her high mileage up to the competition phase because every second week included two anaerobic sessions.

I then took it a step further and included a week's rest in between; so the cycle was as follows:-

Week 1 Long distance
Week 2 Rest week
Week 3 Two to three anaerobic sessions

and then repeat the cycle.

Zola accomplished an unreal achievement: seven pb's in succession during 1985. Switching to a four-week cycle during 1986 (see below) she opened with a 8:34 in Belfast over 3,000m and went directly afterwards for a 50 minute run. Unfortunately the problems of the Commonwealth spoiled the rest of the season. Both of us still firmly believe that she could have broken the record of 8:20 that year.

The result was that I decided to abandon the traditional second phase and the pre-seasonal phase in total, and to integrate the three phases into short four week cycles, i.e. as follows:-

Week 1 Aerobic conditioning (the conventional first phase)
Week 2 Aerobic conditioning (as above)
Week 3 Rest week (emphasis on recovering)
Week 4 Anaerobic conditioning

The logic applicable to the old conventional system also applies in this four tier system. The approach at the start of the season is also built on the principles of progression. For example, during the first two weeks the mileage is low and is progressively stepped up during the following weeks to reach a peak after ten weeks and then mileage is then dropped to about 70-80% of the total of the preceding week. With this method you could ensure that:

i the aerobic background is kept on the highest possible level up to the championship;
ii alterations are possible throughout the whole system and the preceding weeks;
iii an athlete could use one out of every four weeks, or two out of every four weeks to do high anaerobic training without the fear that his aerobic capabilities could be incomplete.

The rest week (week 3) is structurally built-in and, together with one or two days during the other four weeks, is very important in terms of recovering and the well-being of an athlete in general.

The emphasis during this week is to ensure the replacement of muscle glycogen and to stimulate the athlete psychologically and mentally, and to ensure that the athlete arrives at the fourth week full of energy and does the intensity training at a much higher level. The training during the rest phase mainly consists of recovery runs with the emphasis on rhythm, but it is in general very informal. It is sometimes advisable to have no formal training sessions. The important aspect is a complete break with athletics for four to six days. Normally the athlete is by then eager to start training and ready for a hard session or two.

During the anaerobic week (week 4), the logic applicable to the first two weeks is also applicable here. The season will kick off with slow interval training and then the tempo is gradually increased to build up to the major focal point of the season. The major advantages of this method are that :

i a coach has a continuous mechanism to monitor the athlete's level of anaerobic fitness during the build-up phases;
ii the early introduction of work enables the athlete to be much more adaptable to the international scene;
iii the shift to intensity could be progressed at a more cautious pace because the anaerobic phase is distributed over a much longer period.

It is important, however, to spread the anaerobic training sessions in such a way that the weekend is left as a short resting cycle before the next four-week cycle is introduced. Two to three sessions are almost the limit.

What really appeals to me about the system is that the athletes are trained at a high level without experiencing the side-effects of feeling fatigued most of the time - the athlete normally feels refreshed and looks forward to the next training session. The four to six days of light recovery training enable the athlete to do intensity training at a much higher level throughout the season. It is really not a case of carrying a state of semi-tiredness from one training session to another.

The monotonous effect of the different phases of the conventional approach is not present with this approach. A coach has a full range of options and could vary the training virtually from week to week.

8 Conclusion

In many ways middle-distance coaches are limited by the available training principles, like fartlek, interval training, etc. The modification and scientific updating process are still going on - no argument on that.

My point throughout my argument has been that the formal structure in which most coaches cast these training principles does not appeal to me. In my opinion the conventional approach must be looked at and modified to meet the demands of international running.

During 1991 I was confronted with a situation where I had to prepare Elana for two races: a 3,000m at a prestige meeting directly after our national championships and a half-marathon two weeks later. She won both, with the fastest times in the world in 1991 - that is all the proof I need!

How Bobby Farren Trains

by Malcolm McCausland

If you are of nervous disposition fetch a glass of water and keep it handy before you proceed with this article!

What you are about to read is HERESY to all devotees of Frank Horwill and many of the top UK coaches today. It must be faced, however, that the Five-Pace method of training has had it's day and does not reflect developments in middle-distance running over the last 10 to 15 years.

The Five-Pace theory was developed by Frank Horwill in the late sixties following a period of ten years evolution. Struck by the fact that in one year the UK mile rankings were dominated by 5,000m runners, he advocated that milers should get away from traditional sessions such as 10 x 400m. He suggested that 5,000m sessions such as 4 x 1 mile or 6 x 1000m would be more beneficial. Similarly he saw the correlation between 400m speed and 800m potential, and in turn, 800m speed and 1,500m potential, and so on.

Frank's programme was based on training at five racing speeds centred on the athlete's speciality distance, i.e. a 1,500m runner would train at 400m, 800m, 1,500m, 3,000m and either 5,000m or 10,000m pace. The number of repetitions was determined by the total distance to be covered, which in itself related directly to the racing distance. Recoveries followed a similar formula to the distance covered, and the programme looked something like Figure 1.

The domination of British athletes over the middle-distances in the eighties owed much to this system. In his book *Training Distance Runners*, Peter Coe pays lavish tribute to Frank Horwill and acknowledges that Sebastian Coe's training regime was based on the Five Pace System.

Figure 1 - Original Five Pace Example:

Pace	Repetition Distance	Recovery Jog	Standing Time
5,000m	4 x 1 mile	200m ($^1/_4$th)	1 min
3,000m	6 x 1,000m	250m (¾)	75 secs
1,500m	6 x 600m	300m (½)	90 secs
800m	4 x 400m	400m (same)	2 mins
400m	8 x 200m	400m (double)	2 mins

Source: Frank Horwill - Obsession for Running - 1991

Critics of the system, however, maintain that it produces even-paced tired athletes. They say it does not equip the athlete to handle the demands of racing at the highest levels. Their argument is that rarely if ever is a major championship race decided at even pace which is that hallmark of the Five Pace system. It is not geared towards the type of race such as the 1,500m won by Cacho in Barcelona. Critics also argue that the relentless grind of track sessions makes for athletes tired in body and in mind - in other words their best races are left on the training track. It is difficult, after all, to picture a group of Kenyans assembling four to five times a week somewhere in the Rift Valley to grind out with monotonous regularity the sessions detailed above!

These were some of my thoughts at the end of 1992. As an athlete and later as a coach I had been a lifelong devotee of Frank Horwill and the Five-Pace System, and had enjoyed some success in both roles. One particular athlete I coach, namely Bobby Farren, had been a teenage sensation running 3:47 for 1,500m only a matter of days after his 17th birthday, but by age 22 he had not progressed much further. He had trained solidly for six years along Five-Pace lines making frequent 100m round trips to his nearest synthetic surface.

A major examination of his training was needed. After much thought and discussion it was decided that Bob should substitute fartlek sessions for the many speed workouts done on the track throughout the winter and spring. Total mileage was increased only slightly but aerobic threshold runs were added on a regular basis.

When Bob stepped on the track for the Inter-Counties Champs in May 1993, it had been nine months since he had trained on a synthetic surface. The result was devastating - 4th place in 14:16, an improvement of 32 seconds on his personal best. He improved this a few weeks later to 14:09 for 5th place in the UK Championships, behind, amongst others, Eamonn Martin and Steve Cram. The rest of the season saw him rewrite other personal bests with a solo 1,500m in 3:43 and 3,000m in 7:59 (from 8:14). He continued the programme finishing second in the NI 10k road championship, breaking 30 mins in adverse conditions, and came fourth in the NI cross-country championships over 7½ miles. Progress on the track continued in 1994 despite university finals with 3:42 at 1,500m, a BMC record of 7:56 for 3,000m and 13:47 for 5,000m.

I am not necessarily saying that this approach will work for everyone. However, in light of improved standards (particularly 3,000m and above) on the international stage, it would be complacent, possibly arrogant, to maintain that there is nothing wrong with our system of training.

During the winter of 1992/93 Bobby Farren followed a schedule along these lines:

Sun	Long Run - 16 miles on grass and paths
Mon	30 mins aerobic threshold run on the road (or in inclement weather, the treadmill) *[Ed: 10k pace]*
Tues	Fartlek - 10 x 3 mins; 1 min recovery *[Ed: 5k pace]*
Wed	Circuits plus 7 miles easy
Thurs	Short Hills *[Ed: 400m pace]*
Fri	Rest day
Sat	Fixed fartlek on woodland path. 4 laps of 2½ miles, each lap contains efforts of 400m, 200m slightly uphill, 200m, 300m and 600m. Recovery was continuous easy run. *[Ed: All five paces!]*

The above workouts were supplemented by easy runs in the mornings (Mon - Fri) between 4 and 7 miles.

The Editor replies: We think that Malcolm is deliberately playing devil's advocate! Part of the problem is that Five-Pace training is still not universally accepted, and to be fair, the five-pace theory as originally proposed in 1972 was a *summer* schedule. It did however make the point that in the winter, speed sessions should be done at least once a week before Christmas, and twice a week after Christmas; synthetic surfaces were not specified. More recent articles of the Five Pace Philosophy have included guidelines for winter training which are *entirely* compatible with Bobby's schedule (see last issue) and fartleks have regularly been recommended in the *BMC News*.

It is difficult to conceive that training at five paces is less likely than other methods to prepare an athlete for such an unusual race as Barcelona. Anyway, a single BMC athlete would have made it a true run race.

The problem of tiredness is an old chestnut - Labuschagne's rest weeks would be appear to be well worth looking at. Further discussion on these points next issue.

BMC *Development Plan*

by Matthew Fraser Moat

This document has been put forward by the Development Officer for approval as the BMC Development Plan in 1995.

Introduction

For the first time ever, British men emerged with only a solitary bronze medal out of the twelve medals available in the middle-distance events (800m and 1,500m) at the European and Commonwealth Championships in 1994. This comes just eight years after our ten medals (including four golds) in 1986.

However, we should not have been surprised by this after our complete blanks in Tokyo, Barcelona and Stuttgart in 1991 - 1993. The signs are there for a recovery. Craig Winrow and Curtis Robb over 800m, and Gary Lough and Matthew Yates over 1,500m, have realistic medal prospects next summer. With Kelly Holmes and Yvonne Murray leading the way, Britain's women are finally taking on the world. 1995 has much to look forward to, and the BMC will play an active role.

The BMC had a good year in 1994. There was increased co-operation with the BAF National Event Coaches, and the link-ups with Alistair Currie, of the Reebok Challenge, and with HSA, who provided sponsorship for the women's races, transformed our 1994 Race Programme. 27 athletes used our series as a build up to Helsinki and Victoria. No medals this year - we can work on that. There is still much to do before we shall start seeing the results of our endeavours in terms of medals at major games.

Our Mission

Our mission in 1963 was to raise the standard of British middle-distance running to world supremacy. We did it once (1977 - 1986), we can do it again. In the BMC's early days, the most pressing need was to provide performance-enhancing race opportunities for the nation's most talented athletes; our 1994 National Squad Races have shown that this is still the case early and late season.

The meetings at Wythenshawe and Crawley provided about half the top-twenty ranking performances between 800m and 5,000m prior to the AAA's for men and women, and the 1,500m at Solihull provided the best ever strength in depth in Britain (five at 3:41 and under) outside of the AAA's and the Grand Prix.

Despite this, it is clear that neither the BAF nor the BMC caters adequately for the needs and aspirations of talented young athletes of potential international quality. We recognise that our FSA Junior Races only scratch at the surface of the problem. Subject to the continuation of the grant from the Foundation for Sport and the Arts, we aim to select a squad of about twenty U18 athletes whom we hope to nurture over the next five years.

At the same time, the expansion of our Regional Races throughout the country has created problems of its own. We recognise the need for greater inter-regional co-operation with fixtures, and we also recognise that a large number of athletes who run regularly in our races do not have the ability to attain our membership standards. If we are serving their needs, then we should allow them to become members.

The changes in policy set out in this document are a reflection of the Development Officer's perceptions of the current needs and the outcome of extensive consultations within the Committee, with Regional Secretaries and with others who share our aspirations.

Some of the ideas contained in this document have already resulted in changes to the BMC constitution at the 1994 AGM - other ideas may have to wait for a couple of years. It is important not to overstretch our finances and our resources, but equally it is important to have a clear statement of where we intend to go.

Regional Secretary Network

The BMC is very dependent upon having effective Regional Secretaries if it is to meet the needs of the membership, although the needs of the very best seniors will of course be catered for at national level.

In 1994, BMC races were held in all regions of the UK except North East England. Nonetheless there is a clear need to strengthen the regional secretary network and to improve communications within it. During 1995 the regional boundaries, will be reviewed and any necessary alterations proposed to the 1995 AGM. The needs of the south coast counties will be included in this review.

In most regions the present arrangement where the regional secretary also acts as the race organiser remains satisfactory, but in London and the Home Counties and in Scotland, the secretary needs to be supported by a small team of race organisers. A similar arrangement may be necessary to re-establish the BMC in North East England.

Each Regional Secretary will be expected to maintain a regional list or database of athletes to be invited to BMC races, and of active coaches in their area. A standard personal data acquisition form will be issued to Regional Secretaries to pass on to race entrants, for return to a central database. Full confidentiality must be maintained at all times, and the BMC will register under the Data Protection Act.

A new role will be created, title to be advised, who will, on behalf of the National Committee, liaise directly with Regional Secretaries to oversee day-to-day operations. This will involve:

i collating information on proposed fixtures, training days etc., propose rationalisations and discuss opportunities for cross-regional co-operation;

ii collecting race results and prepare them for BMC publication; issue press releases and liaise with *Athletics Weekly*, et al, to ensure regular coverage of details of forthcoming races etc.;

iii drawing on the regional secretaries lists, establishing a central database of the names, addresses and telephone numbers of all athletes and coaches thought likely to be interested in, or benefit from the BMC's services (recording where possible the coach / athlete relationship).

All Regional Secretaries will have a good supply of BMC literature available at their races.

Membership

Many good county and club athletes lack opportunities to get into fast paced races, and the BMC Regional Races have been filling that need. By maintaining deliberately high admission standards, we are depriving ourselves of significant numbers of supporters, unable to meet our standards but who have much to contribute to the spirit of BMC. Accordingly entry standards will be simplified and reduced to ensure that all good quality county / club athletes are eligible for membership, as follows:

	800m	1,500m
Senior Men	1:56.0	3:56.0
U17 Men	2:10.0	4:30.0
Senior Women	2:20.0	4:45.0
U17 Women	2:25.0	5:00.0

BMC *Development Plan*

Admission of Senior BAF Coaches and Associate Members will be unchanged by these proposals. Existing members will not be neglected in this restructuring. We will ensure that there will be a suitable "National Squad" race programme, and they will be entitled to wear a new gold vest, which all existing members will be encouraged to purchase.

All members will be entitled to wear the traditional white vest - new members reaching our old admission standards will be allowed to wear the gold vest.

The BMC will produce a brochure to introduce the BMC to potential members, and this will include a simplified membership application form asking for the following new information:

i authentication of qualifying performance;
ii coach's name and telephone number;
iii the name and telephone number of the secretary of his / her first claim club;
iv proposer and seconder (paid up BMC members only);
v vest size.

This additional information will be sufficient to satisfy the Membership Secretary that all conditions of membership have been satisfied, and accordingly the he will be able to respond to applications within two weeks. Lists of new members will be circulated to the Committee each month. Only in the case of admission of Associate members will he refer back to the National Committee.

Annual Subscriptions will be raised to £10 UK, £15 overseas from 1st January 1995. There will be a £10 joining fee to cover the cost of a BMC Vest, and this will be payable in addition to the first year's subscription.

Current paid-up BMC membership is about 400. It is hoped that membership will reach 500 by the end of 1995.

Competition Policy

The increase in BMC regional races, and ease of travel between regions, demand much greater co-ordination between race organisers. A fixtures conference will be held at Manchester in January 1995 to agree the BMC's competition calendar for 1995. This will involve the National Event Coaches and all regional secretaries. Finances permitting, advertisements will be placed regularly in *Athletics Weekly* throughout the season.

The 1995 competition calendar will contain a series of about six well publicised, high quality meetings, to satisfy the needs of the highest performers in our membership, i.e. those who have attained the gold membership standard. These National Squad meetings will be held at strategic dates in the national calendar, will cover the whole of the UK, and will be based on the 'Wythenshawe' model. Ideally these meeting will rotate around the country and in time it is envisaged that each region will stage one of these national squad meetings each year. Sponsorship of about £1,500 per meeting will be needed to support this initiative, and it is hoped to maintain our successful working relationship with the Reebok Challenge.

Regional Secretaries will continue their regional race programmes which will be targeted at helping members attain the Gold standard. Regional Secretaries will be free to set their own entry standards for races, but as a general guideline they will be equivalent to the BMC entry standards.

The policy of allowing BMC members to run free in BMC races will be discontinued, and in addition non-members are to be charged a premium of at least £1 per race. Members should be encouraged to run in BMC, Area or National vests.

As a general rule, athletes travelling to regional races will not be paid expenses or prizes unless separate funding has been found. When the BMC is asked to put on a special race, to mark the opening of a new track etc., we would expect our sponsor to pay travelling expenses, and an arrangement fee of no less than £150 will be charged.

BMC competition in 1995 is to be focused on the 800m to 1 mile range. All Wherever possible, regional races are to be paced at BMC Gold Standard pace, or according to the wishes of the competitors.

Regional Secretaries will include reasonable quality U17 races in their programmes - mixed if necessary to achieve high quality male and female components and to avoid impractically small fields, and also using senior athletes as hares.

At National Squad meetings, U20 athletes will run with Seniors - and wherever satisfactory fields can be assembled, separate U17 races will be held. National Event Coaches for longer distances will be invited to include races (3k / 5k / 10k) in these meetings.

An end-of-season relays meeting will be held on a Saturday in early September, in conjunction with the AGM / Training Day on the next day. Sponsorship of about £3,000 will be required, and the venue selected will provide suitable overnight accommodation at reasonable cost.

We shall measure the success of our race programme, including the initiatives with the Reebok Challenge, HSA and other sponsors, by the percentage of the 'Top 100' ranking times that are set our races. A level of 50% is deemed to be an appropriate target for 1995.

National Committee

The present Committee consists of: President, Chairman, Vice Chairmen, National Secretary, Treasurer, Membership Secretary, Development Officer, Magazine Officer, Regional Secretaries, Vice Presidents and Life Members.

As it has proved extremely difficult to get full committee meetings, it is proposed that the National Committee will delegate certain 'day-to-day' tasks to a Standing Committee. This will comprise the Chairman, Treasurer, Secretary and at least one other elected officer or committee member, and will focus on:

i race organisation;
ii training courses;
iii sponsorship;
iv magazine preparation and publication.

The Standing Committee will report to the National Committee on a quarterly basis, and will also be responsible for preparing an annual plan, to be approved by the National Committee and subsequently presented for approval at the Annual General Meeting.

Provided we have sufficient resources, it is intended to co-opt members onto the Committee to fill the following positions:

i sponsorship officer;
ii coaches' representative;
iii sports medicine specialist;
iv sports science specialist;
v athletes representatives, male and female.

The Treasurer will be responsible for allocating funds between activities, and for ensuring that the Annual Plan does not overstretch the BMC finances. Conversely, the BMC must not compromise its non-profit making status. National Committee meetings will be held quarterly (in January, April, July and October) at venues in the North West, South, Midlands and again in the South, on either Saturday

BMC *Development Plan*

or Sunday afternoons as decided at the fixture conference.

Sponsorship

The continued support of the FSA for our junior development programme will be sought. We will seek extension of this support to include warm-weather training as well as the continuation of the altitude training initiative. Application for, and administration of, the FSA Grant will be under the direction of the Chairman after programme approval by the National Committee.

Regional Secretaries will be free to organise sponsorship for their own races as they judge the opportunities allow. Local sponsorship by way of prizes for the individual races in the National race meetings will be sought.

The services of a committee member experienced in organising sponsorship will be sought to obtain the financial support needed for the 'National Squad' meetings and for the Relays / AGM meeting.

As a general guideline, the Committee will steer away from commercial sponsorship that promises goods or services from a third party. We will always ensure that third-party offers are available to all members without further financial commitment, that no unreasonable time limits are imposed and that cash alternatives are always available.

Vision 2000

During 1995 the Chairman, on behalf of the National Committee, will prepare a long-term development plan aimed at ensuring that an elite squad of middle-distance athletes is available for selection for the 2000 Olympic Games and beyond. This will entail a major expansion of our junior development plan.

All initiatives will be closely co-ordinated with those of the BAF, and it is hoped to continue the support of the Foundation for Sport and the Arts.

BMC News

The club journal will be brought out twice a year in March and October. The primary purpose of the *BMC News* will be to support the BMC's annual objectives. Other objectives will continue to include:

i improvement of coaching knowledge;
ii reporting of BMC race results;
iii notification of club events;
iv development of the 'club spirit';
v entertaining the membership.

Training Camps

The purpose of the training camps is to expose both coaches and athletes to different training methods. Finances permitting, it is proposed to hold four training events each year:

i national training day;
ii junior endurance weekend;
iii altitude training;
iv warm weather training.

The Standing Committee will nominate BMC Officers to take responsibility for each of these events. Each of these events is to be financially self-supporting unless external sponsorship is achieved.

BMC 'Spirit'

BMC members are expected to be totally committed to the aims of the club, those of raising the standards of British middle-distance running, of putting on fast 'race-for-pace' races, and of following the five-pace training philosophy. This is the BMC Spirit.

The very nature of the BMC is that of continual experimentation. If we fail to take on new ideas, we will fail in our objectives - but the foundation of the BMC is the BMC Spirit, and that spirit is the route back to world supremacy.

BRITAIN'S SUB-FOUR MINUTE MILERS

1954 Roger Bannister
1955 Chris Chataway, Brian Hewson
1956 Derek Ibbotson
1957 Ken Wood
1958 None
1959 None
1960 Gordon Pirie
1961 None
1962 Bruce Tulloh, Stan Taylor, Mike Berisford
1963 None (BMC Founded)
1964 Bill McKim, John Whetton, Andy Green
1965 Alan Simpson, Mike Wiggs, Anthony Harris, John Boulter, Walter Williamson
1966 Neil Duggan, Derek Graham
1967 Allan Rushmer
1968 Maurice Benn
1969 Ian McCafferty, Ian Stewart, Peter Stewart, John Kirkbride, Jim Douglas, Ray Roseman.
1970 Chris Mason
1971 Brendan Foster, Norman Morrison, Adrian Weatherhead, Roy Young
1972 Bob Maplestone, Andy Carter, Ray Smedley
1973 Nick Rose
1974 Ron Martin, Steve Ovett, Frank Clement
1975 Barry Smith, David Moorcroft, Jim McGuinness, Tony Settle, David McMeekin, Ron McDonald
1976 Glen Grant, Paul Lawther, Sebastian Coe
1977 Ron Speirs, Mike Kearns, John Robson, Alan Mottershead, Lawrie Spence, Ken Newton
1978 Graham Williamson, Steve Cram, Tim Hutchings, Mike McLeod
1979 Chris Sly, Tony Leonard, Steve Emson, Mike Downes, Sean Cahill, Malcolm Plant, James Espir
1980 Steve Flint, Ian Stewart II
1981 Geoff Smith
1982 Alan Salter, Jack Buckner, Dave Clarke, Dave Lewis, Colin Reitz
1983 Graham Fell, Geoff Turnbull, Eamonn Martin
1984 Peter Elliott, Steve James, Steve Martin, Rob Harrison, Mark Scruton, John Keyworth, Steve Crabb, Gareth Brown
1985 Clifton Bradeley, Ashworth Laukam, Tim Redman, Gary Staines, Pat Chester, Adrian Callan, Alistair Currie
1986 Gary Taylor, Chris McGeorge, Neil Horsfield, Mark Rowland, Neil Ovington, Roger Hackney, Mark Kirk, Adrian Passey, Paul Larkins, Peter McColgan, John Gladwin
1987 Jon Richards, Andrew Geddes, Malcolm Edwards
1988 Colin Ridding, Seamus McCann, Ian Hamer, Steve Halliday, Tony Morrell
1989 Kevin McKay, Mark Howard, Rob Denmark, David Heath, Paul Davies-Hale, Simon Fairbrother, Craig Mochrie, Matthew Yates
1990 Simon Mugglestone, David Sharpe, Nick Hopkins
1991 Johan Boakes, John Evans, Davy Wilson, Billy Dee, Ken Penney, John Nuttall, John Mayock, Joe Dunbar
1992 Andrew Keith, David Strang, Jason Dullforce
1993 Matthew de Freitas, Ian Gillespie, Tom Buckner
1994 Steve Green, Gary Lough

1995 We have the talent to get another ten names here next year. Will we?

Achilles Writes ....

The most influential column in Athletics

WHAT A SHAMBLES

If there is one word that adequately sums up the 1994 season, it has to be this, "shambles". It all began last Autumn when the fixtures list was announced, then we had the Andy Norman enquiry after the Cliff Temple suicide, and finally we had the mass hysteria over whether or not the whole sport overdosed on *Lemsip* before competitions. My lawyers tell me that I am not allowed to comment on whether these last two media events are connected.

THE EVILS OF TELEVISION

The 1994 Fixture List showed once again that those who decide on fixtures, selection policy and sponsorship have little or no idea of just what it takes to be a successful middle-distance athlete. You didn't have to be a genius to realise that having the AAA's in early June when the Championships were in August was not going to result in your best athletes going to the games.

It takes about twelve weeks to reach your peak. That peak often lasts no more than three or four weeks, and so athletes in form in June are unlikely still to be in form in August. We said as much in the last *BMC News*, and although Peter Coe explained how one could attempt the difficult task of peaking twice, it saddened us to be proved right.

We were told that the reason for the AAA's being so early was that television required athletics to arrange its schedules around the Football World Cup. How totally pathetic, when England didn't even get to the finals! Those responsible for allowing television to get away with such demands should be removed from office - their short sighted decision wrecked the season for hundreds of quality athletes.

REPLACE SPORTS JOURNALISTS

The incredibly righteous and 'holier than thou' attitude of many sports journalists during the argument as to whether Britain's ladies should compete in the World Cup at Crystal Palace has done untold damage to the perceptions of all the parents of young athletes who might join the sport.

Considering these journalists are meant to be 'in the sport', they must surely share the same goals as all the rest of us coaches and athletes, that of raising British athletics to world supremacy. Destroying the next generation of athletes by their desire for short term alarmist headlines means that they no longer deserve any respect.

We don't want people like them in the sport. They should be dismissed by their paymasters. It was very noticeable that the old masters of athletics journalism, those who really understand the sport, stayed out of the debate completely.

DREADFUL TV COVERAGE

For a sport that generated so much adverse media hype, actual TV coverage during 1994 was very sparse, consistently shown at the wrong times, and suffered incredibly inane commentators.

We recognise that action in most major championships happens during the day when most athletes are at work. Athletes then go to train, and get home about 10pm. That is when they want to watch all the action, build-up, heats, finals, interviews. But this year, during the European Championships, there were no evening highlights.

They always have cricket highlights at 11pm during every test match - why can't they do the same for Grand Prix and for major championships? Why should athletes have to cut short their training sessions on order to hurry home to catch TV coverage?

Similarly, the Grand Prix shown by ITV were condensed to just one hour, and concentrated almost entirely on Christie / Jackson / Gunnell. What about the other athletes there?

WHAT WOULD YOU DO?

Let's talk completely hypothetically here. What would you do?

Imagine that you had been training hard for many years for a major games, and had been successful in being selected to represent your country. Imagine also that you *knew* that you have never taken drugs and were totally innocent of taking any banned substances. What would your reaction be if you were told only hours before your event, the greatest moment in your sporting career to date, that you were being withdrawn because one of your drugs tests from two months ago had proved positive?

Would you, the innocent athlete, 1) accept the decision passively, or 2) insist on competing? If proven guilty, you can be disqualified at a later date. If proven innocent, the IAAF aren't exactly going to have a re-run for your benefit.

If you insisted on competing, how would they stop you? Who would stop you? Your name is in the programme - would the starter refuse to start the race if you lined up? Would the team management try to get some bouncers to escort you off the track? It would be interesting to see what might happen.

NAIVE 1?

Statement for the record. In all the years that Achilles has been involved in the sport, he has never been offered drugs, never been shown how he could obtain drugs, or even heard of other athletes being offered drugs. Does this mean Achilles is very naive, or just that he has led a very sheltered life?

NAIVE 2?

What people don't realise is that there is little evidence that steroid abuse significantly enhances MD performance in the short-term. To have a noticeable effect, you would need to take the stuff for six months or so, and then there be unpleasant side-effects such as a deeper voice, and in the case of women, a beard. Rather noticeable, don't you think?

With effective random-testing, anyone taking these substances on a regular basis *must* be caught. Effective strength training works just as well, is a lot more fun, and avoids stress and anxiety when the athlete is tested. So, why do athletes even think about taking steroids? Who is naive now?

LEGAL AIDS?

Why is it that almost without exception, 'legal' aids not only taste horrible but also are incredibly awkward to take? The creatine supplement *Ergomax* requires you to take two tablets three times a day. Fine, apart from the fact that these tablets are so huge that they cannot dissolve in coffee. In fact, they will not dissolve in anything less than a pint of boiling water! Who wants to drink six pints of unpleasant-tasting boiling water each day? Achilles thinks he would rather do one of Frank's sessions. Another product that Achilles was asked to try was *Juice Plus*. It is truly undrinkable! Two products that pass the Achilles taste-bud test are *Redoxon* (vitamin C) and *Powerbar* (carbohydrate) - but the best answer must surely be a healthy balanced diet.

Achilles Writes ....

MORCELI YET AGAIN

Virtually ignored by ITV at the time, Morceli's last lap of 51.9 secs in the 5,000m at Zurich has changed peoples' perceptions of what is possible. How can someone run 4,600m in 12:11 (63.6 secs per lap) and then run a sub 52 second final lap? How low must his lactate acid level have been when he started his final lap? What does that make his VO_2max and his aerobic efficiency?

Morceli has now been world ranked number one at 1,500m / 1 Mile for five consecutive years, a feat never previously achieved, and yet still somehow one cannot not regard him as the *complete* middle-distance runner. There is always that nagging doubt after his failure in the Barcelona Olympics. And if he is so dominant, why doesn't he attempt the 800m / 1,500m double that used to be so commonplace?

Morceli needs to run 1:42 / 2:12 for 800m / 1,000m next season to convince the few remaining sceptics, and then should aim for double gold in Atlanta. That will silence all critics.

FIVE-PACE THEORY - AGAIN

Scarcely a month goes by without some coaches knocking the five-pace-theory, as regularly described in the *BMC News*, as being out-of-touch and out-of-date. On the face of it they are right - any theory first proposed in 1972 must surely be due for revision. Then again, Einstein's work on relativity still remains unchallenged.

What people don't realise is that the five-pace theory *has* evolved, and the 1994 version in the last issue of *BMC News* is subtlely different to the 1972 version, encompassing training throughout the year, and includes lactate response runs, sprinting and strength training as enhancements to the original concept.

We just think these coaches are a) jealous that they didn't think of the theory, and b) furious that after twenty years they can't think of a better theory. We agree that a new theory is long overdue - but we can't see it happening just yet.

For the record, the BMC will continue to promote the five pace theory until such time as someone comes up with a better theory that is: a) more accurate; b) equally soundly based on a physiological basis; c) equally simple to understand; d) equally easy to implement.

Now, for all these critics, how many have theories of their own? Achilles can't recall having read any that tried to present a complete picture. For the next issue of *BMC News*, we challenge all critics of the five-pace theory to come out of the closet and be counted. State how you do things better, and explain how your theory is superior by the four criteria above. We will print all those which are good enough.

We will be delighted to be proved wrong, because if we are, we will have encouraged the first original thought amongst British Coaches for over 20 years! In the meantime *we* will review our thoughts in light of the articles by Labuschagne and McCausland - the next issue will be a scorcher!

SPONSORS

Last Autumn (1993) the BMC made an approach to a well-known snack food company seeking sponsorship of the 1994 BMC Race Programme. We had no joy at the time, but nine months later it was somewhat peeving to find that we had been rather too successful in selling the concept of athletics - KP only went and sponsored the AAA's!

SERPENTINE RC

The Editor makes no secret of the fact that his first claim club is Serpentine RC, a club that caters for all standards, no matter how slow, no matter what age. Indeed most issues of the *BMC News* have contained at least one gratuitous mention of Serpentine!

Serpentine RC was founded in 1982 out of a group of friends who got together via Running Magazine to run the London Marathon. Anyway, back in 1990, Serpentine made an application to the SEAA to enter the Southern League - the team consisted mostly of veterans, and the initial results were not good. The only teams they beat that summer were the incomplete ones in the bottom division, but a few landmarks were achieved, notably the first runner under 60 seconds for 400m and the first 4 x 400m relay under 4 minutes *(hint - the Editor was involved in both performances)*!

After recruiting a couple of unattached runners at the London Road Runners Mile in Hyde Park, a small group decided that to improve on the track they ought to do some track training. So, one Thursday they went to Battersea Park, where they encountered a Mr Frank Horwill. The rest, as they say, is history. Three sessions a week and the club has just been promoted to Division 5 as Champions, and they even have a second team in Division 7. In 1994 both men's and women's vets teams reached the Southern Area Finals.

Obviously there have been new signings and some new blood, but all of the original squad are still with the club. They are all the wrong side of thirty, and are all performing significantly better than they were three years ago. The secret? The motivation of a good coach, and Five-Pace Training. If implemented correctly, it never fails and works with athletes of all standards.

WIMPS

The Editor had a lot a negative feedback from his lead article last issue. "Oh, it is too difficult" the wimps complained. Well they clearly didn't read the article very closely. It clearly stated in italics "*it is meant to be severe - it is not meant to be easy*". Making the transformation from a 4:14 to 4:07 runner can never be easy.

Realistically, however, one session a day with a quality mileage of under 30mpw, and a slow morning run shouldn't be beyond most athletes with international aspirations, no matter how severe the sessions. It is interesting to note how well the article has been received overseas - it has been reprinted by the South African Milers Club Journal and been used with success in Belgium (see letters page 27).

As regards the athlete to whom the schedules were tailored, she missed a lot of spring training due to a work-related back injury. Turning her attentions to 800m, using the schedules, she was able to improve her speed significantly, and came out to run an 800m pb in her *first* race of the season. She then improved that pb further in the AAA's final, and only narrowly missed out on selection.

OUR TRACTOR

Sometimes, however, the BMC does get it wrong. Many keen readers noticed our deliberate typo on page 27 of the last issue, when we omitted the word 'tyre' from the first day of the sprinting schedule. However, somehow Achilles can hear Frank actually shouting "Sprint 50m x 6 pulling a car or tractor behind!"

1994 in Pictures....

Wythenshawe 17th May

W800: Diane Modahl wins in a new BMC Record of 2:03.7

Photo by MFM

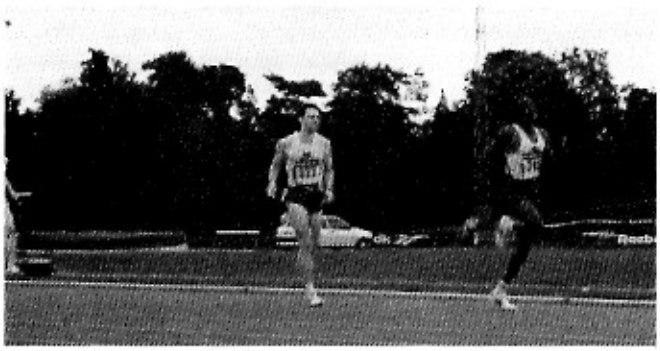
M1500: The most exciting BMC race in years - Gary Lough (84) just holds off Steve Cram (83) in what we hope isn't his last great race.

Photo by MFM

Reebok Challenge - Crawley 29th May

W1500: Debbie Gunning (26), Sonia McGeorge (24), Michelle Faherty (hidden) and Alison Wyeth (21) in a very tight finish.

Photo by MFM



M800: Seb Coe's eighteen year record finally falls to Benson Koech 1:46.83. Andrew Lill finishes second.

Photo by MFM

M1500: Davy Wilson (353) just about to unleash his kick to hold off Ian Gillespie (357). Neil Caddy in 6th set the fastest time of the year by a UK Junior, and World 5,000m champion Ismael Kirui could only finish 11th!

Reebok Challenge - Solihull 21st Aug

W800: Angela Davies (2) pulls away to win in a BMC record of 2:03.67

Photo by MFM

M1500: Ian Grime (30) following Matt Hibberd's frantic 1:57 pace on the way to a BMC record of 3:40.35.

Photo by MFM

M3000: Bobby Farren (74) biding his time on the way to yet another BMC record of 7:56.24. Darius Burrows U20 was third in 8:01.26, which ranked him third fastest junior in the world!

Photo by MFM

1994 in Pictures....

FSA Relay Meeting - Oxford 17th September

All photos by Ken Hickey

M4x800: Michael Gooch (left) just outkicks Chris Blount. Photo by Ken Hickey

M4x800: The new Welsh Record holders: (from left to right) Tom Cordy, Matt Kinnane, Steve Mosley and Martin Jones. Photo by Ken Hickey

M4x800: The victorious England Squad: (from left to right) Neil Williams, Karl Wright, Michael Gooch and Mark Barrow. Photo by Ken Hickey

M4x800: The brave National Junior Squad: (from left to right) Ben Reese, Chris Blount, Ian Bowden and Alan McDougall. Photo by Ken Hickey

FSA JM1500: Robert Morris leads from Ian Robertson Photo by Ken Hickey

FSA W Mile: Wendy Farrow leads from Charlotte Goff Photo by Ken Hickey

M10000: The start of the 10,000m, won by John Lisiewicz (right). Photo by Ken Hickey

4x1 Mile: Nick Comerford leads Neil Caddy Photo by Ken Hickey

4x1 Mile: Tom Buckner pulls away from Steve Mosley. K Hickey

4x1 Mile: Spencer Barden running a solo 4:03. Photo by Ken Hickey

4x1 Mile: Ian Grime giving it all on the final lap. Photo by Ken Hickey

Twelve Things You Should Know About ...

by Frank Horwill

Twelve things you should know about ...

Cross-Country Running

1) In 1984 the first 5k of the World Cross-Country Championships for men was covered in 14:11, in 1994 it was covered in 13:46. It is expected that the WCCC in 2004 will see the first 5k covered in 13:21. The WCCC for women in 1984 was the first time that the first 3k was covered in under 9:30. In 1994 it was reached in 9:05. In the year 2004, the first 3k is expected to be recorded in 8:40.

2) The WCCC distance for men is analogous physiologically to the 10k event on the track or road, i.e. it is 90 per cent aerobic. The WCCC distance for women is at present (1994) analogous to the 5k on the track or road, i.e. it is 80 per cent aerobic.

Aerobic running includes :

- jogging (100%)
- marathon pace (98%)
- half-marathon pace (94%)
- 10k pace (90%)
- 5k pace (80%)
- 3k pace (60%).

Anaerobic running includes:

- 1,500m pace (50%)
- 800m pace (33%).

It will be seen that the 10k distance involves 10% anaerobic running, and the 5k 20% anaerobic running.

It is therefore physiologically indicated that one of these anaerobic sessions must be included in the 19 day cross-country schedule at a ratio of 9 aerobic sessions to 1 anaerobic for men, and 4 aerobic sessions to 1 anaerobic one for women.

3) Two South African females who finished in the first six of the 1994 WCCC were running out of season - in South Africa it was the last month of the track season.

Both runners had specialised in racing from 3k to 10k during the track season and both had previously been coached by the same coach, Peter Labuschagne.

4) In Belgium on Christmas Day, a major cross-country international is televised, it is to the Belgians what the London Marathon is to the British. The financial rewards for the first three places are extremely high.

5) Tim Hutchings, second in the 1989 World Cross-Country Championships, beat every member of the Kenyan team bar one. Over the last 1,000m he was rapidly catching the leader. In preparation for this race Hutchings trained at altitude in Kenya three times for a month's duration each visit within a year. He approximately trained one month up at altitude and two months at sea level in Britain.

Hutchings religiously did a 5k pace session once a week at 13:20 pace (64 secs / 400m). This was either 4 x 1 mile in 4:16 with *one minute* recovery, or 6 x 1,000m in 2:40 with 30 secs recovery, or 7 x 800 in 2:08 with 30 secs recovery. Also, each week, he ran fast up a 400m long hill 1 in 10, until 5k of *ascents* had been achieved.

6) Laura Adam (GB), much under-rated cross-country runner who was the first female home for Britain in the 1994 WCCC had not done a personal best time for 5 years before joining Frank Horwill's squad. Six months of the above type work saw her make the GB cross-country team for the first time, a position she filled regularly for the next 5 years.

7) Frank Horwill's group of under 20-year-old athletes trained at Crystal Palace from 1969 to 1980 succeeded in winning sixteen English Schools Cross-Country Championships, dividing the winter up into three parts, each of two months.

During the first two months the athletes did one track session a week on Sunday at 5k pace one week and 3k pace the next. In the second two months they still alternated 5k and 3k pace work on Sundays and trained at 1,500m pace on Tuesday. In the third and final phase of two months, his athletes trained at 5k or 3k pace on Sunday, 1,500m pace on Tuesday and 800m pace on Thursday. A feature of this group's training was that the *warm-up* before track sessions consisted of 15 minutes running up and down the 800m, 1 in 10, hill on the road outside the stadium.

Another feature of this squad's training was that they trained all day on Sunday, from 11am to 1pm, then from 1:30pm to 3.30pm. The reason for this was that many of the athletes attending on Sunday had travelled up to 150 miles to be present, and it was thought that all-day training was better value for the time expended in travel.

The afternoon session included heavy weight-training one week (heavy weights, small number of repetitions), and the next week lighter weights with a large number of repetitions. This was followed by a 2-man paarlauf (15 mins), 3-man relay (10 mins), and 5-man relay (5 mins). The day concluded with 5-a-side football or volley-ball or basket-ball with net-ball rules (no running with the ball). This group include Tim Hutchings, twice WCCC silver medallist 1985 and 1989.

8) Here is an example of a training cycle for 10k cross-country for men. The figures in brackets denote approximate mileage inclusive of a 10 mins warm up run based on once a day training:

Day 1	Aerobic (100%) - 2 hour jog. (14)
Day 2	Aerobic (98%) -1 hour steady run. (9)
Day 3	Aerobic (80%) - Fast 5k run preceded by 10 mins jog or 4 x 1 mile at 5k pace with 1 minute rest. (6)
Day 4	Aerobic (100%) - 1½ hours jog. (10)
Day 5	Aerobic (98%) - 1 hour steady run. (10)
Day 6	Aerobic (60%) - 3k fast run preceded by 10 mins jog or up to 8 x 800m at 3k pace with 90 secs recovery. (5)
Day 7	Rest
Day 8	Aerobic (98%) - 1 ¼ hours steady. (9)
Day 9	Aerobic (100%) - 1 hour jog (10)
Day 10	*Anaerobic* (50%) - 5 x 600m at 1,500m pace with the same *time* recovery as achieved in the rep. e.g. run 90 secs, rest 90 secs. (4).
Day 11	Start cycle again ensuring that after the sixth day of consecutive training, the seventh is rest.

In the course of 10 days a male will do 77 miles, of which 34 miles will be 100% aerobic (recovery runs), 28 miles will be 98% aerobic, 6 miles at 80% aerobic, 4 miles at 60% aerobic and 4 miles at 50% anaerobic.

9) Here is an example of a training cycle for 5k cross-country for women. The figures in brackets denote approximate mileage inclusive of a 10 mins warm up run based on once a day training:

Day 1	Aerobic (100%) - 1½ hours jog. (10)

Cross Country ...

Day 2 Aerobic (80%) - Fast 5k run or 4 x 1,500m at 5k pace with 1 min recovery. (5)
Day 3 Aerobic (98%) - 1 hour steady. (9)
Day 4 Aerobic (60%) - 3k fast run preceded by 10 mins jog or 6 x 1,000m at 5k pace with 45 secs recovery. (6)
Day 5 Rest
Day 6 *Anaerobic* (33%) - 8 x 200 at 800m pace with 100m jog recovery. (3)
Day 7 Aerobic (100%) - 1½ hour jog. (10)
Day 8 Aerobic (98%) - 1 hour steady run. (9)
Day 9 Aerobic (80%) - Fast 5k run preceded by 10 mins jog or 6 x 1,000m at 5k pace with 45 secs recovery. (6)
Day 10 Aerobic (100%) - 1¼ hour jog. (8)
Day 11 *Anaerobic* (50%) - 6 x 500m at 1,500m pace with the same *time* recovery as reached in the rep., e.g. rep run in 90 secs, rest 90 secs. (4)
Day 12 Rest
Day 13 Start cycle again. Ensure a day of rest before the first anaerobic session.

During the course of 11 days the female will cover 69 miles. Of this total, 7 miles will be anaerobic, 5 miles at 5k pace, 4 miles at 3k pace, 28 miles jogging, 18 miles steady.

10) It has been reported that the carbohydrate intake of cross-country runners in the UK is inadequate. A carbohydrate snack should be taken *immediately* after all training.

11) The world's best cross-country runners race less than the British. Some British runners have recorded twenty-six races before the WCCC. Hutchings averaged seven races before the WCCC.

12) Crescendo racing has a wide following among African cross-country specialists. There are two types of crescendo racing:-

a) The races increase by one each month and are at maximum at the WCCC, e.g.:

- October - 1 race;
- November - 2 races;
- December - 3 races;
- January - 4 races;
- February - 4 races;
- March - 4 races - total 18.

b) The races increase by one every two months;

- October - 1 race;
- November - 1 race;
- December - 2 races;
- January - 2 races;
- February - 3 races;
- March - 3 races - total 12.

Easy to Follow Cross Country Plan (Men)

October / November	December / January	February / March
6 days a week training	6 days a week training	6 days a week training
5 miles a day average	6 miles a day average	7 miles a day average
One run of 10 miles	One run of 12 miles	One run of 14 miles
Five runs of 5 miles	Five runs of 6 miles	Five runs of 7 miles
One of the 5-mile runs up and down a long hill	One of the 6-mile runs up and down a long hill	One of the 7 mile runs up and down a long hill
One 5-mile session at 5k pace	Two of the 6-mile runs at 5k and 3k pace	Three of the 7-mile runs at 5k, 3k and 1,500m paces

Allow 2 miles warm up run before 5k, 3k and 1500m pace sessions. Allow one mile warm down. If the 5k time is not known, multiply the 1,500m time by three and add 3 minutes.

Typical Pace Sessions

Best 5,000m = 15:00	Start with 3 x 1600 with 1 minute rest - add 1 x 1,600m every 2 months
72 secs / 400m	Or 5 x 1,000m with 45 secs rest - add 2 x 1,000m every 2 months.
	Or 6 x 800m with 30 secs rest - add 2 x 800m every 2 months
Best 3,000m = 8:30	Start with 3 x 1500 with 3 mins rest. Add 1 x 1,500m every 2 months.
68 secs / 400m	Or 16 x 400m with 30 secs rest. Add 4 x 400m every 2 months.
	Or 10 x 600m with 45 secs rest. Add 2 x 600m every 2 months.
Best 1,500m = 4:00	Start with 1 x 400m, 30 secs rest, 1 x 800m, 60 secs rest, 1 x 300m.
64 secs / 400m	5 mins rest and repeat. Add 1 set per 2 months.
	Or 3 x 500m with 1 minute rest. 5 mins rest and repeat.
	Add 1 set per 2 months.
	Or 1 x 1,000m with 2 mins rest + 1 x 500m. 5 mins rest and repeat.
	Add 1 set per 2 months.

Hill Sessions

These are in the anaerobic range. One week just run up and down anyhow. Next week attack the hills fast and jog down recovery.

For the Mileage Mad Athlete

Have a 4-week cycle of severe, active rest, moderate, light, which progresses:-

Week 1	Severe - 75mpw.
Week 2	Active rest - 19mpw.
Week 3	Moderate - 57 mpw.
Week 4	Light - 37 mpw.
Week 5	Severe - 94mpw.
Week 6	Active rest - 24 mpw.
Week 7	Moderate - 69 mpw.
Week 8	Light - 47 mpw.
Week 9	Severe - 117 mpw.
Week 10	Active rest - 29 mpw.
Week 11	Moderate - 87 mpw.
Week 12	Light - 58 mpw.

The key to the above is:-

i Active Rest week = 25 per cent of the severe week.
ii Moderate week = 75 per cent of the severe week.
iii Light week = 50 per cent of the severe week.

The severe week increases by 25 per cent per month until it doubles the starting point.

Note that a severe week is *always* followed by an active rest week.

Twelve Things You Should Know About ... (3)

Twelve things you should know about ...

Motivation

1) The word "motivate" means to supply a motive, which in turn means the initiation of movement, or to provide a moving or propelling power for action or a course of action.

2) Psychologists are agreed that there are two types of motivation: 1) Extrinsic - coming from another person or source, 2) Intrinsic - coming from within oneself.

3) Some psychologists believe that extrinsic motivation works in only two ways:

- those athletes who can be motivated:
- those who cannot.

For example, a 15-year-old boy was told by a coach on a Southern Counties Amateur Athletic Association course that he would gain a Great Britain Junior International vest at 400m / 800m by the time he was 17 years of age. The boy achieved this goal in the stated time.

Afterwards, he told the coach in question, "Until you mentioned that I could become a GB International, it had never entered my head that such a thing was possible. I went away from the course confident that I could do it because you had said I was capable of it."

However, another boy of the same age and ability, was told the same thing. Not only did he not achieve the coach's forecast, he gave up the sport of athletics shortly after. One was inspired and the other frightened of the consequences of not being able to live up to expectations.

This leaves the motivator in a quandary as how far it is useful to prophecy future performances. Peter Snell (NZ), former 880yds, 800m, mile, world record holder, and double Olympic gold-medallist, stated that he was irritated by his coach's forecasts of time in forthcoming races. On the other hand, Peter Coe sat down with his son, aged fifteen, and discussed the gaining of world records and Olympic medals, to be executed eight years later.

4) Extrinsic motivation or motivators can come from various sources. The common factor is that the perpetrator shows interest in another person or persons. A physical education teacher is often the first person in our sporting lives to encourage us to progress in a particular sport. The next stage is when we join a club specific to our sport. This is a motivational factor because we are among those who share our interests. Most clubs have a coach and his / her role may make or mar our potential. For a coach to motivate his charges, several things have been documented as essential:-

i athletes prefer coaches who once competed in the same sport as themselves.

ii athletes prefer coaches who look reasonably fit i.e. one major sin is that he / she is grossly overweight.

iii athletes like regular communication with their coach. If the athlete lives near to the coach they prefer face to face contact at least once a week. If the athlete lives too far away for this to be practical they prefer written or telephonic communication on a regular basis, particularly while teenagers. One world-class American marathoner in the 1960's who was in England for several years received taped instructions from his coach in the USA.

iv contrary to popular belief, the possession of a paper qualification for coaching does not carry as much kudos with athletes as was once thought. However, the words of Arthur Lydiard, famous coach and author, to coaches should be borne in mind. "Know your stuff, and make sure that your athletes know that you know your stuff."

v a business-like approach to coaching is needed. If a training session is due to start at a certain time, it must start at that time.

vi the keeping of data on each athlete makes the athlete feel part of a team. The results of the BMC Fitness Tests, published frequently in the *BMC News*, and carried out at least twice a year, are a powerful motivational factor, especially when it can clearly be shown that since the last battery of tests there has been a significant improvement.

vii midst the serious side of coaching there must always be a place for humour and a sense of proportion. A bad race by an athlete is not a disaster in a career, possibly of 300 races.

The coach must never forget his true role - to improve athletes year by year. The latest statistics suggest that the 800/1,500m runner reaches his/her best times at age 24. The 3k/5k runner at age 26. The 10k/marathoner at age 28+. This is not to say that those with more senior years cannot achieve their maximum potential but it does reveal a trend. It is fortunate that we have great exceptions to the rule, men of age 40+ running a sub-4 minute mile or sub 2:12 for the marathon. As these years of great potential approach it may be the time for the coach to analyse his approach and apply more pressure. It should be carefully noted that the ages of maximum potential apply to times (Coe, Ovett and Cram, all ran their best times at age 24).

5) Intrinsic motivation can be sparked off in numerous ways. In the 1956 Melbourne Olympic Games, a 15 year-old boy watched the epic 10,000m battle between Vladimir Kuts (USSR) and Gordon Pirie (GB). Both men were equal on paper with regard to times, Kuts, used to declining recovery times when doing repetition running, decided that he must make things uncomfortable for Pirie by inserting a fast 400m after every mile in the race. After four such efforts, Pirie has not been shaken off, but it had cost him dear. Kuts in desperation, was thinking, "I'll do one more, if he comes with me I've had it". Pirie was thinking "I've kept with him and it's killed me, If he does one more burst, I've had it". Kuts did one more effort and won, whereas an exhausted Pirie slipped back out of the medals. As the 15-year-old boy left the stadium with his father, he turned to him and said "I'm coming back here in four years time to win the 1,500m in the same way as the Iron Man from Russia".

A person can be rich or poor, educated or illiterate, black or white; on the running track everyone starts equal. In the 1930's the negro was poor, badly educated and racially discriminated against, but in running he was an equal. This was the great motivational factor to succeed in his own right. As soon as Jesse Owens became a national hero with three gold medals, others followed, and the negro could succeed. The great motivational factor in Kenya is to take up running to escape poverty (the national average wage is £27 a month), and combined with a climate conducive to performance, there is no shortage of available talent. The same, more or less, applies to coaches. A coach

Motivation ...

can be a road-sweeper by day and a successful coach by night, the motivation to succeed and demand respect is ample.

6) The role of negative motivation cannot be over-looked. Its zealous use can often lead to the break-up of a coach/athlete relationship, but the athlete is spurred on to greater heights. When an athlete is told he *cannot* reach something, e.g. "The day you break 2 minutes for 800m, I'll eat my hat." - it is a clear declaration that the task is impossible in the eyes of the speaker, but the athlete can be so enraged by it that he / she sets out to prove him wrong. As a boy of 16-years old, Steve Ovett was told, "You haven't the right attitude to make world-class". Eight years later, the man who uttered these words presented him with a BMC plaque to commemorate his world record 1,500m run. Did those words ring in Ovett's ears over the years?

7) Self motivation is more important that external inspiration. A trainer can lead a horse to water, he cannot make him drink. Many sports psychologists "jump the gun" with their suggestions of self-improvement. They talk of having a specific target in mind which must be achievable and challenging, then allocating a time scale for its execution. This is sound advice as far as it goes, but the important point to ask is, "What is the state of the union? (Abraham Lincoln). This means taking a close look at one's assets and liabilities. Your assets are:-

- You have a mind;
- You have a body;
- You possess a will.

You run because you like it, therefore you will like it more if you get better at it. Your body will express what your mind dictates, to a point. Your mind may tell you that you want to be a world-class sprinter, but for all that you require some innate talent. The BMC 40yds (36.6m) sprint test will reveal if you have that. If, at age 17, you can record less than 4.9 secs (male), you've got the talent, if you record less that 5.4 secs (female), you are gifted. Likewise if you can run 400m in less than 53 secs (male) and less than 59 secs (female). If you cannot record these, no amount of sprint drills, weights, circuits, or diet will make you a world-class sprinter. You can improve, yes, but not to world class. We can also say the same applies to two-lap running, if you lack that innate speed the chances of making world class are extremely slim.

8) A runner can improve endurance dramatically in a few months, the same percentage of improvement in sprinting will take years. You can assess your current endurance ability by running for 15 minutes around a track and noting the total distance covered. The minimum is 5,000m for men and 4,600m for women (under 30 years of age). Take stock of your assets and weaknesses and aim to improve both within six months. British women runners possess inherently weak leg-strength for world-class 800m running. A strong motivational factor is to get down to less that 10 hops on each leg for 25m distance. Every other day work on leg-strength is required to rectify this weakness.

9) We have dealt with the mind and its ambitions and the body to carry out those desires. Now we must look at something we cannot touch in our body or mind - the invisible all-powerful will. It is an axiom that minor successes lead to greater ones. We should endeavour to feed our will with minor, useful successes and those successes as they grow in stature, will lead us, motivate us, to tasks thought to be beyond our ability. Here are three simple will-power exercises that you can start tomorrow, select *one* only.

i Start with one press-up first thing in the morning, add one each day until you reach a maximum.

ii Do a morning run of 30 mins before breakfast as well as an evening run. The following week add another morning run plus an evening outing. In six weeks time you will be training twice a day with the morning run of 30 minutes, the first of 12 running sessions a week.

iii If you cannot hop 25m in 10 hops each leg, do this exercise every other day until you can record ten hops each leg. The will dictates to the mind and the mind to the body.

10) Motivation is closely linked with success, this particularly applies to training sessions and favours the use of one particular session every two or three weeks. For example, if a 5k runner is doing 3 x 1,600m with 1 minute rest at target race pace every 14 days and improves the time considerably after the fourth attempt, the coach should attach great importance to that achievement and say so. The coach can then discuss the method of *progression* (he who trains the same remains the same). This can be:

i speed up the miles;

ii halve the recovery time;

iii increase reps by one.

11) Motivational gimmicks have been denigrated in some areas of sports psychology. However, the writer has seen at first-hand that they can do only good. These include:-

i the award of a special vest to the athlete in a squad for being the best *trier* of the week.

ii splitting a group into small squads based on times, with different coloured vests for each group. Promotion from one group to another to be marked as something special.

iii members of one squad assisting a lesser talented athlete in a race by running at the target pace.

iv the writing of the word "WILL" with a marking-pen on a postcard and sticking it up in the bedroom after a will-power exercise has been completed for a week. The size of the card and word is subsequently increased with each successful week.

12) To sum up motivating the athlete - he / she must have a specific goal, this is two-fold, *action goal*, a time or good performance for a particular season, and *ideal goal*, the ultimate goal which may be four years hence.

These goals must be achievable and challenging, this depends on the athlete's native ability and how much time he is prepared to give daily, weekly and monthly to training.

The coach can help by reminding the athlete of these commitments. Other factors, which are in the hands of the athlete, must be considered are:

- good nutrition
- weight loss, if necessary
- ample sleep and contented life-style.

The acceptance of basic weakness and their correction is a major motivational force. Another is positive thinking - "I cannot sprint", is a negative statement. "I will improve my sprinting", is a positive statement.

Negative statements oft repeated lead to defeatism. Positive thoughts and actions enhance confidence and motivate you.

Twelve Things You Should Know About ... (5)

Twelve things you should know about ...

Running Statistics

1) The National Union of Track Statisticians (NUTS) is the specialist club in Britain which compiles records of the top 100 performers in every athletics event. The Association of Track and Field Statisticians (ATFS) is the international body with members in sixty countries.

2) In 1963 the age when a man was likely to break 4 minutes for the mile for the first time was 24. The next ages either side of this was 22 and 26. At the time of writing (1994), this had been lowered to 22, and either side to 20 and 24.

3) Steve Ovett, Sebastian Coe and Steve Cram, all ran their life-time best times at age 24, but continued to compete for a further eight years.

4) Endurance-based male athletes up to the age of 30, tend to run increasing distances 4 seconds a lap slower e.g.:

- 400m - 56 secs;
- 800m - 2:00 (60/400);
- 1,500m - 4:00 (64/400);
- 3,000m - 8:30 (68/400);
- 5,000m - 15:00 (72/400);
- 10,000m - 31:40 (76/400)

At world class level there are inconsistencies, e.g. The world record for 3k is only 3 seconds a lap slower than the record for 1,500m. A five-second rule applies for women. It is generally accepted that an athlete's inability to obtain the time per 400m above or below the specialist distance either denotes poor endurance or speed training and or inadequate racing at those distances, e.g.:

- A male athlete with a time of 52 secs / 400m who can only record 2 mins / 800m (60/400) lacks endurance for the longer distance.
- A female athlete who runs 4:40 / 1500m (74.5/400) and can only run 2:22 / 800m (71/400) lacks speed for the shorter distance.

5) An athlete's potential at the mile race can be calculated in two ways:-

i using the 4 or 5 second rule, for men and women respectively, from 800m to 1,500m plus 18 secs (men), 20 secs (female). e.g. best 800m / 1:56 (male) (58/400) = 62/400 for 1500m = 3:52.5 + 18 secs mile = 4:10.5; best 800m / 2:16 (female) (68/400) = 73/400 for 1500m = 4:33.8 + 20 secs mile = 4:53.8.

ii adding 11 secs (male) or 12 secs (female) to the 800m time x 2 = mile time; e.g. (male) best 800m/2:10 + 11 = 2:21 x 2 = 4:42; e.g. (female) best 800m/2:30 + 12 = 2:42 x 2 = 5:24.

6) A quick calculation for an athlete's potential at 5k taken from the best 1,500m time is 3 x 1,500m time plus 3 minutes, e.g. best 1,500m time = 3:50 x 3 = 11:30 + 3 mins = 14:30. However, world class performers have only a 2½ minutes addition, e.g. best 1,500m = 3:40 x 3 = 11 mins + 2½ mins = 13:30.

7) An athlete's potential at the marathon distance can be calculated from the best time for 10k, provided a long run of 2 hours is done weekly. A slow time is 5 x 10k time = Marathon time, e.g. best 10k / 30 mins x 5 = 2:30. A fast time is 5 x 10k time minus 10 minutes = Marathon time, e.g. best 10k / 28 mins x 5 = 2:20 minus 10 mins = 2:10. By taking the average between the slow and fast times a fairly accurate forecast can be made.

8) The potential marathon time can also be calculated from an athlete's best 10 mile time by multiplying this by 3, this is a slow time prediction, e.g. best time for 10 miles = 60 mins x 3 = 3 hours marathon. A fast conversion is the 10 mile time times 3 minus 10 minutes, e.g. best 10 miles = 50 mins x 3 = 150 mins minus 10 mins = 2:20. The average of these two results gives a 90% accurate forecast.

9) A further calculation of marathon potential is to take the best half-marathon time multiplied by 2 plus 5 mins for times up to 65 mins, plus 10 minutes for times from 65 to 70 mins, plus 15 mins for times after 70 mins, e.g. best half-marathon time = 60 mins x 2 + 5 = 2:05; best half-marathon time = 70 mins x 10 + 10 = 2:30; best half-marathon time = 80 mins x 2 + 15 = 2:55.

10) Less known is the marathon potential calculated from the 5k time, provided 80mpw is being recorded. Zatopek had a best 5k time of 13:57. His Olympic winning time in the 1952 marathon was 2:23:03. This is 10 times his 5k time plus 4 minutes.

Frank Shorter (USA), won the 1972 Olympic marathon in 2:12:20. His best 5k time was 13:35. This is 10 times his 5k time *minus* 3:30. We can safely say that an athlete's marathon time is about 10 times his 5k time. Thus a runner with a best 5k time of 13 mins should be able to run 2:10 and possibly 2:05.

11) An athlete's potential at the 3k steeplechase can be calculated from his 3k flat time. If 1 second is allocated to the clearance of each obstacle (28 barriers and 7 water jumps) this equals an additional 35 seconds to the best flat 3k time, e.g. 8:00 / 3k = 8:35 steeplechase time. Where the differential is greater it denotes poor technique over the obstacles.

For example, Kip Keino (Kenya), had a flat 3k time of 7:39.6 but his best time at 3k S/C was only 8:23.6, a differential of 44 secs. However, George Stevens, one-time holder of the British record, had a poor 3k flat time of 8:07.8 and a 3k S/C time of 8:30.9, a differential of 23 secs. Had Keino possessed Steven's barrier-clearance skill his best time may well have been 8:02.6! And obviously, if Stevens possessed Keino's flat speed he could have recorded the same time.

The most remarkable conversion was M Karst (West Germany) who had a 3k flat time of 7:58.8 and a 3k S/C time of 8:18.4, a differential of 19.6 secs - this is just over half a second to clear each obstacle. Keino took 1.4 secs average to clear each obstacle.

12) An athlete's time to sprint 40yds (36.6m) forecasts the 400m potential.

For males, this is 10 times 40yds time plus 2 seconds. For females it is 10 times 40yds time plus 3 seconds, e.g. male - best time for 40yds sprint = 4½ secs times 10 + 2 = 47 secs; female - best time for 40yds sprint = 5½ secs times 10 + 3 = 58 secs.

Where actual 400m times fall short of this formula it denotes poor glycolysis efficiency (burning of sugar) and more sprinting at distances in excess of 250m should be done, i.e. 1 x 350m, 1 x 300m, 1 x 250m, with 800m walk after each effort.

Statistics and Creatine

Twelve things you should know about ...

Creatine Phosphate

1) Creatine has taken the athletics world by storm over the last two years, however it is not normally referred to as such: its correct name is phosphocreatine or PC. Phosphocreatine is a chemical stored in muscle, which when broken down aids in the manufacture of ATP (adenosine triphosphate) which is involved in all muscular movement. There are three ways to get ATP:-

i ATP-PC system for short sprints;
ii Lactic acid system for work exceeding 90 seconds but not more than three minutes at maximum rate;
iii Aerobic system for work exceeding 5 minutes duration at sub-maximal level.

2) PC is a buffer against acidity during intense exercise, it delays fatigue. Once it was thought that its use was confined to sprints only, there is now strong evidence that it helps all events up to and including the 10k via the 'energy shuttle'. This is a term used for the transport of energy from mitochondria (self-contained units inside muscle cells, in which carbohydrates and fat are broken down.)

3) A runner can increase muscle creatine by doing very fast work from 30 to 120 seconds duration with double the time of the repetition as rest, e.g. 60 secs and 240 secs. This is hard work.

4) The primary source of creatine in our normal diet is beef and fish, especially when raw. We can boost creatine levels by dietary means but it is totally impractical. To get 30 grams daily as stated, it would be necessary to consume 15 pounds of steak a day! Vegetarians can manufacture creatine via the liver, pancreas and kidneys, from glycerine and arginine, amino acids found in many foods. However, vegetarians are at a disadvantage, they are always short of creatine.

5) The Swedish research physiologist, Eric Hultman, has discovered an easier way to boost a runner's PC reserve. Before a race the diet is supplemented with 30 grams of PC (actually creatine monohydrate) daily for six conservative days. It *must* be consumed in six separate doses of 5 grams each every 2 hours.

6) What evidence is there that it boosts performance?

Five middle-distance athletes were asked to run for 4 days before supplementation, 4 x 300m fast with 3 minutes rest one day, and the next day to run 4 x 1,000m fast with 4 minutes rest, alternating these sessions. They were then given the creatine supplement for six days and asked to repeat the sessions. Another group of five runners were asked to do the same but they were given a placebo (glucose tablet) which looked the same as the creatine tablet.

Compared with the placebo group, improvement in the final 300m fast run was more than twice as great for the creatine group, and three times as great in the final 1,000m repetition. The total time to run all four 1,000m reps was 770 secs at the *beginning* of the study for the creatine users and 757 secs *after* supplementation. The placebo group slowed from 774 to 775 secs.

What is more, creatine given by supplement creates more creatine with exercise.

EVENT	Length of Performance	Speed ATP-PC	Aerobic Capacity	Lactic Acid
Marathon	135 - 180 mins	0%	95%	5%
10,000m	29 - 45 mins	5%	80%	15%
5,000m	14 - 17 mins	10%	70%	20%
3,000m	8 - 12 mins	20%	40%	40%
1,500m	3 - 5 mins	20%	25%	55%
800m	1 - 2 mins	30%	5%	65%
400m	50 - 65 secs	80%	5%	15%

7) A Dr. Sewell, of Warwickshire University, in 1993, warned of dire consequences if creatine boosting was undertaken and felt so strongly on the subject that he wrote to all national Sunday papers in Great Britain and to all the governing bodies in athletics. Since then, PC has been advertised in athletics journals the world over. A cautionary note is that 30 grams daily for six days should never be exceeded and should not be repeated in that dosage more than twice a year. It is similar to carbohydrate boosting for the marathon, which loses its effectiveness if repeated too many times in one year, being a trick to the body which, in due course, it recognises.

8) Maintenance supplies of PC are 4 grams per day. However, Hultman, Harris and Soderlund discovered that even a 2-day course of 30 grams (six separate 5 gram amounts) boosted plasma creatine.

9) Creatine boosting does not contravene IAAF regulations. If it did, then carbohydrate-boosting would also have to be banned.

10) Is CP likely to be banned in the future by the IAAF? Not unless the IAAF wish to ban the consumption of beef and fish and make us all vegetarians.

11) Should we be cautious? The long-term affects of creatine-boosting are not known. We do not know, however, that the effect of excessive meat consumption on the heart is not good, but this is mainly because of the fat in meat.

A wise method of creatine-boosting before competition is to start with a maintenance does of 4 grams six days before competition and double it each day, e.g.: day 1 - 4 grams; day 2 - 8 grams; day 3 - 12 grams; day 4 - 16 grams; day 5 - 20 grams; day 6 - 24 grams; day 7 - None (Race). As the quantity increases creatine must be taken in 5 gram doses two hours apart.

12) We know of no reason why we shouldn't therefore recommend that athletes *try* creatine supplements *with caution*.

Remember to include creatine-boosting training sessions once a week by running 8 x 200m in 26 secs with 200 jog, or 4 x 800m in 2 mins with 3 mins rest for top-grade runners and lesser times for club athletes.

Medical Matters

by Hippocrates

Q Can you tell me why athletes appear to get infections, sometimes serious when they are at the peak of their fitness? Also, why are some infections like ME so difficult to get over? WD Cambridge.

It is an apparent contradiction in terms in that as an athlete gets fitter, with regard to performing at a specific distance, there is also a decreased resistance to infection. This is because the body has a finite store of anti-stress factors and most of these, if not all, are used up in dealing with the stress of training. We know countless cases where world-class milers have been struck down with infection at the height of their fitness:

i Peter Snell was hit by a gastric bug that turned his world tour into a nightmare;

ii Jim Ryun was frequently rendered unable to run with asthmatic attacks;

iii Steve Ovett contracted glandular fever shortly after breaking 4 minutes for the mile for the first time;

iv Seb Coe was prone to viral infections of a severe kind when his training indicated that he was ready to break his own world records.

And so it goes on. We should understand a few things about infections. Western Society has greatly reduced the incidence of infection within the last hundred years by:

- improved nutrition, to a point;
- clean water supply;
- mass immunisation;

But, we have come full circle. Laziness has made home-cooking less popular and the reliance of high-fat take-away foods has increased and with it, infection. We may think our water is clean but there have been many frequent cases where it patently isn't. We should make a practice of boiling water and emptying it into a container and placing it in the fridge to be drunk later.

The body's immune system is not localised, it consists of various types of white cells which are found in the lymph nodes, liver, spleen, blood, and bone marrow, plus other organs and tissues. There are two different types of white cell: i) granulocytes, ii) lymphocytes. The first contains chemicals which are noxious to infecting organisms. The second produce antibodies which fight infections head-on. Antibodies are a type of protein which attack only after the infecting source has been in the body several days, they also exist if there has been a previous or similar infection. For example, if we've had German Measles we tend not to get it again because we have built up antibodies against it.

The immune system is sensitive to nutritional changes and vitamin and mineral deficiencies definitely increase the possibility of infections. Vitamins B6, C, E and folic acid and essential fatty acids are vital for normal immune function. Iron, zinc, and certain other minerals are crucial too. It is also becoming increasingly obvious that *refined carbohydrates* such as glucose and sucrose depress the immune system within one hour of eating them. Large and regular quantities of alcohol also suppresses the immune system because it depletes the body of B vitamins and zinc.

Live yoghurt contains the "friendly" bacterium lactobacillus acidophilus which is known to combat certain harmful bacteria and should find a regular place in an athlete's diet, particularly women. Garlic contains agents which are anti-bacterial and anti-fungal.

Prevention of infections is the number one priority for all athletes. Here are some useful steps:-

i Get in the habit of taking your pulse for 10 seconds first thing in the morning *in bed*. Then take it 30 seconds later *on rising*. After a week a differential plateau will be established. When the difference is markedly up - *do not train*. When it is noticeably down - you can train severely that day. When the difference is normal, train moderately.

ii Eat every 4 hours meals which contain fruit, vegetables, meat or fish. Include high-zinc consumption foods in your daily diet (a handful of any nuts daily). Avoid excessive consumption of alcohol, tea and coffee.

iii Completely avoid *refined* carbohydrates, glucose and sucrose. Limit your intake of fructose (fruit sugar). Non refined carbohydrates are potatoes, baked beans, parsnips, green peas, beet-root, cabbage, spinach, milk, oranges, apples and raisins.

iv Take a multi-vitamin supplement with high vitamin B and C content.

v Consider the possibility of your being allergic to some foods. If you suffer from migraine, inflamed nose, eczema, bowel complaints, tiredness or aches and pains which do not respond to the above outlined, then it make sense to be tested for food allergens.

vi Don't increase your mileage more than 25% in any month. If you are doing 30 mpw stay at that amount for a month before you increase it to 37½ miles per week for a month, thence to 46 miles for a month, etc. Don't over-race. Some universities in the cross-country season have two races a week, about 40 races in the winter. This should be outlawed!

If you suffer from repeated infections it is in your interest to ask your doctor for several tests to be done (these can either be done under the NHS or privately):

i collect specimens to identify the infecting organism, usually a swab, or urine in the case of cystitis;

ii have blood tests for anaemia, a full blood count, and to check the level of white blood cells;

iii a urine test for sugar to check for diabetes. Diabetics are especially prone to repeated infections.

We now come to the question why such infections as ME and glandular fever linger on for months and even years, in some athletes. In some people the infection changes the immune system, cell metabolism and induces food allergies. Chronic candidiasis is linked with ME. The culprit is *candida albicans*, a yeast, a disease-producing organism.

Most people can resist the infection but as soon as the immune system weakens the infection takes hold. More women than men get candidiasis. Chronic symptoms include:- fatigue, headaches, migraine, joint pains, nettle rash, irritable bowel syndrome, oral thrush, upper abdominal burning, over-sensitive to chemical smells, craving for refined carbohydrates and/or alcohol. The treatment is holistic, not just drug-based:

- try the anti-candida drug *Nystatin*;
- avoid antibiotics;
- avoid the birth-control pill;
- avoid anti-inflammatory drugs;
- check for nutritional deficiencies of vitamins A, B C, minerals zinc, magnesium and iron.
- avoid refined carbohydrates;
- avoid yeasted foods (e.g. bread, cheese, pizza, vinegar), pickled foods, mushrooms, sugar-based foods and corn-based foods.

Athletes should always first consult their doctor if they suspect they have ME.

BMC Constitution

as amended at the AGM 22nd October 1994

1 Name and Objects

The name of the Organisation shall be the *British Milers' Club*. The objects of the organisation shall be:-

a to raise the standard of British middle-distance running.

b to increase the knowledge of coaches and others interested in these events.

2 Membership

a Membership shall be restricted to athletes achieving the Club's entry standards, BAF senior coaches, and others deemed to have qualities to promote the objectives of the Club.

b The qualifying standards for entry shall be decided by the General Committee and approved by the Members at the Annual General Meeting.

c Life Membership may be awarded for outstanding performances or services to the Club. Members to be elected to Life Membership shall be nominated by the General Committee and approved by the members at the Annual General Meeting.

d All desirous of becoming members shall complete an application form approved by the National Committee. The Membership Secretary shall have the authority to admit to membership those who submit a satisfactory application form and make payment of the required joining fee and first annual subscription.

3. Subscriptions

a The annual subscription rate and joining fee shall be set at the AGM.

b Any alteration to the subscription rate shall be approved by a simple majority of members at a General Meeting.

c Any member more than six months in arrears shall be deemed to have forfeited membership and may not be reinstated until all arrears have been paid up.

4. National Committee

a The Club's business shall be managed by a National Committee - hereinafter referred to as the Committee.

b The Committee shall be elected at the AGM and shall consist of:- Chairman, Vice-Chairman, National Secretary, Treasurer, Magazine Editor, Membership Secretary, Regional Secretaries and up to 8 members.

c The Committee shall have the power to co-opt up to three additional members or to replace any of its members.

d Committee meetings shall be as and when the Committee thinks necessary but there shall be not less than four such meetings in any one year.

e A quorum of a meeting of the Committee shall consist of five members.

f If a quorum is not present within fifteen minutes of the specific commencement time, the meeting shall be adjourned.

g The Chairman shall be entitled to a casting vote in the event of a deadlock.

h The Vice-Chairman shall be entitled to act as chairman in the Chairman's absence. If neither are present at a meeting, the members shall elect an acting chairman from those members present.

i Regional Secretaries may appoint deputies to act in their absence; such deputies shall not be entitled to vote at Committee meetings.

j Regional secretaries may appoint Race Organisers to assist them in the promotion of competitions for members.

k The Committee shall publish a club magazine at least once a year.

5. Standing Committee

The National Committee may delegate to a Standing Committee, comprising the Chairman, Treasurer, National Secretary and one other elected officer or Committee member for the day-to-day running of the Club in relation to:-

a organisation of races.

b magazine preparation and publication.

c training courses.

d admissions to membership.

e sponsorship agreements.

f social functions.

The Standing Committee shall report fully to the next meeting of the Committee all actions it has taken.

6. Presidents and Vice-Presidents

These positions shall be elected at the AGM. Members so elected may attend and vote at committee meetings, but will not be liable to pay the annual subscription.

7. General Meetings

a The Club shall in each year hold a General Meeting as its Annual General Meeting (AGM), in addition to any other General Meetings in the year.

b The AGM shall be held not later than 31st October in any year, in any appropriate place as approved by the Committee.

c All General Meetings other than the AGM shall be called Extraordinary General Meetings.

d Members shall be given at least 28 days notice of the AGM via the athletic press, and at least 14 days notice of Extraordinary General Meetings.

e All matters for inclusion in the AGM shall be received by the National Secretary at least 21 days before the meeting.

f An Extraordinary General Meeting shall be called by the National Secretary within 21 days of the receipt by him of a requisition signed by at least 20 members, stating the business to be brought forward before such a meeting.

8. Alterations to the Constitution

The Constitution shall be altered only at a AGM by a two-thirds majority of members present and voting; proxy votes shall be allowed. Any alteration made shall take effect immediately.

9. Proceedings at the Annual General Meeting

The business at the meeting shall be:

a to receive and consider the Annual Report of the Treasurer (to include the Income and Expenditure Account and the Balance Sheet), the Annual Report of the National Secretary and Regional Secretaries;

b the election of the Offices, the President, Vice-President and Committee Members for the ensuing year;

c to transact any other business.

No business shall be transacted unless a quorum of six members is present. All resolutions put to the vote must be approved by a majority of members entitled to vote. The Chairman shall decide the manner of voting.

10. Proceedings at Extraordinary General Meetings

The business of the meeting shall be conducted as directed by the Chairman.

11. Accounts

a The Treasurer shall keep an account showing details of all sums of money received and sent. This account shall be available at each meeting of the Committee.

b All outgoing cheques shall be signed by the Treasurer, the Chairman, or other Officer as authorised by the National Committee.

12. Audit

A statement of accounts shall be presented at the AGM.

13. Interpretation of the Rules

The interpretation of the rules shall be the prerogative of the National Committee.

14. Dissolution

In the event of the Club's dissolution its net assets shall be realised and donated to a charity nominated by a majority of the members at an Extraordinary General Meeting.

Lanzarote 1994

by Alistair Currie

(first published in Reebok RC News)

The first Reebok Racing Club warm-weather trip, organised in conjunction with the British Milers' Club, to Club La Santa proved to be a resounding success, with around 45 athletes of varying ages and abilities heading to Lanzarote in early March.

The finale of the two weeks was the Reebok Grand Prix, held over the last three evenings of the trip, the distances were 5000m on the Monday, 800m on the Tuesday and 1 Mile on the Wednesday. Action at the front of the field in the 'A' races was of the highest standard with sub-four minute miler and GB international Matt de Freitas sweeping the board in the Men's races including a 53 second last lap in the 5,000m. The Women's competition was somewhat closer; Wendy Sutherland's superior pace judgement and Sally Eastall's superior endurance in the 5,000m gave both of them an initial points advantage over GB 1,500m international Michelle Faherty. Michelle had levelled the scores by the end of the 800m and then eased away with the class performance of the series with a 4:53 mile on the last night.

Other highlights of the Grand Prix were: BMC organiser Matthew Fraser Moat's 'heroic' efforts against top sprinter MacLean Okotie over 800m following a pre-race wager (he lost); Transplant Games gold medallist Barrie Laverick beating many able-bodied athletes; the graceful sight of top model Wendy Cooper striding out in the 800m; 62 year old Bob Davidson sprinting it out with runners half his age following a half-marathon race that morning; and the resolute performances of veteran international ultra-distance race-walker Kathy Crilley who classes the 5,000m as a mere sprint race! Support from Derrick Harding, Beatrice Roh, Julie Swann and Lisa York was much appreciated.

Guest performances from a number of top German decathletes and a group of the UK's top triathletes including former Olympic swimmer, Robin Brew, Richard Hobson and UK women's No 1 Ali Harrison added to the multitude of diverse talent on show.

As a training resort Club La Santa has it all, excellent facilities backed up by staff ('The Green Team') who are really into sport and know what they are doing. As well as helping to promote our races they managed, over the two weeks, to organise numerous other events including 10km, 20km road races, and the Haria half-marathon on behalf of the Nutrasweet London Marathon.

The big occasion of the trip was, however, the presentation dinner at local restaurant *Guatifay* where everyone received diplomas and awards for their exploits both on and off the track over the two weeks. Frank Horwill acted as MC and proved, as many were already aware, to be a very eloquent raconteur and songster!

All in all a good time was had by everyone - many new friendships were made, most went home fitter (or at least rejuvenated by the respite from British weather) and all were eager to return again next year.

1995 dates are 9th to 23rd March; see page 4 for details.

Winners of the Reebok Grand Prix - from left to right: Bob Llewellyn, Wendy Sutherland, Matt de Freitas, Michelle Faherty, Robin Brew and Robin Kindersley. Photo by MFM

Glen

by Paul Larkins

(first published in Athletics Weekly)

Glen Grant has a message to all those who think Britain is a spent force in the middle-distance wars of the 90s - "think again".

The former Commonwealth Games finalist over 800m, a man who can still clock 1:53 for two laps at 40, is the U23 contender age-group coach for the middle-distances and, as such, is privileged to the talent emerging. "They are a very talented bunch," Grant says. "Steve Ovett's comment about there not being the talent around is very wrong." Grant does, however, think there are a couple of problems to address before the talent begins to appear, and solving them, he says, does not require anything more radical than a history lesson.

He, as was Ovett, Bernie Ford, Barry Smith, Tony Simmons and a list of others as long as your arm, was the product of the Southern Squad. Were the squad principle to return, Grant believes the results would be eye-opening.

"There are people in the U23 squad that are as talented as Steve Ovett ever was", he explains, "but they are two or even three years behind where I think they ought to be. They should have been running the times they are now at 22 at the age of 19".

"Whether that's because so many people have got this thing 'don't push them when they are young', or whether it's because their coaches at that time didn't realise how much work they needed to do, I don't know".

"But I do know that one of the things is that a lot of them don't train with people of the same standard or of a higher standard. They are actually pulling instead of being pulled. Ovett ran in the Southern Squad with people like Bernie Ford who was setting such a high endurance standard that he had to follow", he explains.

Considering some of the sessions Grant recalls fondly, that is not so surprising. Four times a mile over country with two minutes rest or upwards of 20 x 300 and a strenuous weights session one weekend per month, all winter, all conspired to make the members of that squad some of the strongest, toughest... and fastest runners in the world.

"We should have a Southern Squad and a Northern Squad and have competitions through the winter against each other",

Grant

WHAT IT TAKES TO BE A WORLD CLASS MALE MIDDLE-DISTANCE RUNNER

- A terrific endurance capacity of probably around 28 minutes for 10km. This will enable you to go through the heats and semis and still perform in the final.
- A power to weight ratio of around three times body weight in leg strength. This will give you sufficient acceleration at the vital stage in the race
- A top speed of around 23 sec for 200m, although if you've got the endurance you can get away with it.
- The mentality to race sufficiently often in races where you're going to try different things out.

Grant concludes. They could have something like a 24-hour relay - anything to pitch them against each other during the winter months to make them understand they can raise their standards much higher than they have at the moment." Standards certainly were tough when Grant was a member of such a squad in the 70s.

"We trained together once a month", he recalls. There were 25 to 30 of us and the group was so strong that it was the case of not who was going to lead, but who could get to the front.

He feels that once a month is ample for the groups to meet. "You've then got a few days to recover and three weeks to knuckle down and try to get the upper hand in something. All the time with this system, you are being shown where your weaknesses are. I knew, for instance, that if I could hold Bernie in an endurance workout, then I had all the endurance I would ever need, and could then work on matching Steve in the weights room and maybe on my speed.

"We had one great speed session," he continues. It was 20 x 100m in sets of four with 25 sec rest, then 20 sec, then 15 sec, then 10 sec, then 5 minutes rest between each set. The aim was to win as many as possible. It was really serious business."

And, of course, Britain ruled the middle-distances.

Your Letters

From Peter Coe and Harry Wilson

SIR - Steven Downes's article headlined 'Medal Prospects fading...' in the *Sunday Telegraph* (July 31) reports on the committee appointed to discover what is wrong with British middle-distance running.

In the article David Moorcroft, a member of that Committee, is quoted as saying, when referring to the triumphs of Sebastian Coe and Steve Ovett: "We're trying to produce a structure to reproduce something which happened by accident" and added that "the bottom line is that we don't know what's gone wrong."

Let us put the record straight. These athletes and their success was our success too, and none of it was an accident. It was the result of deep personal commitment by coaches and athletes alike. It is statistically ridiculous to suggest that at any one time in the United Kingdom there are only one or two athletes with capacity for world class middle-distance performances. What turns capacity into ability is hard training which is truly specific to the individual and his events.

Coe was always told: "Don't worry about selection - give the selectors performances they cannot ignore." Ovett's response to missing selection when young was similar. He simply resolved to make it impossible for them not to sit up and take notice.

Part of the current problem is a national one in which too many have lost the will to win and have no idea of the intensity and quality of the training that takes an athlete to the top. It is a mistake to seek to repeat a structure that never was. We failed to implement the way set out so long ago by Geoff Dyson. To think of the Coe / Ovett saga as an accident will preclude finding the solution; not even their training diaries will provide the answer. Their success came from the exploration of their absolute limits together with far-sighted innovative training by two coaches who tailored their training exactly to suit the individuals.

Another problem lies in the national confusion over professionalism. It is much more than getting paid, it is about adopting dedicated and ethical attitudes to work. There is more to wearing the national colours than how much you can get paid for it.

Once again, Coe and Ovett were not an accident, neither were their coaches.

From Alan Blaskiewicz

SIR - I am a vet born in 1954, and am coached by one of your overseas members David McCreanney here in Belgium.

'Mac' regularly circulates the *BMC News* amongst his athletes. In your last issue you gave a schedule for a female athlete preparing for your AAA's championships - coincidentally the target times you gave were more or less exactly my requirements for the Belgium National Vet championships. Together with 'Mac', we followed your schedule to the letter.

I am pleased to report that I won the 800m in 2:02.16 and was second in the 1,500m in 4:11.68. I feel certain that had these events not been held on the same day I could have won them both. These performances are particularly pleasing when one considers that my best 800m as a senior was 1:56.2, age 27, and that I have never broken 4 mins for 1,500m.

Coaching schedules are so often a 'matter of opinion', but your opinion certainly worked for me.

From Tommy Boyle

SIR - Please find enclosed my subs for 1994. Keep up the good work - you are doing a tremendous job with lots of thought provoking articles.

Please pass on my best regards to Frank and the rest of your team, and tell them that we are using a lot of your ideas on endurance training, especially with regard to Yvonne stepping up to 10k.

From Maureen Jackson

SIR - I thoroughly enjoy the BMC magazines and have found the articles / schedules etc. of great benefit to myself and my athletes. I now have practical 'answers' which were so difficult to obtain on the various NACC courses and workshops.

Since becoming a BMC member my athletes have progressed beyond expectation in cross-country and are highly ranked in the region. With a strong foundation we are looking forward to a successful track season.

From Daniel Park

SIR - I'm sorry for allowing my subscription to the BMC to fall in arrears. My only excuse is that I'm a tight fisted student on a limited budget with a fierce determination not to part with cash. Enclosed is a cheque for 24 smackeroonies - please be kind to it!

Race Results 1994

14th March, Lanzarote: M5000: 1, M de Freitas (Ports) 15:44.9; 2, R Kindersley (Serp) 15:59.2; 3, R Llewellyn (Serp) 16:04.9; W5000: 1, W Sutherland (Serp) 17:39.9; 2, S Eastall 18:03.5; 3, M Faherty (Skyrac) 18:05.9; **15th March, Lanzarote:** M800: 1, M de Freitas (Ports) 1:55.5; W800: 1, M Faherty (Skyrac) 2:11.3; **16th March, Lanzarote:** M Mile: M de Freitas (Ports) 4:29.1; W Mile: M Faherty (Skyrac) 4:53.5; **6th April, West London:** M800: R Bunn (Lincoln) 1:55.4; M3000: W Oxborough (Thames H & H) 8:39.2; W3000: W Sutherland (Serp) 10:05.2; **20th April, Ealing:** M1500: R Miller (Shaftesbury Barnet) 3:56.2; **26th April, Stretford:** M800: P Burgess (Wigan) 1:51.9, ..5, C Blount U20 (Newport) 1:53.2; W800: 1, J Latimer (Sale) 2:08.4; 2, P Smith (Sale) 2:08.5; 3, J Swann (Wolv) 2:10.4; A Thorpe (Hyndburn) 2:10.8; 5, M Wilkinson (Sale) 2:10.9; ..7, K Bright (U20) (Newport) 2:13.0; M1500: 1, C Winrow (Wigan) 3:49.4; ..3, A Tatham U20 (Derby) 3:51.2; **1st May, Yate**: JM800: M Kuklinski (Swin) 2:01.3; JW800: G Salmon U15 (Bristol) 2:19.3; 2, G Adams U17 (Bristol) 2:19.8; 3, C Hale U15 (Glouc) 2:20.4; 4, J Woolley U15 (Bristol) 2:22.4; M3000: W Speake (Wells) 8:34.0; W3000: 1, A Braham U20 (Millfield); 2, K Dyer U20 (Bristol) 10:11.3; 3, C McNulty U17 (Yate) 10:12.6; 4, D Howard V35 (Westbury) 10:15.7; **2nd May, Welwyn:** M800: 1, R Bunn (Lincoln) 1:52.4; ..3, T Balaan (U20) (Ipswich) 1:54.1; ..5, K Kyereme (U20) (Lowestoft) 1:54.7; **4th May, Warley:** M800: B Sutton 1:57.5; W800: L Robinson (Coventry) 2:08.9; **4th May, Grangemouth:** M800: 1, G Graham (Clydebank) 1:51.5; 2, E Calvert (TVH) 1:52.0; **10th May, Stretford:** M1500: R Bunn (Lincoln) 3:50.6, W1500: 1, A Thorpe (Hyndburn) 4:25.5; 2, D Brockley (Trafford) 4:25.9; 3, S Bentley (Stoke) 4:27.3;

18th May, National Squad Races, Wythenshawe

M800: C Winrow (Wigan) 1:50.1; 2, T West (Morp) 1:50.3; 3, C Gilby (Camb H) 1:50.6; 4, M Guegan (Jersey) 1:50.6; 5, L Cadwallader (Liv) 1:50.7; 6, K McKay (Sale) 1:51.0; b) 1, J Lobo (Blackburn) 1:50.6; 2, M Sesay (Leeds) 1:50.8; 3, P Burgess (Wigan) 1:50.9; 4, R Finch (Soton) 1:51.1; 5, J Swift-Smith (Shaftesbury) 1:51.4; 6, P Roberts (Cardiff) 1:51.8; c) 1, E King (U20) (Ballymena) 1:50.7; 2, I Bowden (U20) (Skyrac) 1:51.9; ..4, C Stringer (U20) (Sale) 1:52.3; d) 1, E Calvert (TVH) 1:51.6; 2, D Roache (Clyde) 1:52.0, 3, S Parsons (Hunt) 1:52.0; e) 1, P Broadley (Notts) 1:54.6; ..7, G Grant M40 (Camb H) 1:56.3; **HSA W800:** 1, D Modahl (Sale) 2:03.7 **(BMC Record)**; 2, M Faherty (Skyrac) 2:05.4; 3, D Gandy (Hounslow) 2:05.7; 4, J Latimer (Sale) 2:06.7, 5, C Dawson (Highgate) 2:07.0, 6, P Fryer (Sale) 2:07.7; 7, J Jones (Soton) 2:09.2; 8, S Bevan (Essex) 2:09.8; b) 1, V Lawrence (B&F) 2:09.1; 2, L Baker (Coventry) 2:10.9; 3, A Coates (Bing) 2:11.7; ..7, E Graysmark U20 (Cheltenham) 2:16.2; **M1500:** 1, G Lough (LSAC) 3:42.7; 2, S Cram (J&H) 3:42.8, 3, M Barnes (Enfield) 3:43.3; 4, G Stewart (Edin SH) 3:43.4; 5, I. Gillespie (Birchfield) 3:43.8; 6, G Graham (Clyde) 3:44.7; 7, V Wilson (J & H) 3:45.1; 8, C Murphy (Sale) 3:45.5; 9, P Mowbray (Edinburgh Univ) 3:45.8; 10, P Healy (B'drain) 3:47.6, 11, M Hibberd (TVH) 3:47.7, 12, S Fairbrother (Haringey) 3:48.8; b) 1, S White (Cov) 3:46.0; 2, A Hart (Coventry) 3:46.7; 3, D Daniels (Birchfield) 3:46.9; 4, B Witchells (U20) (Mole Valley) 3:46.9; 5, B Glenton (Southampton) 3:47.0; 6, N Caddy (U20) (Newquay) 3:47.3; 7, N Hopkins (Reigate) 3:47.4; 8, S Barden (GEC) 3:47.9; 9, R Scanlon (Coventry) 3:47.9; c) P Green (E Ches) 3:52.1; d) S Hope (Tip) 3:51.1; e) K Critchley (Rown) 3:54.3; **HSA W1500:** B Hartigan (Birchfield) 4:14.6; 2, I. Gibson (Andover) 4:14.9; 3, A Davies (Basingstoke) 4:15.1; 4, D Gunning (Swindon) 4:17.3; 5, M Newman (Coventry) 4:18.5; 6, L Robinson (Coventry) 4:20.1; 7, J Spark (Alt) 4:21.9; 8, S King (Sale) 4:23.2; 9, A Thorpe (Hyndburn) 4:26.5; b) 1, J Symonds (Birchfield) 4:27.4; 2, S Bentley (Stoke) 4:28.3; 3, P Thackeray (Spen) 4:30.0;

28th May, Reebok Challenge, Crawley

M800: 1, B Koech (KEN) 1:46.83 **(BMC Record)**; 2, A Lill (Newham & EB) 1:47.52; 3, M Guegan (Jersey) 1:48.95; 4, J Swift-Smith (Shaftesbury) 1:50.43; 5, M Hibberd (TVH) 1:51.62; b) A Draper (Blackheath) 1:51.69; c) J Thompson (Dart) 1:54.38; **HSA W800:** 1, S Bowyer (Sale) 2:04.75; 2, D Gandy (Team Solent) 2:05.65; 3, H Daniel (Camb H) 2:05.82; 4, L Robinson (Cov) 2:06.13; 5, J Latimer (Sale) 2:07.19; 6, B Hartigan (Birchfield) 2:07.50; 7, J Jones (Soton) 2:07.72; 8, L Keough (Basingstoke) 2:08.86; b) I. Thompson (Bromley L) 2:09.95; **M1500:** 1, D Wilson (Annadale) 3:43.77; 2, I Gillespie (Birchfield) 3:44.48; 3, N Hopkins (Reigate) 3:45.05; 4, J Starling (Southampton) 3:45.74; 5, S Poore (Team Solent) 3:45.75; 6, N Caddy (Newquay &P) 3:46.16; 7, S Barden (GEC) 3:46.20; 8, S Duval (C&S) 3:46.42; 9, K Howard (Crawley) 3:46.48; 10, D English (Havering) 3:46.98; 11, I Kirui U20 (KEN) 3:48.68; b) J Humm (Camb H) 3:51.14; ..8, M Steinle U20 (Blackheath) 3:55.23, ..15, A Moses U17 (Reigate) 4:04.03; **HSA W1500:** 1, A Wyeth (Parkside) 4:14.62; 2, S McGeorge (B&H) 4:14.80; 3, D Gunning (Andover) 4:16.50; 4, M Faherty (Skyrac) 4:16.90; 5, C Slimmin (BMH) 4:21.33; 6, W Williams (Salisbury) 4:21.36; 7, J Symonds (Birch) 4:22.09; 8, W Ore (Cardiff) 4:22.51; 9, M Harries (Parkside) 4:23.16; 10, A Barnes (Bourn) 4:25.30; **M5000**: 1, J Sherban (Shaft) 13:46.4; 2, D Donnelly (Annadale) 13:47.0; 3, J Campbell 13:48.9; 4, B Farren (Sparta) 14:12.0; 5, J Lisiewicz (Morp) 14:14.4; 6, G Gerrard (RN) 14:15.2; **W5000:** 1, J Thompson (Bath) 16:13.43; 2, S Dixon (Park) 16:39.57; 3, G Collison (Bel) 16:44.58; 4, W Sutherland (Serp) 17:18.45; 5, A Joiner (Charnwood) 17:20.77; M Wooldridge (N & P) 17:22.69;

29th May, Stretford: M5000: 1, S Green (Bingley) 14:17.2; 2, C Moore (Bingley) 14:17.8; 3, P Dugdale (Horwich) 14:20.5; W5000: A Hulley (Leeds) 16:25.7; **31st May, Stretford:** M800: 1, C Murphy (Sale) 1:51.5; 2, A Parker (Scarborough) 1:51.7; 3, I Bowden (U20) (Skyrac) 1:51.9; 4, P Hackley (Border) 1:52.0; 5, P Roberts (Cardiff) 1:52.0; b) D Thornton (Hynd) 1:53.6; .. 5, P Dunlop U20 (Pres H) 1:54.5; W800: 1, V Lawrence (B&F) 2:08.1; 2, A Thorpe (Hyndburn) 2:09.5; 3, J Spark (Alt) 2:10.0; 4, W Farrow (Derby) 2:11.8; **1st June, Warley:** M1500: R Taylor (Coventry) 3:52.3; ..5, D Bedwell V40 (Bristol) 3:55.2; ..7, R Mann U20 (Solihull) 3:55.5; 8, E Bowen U20 (Leamington) 3:55.5; W1500: K Dyer (U20) (Bristol) 4:37.7; ..3, R Love U20 (Northants) 4:44.0; **1st June, West London:** W800: A Layzell (Chelt) 2:09.4; **1st June, Grangemouth:** M1500: F McGowan (Edinburgh RC) 3:52.2; **4th June, Belfast:** M1500: 1, D Wilson (Anna) 3:41.28; 2, G Stewart (Edinburgh SH) 3:44.38; 3, B Farren (Sparta) 3:46.64; FSA JM800: C Curran (Anna) 1:59.90; **15th June, Ealing:** M800: L Mangelshot (Woodford Green) 1:53.5; W800: T Baker (And) 2:11.1; M1500: 1, A Hart (Coventry) 3:44.9; 2, I Gillespie (Birch) 3:45.7; **21st June, Stretford:** M800: 1, C Murphy (Sale) 1:52.1; ..7, J Staneke (U20) (Wirral) 1:54.4; W800: 1, A Coates (Bingley) 2:10.9; 2, K Smithson (U20) (Hyndburn) 2:12.7; M1500: 1, R Whalley (Stoke) 3:46.7; 2, P Freary (Bolton) 3:47.0; 3, B Hussein (Stock) 3:48.1; .. 6, B Reese (U20) (Wirral) 3:49.7; .. 11, I Mitchell (U20) (Skyrac) 3:53.1; 12, E Bowen (U20) (Leamington) 3:53.6; **24th June, Cardiff:** M1500: M Morgan (Swansea) 3:51.0. **6th July, Solihull:** M800: A Hart (Cov) 1:52.0; b) S. Parsons (Huntingdon) 1:53.3; c) A Stuckley (Sandwell) 1:53.7; W800: 1, L Robinson (Cov) 2:04.7; 2, L Carthew (Swansea) 2:10.1; 3, M Newman (Cov) 2:10.2; .. 6, J Gardener U20 2:17.9; **6th July, West London:** M Mile: J Kendal (AFD) 4:19.1; **10th July, SW Grand Prix, Salisbury:** M1500: 1, I Gillespie (Birchfield) 3:44.0; 2, R Whalley (Stoke) 3:45.9; 3, P Drake (Bournemouth) 3:46.7; 4, S Mosley (Card) 3:47.1; **12th July, Stretford:** M800: 1, S Parsons (Hunt) 1:51.4; 2, B Reese U20 (Wirral) 1:51.4; 3, P Roberts (Cardiff) 1:51.5; 4, N Bentham (Doncaster) 1:51.6; 5, K Wright (Leigh) 1:51.7 (b) 1, A Walling 1:53.7; .. 5, S Ilhdge U20 (Lincoln W) 1:54.7; .. 10, P Mullany U20 (Hyndburn) 1:57.6; c) 1, D Canning U17 (Stockport) 1:55.1; W800: 1, A Thorpe (Hyndburn) 2:11.6; 2, M Wilkinson (Sale) 2:11.9; **13th July, Newport:** M3000: 1, S Knight (Card) 8:17.6; 2, N Comerford (Card) 8:23.3; W800: 1, L Carthew (Swansea) 2:10.3; 2, K Bright U20 2:13.8; 3, A Pritchard U15 (Cardiff) 2:14.3; **13th July, Ealing:** M800: L Mangleshot (Woodford Green) 1:53.2; W800: C Dawson (Highgate) 2:04.6; **20th July, Milton Keynes:** M1500: I Hudspith (Morpeth) 3:47.6; **20th July, Cheltenham:** M800: 1, A Hart (Coventry) 1:49.8; 2, A Duke (TVH) 1:50.7; 3, R Whalley (Stoke) 1:51.0; 4, N Bentham (Doncaster) 1:51.8; 5, R Scanlon (Coventry) 1:51.8; 6, I Thompson (Shaftesbury Barnet) 1:52.0; 7, C Blount U20 (Newport) 1:52.5; b) A Draper (Cov) 1:53.3; c) M Walker (Stour) 1:57.7; W800: 1, A Layzell (Chelt) 2:06.5; 2, M Newman (Coventry) 2:07.3; 3, K Bright U20 (Newport) 2:13.7; .. 6, G Salmon (Bristol) 2:16.0; W1500: 1, L Robinson (Coventry) 4:13.6; 2, A Wight (Tipton) 4:27.5; b) K Dyer U20 (Bristol) 4:42.1; M3000: 1, I Gillespie (Birchfield) 8:03.1; D Daniels (Birchfield) 8:03.5; 3, N Comerford (Cardiff) 8:10.2; 4, K Yuen (USA) 8:11.3; 5, J Burke (London Irish) 8:12.7; .. 12, B Noad U20 (Bristol) 8:25.0; b) 1, D Duke (Bristol) 8:29.4; .. 3, M Palmer U20 (Westbury) 8:35.6; **27th July, Cambourne:** M800: N Caddy U20 (Newquay)

Race Results 1994

1:51.8; W800: S Salmon (Newquay) 2:12.9; **27th July, Barry**: M800: 1, N Horsfield (Newport) 1:52.2; 2, I Price 1:52.8; 3, D Povall (U20) (Newport) 1:53.9; **2nd Aug, Stretford:** M1500: 1, M Hibberd (TVH) 3:45.2; 2, J Lobo (Blackburn) 3:45.3; 3, P Freary (Bolton) 3:45.3; 4, N Ovington (TVH) 3:46.2; 5, A Pearson (Longwood) 3:46.9; 6, P Jones (Hull) 3:47.3; 7, M Davies (C&C); 3:48.4; 8, M Cooper (W&B) 3:48.7; b) 1, P Miller 3:51.6; 2, E Crowther U20 (Salford) 3:52.0; ..6, K Farrow U20 (Derby) 3:53.5; 7, G Cuddy U20 (Sale) 3:54.7; 8, L O'Brien U20 (Skyrac) 3:55.8; W1500: P Thackeray (Spen) 4:31.8; **3rd Aug, Grangemouth:** M600: 1, G Brown (Cab) 1:18.6; 2, P McDevitt (Sheffield) 1:19.5; 3, E Calvert U20 (TVH) 1:20.3; 4, P Mowbray (Edinburgh Univ) 1:20.3; 5, J MacFayden (Edinburgh S) 1:20.8; M5000: 1, C Robison (IBM) 13:55.7; 2, J McKay (Shett) 14:22.8; 3, G Wight (Shett) 14:31.0, 4, W Coyle (Shett) 14:35.5; **3rd Aug, West London:** M5000: 1, J Lisiewicz (Morpeth) 14:19.4; 2, G Gerrard (Royal Navy) 14:20.5; 3, I Manners (Highgate) 14:41.0; **3rd Aug, Warley:** M1500: G Tromans (Coventry) 3:49.6; W1500: J Davis (Exeter) 4:24.6; 2, A Wight (Tipton) 4:30.1; ..6, G Salmon U15 (Bristol) 4:42.2; ..9, J Woolley U15 (Bristol) ; **6th Aug, Antrim:** M Mile: B Farren (Sparta) 4:00.2; **8th Aug, SW Grand Prix, Exeter:** M Mile: 1, A Hart (Coventry) 4:03.3; 2, R Whalley (Stoke) 4:03.8; 3, I Gillespie (Birchfield) 4:04.8; 4, T Buckner (Hav) 4:05.4; 5, N Caddy U20 (Newquay & Par) 4:06.1; 6, I Manners (Highgate); 4:06.9; 7, T Chimusasa (ZIM) 4:09.1, 8, A Renfree U20 (Newquay) 4:12.5; ..13, D Hyde U17 (Torbay) 4:21.5; **10th Aug, Watford:** M1500: 1, J Downes (London Irish) 3:44.6; 2, S Poore (Team Solent) 3:45.5; 3, R Ashe U20 (B&H) 3:46.6; 4, J Mills (Chelmsford), 3:46.7; 5, L Mangleshot (Woodford Green) 3:47.2; 6, P Gardner (Telford) 3:47.7; 7, K Cullen (Chelmsford) 3:48.1; **10th Aug, SW Grand Prix, Newport:** M1500: 1, R Whalley (Stoke) 3:45.5; 2, A Keith (Hereford) 3:45.6; 3, I Gillespie (Birchfield) 3:47.8; ..7, B Noad U20 (Bristol) 3:53.9, ..12, C Blount U20 (Newport) 3:55.9; b) D Povall (Newport) 3:59.4; W1500: H Mittleberger (Aber) 4:39.7; **14th Aug, Stretford:** M5000: D Mason (Salford) 14:35.5; W5000: 1, S Rigg (Warr) 15:58.7; 2, J Spark (Alt) 16:12.1; **18th Aug, Ealing:** M1500: J O'Shea (Hounslow) 3:53.9;

21st August, Reebok Challenge, Solihull

M800: 1, A Knight (Camb H) 1:49.21; 2, J Swift-Smith (Shaftesbury B) 1:49.42; 3, E King U20 (B&A) 1:49.47; 4, A Hart (Coventry) 1:50.76; 5, C Blount U20 (Newport) 1:51.61; b) 1, I Mansfield (Lincoln) 1:51.56; 2, J Thompson (Dartford) 1:51.73; 3, L Mangleshot (Woodford Green) 1:51.81; 4, M Kloiber (Bristol) 1:51.86; c) A Draper (Coventry) 1:53.05; **FSA JM800:** 1, M Clarke U20 (Dav) 1:54.50; 2, S Illidge U20 (Lincoln W) 1:54.66; 3, R Morley U20 (Lincoln W) 1:55.77; **HSA W800:** 1, A Davies (Basingstoke) 2:03.67 **(BMC Record)**; 2, A Layzell (Cheltenham) 2:05.78; 3, N Tait (Hounslow) 2:06.17; 4, D Lee U20 (Yeovil) 2:06.67; 5, M Harries (Parkside) 2:07.02; 6, M Kitson (Hounslow) 2:07.04; 7, J Jones (Soton) 2:07.10; 8, L Thompson (Bromley) 2:07.38; 9, L Mallows (Coventry) 2:08.39; 10, M Faherty (Skyrac) 2:09.23; **FSA JW800:** 1, E Davies U20 (Andover) 2:14.91; 2, G. Salmon U15 (Bristol) 2:16.08; 3, K Thorpe U20 (Dav) 2:16.18; 4, I. Rice U20 (Coventry) 2:18.00; 5, R Love U20 (North P) 2:19.26; 6, C Newton U20 (C&S) 2:19.61; **M1500:** I Grime (NEB) 3:40.35 **(BMC Record)**; 2, S White (Coventry) 3:41.02; 3, P Mowbray (Edinburgh Univ) 3:41.63; 4, I Gillespie (Birchfield) 3:41.65; 5, M Hibberd (TVH) 3:41.73; 5, R Scanlon (Coventry) 3:43.90; 6, J Downes (London Irish) 3:44.38; 7, C Murphy (Sale) 3:44.60; 8, S Poore (Team Solent) 3:44.77; 9, J Mills (Chelmsford) 3:48.11; 10, R Fitzsimmons (Kilbride) 3:48.27; b) 1, N Comerford (Cardiff) 3:47.55; 2, K Critchley (Rown) 3:47.76; 3, F Boyne (Aberdeen) 3:48.95; ..6, K Farrow U20 (Derby) 3:54.85; c) 1, S Edmonds (Birch) 3:51.99; ..4, S Overthrow U20 (Gloucester) 3:54.51; **HSA W1500:** 1, C Slimmin (Basingstoke) 4:18.61; 2, L Robinson (Coventry) 4:20.18; 3, W Ore (Cardiff) 4:20.60; 4, L Carthew (Swansea) 4:23.07; 5, J Davies (Exeter) 4:23.36; 6, S King (Sale) 4:25.56; 7, W Farrow (Derby L) 4:25.82; 8, A Moutrie (Parkside) 4:27.33; 9, S Salmon (Newquay & Par) 4:28.41; 10, J Swann (W&B) 4:28.51; **M3000:** 1, B Farren (Sparta) 7:56.24 **(BMC Record)**; 2, S Barden (GEC) 8:00.29; 3, D Burrows U20 (Birchfield) 8:01.26; 4, S Bitok (KEN) 8:03.38; 5, J Lisiewicz (Morpeth) 8:05.41; 6, J Burke (London Irish) 8:08.42; 7, S Newport (Blackheath) 8:09.76; 8, I Manners (Highgate) 8:13.92; **W3000:** 1, S Bentley (Stoke) 9:25.93; 2, L Hollick (Shaftesbury) 9:41.14; 3, W Sutherland (Serpentine) 9:42.55; S Dixon (Parkside) 9:57.68; M Wooldridge (Newquay & Par) 10:02.20; A Joiner (Charnwood) 10:09.68;

23rd Aug, Stretford; M800: 1, J Lobo (Blackburn) 1:49.3; 2, E Calvert (TVH) 1:49.3; 3, G Graham (Clydesdale) 1:49.6; 4, C Murphy (Sale) 1:50.1, 5, P Freary (Bolton) 1:50.5, 6, B Reese U20 (Wirral) 1:50.5, 7, N Bentham (Doncaster) 1:51.3; 8, D Locker U20 (Stoke) 1:52.2; b) 1, D Thornton (Hynd) 1:52.7; ..5, D Bullock U20 (Shaft B) 1:54.4; c) 1, B Reiper (Leic) 1:53.5; ..6, P Mullany U20 (Hynd) 1:56.2; W800: V Boden W35 (Trafford) 2:11.3; 2, M Wilkinson (Sale) 2:11.4; **29th Aug, Welwyn:** M1500: L Mangleshot (W Green) 3:50.8; ..3, T Mayo U20 3:52.0; **29th Aug, SW Grand Prix, Cheltenham:** M1500: 1, I Gillespie (Birchfield) 3:44.7; 2, A Hart (Coventry) 3:45.1; 3, P Gardner (Telford) 3:46.9; 4, J Swift-Smith (Shaft B) 3:48.1; 5, R Whalley (Stoke) 3:48.5; b) 1, S Overthrow U20 (Gloucester) 3:52.3, 2, C Elliott U20 (Ports) 3:52.3; 3, A Renfree U20 (Newquay & Par) 3:52.7; ..6, P Steel U20 (Stroud) 3:56.3; 7, D Bedwell M40 (Bristol) 4:04.8; W1500: 1, L Carthew (Swansea) 4:32.6; ..3, G Salmon U15 (Bristol) 4:42.5; ..7, J Woolley U15 (Bristol) 4:48.6; **4th Sept, SW Grand Prix, Southampton:** M Mile: 1, A Hart (Cov) 4:05.7; 2, T Buckner (Havant) 4:06.0; 3, R Hough (Sheff) 4:06.4; 4, I Manners (High) 4:09.8;

7th Sept, Reebok Challenge, Loughborough

M800: 1, A Knight (Camb H) 1:49.54; 2, J Swift-Smith (Shafts B) 1:50.43; 3, C Blount U20 (Newport) 1:52.53; b) 1, P Cooper (City of Hull) 1:52.93; 2, D Bullock U20 (Shaftesbury Barnet) 1:53.40; 3, A McDougall U20 (GEC) 1:53.67; c) 1, D Bedford U20 (Hallam) 1:54.60; **HSA W800:** 1, M Kitson (Houns) 2:06.0; 2, L Robinson (Coventry) 2:06.5; 3, I. Thompson (Bromley) 2:08.3; 4, M Wilkinson (Sale) 2:08.6; 5, K Rawnsley.Pemberton V35 (Spenborough) 2:08.7; **M1500:** 1, M Hibberd (TVH) 3:42.5; 2, D English (Havering) 3:43.1; 3, S White (Coventry) 3:43.4; 4, C Murphy (Sale) 3:43.8; 5, R Johnston (NZ) 3:44.2; 6, S Barden (GEC) 3:44.6; 7, R Scanlon (Coventry) 3:45.6; 8, J Mills (Chelms) 3:45.7; 9, N Comerford (Cardiff) 3:46.5; 10, G Graham (Clydesdale) 3:48.6; 11, I Gillespie (Birch) 3:48.6; 12. D Burrows U20 (Birch) 3:48.9; b) K Critchley (Rown) 3:49.8; ..5, M O'Dowd U20 (Swindon) 3:55.2; **HSA W1500:** 1, L Carthew (Swansea) 4:23.62; 2, C Slimmin (Basingstoke) 4:24.22; 3, W Ore (Cardiff) 4:24.62; 4, L Talbot (Bedford) 4:25.32; 5, S King (Sale) 4:25.58; 6, W Farrow (Derby) 4:26.95; 7, J Swann (W & B) 4:28.38; 8, J Jones (Southampton) 4:28.56; **M5000:** 1, T Buckner (Havant) 14:07.00; 2, I Grime (NEB) 14:08.31; 3, J Lisiewicz (Morpeth) 14:09.20; 4, K Cullen (Chelmsford) 14:11.88; 5, M Steinle (Blackheath) 14:25.44; **W5000:** 1, G Collison (Belgrave) 16:59.30; 2, S Dixon (Parkside) 17:25.49; 3, K Atkin (Charnwood) 17:29.03;

10th Sept, SW Grand Prix, Yate: M Mile: 1, R Whalley (Stoke) 4:13.5; 2, T Buckner (Havant) 4:14.3; 3, P Freary (Bolton) 4:14.4; 4, N Comerford (Card) 4:14.4; ..7, M O'Dowd U20 (Swindon) 4:20.5; .. 9, D Bedwell V40 (Bristol) 4:25.5; 10, P Molloy V45 (Swindon) 4:33.0; **11th Sept, SW Grand Prix, Bristol:** M Road Mile: 1, P Freary (Bolton) 4:05.8; 2, T Buckner (Havant) 4:07.4; 3, N Comerford (Cardiff) 4:08.6; 4, I Gillespie (Birchfield) 4:09.8; ..9, M O'Dowd U20 (Swindon) 4:13.8; **Post Office Counters SW Grand Prix, Final Positions:** 1, I Gillespie (Birchfield) 156.5 pts; 2, R Whalley (Stoke) 154 pts, 3, A Hart (Coventry) 146 pts; 4, T Buckner (Havant) 111.5 pts; 5, N Comerford (Cardiff) 97 pts. **14th Sept, Ealing:** M Mile: N Yelling (Bedford) 4:23.7;

17th Sept, FSA Relay Meeting, Oxford

FSA JM1500: R Morris U17 4:08.2; **FSA W Mile:** 1, W Farrow (Derby) 4:50.4; 2, H Pattinson 5:03.2; 3, C Goff U20 5:08.2; 4, R Love U20 5:11.7; **M10000:** 1, J Lisiewicz (Morpeth) 29:49.2; 2, R Kindersley (Serp) 32:12.4; **FSA M4x800:** 1, BMC England 7:37.5 (N Williams 1:56.2, M Barrow 1:54.0, K Wright 1:52.4, M Gooch 1:54.9); 2, BMC Junior 7:37.7 (B Reese U20 1:52.8, A MacDougall U20 1:57.0, I Bowden U20 1:56.0, C Blount U20 1:51.9); 3, BMC Wales 7:44.7 **(Welsh Record)** (S Mosley 1:55.0, M Kinnane 1:58.7, T Cordy 1:54.0, M Jones 1:57.0); **FSA M4x1Mile:** 1, BMC National Squad 16:37.1 (N Caddy U20 4:13.4, T Buckner 4:09.9, S Barden 4:03.6, I Grime 4:10.2); 2, BMC Wales 17:10.5 (N Comerford 4:11.9, S Mosley 4:19.4, M Davies 4:20.5, S Snow 4:18.7); 3, BMC South 17:42.2 (A Renfree U20 4:23.2, D Rankin 4:26.6, M Roberts 4:24.6, J Brooks 4:27.8); **18th Sept, Sutton:** M800: J Mills (Chelmsford) 1:54.1

1994 BMC Rankings

Men's 600m

1:18.6	Gary Brown	1	Grangemouth	3 Aug
1:19.5	P McDevitt	2	Grangemouth	3 Aug
1:20.3	Ewan Calvert	3	Grangemouth	3 Aug
1:20.3	Phil Mowbray	4	Grangemouth	3 Aug
1:20.8	John MacFayden	5	Grangemouth	3 Aug

5 performances to 1:21.0 by 5 athletes

Men's 800m

1:46.83	Benson Koech KEN	1r1	Crawley	28 May
1:47.52	Andrew Lill	2r1	Crawley	28 May
1:48.95	Mike Guegan	3r1	Crawley	28 May
	1:50.6	4r1	Wythenshawe	18 May
1:49.21	Andy Knight	1r1	Solihull	21 Aug
	1:49.54	1r1	Loughborough	7 Sep
1:49.3	Jason Lobo	1r1	Stretford	23 Aug
	1:50.6	1r2	Wythenshawe	18 May
1:49.3	Ewan Calvert	2r1	Stretford	23 Aug
	1:51.6	1r4	Wythenshawe	18 May
	1:52.0	2	Grangemouth	4 May
1:49.42	Justin Swift-Smith	2r1	Solihull	21 Aug
	1:50.43	4r1	Crawley	28 May
	1:50.43	2r1	Loughborough	7 Sep
	1:51.4	5r2	Wythenshawe	18 May
1:49.47	Eddie King U20	3r1	Solihull	21 Aug
	1:50.7	1r3	Wythenshawe	18 May
1:49.6	Grant Graham	3r1	Stretford	23 Aug
	1:51.5	1	Grangemouth	4 May
1:49.8	Andy Hart	1	Cheltenham	20 Jul
	1:50.76	4r1	Solihull	21 Aug
	1:52.0	1r1	Solihull	6 Jul
	(10)			
1:50.1	Craig Winrow	1r1	Wythenshawe	18 May
1:50.1	Cieran Murphy	4r1	Stretford	23 Aug
	1:51.5	1	Stretford	31 May
1:50.3	Terry West	2r1	Wythenshawe	18 May
1:50.5	Paul Freary	5r1	Stretford	23 Aug
1:50.5	Ben Reese U20	6r1	Stretford	23 Aug
	1:51.4	2	Stretford	12 Jul
1:50.6	Clive Gilby	3r1	Wythenshawe	18 May
1:50.7	Lee Cadwallader	5r1	Wythenshawe	18 May
1:50.7	Adam Duke	2	Cheltenham	20 Jul
1:50.8	Mark Sesay	2r2	Wythenshawe	18 May
1:50.9	Paul Burgess	3r2	Wythenshawe	18 May
	1:51.9	1	Stretford	26 Apr
	(20)			
1:51.0	Kevin McKay	6r1	Wythenshawe	18 May
1:51.0	Rob Whalley	3	Cheltenham	20 Jul
1:51.1	Rod Finch	4r2	Wythenshawe	18 May
1:51.3	Nick Bentham	7r1	Stretford	23 Aug
	1:51.6	4	Stretford	12 Jul
	1:51.8	4	Cheltenham	20 Jul
1:51.4	Simon Parsons	1	Stretford	12 Jul
	1:52.0	3r4	Wythenshawe	18 May
1:51.5	Paul Roberts	3	Stretford	12 Jul
	1:51.8	6r2	Wythenshawe	18 May
	1:52.0	5	Stretford	31 May
1:51.56	Ian Mansfield	1r2	Solihull	21 Aug
1:51.61	Chris Blount U20	5r1	Solihull	21 Aug
	1:51.9	relay	Oxford	17 Sep
1:51.62	Matt Hibberd	5r1	Crawley	28 May
1:51.69	Andrew Draper	1r2	Crawley	28 May
	(30)			
1:51.7	Andrew Parker	2	Stretford	31 May
1:51.7	Karl Wright	5	Stretford	12 Jul
1:51.73	Jason Thompson	2r2	Solihull	21 Aug
1:51.8	Rob Scanlon	5	Cheltenham	20 Jul
1:51.8	Neil Caddy U20	1	Cambourne	27 Jul
1:51.81	Larry Mangleshot	3r2	Solihull	21 Aug
1:51.86	Matthew Kloiber	4r2	Solihull	21 Aug
1:51.9	Ian Bowden U20	3r3	Wythenshawe	18 May
	1:51.9	3	Stretford	31 May
1:52.0	Des Roache U20	2r4	Wythenshawe	18 May
1:52.0	Peter Hackley	4	Stretford	31 May
1:52.0	Ian Thompson	6	Cheltenham	20 Jul

63 performances to 1:52.0 by 41 athletes

Additional U20

1:52.2	David Locker	8r1	Stretford	23 Aug
1:52.3	Chris Stringer	4r3	Wythenshawe	18 May
1:53.40	Dave Bullock	2r2	Loughborough	7 Sep
1:53.67	Alan McDougall	3r2	Loughborough	7 Sep
1:53.9	Dave Povall	3	Barry	27 Jul
1:54.1	Tim Balaan	3	Welwyn	2 May
1:54.4	J Staneke	7	Stretford	21 Jun
1:54.50	Matthew Clarke	1r4	Solihull	21 Aug
1:54.5	P Dunlop	5r2	Stretford	31 May
1:54.60	David Bedford	1r3	Loughborough	7 Sep

Men's 1,500m

3:40.35	Ian Grime	1r1	Solihull	21 Aug
3:41.02	Steffan White	2r1	Solihull	21 Aug
	3:43.4	3r1	Loughborough	7 Sep
	3:46.0	1r2	Wythenshawe	18 May
3:41.28	Davy Wilson	1	Belfast	4 Jun
	3:43.77	1r1	Crawley	28 May
3:41.63	Phil Mowbray	3r1	Solihull	21 Aug
	3:45.8	9r1	Wythenshawe	18 May
3:41.65	Ian Gillespie	4r1	Solihull	21 Aug
	3:43.8	5r1	Wythenshawe	18 May
	3:44.0	1	Salisbury	10 Jul
	3:44.48	2r1	Crawley	28 May
	3:44.7	1r1	Cheltenham	29 Aug
	3:45.7	2	Ealing	15 Jun
	3:47.8	3	Newport	10 Aug
	3:48.6	11r1	Loughborough	7 Sep
3:41.73	Matt Hibberd	5r1	Solihull	21 Aug
	3:42.5	1r1	Loughborough	7 Sep
	3:45.2	1	Stretford	2 Aug
	3:47.7	11r1	Wythenshawe	18 May
3:42.7	Gary Lough	1r1	Wythenshawe	18 May
3:42.8	Steve Cram	2r1	Wythenshawe	18 May
3:43.1	Des English IRE	2r1	Loughborough	7 Sep
	3:46.98	10r1	Crawley	28 May
3:43.3	Matt Barnes	3r1	Wythenshawe	18 May
	(10)			
3:43.4	Glen Stewart	4r1	Wythenshawe	18 May
	3:44.38	2	Belfast	4 Jun
3:43.8	Cieran Murphy	4r1	Loughborough	7 Sep
	3:44.60	8r1	Solihull	21 Aug
	3:45.5	8r1	Wythenshawe	18 May
3:43.90	Rob Scanlon	6r1	Solihull	21 Aug
	3:45.6	7r1	Loughborough	7 Sep
	3:47.9	9r2	Wythenshawe	18 May
3:44.2	Robbie Johnston NZ	5r1	Loughborough	7 Sep
3:44.38	John Downes IRE	7r1	Solihull	21 Aug
	3:44.6	1	Watford	10 Aug
3:44.6	Spencer Barden	6r1	Loughborough	7 Sep
	3:46.20	7r1	Crawley	28 May
	3:47.9	8r2	Wythenshawe	18 May
3:44.7	Grant Graham	6r1	Wythenshawe	18 May
	3:48.6	10r1	Loughborough	7 Sep
3:44.77	Stuart Poore	9r1	Solihull	21 Aug
	3:45.5	2	Watford	10 Aug
	3:45.75	5r1	Crawley	28 May
3:44.9	Andy Hart	1	Ealing	15 Jun
	3:45.1	2r1	Cheltenham	29 Aug
	3:46.7	2r2	Wythenshawe	18 May
3:45.05	Nick Hopkins	3r1	Crawley	28 May
	3:47.4	7r2	Wythenshawe	18 May
	(20)			
3:45.1	Vince Wilson	7r1	Wythenshawe	18 May
3:45.3	Jason Lobo	2	Stretford	2 Aug
3:45.3	Paul Freary	3	Stretford	2 Aug
	3:47.0	2	Stretford	21 Jun
3:45.5	Rob Whalley	1	Newport	10 Aug
	3:45.9	2	Salisbury	10 Jul
	3:46.7	1	Stretford	21 Jun
	3:48.5	5r1	Cheltenham	29 Aug

1994 BMC Rankings

3:45.6	Andrew Keith	2	Newport	10 Aug
3:45.7	Joseph Mills	8r1	Loughborough	7 Sep
	3:46.7	4	Watford	10 Aug
	3:48.11	10r1	Solihull	21 Aug
3:45.74	James Starling	4r1	Crawley	28 May
3:46.16	Neil Caddy U20	6r1	Crawley	28 May
	3:47.3	6r2	Wythenshawe	18 May
3:46.2	Neil Ovington	4	Stretford	2 Aug
3:46.42	Spencer Duval	8r1	Crawley	28 May
	(30)			
3:46.48	Kevin Howard	9r1	Crawley	28 May
3:46.5	Nick Comerford	9r1	Loughborough	7 Sep
	3:47.55	1r2	Solihull	21 Aug
3:46.6	Richard Ashe U20	3	Watford	10 Aug
3:46.64	Bobby Farren	3	Belfast	4 Jun
3:46.7	Paul Drake	3	Salisbury	10 Jul
3:46.9	Darren Daniels	3r2	Wythenshawe	18 May
3:46.9	Bruno Witchalls U20	4r2	Wythenshawe	18 May
3:46.9	Andrew Pearson	5	Stretford	2 Aug
3:46.9	Paul Gardner	3r1	Cheltenham	29 Aug
	3:47.7	6	Watford	2 Aug
3:47.0	Brad Glenton	5r2	Wythenshawe	18 May
	(40)			
3:47.1	Steve Mosley	4	Salisbury	10 Jul
3:47.2	Larry Mangleshot	5	Watford	10 Aug
3:47.3	Peter Jones	6	Stretford	2 Aug
3:47.6	Philip Healy	10r1	Wythenshawe	18 May
3:47.6	Ian Hudspith	1	Milton Keynes	20 Jul
3:47.76	Kim Critchley	2r2	Solihull	21 Aug
3:48.1	Bashir Hussein	3	Stretford	21 Jun
3:48.1	Keith Cullen	7	Watford	10 Aug
3:48.1	Justin Swift-Smith	4r1	Cheltenham	29 Aug
3:48.27	Robert Fitzsimmons	11r1	Solihull	21 Aug
	(50)			
3:48.4	Matthew Davies	7	Stretford	2 Aug
3:48.68	Ismael Kirui U20 KEN	11r1	Crawley	28 May
3:48.7	M Cooper	8	Stretford	2 Aug
3:48.8	Simon Fairbrother	12r1	Wythenshawe	18 May
3:48.9	Darius Burrows U20	12r1	Loughborough	7 Sep
3:48.95	Frank Boyne	3r2	Solihull	21 Aug
	94 performances to 3:49.0 by 56 athletes			
Additional U20				
3:49.7	Ben Reese	6	Stretford	21 Jun
3:51.2	Alan Tatham	3	Stretford	26 Apr
3:52.0	F Crowther	2r2	Stretford	2 Aug
3:52.0	Thomas Mayo	3	Welwyn	29 Aug
3:52.3	I Mitchell	11	Stretford	21 Jun
3:52.3	Stuart Overthrow	1r2	Cheltenham	29 Aug
3:52.3	Chris Elliott	2r2	Cheltenham	29 Aug
3:53.5	Kevin Farrow	6r2	Stretford	2 Aug
3:52.7	Andrew Renfree	3r2	Cheltenham	29 Aug
3:53.6	Eddie Bowen	12	Stretford	21 Jun
3:53.9	Ben Noad	7	Newport	10 Aug
3:54.7	Grant Cuddy	7r2	Stretford	2 Aug
3:55.2	Matthew O'Dowd	5r2	Loughborough	7 Sep
3:55.23	Mark Steinle	8r2	Crawley	28 May
3:55.5	Richard Mann	7	Solihull	1 Jun
3:55.5	Eddie Bowen	8	Solihull	1 Jun
3:55.8	L O'Brien	8r2	Stretford	2 Aug
3:55.9	Chris Blount	12	Newport	10 Aug

Men's Mile

4:00.2	Bobby Farren	1	Antrim	10 Aug
4:03.3	Andy Hart	1	Exeter	8 Aug
	4:05.7	1	Southampton	4 Sep
4:03.6	Spencer Barden	relay	Oxford	17 Sep
4:03.8	Rob Whalley	2	Exeter	8 Aug
4:04.8	Ian Gillespie	3	Exeter	8 Aug
4:05.4	Tom Buckner	4	Exeter	8 Aug
	4:06.3	2	Southampton	4 Sep
	4:09.9	relay	Oxford	17 Sep
4:06.1	Neil Caddy U20	5	Exeter	8 Aug
4:06.4	Robert Hough	3	Southampton	4 Sep
4:06.9	Ian Manners	6	Exeter	8 Aug
	4:09.8	4	Southampton	4 Sep
4:09.1	Tendai Chimusasa ZIM	7	Exeter	8 Aug
	14 performances to 4:10.0 by 10 athletes			
Additional U20				
4:12.5	Andrew Renfree	8	Exeter	8 Aug
4:21.5	Daniel Hyde U17	13	Exeter	8 Aug

Men's 3,000m

7:56.24	Bobby Farren	1	Solihull	21 Aug
8:00.29	Spencer Barden	2	Solihull	21 Aug
8:01.26	Darius Burrows U20	3	Solihull	21 Aug
8:03.1	Ian Gillespie	1r1	Cheltenham	20 Jul
8:03.38	Sammy Bitok KEN	4	Solihull	21 Aug
8:03.5	Darren Daniels	2r1	Cheltenham	20 Jul
8:05.41	John Lisiewicz AUS	5	Solihull	21 Aug
8:08.42	John Burke IRE	6	Solihull	21 Aug
	8:12.7	5r1	Cheltenham	20 Jul
8:09.76	Spencer Newport	7	Solihull	21 Aug
8:10.2	Nick Comerford	3r1	Cheltenham	20 Jul
	(10)			
8:11.2	K Yuen USA	4r1	Cheltenham	20 Jul
8:13.92	Ian Manners	8	Solihull	21 Aug
	13 performances to 8:15.0 by 12 athletes			
Additional U20				
8:25.0	Ben Noad	12r1	Cheltenham	20 Jul

Men's 5,000m

13:46.4	John Sherban	1	Crawley	28 May
13:47.0	Dermot Donnelly	2	Crawley	28 May
13:48.9	Jim Campbell	3	Crawley	28 May
13:55.7	Chris Robison	1	Grangemouth	3 Aug
14:07.00	Tom Buckner	1	Loughborough	7 Sep
14:08.31	Ian Grime	2	Loughborough	7 Sep
14:09.20	John Lisiewicz AUS	3	Loughborough	7 Sep
	14:14.4	5	Crawley	28 May
	14:19.4	1	West London	3 Aug
14:11.88	Keith Cullen	4	Loughborough	7 Sep
14:12.0	Bobby Farren	4	Crawley	28 May
14:15.2	Garry Gerrard	6	Crawley	28 May
	14:20.5	2	West London	3 Aug
	(10)			
14:17.2	Steve Green	1	Stretford	31 May
14:17.8	Colin Moore	2	Stretford	31 May
14:20.5	Paul Dugdale	3	Stretford	31 May
14:22.8	John McKay	2	Grangemouth	3 Aug
14:25.44	Mark Steinle U20	5	Loughborough	7 Sep
	18 performances to 14:30.0 by 15 athletes			

Men's 10,000m

29:49.2	John Lisiewicz AUS	1	Oxford	17 Sep
	1 performance to 30:00.0 by 1 athlete			

Women's 800m

2:03.67	Angela Davies	1r1	Solihull	21 Aug
2:03.7	Diane Modahl	1r1	Wythenshawe	18 May
2:04.6	Cathy Dawson	1mx	Ealing	13 Jul
	2:07.0	5r1	Wythenshawe	18 May
2:04.7	Lynne Robinson	1mx	Solihull	6 Jul
	2:06.13	4r1	Crawley	28 May
	2:06.5	2	Loughborough	7 Sep
	2:08.9	1	Warley	4 May
2:04.75	Sonya Bowyer	1r1	Crawley	28 May
2:05.4	Michelle Faherty	2r1	Wythenshawe	18 May
	2:09.23	10r1	Solihull	21 Aug
	2:11.3	1	Lanzarote	15 Mar
2:05.65	Dawn Gandy	2r1	Crawley	28 May
	2:05.7	3r1	Wythenshawe	18 May
2:05.78	Alyson Layzell	2r1	Solihull	21 Aug
	2:06.5	1	Cheltenham	20 Jul
	2:09.4	1	West London	1 Jun
2:05.82	Helen Daniel	3r1	Crawley	28 May
2:06.0	Mary Kitson	1	Loughborough	7 Sep
	2:07.04	6r1	Solihull	21 Aug
	(10)			

1994 BMC Rankings

2:06.17	Nathalie Tait	3r1	Solihull	21 Aug
2:06.67	Dorothea Lee U20	4r1	Solihull	21 Aug
2:06.7	Joanna Latimer	4r1	Wythenshawe	18 May
	2:07.19	5r1	Crawley	28 May
	2:08.4	1	Stretford	26 Apr
2:07.02	Michelle Harries	5r1	Solihull	21 Aug
2:07.10	Jillian Jones	7r1	Solihull	21 Aug
	2:07.72	7r1	Crawley	28 May
	2:09.2	7r1	Wythenshawe	28 May
2:07.3	Maxine Newman	2	Cheltenham	20 Jul
	2:10.2	3mx	Solihull	6 Jul
2:07.38	Lisa Thompson	8r1	Solihull	21 Aug
	2:08.3	3	Loughborough	7 Sep
	2:09.95	1r2	Crawley	28 Aug
2:07.50	Bev Hartigan	6r1	Crawley	28 May
2:07.7	Paula Fryer	6r1	Wythenshawe	18 May
2:08.1	Vicky Lawrence	1	Stretford	31 May
	2:09.1	1r2	Wythenshawe	18 May
	(20)			
2:08.39	Lesley Mallows	9r1	Solihull	21 Aug
2:08.5	Phyllis Smith	2	Stretford	26 Apr
2:08.6	Michelle Wilkinson	4	Loughborough	7 Sep
	2:10.9	5	Stretford	26 Apr
	2:11.4	2	Stretford	23 Aug
	2:11.9	2	Stretford	12 Jul
2:08.7	Cath R.Pemberton V35	5	Loughborough	7 Sep
2:08.86	Linda Keough	8r1	Crawley	28 May
2:09.5	Amanda Thorpe	2	Stretford	31 May
	2:10.8	4	Stretford	26 Apr
	2:11.6	1	Stretford	12 Jul
2:09.8	Sue Bevan	8r1	Wythenshawe	18 May
2:10.0	Jayne Spark	3	Stretford	31 May
2:10.1	Lisa Carthew	2mx	Solihull	6 Jul
	2:10.3	1	Newport	13 Jul
2:10.4	Julie Swann	3	Stretford	26 Apr
	(30)			
2:10.9	Lorraine Baker	2r2	Wythenshawe	28 May
2:10.9	Angela Coates	1	Stretford	21 Jun
	2:11.7	3r2	Wythenshawe	18 May
2:11.1	Tanya Baker	1	Ealing	15 Jun
2:11.3	Veronica Boden V35	1	Stretford	23 Aug
2:11.8	Wendy Farrow	4	Stretford	31 May

60 performances to 2:12.0 by 35 athletes

Additional U20

2:12.7	K Smithson	2	Stretford	21 Jun
2:13.0	Kathryn Bright	7	Stretford	26 Apr
2:14.3	Amanda Pritchard U15	3	Newport	13 Jul
2:14.91	Emma Davies	1r2	Solihull	21 Aug
2:16.0	Georgie Salmon U15	6	Cheltenham	20 Jul
2:16.18	Karen Thorpe	3r2	Solihull	18 May
2:16.2	Emma Graysmark	7r2	Wythenshawe	18 May
2:16.2	Juliette Oldfield	4	Warley	4 May
2:17.9	Joanne Gardener	6	Solihull	6 Jul
2:18.00	Lorna Rice	4r2	Solihull	21 Aug
2:19.26	Ruth Love	5r2	Solihull	21 Aug
2:19.61	Claire Newton	6r2	Solihull	21 Aug

Women's 1,500m

4:13.6	Lynne Robinson	1	Cheltenham	20 Jul
	4:20.1	6r1	Wythenshawe	18 May
	4:20.18	2	Solihull	21 Aug
4:14.6	Bev Hartigan	1r1	Wythenshawe	18 May
4:14.62	Alison Wyeth	1	Crawley	28 May
4:14.80	Sonia McGeorge	2	Crawley	28 May
4:14.9	Lynn Gibson	2r1	Wythenshawe	18 May
4:15.1	Angela Davies	3r1	Wythenshawe	18 May
4:16.50	Debbie Gunning	3	Crawley	28 May
	4:17.3	4r1	Wythenshawe	18 May
4:16.90	Michelle Faherty	4	Crawley	28 May
4:18.5	Maxine Newman	5r1	Wythenshawe	18 May
4:18.61	Caroline Slimmin	1	Solihull	21 Aug
	4:21.33	5	Crawley	28 May
	4:24.22	2	Loughborough	7 Sep
	(10)			

4:20.60	Wendy Ore	3	Solihull	21 Aug
	4:22.51	8	Crawley	28 May
	4:24.62	3	Loughborough	7 Sep
4:21.36	Wendy Williams	6	Crawley	28 May
4:21.9	Jayne Spark	7r1	Wythenshawe	18 May
4:22.09	Joanne Symonds	7	Crawley	28 May
	4:27.4	1r2	Wythenshawe	18 May
4:23.07	Lisa Carthew	4	Solihull	21 Aug
	4:23.62	1	Loughborough	7 Sep
4:23.16	Michelle Harries	9	Crawley	28 May
4:23.2	Sharon King	8r1	Wythenshawe	18 May
	4:25.56	6	Solihull	21 Aug
	4:25.68	5	Loughborough	7 Sep
4:23.36	Joanne Davies	5	Solihull	21 Aug
	4:24.6	1	Warley	3 Aug
4:25.30	Alison Barnes	10	Crawley	28 May
4:25.32	Liz Talbot	4	Loughborough	7 Sep
	(20)			
4:25.5	Amanda Thorpe	1	Stretford	10 May
	4:26.5	9r1	Wythenshawe	18 May
4:25.82	Wendy Farrow	7	Solihull	21 Aug
	4:26.65	6	Loughborough	7 Sep
4:25.9	Diane Brockley	2	Stretford	10 May
4:27.3	Sarah Bentley	3	Stretford	10 May
	4:28.3	2r2	Wythenshawe	18 May
4:27.33	Anna Moutrie	8	Solihull	21 Aug
4:27.5	Amanda Wight	2	Cheltenham	20 Jul
4:28.38	Julie Swann	7	Loughborough	7 Sep
	4:28.51	10	Solihull	21 Aug
4:28.41	Sarah Salmon	9	Solihull	21 Aug
4:28.56	Jillian Jones	8	Loughborough	7 Sep
4:30.0	Penny Thackeray	3r2	Wythenshawe	18 May

46 performances to 4:30.0 by 30 athletes

Additional U20

4:37.7	Kim Dyer	1	Solihull	1 Jun
4:42.5	Georgie Salmon U15	3	Cheltenham	29 Aug
4:44.0	Ruth Love	3	Solihull	1 Jun
4:45.9	Jessica Woolley U15	9	Warley	3 Aug

Women's Mile

4:50.4	Wendy Farrow	1	Oxford	17 Sep
4:53.5	Michelle Faherty	1	Lanzarote	16 Mar

2 performances to 5:00.0 by 2 athletes

Additional U20

5:08.7	Charlotte Goff	3	Oxford	17 Sep
5:11.7	Ruth Love	4	Oxford	17 Sep

Women's 3,000m

9:25.93	Sarah Bentley	1	Solihull	21 Aug
9:41.14	Lisa Hollick	2	Solihull	21 Aug
9:42.55	Wendy Sutherland NZ	3	Solihull	21 Aug
	10:05.2	1	West London	6 Apr
9:44.1	Alice Braham U20	1	Yate	1 May
9:57.68	Sharon Dixon	4	Solihull	21 Aug

5 performances to 10:00.0 by 5 athletes

Additional U20

10:11.3	Kim Dyer	2	Yate	1 May
10:12.6	Caroline McNulty U17	3	Yate	1 May

Women's 5,000m

15:58.7	Suzanne Rigg	1	Stretford	14 Aug
16:12.1	Jayne Spark	2	Stretford	14 Aug
16:13.43	Jo Thompson	1	Crawley	28 May
16:25.7	Angie Hulley	1	Stretford	29 May
16:39.57	Sharon Dixon	2	Crawley	28 May
	17:25.49	2	Loughborough	7 Sep
16:44.58	Gabrielle Collison	3	Crawley	28 May
	16:59.30	1	Loughborough	7 Sep
17:18.45	Wendy Sutherland NZ	4	Crawley	28 May
	17:39.9	1	Lanzarote	14 Mar
17:20.77	Angela Joiner	5	Crawley	28 May
17:22.69	Maureen Wooldridge	6	Crawley	28 May
17:29.03	Kathleen Atkin	3	Loughborough	7 Sep

13 performances to 17:40.0 by 10 athletes