

BMC



NEWS

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British Milers' Club*

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The British Milers' Club

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Founded 1963

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COVER PHOTOGRAPHS

Top: Manchester, July 02.
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Bottom Left: Manchester, July 02.
PAULA RADCLIFFE
Bottom Right: Manchester, July 02.
KELLY HOLMES
By Mark Shearman

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Bristol, 24.11.02. BETHAN DAVIES (104) & STEPHANIE BARNES (101). photo by Mark Shearman.

THE GRAND PRIX PRIZES WILL BE AS FOLLOWS

	First	Second	Third	Fourth
'Normal Time'	£75.00	£50.00	£30.00	£20.00
Elite Time	£150.00	£100.00	£60.00	£40.00
European Championships Qualifying Time	£300.00	£200.00	£120.00	£80.00
BMC Record	£750.00	N/A	N/A	N/A

The above amounts are 'total winnings' so for instance a male 800m runner who wins in 1:49.1 would take home £75, if he ran 1:49.0 (the elite standard) he would take home £150.

A 'Normal Time' is a slower time than the elite standard.

The BMC Record will be the time as at the day of the race and is the best time by anyone in a BMC race.

ADDITIONAL PRIZES

In addition to these prizes **£400** will be paid for a performance by a non-winning athlete who runs a BMC Members record. This is the best performance by a paid up BMC member in a BMC race. This could be achieved by a second or third placed athlete who runs a members record in a race won by a non-member.

A **£100** prize will be paid for a BMC Junior members record. This is the best performance by a paid up Junior BMC member in a BMC race.

Non-members who have not been especially invited as guests will have their joining subscription deducted from any winnings.

If an athlete has more than one performance in the same event on the same night then their best performance only counts for the prize money.

THE TIMES ARE:-

	M 800m	W 800m	M 1500m	W 1500m
Elite Time	1:49.0	2:05.0	3:43.0	4:20.0
European Championships Qualifying Time	1:46.5	2:00.5	3:36.5	4:06.0
BMC Record*	1:45.2	2:00.7	3:37.33	4:05.94
BMC Members Record*	1:46.7	2:01.93	3:37.33	4:05.94
BMC Members Record*	1:47.22	2:03.86	3:42.2	4:13.94

To encourage fast times we will reward front-runners or those who kick for home early. A prize of **£100** will go to athletes who are:-

Leading at 12000m in the 1500m in time faster than 2.55 (men) or 3.20 (women).

Leading at 600m in an 800m in a time faster than 78.5 (men) or 91 (women).



Chairman's Notes

Within my Chairman's Notes of the Autumn 2002 edition of the BMC News I outlined a number of issues which the BMC Committee were to address.

Firstly the Committee has worked extremely hard this winter in an attempt to secure 4 Saturdays and 1 Wednesday on which to stage the 2003 GP Series. Throughout the Winter we have had what I can only term a constant battle with the UKA fixtures organisers to obtain, in particular, the 4 Saturdays. I am pleased to inform you that our efforts have now been rewarded. Unfortunately on 2 of these Saturdays our competitions will clash with UK League fixtures. Our friends within the Leagues find this as unsatisfactory as ourselves but between us we hope to improve this situation for the 2004 Summer season.

During the 2002 season no mens 1500m within our GP Series was won inside 3:40 although Malcolm McCausland has to be congratulated for organising the competition in Bangor in which Andrew Graffin ran his excellent 3:37.33. There were occasions where athletes in the GP series men's 1500m could be said to have demonstrated a lack of commitment. In order to reward commitment and aim for faster times in all of the middle distance events we have proposed a system which Tim Brennan has detailed in the forthcoming pages. It is important that we recognise these committed athletes. It is they who have a positive influence on races and who engender the spirit of progress.



Dr. Norman Poole, Chairman

Over the years Frank Horwill has probably made more of a contribution to the UK middle distance events than any other individual. His coaching/training weekends in the South of England are always oversubscribed by both athletes and coaches. Although his inspirational lectures are legendary it is his knowledge and advice which coaches in particular seek. Frank was the first to recognise that there is a great need to reproduce such opportunities in other parts of the UK. We are also aware that the demise of both the Senior Coaches Event Specific Weekend and the National Endurance Conference has denied many coaches of the opportunity to listen to our most experienced and successful coaches lecture on the

practicalities of preparing training schedules for the middle distance events. We now propose to create a forum in which we aim to begin to remedy this situation. In conjunction with UKA we will now organise a National Endurance Coaching Symposium where coaches will have the opportunity to listen to the training practices as outlined by some of our most successful coaches. Former National Event Coach, Dave Sunderland, will organise the Symposium and the provisional one day event will take place at Birmingham University on September 13th. Further details will appear on the BMC website in the coming weeks.

For almost 40 years the BMC middle distance events held at Longford Park, and organised by Trafford AC, have made a huge contribution each year to the UK Top 100 men's and women's rankings. Eddy Powell and Gerry Barnes were the major organisers in the 60's-90's and in recent years Mike Harris has been the BMC dynamo in the North-West. The time demands that this has exacted have been excessive and in December Mike informed the BMC that he wished to step aside from his BMC commitments. Along with all of the BMC committee I am very pleased that Mike has now decided to continue as the North-West Regional Secretary and the BMC race organiser for a limited number of competitions. Please continue to give your full support to Mike who will now take entries on the night only and offer pacemakers for A and B men's 800m and A men's 1500m.

Race Terms

The British Milers Club is a voluntary organisation aiming to improve the standards of British middle distance running.

The BMC aims to put on athlete friendly meetings and create the conditions in which athletes have the best possible chance of achieving fast times.

To do this it is our aim that:-

- All races are seeded appropriately
- All races are paced appropriately (The pacemaker will be asked to run at the pace stated irrespective of whether the field follow them)
- All meetings run to time
- Results are produced quickly, completely and accurately
- Athletes are treated with courtesy and understanding
- Race venues are chosen for their suitability for fast times

We will always strive to achieve the above but our success is dependent on the goodwill of athletes and officials, and sometimes on events

outside our control. The BMC does not attempt to provide opportunities for slow tactical races. Athletes seeking this kind of race to prepare themselves for a championship should look elsewhere.

We expect from athletes that they will:-

- Enter the races by the deadlines set.
- Be truthful about their season and personal best times.
- Be truthful about their current form.
- Turn up for races that they have entered.
- Enter only one race per meeting unless intending to run more than one.
- Inform the organiser in good time if for any reason they cannot compete and the reason why they can't compete.
- Run at the pace stated for their race and not attempt to slow a race.
- Be prepared to take the initiative if a pacemaker is running too slowly.

We expect of all athletes, coaches and parents who attend our meetings that they will be polite and considerate to the volunteers organising the meeting.

When entering a British Milers Club meeting you should understand the above expectations and abide by them. Athletes who do not meet

these expectations are denying their fellow BMC members opportunities, letting our sponsors down, and causing extra work for officials.



Eton, 3.7.02. MARIA LYNCH (Ireland). photo by Mark Shearman.



2003 Grand Prix Entry Policy

In 2002 we found that some of our Grand Prix meetings were reaching their entry limits. In 2003 the policy will be as follows:-

Paid up members of the British Milers Club or associated clubs (Irish and New Zealand Milers).

- Paid up members will be issued with a membership card.
- Entry will be guaranteed for those entering 7 or more days in advance of the meeting provided they have achieved the BMC senior qualifying standard in the year of competition.
- Members and associates who have not achieved the senior qualifying standard in the year of competition should enter 7 or more days in advance and will be able to run if space is available. This should be known between 7 and 2 days before the meeting.
- Those entering within 7 days of the competition will be able to run if space is available.

Members owing subs

- Members owing subs will need to pay what is owed in advance of entering the meetings or else be treated as non-members.

Overseas athletes

- We welcome overseas athletes who have run the required standards into our races.
- Overseas athletes seeking an invite to a British Milers' Club meeting should contact the meeting organiser at least 7 days before the competition date.

Non-Members

- Non members should enter as much in advance as possible and will be able to run if space is available after all members, associates and invited athletes have been catered for. This will be known between 7 and 2 days before the competition date.
- The BMC may refuse an entry to a race if an athlete has previously broken our race terms.

2003 Grand Prix Seeding Policy

The organisers will seed races. Factors they will consider in an approximate order are:-

- Performances in the 2003 BMC Grand Prix and other BMC meetings.
- Performance in area/national championships.
- Performance in other major races.
- Best time for the season.
- Performances in BMC races in previous years.
- Personal best time.

Other factors are:-

- As well as actual times, performance will be measured on the attitude to racing.
- If other factors are even in a seeding decision, we will give priority to BMC members.
- We will upgrade young or developing talent to higher standard races than their times would naturally suggest.
- We will seed winners and high finishers of B races in previous GP's ahead of those at the back of the A race and apply the same policy across the other races.
- We will give opportunities to athletes who have performed well in the BMC regions but may not have had good opportunities at National level.
- We try and help establish athletes making a comeback from injury who can show some evidence of a return to form.
- We will try and help athletes prepared to travel long distances for race opportunities.



Eton 3.7.02. JAMES McILROY. photo by Mark Shearman.

The Irish Milers Club

The Irish Milers Club are currently constructing their fixture list.

More details can be found on www.irishmilersclub.com

Fixtures to date are:-

Saturday 17th May

Men's and women's 3000m at the AAI Games in Navan which is 30 miles from Dublin Airport.

Saturday 31st May

May men's mile and women's 800m at the Irish Schools Championship in Tullamore.

Saturday 5th July

Men's 800m at the Cork City Sports.

Friday 15th August

Men's 800m and women's 1500m at the Dublin International.



BMC Fixtures 2003

See www.britishmilersclub.com for Online entry, Timetables, Seedings, Results and New Fixtures

BMC Nike Grand Prix

(Overall Directors Steve Mosley 029 2030 6733, Tim Brennan 01628 415748)

Sat 31 May	Wythenshawe	M800, M1500 W800, W1500	Norman Poole John Davies	0161 980 8358 0161 611 9065
Sat 14 Jun	Eton	M800, M1500 W800, W1500	Liam Cain Andrew Osment	01753 554244 01344 482171
Sat 5 Jul	Watford	M800 M1500	Tim Grose Rupert Waters	01372 466946 TBA
Wed 6 Aug	Solihull	W800, W1500 M800, M1500	Tim Brennan Toby Gosnall	01628415748 0121 445 6411
Sat 30 Aug	Glasgow	W800, W1500 M800, M1500	Steve Mosley Mike Johnston	029 2030 6733 0141 634 9966
		W800, W1500	John Montgomery	01560 483225

The BMC's premier meetings are the combined *Nike Grand Prix and UKA Endurance Initiative* meetings. The winning times of the "A" races are of true international standard

Wythenshawe is telephone entries only.

UKA Endurance Initiative

Sat 31 May	Wythenshawe	M3000, W3000, M3000SC	Mike Deegan	01457 765416
Sat 14 Jun	Eton	M5000 W5000, W2000SC	Liam Cain Andrew Osment	01753 554244 01344 482171
Sat 5 Jul	Watford	M10000, W10000 M3000STCH	AAA champs Tim Brennan	enter via AAA 01628415748
Wed 6 Aug	Solihull	M5000, M2K or 3K SC W5000	Toby Gosnall Steve Mosley	0121 445 6411 029 2030 6733
Sat 30 Aug	Glasgow	M3000, M2000SC W3000	Mike Johnston John Montgomery	0141 634 9966 01560 483225

Maps showing the location of each venue can be found at :- www.runtrackdir.com

Entry to the Grand Prix and UKA EI will be guaranteed for those paid up members entering 7 or more days in advance of the meeting provided they have achieved the BMC senior qualifying standard or UKA EI standard. They are: M800 1:56.0, W800 2:20.0, M1500 3:56.0, W1500 4:45.0, M3000 8:30, W3000 10.00, M5000 14:40, W5000 17:30, M3000SC 9:20

BMC Gold Standard

Watford

Men -Philip O'Dell 01234 852038
Women -Ray Thompson 01737 554450

Wed 14 May	M800, M1500, W800, W1500
Wed 25 Jun	M800, M1500, W800, W1500
Wed 23 Jul	M800, M1500, W800, W1500
Wed 20 Aug	M800, M1500, W800, W1500

Stretford

Mike Harris (Enter on the Day, women can run open races)

Tue 20 May	M800, M1500
Tue 3 Jun	M800, M1500
Tue 1 Jul	M800, M1500
Tue 15 Jul	M800, M1500
Tue 26 Aug	M800, M1500

BMC Nike Young Athletes Meeting – Millfield – Mon 5 May

Mike Down 0117 973 3407

W800 ALL, W1500 U20-U13, W3000 U15 & older M800 ALL, M1500 U20-U13, M3000 U15 & older

BMC Regional Races

BMC Northern Ireland

Malcolm McCausland 028 7134 9212

Sat 10 May – Belfast	M800, W800
Sat 21 Jun - Londonderry	M800, W800
Sat 26 Jul – Bangor	M1500, W1500
Fri 1 Aug - Bangor	M800, M1500 W800, W1500

BMC London - Colindale

Tim Grose 01372 466946
Wed 9 Jul M1500 U15, U17 SNR, W1500

BMC South – Brighton

Chris Carter 01273 503446
Wed 13 Aug M800, W800

BMC North East - Jarrow

Phil Hayes 01207 505 892	
Mon 16 Jun	M1500, W1500
Mon 21 Jul	M800, W800
Sat 9 Aug	M800, W800

BMC Midlands - Birmingham Alexander Stadium

Organiser - 0121 344 4858

Wed 30 Apr	M1500, W1500
Wed 28 May	M800, W800
Wed 2 Jul	M1500, W1500
Wed 30 Jul	M3000, W3000

See www.britishmilersclub.com for latest fixtures



Another Look at the 800m

Let us imagine that we have three runners who have raced the distances of 400 and 800 metres many times and have all come up with same 400 metres time but different 800 metre recordings, i.e.

Best 400 time	Best 800m time
"A" 50 secs	1:48
"B" 50secs	1:52
"C" 50secs	1:56

What can we deduce from the 800 metre times? Athlete "A" is able to run two consecutive laps 4-seconds slower than his best 400m time, i.e. $50+4 \times 2=1:48$. Athlete "B" can run two consecutive laps six-seconds slower than his best 400m time, i.e. $400+6 \times 2 = 1:52$. Athlete "C" can run two laps 8-seconds slower than for his best 400m time, i.e. $50+8 \times 2= 1:56$. It is commonly accepted that an athlete who can run two laps just 4 seconds slower than his best 400metres time, must possess great endurance. Only half a dozen athletes in 800m history have a better conversion. Athlete "B" has moderate endurance and athlete "C" very poor endurance. We now have to ask how these three athletes are going to improve their two-lap times? Athlete "A" has only one way to go: the 400m time MUST come down while his endurance must be maintained. If he lowers the one-lap time to 49 seconds, he has the potential to run 1:46. to get on world class terms, he will have to lower it to 47-seconds minus.

Athlete "B" has a relatively simple task to achieve improvement, he must step up his endurance training. A. V. Hill allocates the 800m event 33% Aerobic Training. This could be 1500metres pace (50%), 3k pace (60%), 5k pace (80%), 10k pace (90%), half-marathon pace (94%). About three training sessions out of nine should be devoted to fast aerobic training. According to Dudley, the greatest return for the work expended comes from training at 3k and 1500metres speed. For "B" this could be:- 1500m pace – 4 x 800 in 1:59 minus with 3-minutes' rest, and for "C" 4 x 800 in 2:04 with 3mins, rest. 3k pace – for "B" 3 x 1500 in 4mins minus with 3mins rest, and for "C" 3 x 1500 in 4:07.5 minus with 3mins rest. Half-marathon pace – for "B" a 10-mile run at 5mins.10secs/mile minus, and for "C" 10miles at 5mins.15secs/mile minus.

"A" has a more difficult task. First of all, he will have to race 400metres at least twice a month. He will have to experiment on finding the best way to race the distance. He has limited choice:-

- a) Run flat out for 300metres and hang-on.
- b) Run the first 100metres flatout, coast the next 100metres and attack the third segment and hang on.

The start should not be ignored, middle distance runners are not noted for their flying starts! Many choose to do a standing start with the left foot forward with the left arm. We do not run this way! We run with opposite arm forward and the other arm back.

Work for 400 metres should be divided between short sprints and long sprints. Pure speed is obtained by the Soviet method, a 20m flying start, 30m sprint and 30m slowing down. Work in a 400 metres race starts from 200 metres on, and training at distances from 250 to 350 metres needs to be included. All this will be in vain if technique and leg-strength is not up to the mark. The minimum requirement for the latter is the ability to hop 25 metres in 9 hops on each leg and to curl on each leg 60% of the maximum quadricep curl. If the maximum single-leg curl is 30kg, the hamstring curl should be 20kg on each leg. The writer has also found that sub 1:50 males and sub 2-minute females can do a full squat with bodyweight and more, lift seven-tenths of their weight overhead, and curl six-tenths bodyweight. A weight-training regime every other day for 12 weeks should be embarked on if these parameters cannot be met, thereafter two sessions a week for 12 weeks and once a week for a remainder of the year.

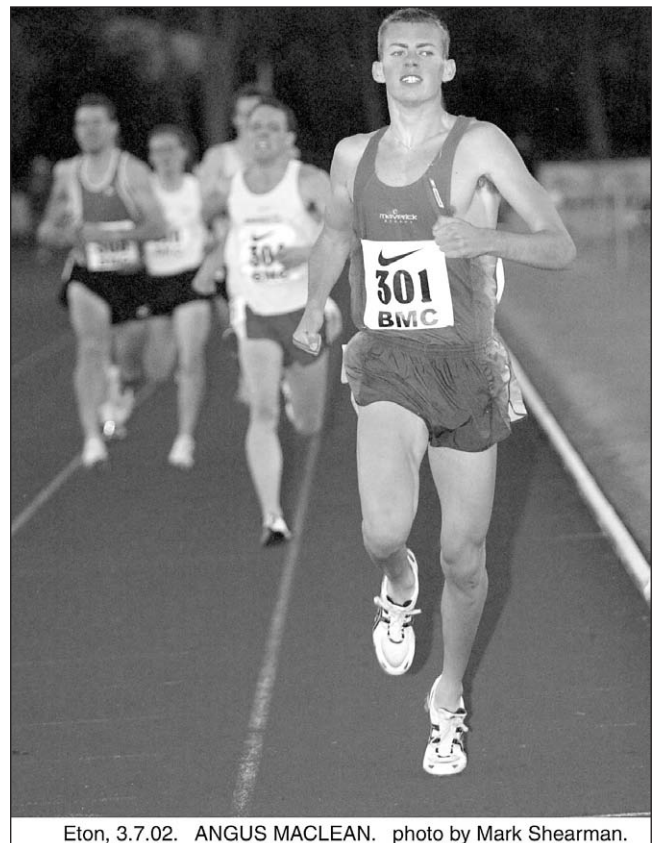
Aerobic fitness in top-class 800 metre runners is contradictory. For example, a runner with a flat time of 45-seconds for 400 metres and a time of 1:44 for 800 metres, often only has a VO2 max of 70mls.kg.min,

which is mediocre. Whereas an athlete with a time of 47secs/400m and 1:42/800 is often around 80mls.kg.min. A practical way of predicting the VO2 max is to run around a track on a windless day covering as much distance as possible.

4000 metres run = 56.5mls.kg.min
 4500 metres run = 62mls.kg.min
 5000 metres run = 67.5mls.kg.min
 5500 metres run = 75mls.kg.min

The method of running the 800 metres is a controversial one. If the aim is to win the race and not to record a fast time, the sprinter-type holds most of the cards. The only way to defeat such a runner is to increase speed from 400 to 600 metres, which needs to be rehearsed in training many times. The common practice of going through the first 400 metres a couple of seconds off ones's best 400 metre time seems a foolhardy tactic. Numerous Olympic finals (two-thirds) have been won where the victor took the lead in the last 100metres, having been frequently last at the bell. The first man to break 1:50 for 800metres, Tommy Hampson (GB), ran two almost identical laps 54.9 secs. Level pace running is a powerful weapon, which requires increased effort in the second lap. To achieve it, one requires a cool head as one can panic seeing the field several metres up at the bell. The sequence of races leading up to a two-lapper is of interest. The Americans favour a combination of 400 and 800 throughout the season. The writer favours a sequence of 1500metres, 400 metres and 800 metres. The first confirms endurance, the second confirms basic speed, powerful things for the mind when racing 800 metres.

The number of 800 metre races to achieve one's best is between the sixth and eighth race of the season, according to a BMC survey done 25 years ago among the club's members. This, of course, is an average, an athlete is an experiment of one and it may be that some record their best in the fourth race or tenth race of a season. If this pattern is known, care has to be used in planning that the peak performance occurs at the right time. Not much point rattling off all the allotted races in two months when the major championships occur two months later.



Eton, 3.7.02. ANGUS MACLEAN. photo by Mark Shearman.



Leaving No Stone Unturned on the Track to Success

by

Derek Parker

I once read an article by Frank Horwill in the BMC News urging coaches and athletes to leave no stone unturned in the quest for athletics success.

I remembered that when William Docherty, a runner whom I coach, said he wanted to win the 1500metres steeplechase title at the under 17 championships in Sheffield two seasons ago.

Although the six days a week training schedule – including daily 20 minute morning runs – fulfilled the dominant role in Williams year-long build-up to Sheffield, we turned to the computer for that little bit extra help which makes all the difference between victory and defeat.

In the months prior to the AAAs, William kept computerised performance files on his main rivals for the coveted title. Using race results from magazines like the BMC News and Athletics Weekly, we evaluated the strengths and weaknesses of the opposition.

Athletes with faster 400 and 800 metres times would be major threats in fast finishes if the early pace was too slow to nullify their superior speed. Runners with quicker 1500 and 3000 metres times could make long sustained breaks for the finishing line or throw in fast surges during the race.

Our analysis was then used to draw up a tactical plan to cope with any eventuality and ensure William would not be caught unawares

or indecisively when rivals made their move.

His training sessions included 8 x 400metres over the steeplechase barriers at race pace with 45-60 seconds recovery or 5 x 600metres, again with hurdles, using recoveries of 90 to 120 seconds.

And, to prepare body and mind for a fast sprint at the end of the race, track sessions concluded with 4 x 200metres full effort over the water jump and one hurdle with 200metres jog recovery in 120 seconds.

Living in Scotland meant William was not a regular competitor on the English, Irish or Welsh circuits so he was unable to visually identify his main rivals. He circumvented this by keeping computerised photographs of his rivals – sourced from athletics magazines – so he could recognise them during the race and put faces to names, current performances and likely tactics.

He also called up screen images of the precise location of the steeplechase barriers at Sheffield, especially the water jump, and starting and finishing points of the race.

Keying in to local weather reports enabled us to work out whereabouts on the track the prevailing wind would be the strongest.

This information helped us to identify probable take off and landing points. When running into the wind, the take-off would be closer to the barriers. With a tail-wind, take off

would be farther away to ensure safe barrier clearances.

Ironically, the expected challenge from top English, Irish and Welsh athletes whose form we studied so assiduously failed to materialise.

The main opposition came instead from fellow Scots Adam Watt and John Walker. Nevertheless, all our meticulous planning paid off as William raced to victory, outsprinting his rivals over the final 200 metres, to the AAA title in 4:27:1.

His specific preparation equipped him to cope with a fast final furlong over the barriers. And all the information gleaned about his rivals and the track lay-out inculcated the confidence of knowing that – physiologically, psychologically and tactically – no one was better prepared than he to win the title.

Although William's computerised build-up was specifically for the steeplechase, its lessons are applicable to all distance running events.

Frank Horwill, the advocate of leaving no stone unturned in the quest for success, would have approved.

Derek Parker is a UK Athletics Level 4 Coach who has guided more than 100 athletes to Scottish championships and international honours in sprints, hurdles, relay, middle-distance, steeplechase and marathon.

BMC 40th Anniversary

It is planned to hold a dinner, at the end of the season, to celebrate the 40th Anniversary of the founding of the club. Further details will appear on the BMC website and will be published in Athletics Weekly. Watch for it.

Book Review

The Complete Guide to Sports Nutrition.

by

Anita Bean

This 265-page book, published by A & C Black, at £13.99, is a more than useful contribution to the knowledge and practice of "food and running". Middle distance runners are less concerned, if at all, with taking fluids on board during a race, but during training periods the book suggests it is VITAL to, for example, drink 150-350 mls of water every 10-20 minutes if sweating. In addition it emphasises the desirability of drinking 400-600 mls at least two hours before exercise, and to have a drink upon completion of training. Common sense it might be said but it needs a disciplined approach. Similarly with food, runners are urged to eat no more than 1½ hours AFTER a race or training session. Before racing/training a meal should be taken around three hours before followed by a "snack" an hour or two before. The inference is that an "engine" needs "fuel" and this is especially true of the human body. Failure to follow this disciplined approach will result in a small percentage fall in performance but it WILL be a fall and no athlete can afford that when it can easily be avoided.

There is a whole range of advice in this book and the thinking athlete, and coach, would strongly benefit from reading it.



Distance Running Quiz for Coaches and Others

How much don't you know?

1. There are many ways of calculating an athlete's lactate threshold running speed, the physiologist, Bert Daniels, came up with a simple formula. What is it?
2. Gerschler stated that the benefit of interval training occurs in the recovery time. Why is this so?
3. In 1956, the Hungarian coach, Mihaly Igoli, as coach to the Los Angeles Track club, made several changes to the accepted pattern of repetition running. List them.
4. What was Franz Stampf's basic formula in training that helped Bannister to break the 4-minute mile barrier?
5. In 1971, Frank Horwill, introduced new guidelines for recovery times when doing repetition running at different speeds. List them?
6. Why did Gerschler instruct the late Gordon Pirie to lie on the ground with the feet elevated on a bench when doing interval training?
7. When telling athletes to go for a "steady run" which is meaningful, what guidelines would you give?
8. You tell an athlete that you wish him/her to do 3 x 1600 at 5k pace. However, the athlete has never run 5k before. How would you approximate the pace?
9. What is the recent trend with regard to leg-strengthening exercises?
10. The late Harry Wilson (Ovett's coach) liked to give sprint-training after a MD training session. What do you think his reasoning was for this?
11. List all the predominately aerobic paces an athlete can do with percentages of oxygen used?
12. List all the predominately anaerobic paces with percentages of oxygen NOT used?
13. How would you calculate an athlete's potential time in the marathon from the 10k time?
14. What is the main difference physiologically between low and high glycaemic carbohydrates?
15. How long should ice be applied immediately to a sudden muscle injury?
16. What are "contrast baths"?
17. In hot weather training athletes lose a lot of one particular mineral and if not replaced can actually cause heart failure in extreme cases. Name it and the substance that can quickly replace the loss.
18. Excessive consumption of colas and many soft drinks can lead to bone injury. Why is this so?
19. Dudley, in 1984, discovered that training at one particular speed was worth ten times the distance done on a steady run and proved it by measuring the increase in mitochondrial numbers
20. Subotnik, "The Running Foot Doctor" of fame in the USA, suggests that athletes should do what with all old injuries immediately after training?



Eton, 3.7.02. CHARLOTTE BEST (267) finishes ahead of CHARLOTTE BROWNING (262).
photograph by Mark Shearman.

World Record Autographs

Derek Ibbotson has for sale the following prints, 1) autographs of the World One Mile Record holders from 1937 to 2003, in a frame.

Wooderson, Andersen, Haegg, Bannister, Landy, Ibbotson, Elliot, Snell, Ryan, Bayi, Walker, Coe, Ovett, Cram, Morceli, and El Guerrouj. Bannister and El G are also pictured on this print. Frame size is 21" x 14" and the cost, to include postage in the UK is £150. 2) In a frame, the menu, autographed by all except Coe and El G, from the re-union launch at the Randolph Hotel in Oxford. This offering includes a write-up of the days events. Frame size 27" x 23" and the cost £150.

Cheques made out to L.Beveridge at 13, Ventnor Close, Ossett, West Yorkshire, WF5 8PB. Any queries can be addressed to Derek at this address.

Editor's note. These are highly collectable items, it is understood that these prints have raised sums far in excess of the asking prices at charity auctions.



Answers

Distance Running Quiz for coaches and Others

1. Take the MILE time in your best 3k time and add 15-seconds to it for 3k times between 7mins 30seconds to 8mins and an additional 5-seconds for every 30second decrease in speed in the 3k. Example – best 3k time = 7mins 45seconds = 4mins 1second per mile + 15 secs = 4:26/mile on an LT run for 4 miles. Best 3k time = 9mins = 4:48/mile + 25secs = 5mins.13secs/mile on an LT run. Best 3k time = 10mins = 5mins.20secs/mile + 35 secs = 5:55/mile on an LT run.
2. During the rep. The pulse will rise rapidly and the heart will pump out PER BEAT about 90mls of blood. During the recovery period, the pulse will regain 60% of normality within a minute, during that time the amount of blood pumped out PER BEAT will rise to 110mls and continue to rise as the session progresses. The rapid filling up of the heart chambers will strengthen the heart muscle.
3. a) The athletes trained at 6am and 6pm daily.
b) The recovery jog was HALF the distance of the rep.
c) The introduction of sets. Having done 10 x 400m, with 200 jog, there would be a 400 jog and the session would be repeated.
4. a) 10 x 440yds, 440yds jog recovery within 3 minutes.
b) 5 x 880yds, 880yds jog within 6mins.
c) 3 x ¾mile with ¼ jog within 9 mins
d) 3 x 1.5miles with 440yds walk rest.
5. a) When sprinting jog DOUBLE the distance of the rep.
b) At 800m speed jog THE SAME DISTANCE as the rep.
c) At 1500m speed, jog HALF the distance of the rep.
d) At 3k speed jog ONE-QUARTER distance.
e) At 5k speed, jog ONE_EIGHTH.
f) At 10k speed, jog ¼. Example - an athlete wishes to do 6 x 1600 at 10k speed, the jog recovery after each run will be 100 metres in 45 seconds.
6. The heart will recover faster to 120 bpm before starting the next rep.
7. Take the time per 400 metres in the best 1500 metres time and add 20-seconds. Thus a 4mins/1500 runner has an average 400m time of 64secs + 20 secs = 84secs = 5mins.36secs/mile.
8. Add 8sec to the average 400m time in the best 1500m. Example – Best 1500m = 5mins = 80secs/400 = 88secs/400 in 5k session = 18mins.20secs.
9. Greater strength is gained by exercising one leg at a time instead of both together.
10. Athletes have to sprint at the end of a race when tired, they should get used to it.
11. Jogging – 100%, marathon – 99%, ½ marathon – 94%, 10k – 90%, 5k – 80%, 3k – 60%, 1500m – 50%(marginal).
12. 100m – 100%, 200m – 95%, 400m – 83%, 800m – 67%, 1500m – 50%(marginal).
13. 5 x 10k time minus 10 mins
14. High glycaemic carbs (Glucose) is in the blood within 15minutes. Low glycaemic carbs (Fructose) can hardly be traced in the blood because it's immediately stored in the liver.
15. 5 minutes. It used to be for an unlimited time until it was discovered that a muscle could be permanently paralysed after long application.
16. The injured part is iced for 5-minutes and then immersed in hot as bearable water for the same period x 2, morning and night.
17. Potassium loss in sweat in hot weather has a direct affect on the heart muscle and if not corrected can cause heart failure. Drink PURE orange juice with all meals.
18. The phosphorus in colas and soft drinks taken in excess will prevent calcium being absorbed which will undermine bone density.
19. 3k speed is 60% aerobic and run at 100% of the VO2 max. To calculate 3k speed, add 4-seconds to the average 400m time done in one's best 1500m. A session of 4 x 1500m at 3k speed with 3mins rest, accordingly to Dudley, would get better results than running ten times the distance of the 3k session, i.e. 3k session = 6k = 60k steady run!
20. Ice them. They bleed a little internally and set up scar tissue which may be troublesome later.

How did you get on?

More than 15 right is excellent

More than 10 is fair

Less than 10 right is a warning sign that there is much more to middle-distance knowledge than you thought.



Questions and Answers

Andre Bucher - World Champion 800m

In recent years you have appeared to have concentrated on the 800m. Are you likely to run any 1500m races this year?

I was actually planning to run one or two 1500m races this year early in the season. but unfortunately, I will not be able to go ahead as planned as I still have to do some alternative training like water-jogging, cycling, weight-training, . . . ! Maybe, I will get the chance to run some 1500m in the next few years. But in any case, the 1500m will serve as preparation for the 800m. I will stay with my favourite distance.

Is it possible to give an indication of your winter and summer training? Please feel free to give as much as you feel able. I will print it in full.

For years, I always started by trying to set a good basic training in autumn (long runs, basic weight training, endurance, . . .). The indoor season normally is only prepared within a few weeks early in the year, usually during a training camp where I try to train quality (2001 Mexico, 2002 Portugal, 2003 South Africa).

This year, I had the chance to train with a very good group of middle distance runners such as Hezekiel Sepeng, Glody Dube, James McIlroy, . . .

In spring, I usually do a long build up from mid-March until mid-June. This includes a high altitude training camp in St. Moritz (1800m). After the first half of the season (European Cup, Lausanne, the first Golden League races, . . .). After that, I do a second training camp in St. Moritz to prepare the second half of my season which also includes the main races (World champs, Olympic Games, . . .) and of course the race in Zurich which for a Swiss athlete is always something special.

I recall a good 800m runner called Christian Waegli who also ran from the front. Have you in any way been influenced by his tactics?

No, I don't even know this athlete. I have always tried to run my own race rather than to react on other athletes' tactics.

Assuming you agree, are you able to say why you feel " front running" suits you?

Well, I think front running is only one tactic among others, and I wouldn't say it suits me best. But of course, in 2001 I won quite a few races that way, but also had other races that year such as the Grand Prix Final in Melbourne.

To run in front is often the easiest tactic if you are in good shape, because you are the one to set the pace and all the others have to follow you, whether they want to or not . . .

Would I be correct in saying that as a young man you tried all distances before finding the one that suited you best or do you feel that might have been as successful at another distance? If so what distance might that have been?

As a junior, I thought that I will be a long distance runner in the future. But my coach always motivated me to try various distances... and finally I found the event that suited me best. I found a distance, that combines endurance, speed, power, . . . My training is never getting boring at all.

The British Milers Club strives to improve the levels of UK 800 and 1500 running. Do you feel able to offer any advice, in a few words, to young runners?

The best advice is not to set yourself any limits. Trying various events as a young runner makes you run better in your main event (to be a good 800m runner, you need to have a good speed=>400m, but also you need to have a good endurance =>cross country, 5000m, 3000st., . . . Never specialise too early and always try to have some fun in checking out new distances.

Bill Nankeville

Bill was sixth in the 1500 at the 1948 Olympic Games and third in the Europeans in 1950. He was our best miler for the period between Wooderson's retirement and the emergence of Bannister. Through the offices of Dave Thurlow we have obtained some details of his training. He was a contemporary of Doug Wilson's whose training details appeared in a previous issue.

Summer

Monday evening. Run 3 to 4 miles with short bursts at my club, Walton. Would sometimes run 2-3 bends of 150 yards, run 2 miles to cool down. Training period 1 to 1.5 miles.

Tuesday evening. Run 3-4 miles with short bursts, run 2-3 440 yards, time 58 seconds, run 2 miles to cool down. Training period 1 hour.

Wednesday evening. Meet my coach Bill Thomas at Tooting Bec track to check my running style. Run 2 miles warm up, run 660 time trial, run 2 miles to cool down. Training time 1.5 hours.

Thursday evening. Run 2-3 miles with short bursts, run 2-3 bends of 150 yards, run 2 miles to cool down. Training period 1 hour.

Friday evening. Run gentle 3 miles ready for Saturday competition.

Saturday race.

Sunday. Sometimes rest or 3 mile run.

I would do time trials with Bill Thomas 3-4 miles flat out every 12 days, I would also do 3 x 300 yards with the sprinters.

Winter. (September to April)

Tuesday evening. Run 3 miles with bursts at the Walton track.

Thursday evening. The same.

Saturday. Once per month a 4-5 cross-country.

Sunday. 3 miles with bursts at the Walton track.

Sometimes in the winter I would meet Bill Thomas at the Herne Hill track with Doug Wilson and John Parlett (European 800 winner 1950). After training we would all take bitter cold showers in 1947 as it was the worst winter in living memory and fuel was in very short supply. I can say I never caught a cold!!

Andre Bucher

Born 19.10.1976. Height 1.85m Weight 75kg.

Ran 1:56.40 at 16 and 1:48.32 at 17. Personal bests of 22.18w for 200, 46.32 at 400, 1:42.55 at 800, 2:15.63 at 1000, 3:38.44 at 1500, 8:16.9 at 3000, 14:06.9 at 5000, 30:40.5 at 10000 and 9:09.73 for the steeplechase.

After his superb 2001 season when he became World Champion, he missed the early part of 2002 with injury but still managed to claim the European silver medal. Illness hampered his preparation for the 2003 indoor season so he passed on it. Incidentally Christian Waegli finished 5th in the 1960 Olympic 800 in 1960 and had a reputation as a front runner.



How Steve Cram Trains

by Dr Norman Poole, UK National Event Coach Men's 800m & 1500m

First presented by Steve Cram and Norman Poole at the BAF National Endurance Conference, November 1994. Reproduction prohibited without written permission of the author.

1 Introduction

Steve Cram, multiple world record holder and the winner of numerous middle-distance major championship medals, has been one of the world's most consistent performers for more than ten years. Injuries have proved to be the only obstacle to him continuing to achieve at the highest level in recent times.

Although his track exploits are well documented, his training methods have never been published. From discussions with Steve in Stuttgart during the 1993 World Championships and in the UK with his coach, Jimmy Hedley, who has supervised and helped plan virtually all of

his training from the age of 10 years, I have attempted to describe how Steve's basic training is planned throughout a twelve month period.

The main principles of his training have been maintained during the period 1975 to the present as have his many ideas and basic philosophy on periodisation and race planning.

2 The Early Years

Steve Cram first started to train with Jimmy Hedley when he was 10 years old and by the time he had reached 15 years he was running seven days per week, once per day.

During the first five years of Steve's involvement with the sport, Jimmy actually ran in most of the training sessions with his young group. This he felt was of particular value since he could control the pace and intensity of the

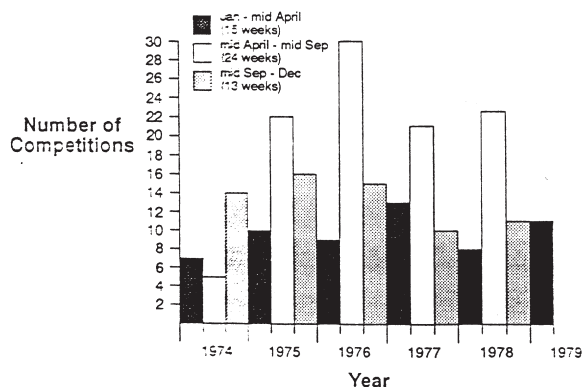
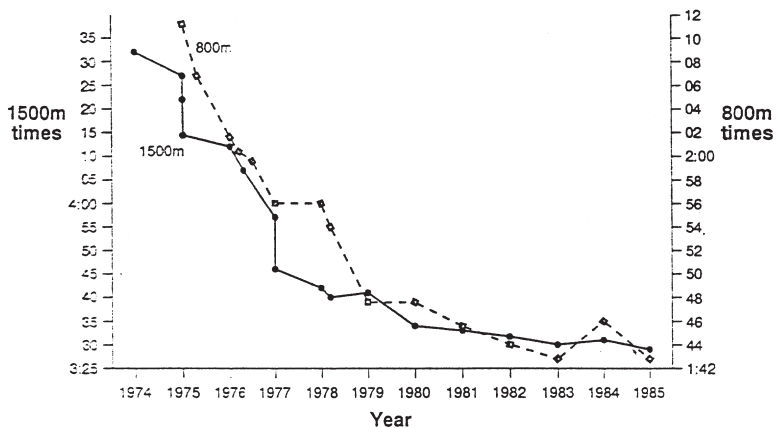
training as the training load was gradually increased.

Between the ages of 13 and 15 years, Jimmy introduced Steve to training on different surfaces on a regular basis, thereby offering as much variety as possible e.g. grass, beach, forest, trails, road and track. During this time, the emphasis was on the enjoyment of training. Jimmy strongly believes that this is very important if a young athlete is to continue in his desire to absorb and benefit from increased training loads.

Apart from training on these various surfaces, using fartlek type sessions in particular, Steve also raced on them as a young athlete. As well as cross-country and track, Steve was of international standard as a junior in the sport of Orienteering. He eventually decided to forego this particular sport in his junior years due to the greater probability of injury during the winter months.

At the age of 15 years, it is an interesting fact that the young Steve Cram was not even the best middle-distance athlete in his county. It could be argued that those particular youngsters who consistently beat him had superior natural physical ability. But it is the vital chemistry of natural talent, the desire to train and progress and the development of a superior competitive nature which makes the champion. It is these latter two qualities in particular which, in the opinion of Jimmy, marked out Steve Cram as 'different from the rest'.

It was events which also occurred during his 15th year which both Steve and Jimmy credit as important in the development of these two character assets of the future champion. These were monthly organised training sessions of the best young athletes in the County, a scheme arranged by the then BMC Regional Secretary, and now the UK National Event Coach for the men's marathon, Gordon Surtees. They were highly competitive training sessions and a unique opportunity for Steve to measure himself, apart from actually racing, against the best in his area. More importantly for Steve was the realisation of what training levels were required for him to improve and to be the best in his County. These monthly training gatherings proved to be the 'seed bed' of a determination to succeed. They also began to draw out the competitive nature of Steve



How Steve Cram Trains (2)

Cram and a real sense of ambition which enabled him to willingly embark on his first early introduction to hard training.

Just as today Steve's summer season focuses on a major Championships, so it was in his early athletic years that his main aim for the season was the English Schools' Championships.

Steve Cram's training did not, therefore, undergo a radical change as he stepped on to the World stage of major Championships as a senior athlete. As explained, he had in many ways been developing his training and approach to championships for many years.

In Figure 1, I have plotted two figures which chart the progress of the young Steve Cram from the age of 13 years in 1974. From the meticulous records kept by his father, Bill, between 1974 and 1979, I have shown each step in the improvement of Steve's personal best time for both 800m and 1,500m. Between 1979 and 1985, the year of Steve's current pbs. I have only shown his season's best times.

It is interesting to note how the progression of both 800m and 1,500m are equally mirrored. The dramatic improvement in Steve's 1,500m best times during 1977 at the age of 16 years is also equally apparent.

In the Figure 2, I have plotted the number of competition dates for Steve during three periods of each year from 1974 to early 1979. These periods are January to mid April, mid April to mid September i.e. the track season, and mid September to the end of December.

The high number of competitions, averaging almost one per week during the period 1975-78, is immediately obvious. The number of races is actually higher during each track season than the figure suggests since Steve often competed in more than one race during a particular competition meeting. In many coaching circles today, this number of competitions for a young athlete would be considered unduly high. But it must be stressed that many of these races were low-key local competitions which were utilised by Jimmy Hedley as competitive training sessions. As previously mentioned, Jimmy Hedley had always emphasised the importance of the development of the competitive nature of the young athlete if he was to succeed as a senior. The foundations of Steve Cram 'the competitor' and Steve Cram 'the racer' were laid in

these numerous races during his early years. He enjoyed them. He thrived and progressed on them, and by the time he arrived on the World stage, he was already a highly experienced competitor.

During these formative years, Jimmy Hedley had also unselfishly encouraged the young Steve Cram to obtain useful training tips and ideas from other successful athletes in his area such as Brendan Foster and Jim Alder. But it was together, over many years, that they worked to perfect the training ideas which led Steve to such success on the track and it is these ideas that I have attempted to explain below.

3. Periodisation

Since the beginning of his athletic career, Steve Cram has always adopted a single periodised year. The British autumn and winter have been endurance based with his track season in the summer. He has never focused on an indoor season. The main aim of the year is to be at a peak of fitness for the major Championships each Summer.

Each year can broadly be split into five periods. (NB the periods of training given below are approximate in length and have varied from year to year to accommodate any loss of training which may have occurred or areas of training which were felt to require additional work.)

4. Period 1: Endurance October to February (22 weeks)

This is a basic conditioning period with the main aim of achieving a high level of aerobic fitness by the end of February.

After an initial 2 - 3 week build-up in mileage during October, Steve would gradually approach a maximum weekly mileage of 80 miles, although the average during this 22 week period may approximate to 60-70 miles per week. During the winter of 1983/84, Steve did go as high as 120 miles in a single week but believes that this increase was not beneficial to him. Another major reason for restricting his winter mileage to these lower levels was the advice given to him in 1984 by the doctors who diagnosed compartment syndrome in both legs.

The training detailed in Fig 3 is for a typical week during this period. None of the above running could be considered as 'slow'. Even morning runs are inside 6 minutes per mile. All of the evening runs

Fig 3: Typical Training Week : October to February

Mon	am	4-5 miles
	pm	5-8 miles group road run
Tue	am	4-5 miles
	pm	5-8 miles group road run
Wed	am	4-5 miles
	pm	5-8 miles group road run
Thurs	am	4-5 miles
	pm	5-8 miles group road run
Fri		rest or 5-8 miles easy
Sat		Competition or 8-10 miles competitive group session
Sun		10-14 miles

Monday to Thursday are in the company of other club colleagues and often incorporate surges and an acceleration of pace during the final 2 miles to well inside 5 minutes per mile.

Although orthodox hill repetition sessions are never included, all of the evening runs do include hills of varying types. These range between 150-500 metres in length and would be run fast by the group. The quality of these surges can in part be determined by the standard of the athletes who regularly participated. Over many years, these have included Mike McLeod, Paul Cuskin and David Sharpe.

Although, as explained, the morning runs are at an average pace of no slower than 6 minutes per mile and the evening runs are faster, Steve firmly believes in 'running as you feel'. If he was particularly fatigued, he would either slow the pace of a run and even occasionally miss a training session completely. In other words, recovery is as important as the training itself. At no stage during this 22 week endurance period does Steve Cram train on a track and neither has he adopted any specific strength training sessions in the past.

Since Steve has been restricted to relatively low weekly mileages, he only usually requires one complete rest day during a 2-3 week training period and prefers a cross-country or road race on most week-ends.

A number of these, such as the Team Valley Relays, 2 to 8 miles in length, have acted as an excellent benchmark of his endurance condition comparing his performance with that of other local top class endurance athletes such as Charlie Spedding, Mike McLeod and Brendan Foster.



How Steve Cram Trains (3)

It is interesting to note that in February 1985 prior to his best ever track session, Steve achieved his only win in the North of England Cross-Country Championships.

Although the basics of Steve's winter training have been outlined, it is worth mentioning that, when appropriate, he has spent many weeks of various winters training in warmer parts of the world. Over the years, trips to Australia and Florida have offered useful breaks during cold British winters.

5. Period 2: Altitude March (3 weeks)

In most years during the period March - April, Steve has trained in Boulder (USA) at an altitude of 5,500 feet for a period of three weeks. After an initial short acclimatisation stage, training would be little changed from that previously described with the emphasis on endurance.

This period is considered the final foundation stone of his endurance condition. Steve also did stress that his visits to Boulder were not solely for an altitude effect but for a change of training venue, a stimulating and psychologically uplifting experience. It was important to return from Boulder suitably recharged and fresh to approach his pre-competition training with renewed determination.

During his three week stay, Steve may compete in a 5K and 10K road race as a form of competitive session and would

also possibly attempt his first track training session of the year.

6. Period 3: Pre-competition Late March-May (9 weeks)

During this period, weekly mileage is reduced slightly as the intensity of major training sessions is increased. Tuesday and Thursday evening training sessions are transferred to the track and Saturdays are either group training sessions or road race competitions.

6.1 Road Races

As previously described, the road races vary from two mile relays, such as the annual Elswick Relays, to ten miles such as the Brampton-Carlisle which Steve has run in 48:10. These are all considered as excellent gauges to the progress of winter training.

6.2 Saturday Training Sessions

If not racing on a Saturday, training is usually always performed on hilly park land during the period late February to May. This incorporates various surfaces from paths, steps and grass and involves a major speed endurance session of 60 minutes duration with a gradually increasing pace as the session progresses. This training session is usually always performed with other good class athletes and is considered high on the 'difficulty' scale.

Fig 4: Saturday Training Session Late Feb - May

1,600m jog, 1,600m fast, 1,000m jog,
1,000m fast, 1,000m jog, 1,000m fast
+ 600m jog, 400m fast, 600m jog, 400m
fast, 600m jog, 200m fast.
+ 200m slow, 200m fast.
+ 4 x 150m hill (jog back recovery)
+ 6 x 60m hill (turn around recovery)
down hill fast

In pre-competition terms, this session has much to offer in terms of endurance and a graduated increase in pace. Since fatigue factors are high, Steve states that the psychological consideration of the efforts reducing in length as the session progresses is important for him to dwell on.

6.3 Tuesday and Thursday Track Sessions

During this pre-competition period, track training sessions involve repetition distances varying from 200 to 800 metres. In broad terms, recoveries are calculated as 15 seconds for each 100 metres of repetition effort e.g. for 200m repetitions the recovery would be 30 seconds and for 600m it would be 90 seconds.

Both Jimmy and Steve believe that these speed endurance factors are the most important aspects of training for middle

Fig 6 : Typical 14 Day Training Plan : late March - May

	am runs		major pm sessions		
	distance	pace	volume	type	pace
Monday	4 miles	5½ - 6 mins / mile	6 miles	OBLA	av 5 mins / mile
Tuesday	4 miles	5½ - 6 mins / mile	6 x 800m	speed endurance	3k
Wednesday	4 miles	5½ - 6 mins / mile	6 miles	OBLA	av 5 mins / mile
Thursday	4 miles	5½ - 6 mins / mile	10 x 400m	speed endurance	1500m
Friday	4-6 miles	5½ - 6 mins / mile			
Saturday			5,000m	road race	5k
Sunday	8-10 miles	6 mins / mile			
Monday	4 miles	5½ - 6 mins / mile	6 miles	OBLA	av 5 mins / mile
Tuesday	4 miles	5½ - 6 mins / mile	8 x 600m	speed endurance	3k
Wednesday	4 miles	5½ - 6 mins / mile	6 miles	OBLA	av 5 mins / mile
Thursday	4 miles	5½ - 6 mins / mile	10 x 400m	speed endurance	1500m
Friday	4-6 miles	5½ - 6 mins / mile			
Saturday			60 mins	speed endurance	400m - 1500m
Sunday	8-10 miles	6 mins / mile			



How Steve Cram Trains (4)

Fig 5: Typical Tuesday and Thursday Track Sessions

	APRIL	MAY	JUNE
Tuesday	6 x 800m (2 mins recovery) run in 2:05	6 x 600m (90 secs recovery) run in 92-93	6-10 x 400m (60 secs recovery) run in 57-58
Thursday	10-12 x 400m (60 secs recovery) run in 60 secs	10-12 x 300m (45 secs recovery) run in 41½ secs	10-12 x 200m (30 secs recovery) run in 26-27 secs

distance competitions. During this period of training, no sessions are characterised by longer recoveries.

A progression in the quality or speed of training during this period is achieved by a gradual reduction in the volume of these major sessions as shown in Figure 5 where typical sessions performed in June are also described.

Steve believes it is essential that the pace of the above Tuesday and Thursday track sessions are controlled very carefully. Too fast in the early stages results in the final repetitions deteriorating in time. Too slow in the early stages and the training effect of the session is under-valued.

After many years of practice, he has such control that each repetition can be slightly faster than the previous one with the last repetition the fastest of the evening's training.

This is the manner in which many major championship 1,500m finals are run and it is this aspect of increasing pace under conditions of fatigue which short recovery sessions such as those described are meant to stimulate.

6.4 Monday and Wednesday Evening Sessions

The nature of the Monday and Wednesday evening training runs during the period March to May is maintained from the previous winter period. Although the length or volume of the runs is reduced to 5-6 miles, the average pace is maintained at 5 mins per mile. This could be referred to as an OBLA (onset of blood lactic acid) type of run.

Apart from the Saturday mixed pace training session, few of Steve Cram's individual sessions, when viewed in isolation, could be termed as 'World Class'. When viewed throughout a typical two week period, the true scale, in terms

of volume, intensity and the number of demanding training sessions i.e. 10 in 14 days, can be classified as truly 'World Class' as shown in Fig 6.

When you consider that Steve Cram rarely requires rest days during this period of training, it obviously suggests that he recovers from training remarkably quickly. Looking back on his career both Steve and Jimmy agreed that no single year's training was identical to any others during this critical pre-competition period.

They have constantly changed and altered the programme for reasons of variety although, as previously mentioned, the training already described, is typical of what was performed.

The Tuesday and Thursday training has been performed over many years and could be termed as 'key' sessions for Steve Cram. Steve and Jimmy have found that the average pace maintained for a session of 10 x 400m (60 secs recovery) correlates very closely with that achieved by Steve in a 1 mile race.

7. Period 4 : Competition June - August (15 weeks)

The main aim for a season is always to be at a peak of form for a major Championship. Careful planning of competitions and training during the period June to August is, therefore, all important.

Steve usually starts his track racing season in June with two 3k races in the region of 7:45 / 55 and in earlier seasons, these would be tactical competitions

JIMMY HEDLEY

A few facts and items of additional information concerning his ideas and involvement with Steve Cram are listed as follows:-

- Date of birth 9 March 1927.
- Was an active athletics competitor between the ages of 11 and 55 years.
- Competed mainly between 100 yards and 440 yards at county level with pbs of 10.4 secs (100yds), 22.8 secs (200yds), 51.0 secs (440yds) and has also run 10 miles (road) in 54 mins aged over 40 years.
- Heart problem, a family inherited complaint, curtailed his own competitive athletic career in 1982.
- Began coaching in 1964.
- Jimmy is a highly competitive individual and believes very strongly in passing this on to his athletes. He often emphasises this aspect of the Sport in particular training sessions but always sets goals for his athletes that he knows are achievable.
- His particular source of satisfaction as a coach is to bring an athlete through from a young age to be a successful senior competitor.
- He treats all of his athletes as individuals and encourages them to think for themselves. A vital quality if they are to be winners.
- He is not over selfish about his own athletes and encourages them to seek occasional ideas and advice from other high athletic achievers in his own area.
- Enjoyment of the Sport and of training are the most important aspects for the young athlete.
- Jimmy believes that an athlete is ready to commence training twice per day in the age-range 18-21 years. The exact timing depends on the individual and can only be determined accurately by the personal coach who supervises training.
- For the reasons given above and others of detailed attention to an athlete's needs at any point in the training cycle, Jimmy has never coached by correspondence.
- Even during Steve Cram's early years, Jimmy realised that his strengths were endurance and speed endurance. Basic natural speed was never one of Steve's main assets. Consequently, training has been designed to work to Steve's strengths.
- Jimmy strongly believes that speed endurance track sessions should be kept simple. They are more difficult to control if overcomplicated with many difficult repetition distances and recoveries on any one night.



How Steve Cram Trains (5)

Steve CRAM

Born: 14 Sept 1960,
Gateshead, England
Height: 1.86m
Weight: 69.0kg
Status: Married

PERSONAL BESTS

400	49.1	15 Aug 82	Durham
800	1:42.88	21 Aug 85	Zurich
1,000	2:12.88	9 Aug 85	Gateshead
1,500	3:29.67	16 Jul 85	Nice
Mile	3:46.32	27 Jul 85	Oslo
2000	4:51.39	4 Aug 85	Budapest
3,000	7:43.1+	29 Aug 83	Crystal Pal
5,000	13:28.58	3 Jun 89	Jarrow

MAJOR HONOURS

800 m: (1) Commonwealth Games '86
(3) European Champs '86
qf Olympic Games '88
1500m: h Commonwealth Games '78
(8) Olympic Games '80
(3) European Cup '81
(1) Commonwealth Games '82
(1) European Champs '82
(1) European Cup '83
(1) World Champs '83
(2) Olympic Games '84
(1) European Cup '85
(1) Commonwealth Games '86
(1) European Champs '86
(2) European Cup '87
(8) IAAF World Champs '87
(4) Olympic Games '88
(5) European Champs '90
sf IAAF World Champs '91
sf IAAF World Champs '93

PROGRESSION

	800m	1500m	Mile
1994		3:42.8	
1993		3:35.63	3:52.17
1992		3:42.24	3:58.7
1991		3:34.18	3:52.11
1990		3:33.03	3:53.99
1989	1:46.37	3:35.3	3:51.58
1988	1:43.42	3:30.95	3:48.85
1987	1:45.31	3:31.43	3:50.08
1986	1:43.22	3:30.15	3:48.31
1985	1:42.88	3:29.67	3:46.32
1984	1:46.0	3:33.13	3:49.65
1983	1:43.61	3:31.66	3:52.56
1982	1:44.45	3:33.66	3:49.90
1981	1:46.29	3:34.81	3:49.95
1980	1:48.41	3:34.74	3:53.8
1979	1:48.5	3:42.5	3:57.03
1978	1:53.5	3:40.09	3:57.43
1977	1:56.3	3:47.7	
1976	1:59.7	4:07.1	
1975	2:07.1	4:13.9	
1974	2:11.0	4:22.3	
1973		4:31.5	

without pacemakers. Subsequent 800m and 1,500m races would then be planned along with training to give a positive progression in times.

Prior to a major Championship, this would ideally have encompassed two fast 1,500m races, three to four fast 800m races i.e. in the 1:44 region and two 1,000m races in approximately 2:16.

During this 15 week competition period, Steve would train on the track twice per week and would engage two to three morning runs of reduced mileage. Many of Steve's evening road runs are still maintained at 6 miles and again, can average 5 min/mile pace i.e. they are OBLA sessions. Although at this stage of the season such runs could be considered as of endurance maintenance value, they are run exceptionally fast.

If preparing for an 800m race on a Saturday, Steve would train on the track on the previous Monday and Wednesday. On the Monday evening this would be 10 x 300m (45 secs recovery) run in 41.5 secs and on a Wednesday, 600m (3 min recovery) plus 6 x 200m (30 secs recovery). The 600m would be run at 800m pace i.e. 77 secs and the 200m efforts at a similar pace. Once again, both of these sessions could be considered of the speed endurance type, one at 1,500m pace and the other at 800m race pace.

As can be seen in virtually all of his track sessions and his evening road runs, Steve runs to his strengths i.e. endurance and speed endurance. *There is no place in any of his training for what could be termed 'long recovery' sessions.* This he believes should also be the case for any aspiring middle distance athlete of his type. On the Thursday and Friday runs prior to his 800m competition, the pace is very much more reduced than usual.

It is during June and July that Steve has run various 1000m competitions. These are usually in major UK meetings and they have often been utilised as competitive training sessions where he has aimed to run a fast final 200m in preparation for major tactical competitions.

Many of these have been run in approximately 2:16 but with the final 200m in a 'confidence boosting' 24 or 25 seconds. Occasionally, Steve has not won such a race, but he has achieved his desired aim. In such races, he has also learned that when running very well, you

can make errors of race judgement due to over confidence factors and a lack of consideration of poor positioning.

For obvious psychological reasons, Steve only ever truly eases down for one (i.e. a major Championships) or two competitions during a season. These competitions are different and have to be considered as such and prepared for in a non standard manner.

Preparing for this phase would commence seven days prior to the start of the competition. During these seven days, Steve would again train twice on the track:

Session 1: 8 x 200m (60 secs recovery) in a controlled 25-26secs.

Session 2: 2 x 400m (2 mins recovery) plus 6 x 200 (walk back recovery)

Again these sessions are run in a controlled fashion, accelerating towards the end of the 200m efforts.

During the two days, immediately prior to the commencement of his major competition, Steve would run no more than 3 miles only each day or would possibly even take a complete break.

Although pure speed sessions are occasionally performed in training, they are kept to a minimum due to the lower level of return from the investment in this type of training. Even when performing this type of session, the recoveries measured by conventional standards are kept to a minimum, e.g. 8 - 10 efforts of 150m sprints may only have a 250m jog recovery.

8. Period 5 : Rest and Recovery September (3 weeks)

At the end of his Summer racing campaign, Steve prefers to take three weeks of active rest.

This may be incorporated into a holiday, where he would participate in a low key manner in other sports. He also may take occasional short runs to ensure that he does not cause an injury on his return to more serious training.

Editor's note : we are very grateful to Steve Cram and Norman Poole for allowing the BMC News to print this article for the first time anywhere in the world, and trust that other journals will respect the copyright of the authors.



1500m Racing Tactics

Tactics are a very important tool in winning races. Often, races will have many athletes of similar standard and ability competing against each other. The deciding factor in who crosses the line first in these races often comes down to the person who has the better tactics. When formulating race tactics, you should be aware of the strengths and weaknesses of your opponents. Points to consider when planning tactics are:-

- Who has a fast finishing speed?
- Who likes to make a long burst to the finish?
- Who likes a fast pace throughout the race?
- Which runners like to break away from the pack early and build up a big lead?
- Which runners are comfortable when they are leading, however, get discouraged when overtaken?
- Which runners like to tuck in the pack and wait until the very last moment before making a move to the front?
- Who is fit and running well and who is not?
- What are your own strengths?

All the above factors should play an important part in how you plan race tactics. Beyond that, however, your first priority is to make sure that you are in your best physical condition. After whichpoint, you should be honest and critical about your strengths and weaknesses and here discussion with

your coach can be very beneficial. If you do not have a fast finish you should always try to break away from the fast finishers early on in the race. This can be done by gradually increasing the pace or by a series of fast bursts. A gradual increase in pace will normally take the edge off fast finishers towards the end of the race. Fast bursts are usually more damaging when they are injected into an already fast pace. They are also more dangerous to others, and potentially to yourself, when they are done unexpectedly and at varying lengths and intensities.

If you decide on a fast finish to a race you must make sure that you stay in contact with the leaders. Then when the finishing line approaches any move must be strong in a final burst, timed so that you reach the line with the optimum amount of energy used. This burst should be decisive enough not to give any other competitors time to retaliate. You athlete should always try to force your rivals into situations which make them feel uncomfortable. For example, not letting a front runner run in the front by setting out at a fast pace will often cramp that athlete's style and make them run below par. Similarly, forcing a runner who likes to hang back in the pack to run in the front, by not taking the pace on yourself, often disturbs that runner's style.

If you are attempting, on the other hand, to run a personal best time for 1500m, in a race with superior athletes, it is advisable to run at an even pace. Running at an even pace is the most efficient way of running a race and the easiest in trying to run personal best times. You should, however, resist the temptation of running too fast in the beginning of the race in order to run evenly throughout. Often, you will find that if you maintain this even schedule and be on target in the first two thirds of the race, momentum and the 'racing brain' will enable you to finish stronger and achieve that personal best.

One of the reasons for the great popularity of the British Milers' Club Grand Prix races and other regional races is that they provide an opportunity to run the even paced way to personal bests, giving confidence and skills that can be taken into Championship racing. It should never be forgotten, however, that we train to race and the BMC races should be a very important means to an end, racing well in Championships, rather than an end in themselves.



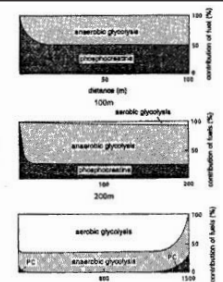
Bristol, 24.11.02. RICHARD FARROW. photo by Mark Shearman.

Racing Tactics

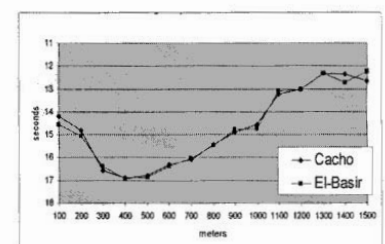
- Who has a fast finishing speed?
- Who likes to make a long burst to the finish?
- Who likes a fast pace throughout the race?
- Which runners like to break away from the pack early and build up a big lead?
- Which runners are comfortable when they are leading, however, get discouraged when overtaken?
- Which runners like to tuck in the pack and wait until the very last moment before making a move to the front?
- Who is fit and running well and who is not?
- What are your own strengths?



Contribution of the 3 Energy Systems during Running Events



1992 Olympic 1500m Final



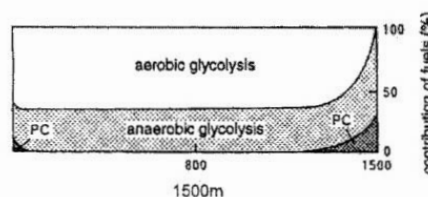
Contribution of the Energy Systems during Running Events

Event	Approximate % VO ₂ max	% Energy Contribution		
		ATP-CP	Lactate	Aerobic
100m	-	70	22	8
200m	-	40	45	14
400m	-	10	60	30
800m	135	5	38	57
1500m	112	2	22	78
3000m	102	<1	12	88
5000m	97	<1	7	93
10000m	92	<1	3	97
Marathon	82	<1	<1	99

After Mathis, D.E. & Coe, P.N., 1991

Table 2.4 The % contribution of energy sources to the Olympic distance events

Contribution of the Predominant Energy Systems during Running Events



European Championships Budapest, 1998 1500m Men's Final

1	Reyes Estévez ESP	3:41.31
2	Rui Silva POR	3:41.84
3	Fermin Cacho ESP	3:42.13
4	Tony Whiteman GBR	3:42.27
5	John Mayock GBR	3:42.58
6	Matthew Yates GBR	3:42.63
7	Rüdiger Stenzel GER	3:42.75
8	Abdelkader Chékhémani FRA	3:42.92



Performance Predictors

www.Run-Down.com

The above website is an excellent resource and can give a very good prediction of performances at a variety of distances based on the time at one specific distance. In the example below, 4:00 was entered as the time for 1500m. From this, the website programme immediately computes and predicts, as indicated on the table reproduced below. For those of you familiar with the 'Horwill 4 -5 second' rule will observe the agreement of the 'Average' column with this rule.

Performance Predictors

Enter a distance and a time (in seconds or hh:mm:ss.00 format):

Distance:

Time:

The Purdy Points for 1500m in 4:00 is 824.55

VO2 Max based on this performance is 70.10 ml/kg/min and VO2 at this pace (111.80% of max) is 78.37ml/kg/min.

This performance is equivalent to:

Distance	Purdy	VO2 Max	Cameron	Riegal	Average
100m	10.88	14.41	7.24	13.60	11.53
200m	22.15	29.07	19.60	28.36	24.79
400m	49.83	59.13	49.29	59.12	54.34
800m	1:55.56	2:02.05	1:55.85	2:03.26	1:59.18
1000m	2:30.44	2:34.82	2:30.70	2:36.15	2:33.03
1500m	4:00.00	4:00.00	4:00.00	4:00.00	4:00.00
1600m	4:18.48	4:17.53	4:18.11	4:16.99	4:17.78
1 Mile	4:20.20	4:19.17	4:19.81	4:18.58	4:19.44
3000m	8:41.17	8:33.97	8:36.52	8:20.38	8:33.01
3200m	9:19.26	9:11.65	9:13.93	8:55.81	9:10.16
2 Mile	9:22.82	9:15.18	9:17.44	8:59.13	9:13.64
4000m	11:52.01	11:43.46	11:44.46	11:18.79	11:39.68
3 Mile	14:31.27	14:21.53	14:21.49	13:48.61	14:15.72
5000m	15:04.43	14:54.42	14:54.24	14:19.93	14:48.25
8km	24:54.01	24:30.51	24:31.83	23:35.24	24:22.90
6 Mile	30:27.35	29:51.62	29:55.21	28:47.60	29:45.45
10km	31:36.92	30:58.69	31:02.74	29:52.89	30:52.81
12km	38:25.52	37:31.58	37:37.92	36:15.14	37:27.54
15km	48:47.66	47:30.26	47:38.39	45:55.57	47:27.97
10 Mile	52:37.89	51:11.13	51:19.53	49:28.95	51:09.37
20km	1:06:20.45	1:04:30.49	1:04:39.44	1:02:18.06	1:04:27.11
Half Marathon	1:10:15.37	1:08:17.62	1:08:26.95	1:05:55.84	1:08:13.95
Marathon	2:27:44.01	2:23:02.23	2:25:27.36	2:17:27.67	2:23:25.32
100km	6:25:43.79	5:48:38.01	6:45:01.83	5:43:05.17	6:10:37.20



Explaining the Performance Predictors

Back to the calculator

The calculator/performance predictor takes a distance and corresponding time as input, and uses them to compute several pieces of information and predict comparable performances for other events. First, the Purdy points are reported, demonstrating what the performance is worth. The Purdy points tables provide a way of assigning a "worth" to performances of most any distance, with comparable performances across distances being worth an equal number of points. Also known as the Portuguese Scoring Tables, the Purdy calculations match the lookup charts in "Computerised Running Training Programs" by James B. Gardner and J. Gerry Purdy. The calculations are a PHP version of the C program kindly presented by Patrick Hoffman on Cross Country, Track, and Running Analysis.

The second item is your V02 Max, with the calculations based on Jack Daniels' "Oxygen Power Performance Tables for Distance Runners." V02 Max represents maximum oxygen consumption, or in simplest terms, aerobic capacity. Endurance athletes typically have higher V02 Max readings. Although V02 Max may not be a perfect predictor of who will win between any two athletes, it does do a good job of predicting comparable performances for distances over 1500m. Distances shorter than 1500m do not rely on aerobic capacity nearly as much, thus they are better predicted by other models. Also reported along with V02 Max is the V02 at the calculated time and pace, as well as the percentage of your V02 Max.

Next come the performance predictors. They are, in order:

1. Purdy Points: Taking the Purdy points calculated above for the original distance and time, a time is calculated for each new distance that is worth the same number of points.
2. V02 Max: This is the most complicated model to calculate, as the times for each distance must be found by narrowing down a time prediction until they are "close enough" through various combinations of Newton's Method and derivatives of quadratic equations. For the Run-Down calculator, times within a tenth of a second or 0.001 of the time prediction, which ever is less, were deemed reasonable. This is especially true since at most a tenth of a second in a distance race is negligible and the V02

Max predictions are not very accurate in the first place for events that are short enough for 0.001 to be meaningful. The standard predictions for calculating V02 Max are:

$$\text{percent_max} = 0.8 + 0.1894393 * e^{A(-0.012778 * \text{time})} + 0.2989558 * \text{time}$$

$$\text{vo2} = -4.60 + 0.182258 * \text{velocity} + 0.000104 * \text{velocity}^2$$

$$\text{vo2max} = \text{vo2} / \text{percent_max}$$

where time is in minutes and velocity is in meters per minute. These equations are also used for working backward to determine a time corresponding to a known V02 Max and distance, although it requires approximating percent_max, combining equations, and treating vo2 as a quadratic equation to solve for velocity, which is in turn used to calculate time (time = distance / velocity) and check how close the initial time estimate was.

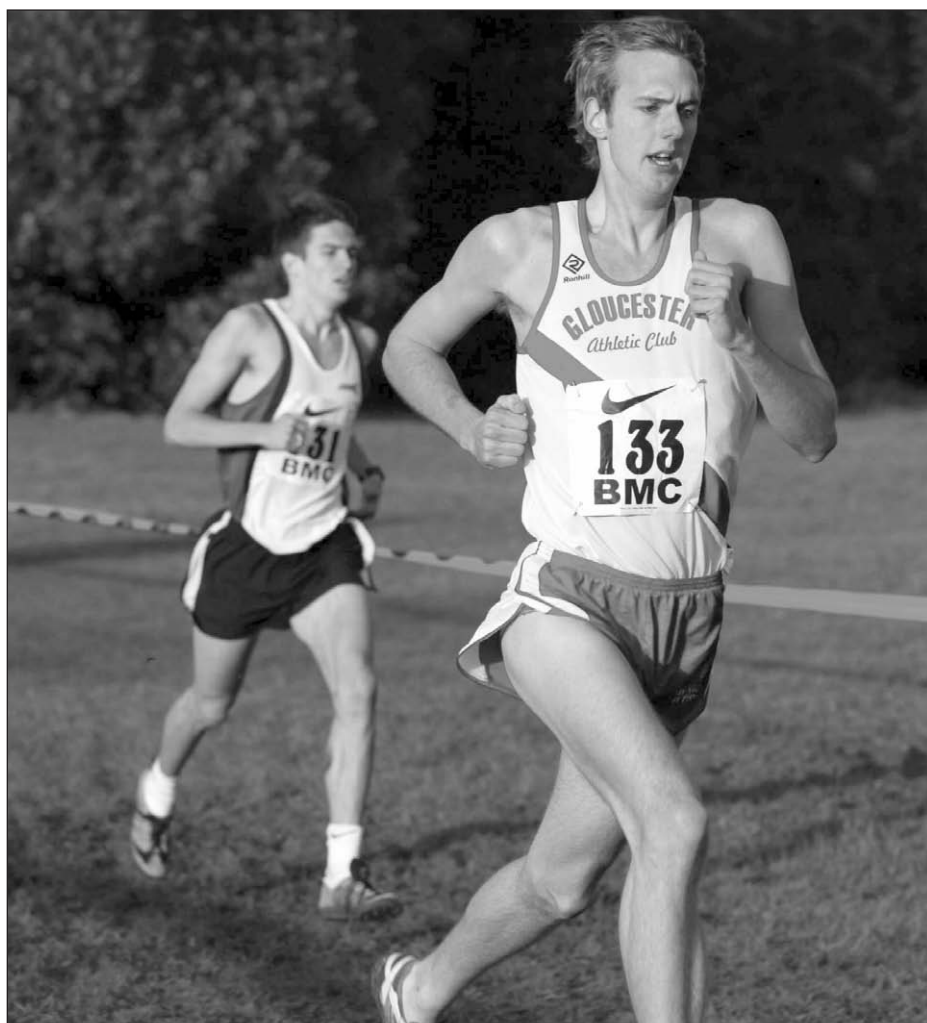
3. Dave Cameron's Model: This model is based on the top 10 times in the world at each distance, using them to compute comparable performances across distances. The speed vs. distance model works well for post-1945 records at 800m through 10k. From 1964 onward it also works well for the marathon. The calculations are as follows, with new_time and old_time being in seconds and new_dist and old_dist being in meters:

$$a = 13.49681 - (0.000030363 * \text{old_dist}) + (835.7114 / (\text{old_dist}^{0.7905}))$$

$$b = 13.49681 - (0.000030363 * \text{new_dist}) + (835.7114 / (\text{new_dist}^{0.7905}))$$

$$\text{new_time} = (\text{old_time} / \text{old_dist}) * (a / b) * \text{new_dist}$$
4. Pete Riegel's Model: $t_2 = t_1 * (d_2 / d_1)^{1.06}$
 where t1 equals the initial time, d1 equals the initial distance, d2 equals the new distance being calculated for, and t2 equals the predicted time for the new distance.
 The formula was developed by Pete Riegel and published first in a slightly different form in Runner's World, August 1977, in an article in that issue entitled "Time Predicting." The formula was refined for other sports (swimming, bicycling, walking) in an article "Athletic Records and Human Endurance," also written by Pete Riegel, which appeared in American Scientist, May-June 1981.

Of the 4 prediction models, the Purdy points method does the best job of predicting comparable performances in events shorter than a mile, and it appears to be equally accurate for events that are longer in duration.



Bristol, 24.11.02. PETER KELLIE (133) leads from IAN CARTER (131). photo by Mark Shearman.



A Way Forward for the British Milers Club

by
Glen Grant

Norman as Chairman, has asked the committee for their views on how we can take the club forward. These are my personal views although I have discussed many of the individual points with others.

THE BIG DECISION

The big decision concerns what son of club we want to become. For example do we take our sport onto a professional event basis - a la Wimbledon, do we take over support of running completely on behalf of UKA, do we expand our current role of service provider for athletes onto a more professional basis, should we become an athletics management company or do we just continue rolling on year by year as now Vision 2000 served us well as a starter document and the underlying ethos still remains, but the practicalities now been overtaken by time. Whatever we do next will take funding and right now there is an opportunity from the funds available to Sport England that may never be repeated. We need to act now or miss the boat. I suggest that to grasp these financial opportunities currently on offer we need to rethink what sort of club we want to be in 10 years time. But this vision will be insufficient on its own. It needs to be backed by a robust set of business style objectives laying down clearly where we wish to go, with relevant milestones, costing and responsibilities. Without this approach we will almost certainly fail to attract the level of funding we deserve and we will not therefore support our members as well as we could or would wish.

What is clear is that our members want our current outstanding race service to continue - and progress. We have a powerful mandate to do anything that will produce better and faster races. Many members would also welcome a greater involvement from the club in areas such as elite coaching squads and training support. With ever better junior times in our races, it is becoming clear that we need to look forward to how we can best serve this new generation of middle distance (and possibly long distance) athletes not just on a season by season basis but over the longer term. Our current crop of juniors can look forward to a ten-year career at least. If we are serious in our aims, we should be ready to develop and grow alongside the youngsters, not just repeat the same year over and over. We need a seamless programme that supports each level from aspiring schoolchild through to World Class athlete.

We also need to be inspiring and training the next band of athletes and their coaches helping them to strive for even higher world standards than now. For the very young there are already well-organised and well supported events such as sports-hall athletics bringing on the next generation of runners. But this is of no use if athletics has no reinforcing links with the schools or if there are insufficient middle distance coaches capable of taking these

youngsters through to senior success. The relationships with schools can be positive to our progress as a club, as that with Millfield has clearly shown. With many schools wanting (and now funded) to offer something unique, there may be a greater role here for the BMC. There is every reason why we should encourage more schools to specialise in running.

Clearly any change must be an evolving



Bristol, 24.11.02. CHARLOTTE MOORE. photo by Mark Shearman.

process during which, as long as we keep the aim of supporting athletes to the fore, we will not go far wrong. But a less than well thought out approach runs the risk of being overtaken by events or simply being sidelined by UKA or Fastrack as they move the sport towards greater professionalism. There are big decisions to be made but as a club run by volunteers we can only move at the speed that people will and can join us as officials. What is clear though is that moving in a positive and business like fashion is far more likely to attract better quality and more motivated volunteers than just drifting along from year to year.

RUNNING THE CLUB

The most important aspect of running the club is that we must all pull together - and this requires consensus (Or democracy as Frank

frequently reminds us). The historical way of doing this has been through the national committee. This has served us extremely well in the past, but with modern communications, especially mobile phones and the Internet it is also proving to be inefficient and slow. We have tried a method of devolving responsibility to one man (or team) to run the Grand Prix series and this has worked extremely well. I suggest that this method of working should be gradually expanded to other areas of club life. I would add that this idea is in no way intended to reduce the authority of the BMC committee (as Frank suggested I wanted in the last Newsletter). In fact what I am suggesting is not a reduction in authority, but a stronger focus for the committee in order to make the club more efficient.

I would recommend that the committee would work thus:

The Committee should:

decide objectives, seek funding, allocate funds and if necessary set main spending priorities, delegate responsibility to a volunteer/team, check progress of each activity, receive reports, decide on success or failure, analyse the activity and agree any changes for following year with the team leader. Then the whole process would start again by resetting priorities etc.

The person/team would: agree to take on the task, agree objectives and funding, attempt to achieve the objectives within budget, build a stronger team of volunteers, report as required, provide analysis of the year with possible objectives and funding requests for the following year etc.

The idea is that the committee should spend more time running the club than in talking detail about specific activities (although we all know that discussion is bound to take place as the committee are always likely to be team leaders or members). But this way of working means that the team leader would have clear lines of responsibility, authority to act within budget and would be encouraged to recruit volunteers to help him run the activity. This should allow much more leeway to meet targets and cut out time killing indecision. There will inevitably be working overlaps by individuals but we have this now already with Steve and the two Tims. This should not change the general idea.

I suggest that the key working areas within the club for this approach are;

Operations Team (The Chairman)

Running the club/committee

Relationship with UKA/Regions

Overseeing the race programme



A Way Forward for the British Milers Club (continued)

Relationship with sponsors

Coaching Team

Training Doctrine
Coaching sessions/weekends
Relationship with UKA coaching team
Conferences

Race Team

Grand Prix
Other track races
Cross country/road races

Communications Team

Web site
Public relations
Magazine
Publicity in support of sponsors

Administration Team

Membership
Equipment
Administrative support for all
activities

Accounts and budgets
Arranging Audits
Entertainment/functions

Planning Team (Vice Chairman*)

Drafting objectives and budgets
Seeking sponsorship
Seeking funding from UKA
Long term planning

Recruiting Team

Education Ministry liaison
Schools liaison
Clubs liaison

* New Post

CONCLUSIONS

The BMC has progressed rapidly in the last few years but needs to gain a clear idea of where to go next, both to match the aspirations of the next generation of runners, and to make best use of the unique funding offer currently available (for a limited time) to the sport from Sport England. There are many areas of our sport that are currently weak and could be profitably engaged in by the club. These include: training coaches in the technical bases of our sport, organising elite training squads, running technical conferences for coaches and encouraging the formation of specialist running schools. To these or any other activities well we need more trained volunteers and we also need to improve how we do business. Each volunteer needs clarity of purpose, authority and financial responsibility if we are to maximise all our time and effort. We have already modernised with some success by devolving responsibility in the administrative, communications and competition areas. I would suggest that this must be the start of a developing process. We must accept the risks involved in this change in



Bristol, 24.11.02. CHRIS MOSS (277) leads from STEVE MOSLEY (276) & RUSSELL BENTLEY. photo by Mark Shearman.

World Indoor Championships

Mens 800

Chris Moss drew the world record holder and the eventual champion in his heat. The pace was never fast but with such luminaries no doubt intimidating. 200m times as follows, 27.05, 56.02, 82.65 with the winner recording 1:48.47. These negative 400 splits would make it especially tough for a "second level" performer. Note last 200 of 25.82. Chris managed fourth with 1:50.21 suggesting his last 400 was around 53 after a 57 opener. In the circumstances commendable.

Women's 800

Jo Fenn's heat showed 200 times as follows, 28.91, 60.09, 92.70 and 2:05.16 with Jo easing in with 2:05.45. Her semi showed 27.89, 58.51 and 89.76 and 1:59.76 Jo being close up again with 1:59.83. The final, as most will know, showed her running with great courage at the front against the best in the world. First 200 at 27.54, 57.89, 89.75 with Mutola going on to a 1:58.94. Jo only yielded the lead in the last 50 to record a fifth place with 1:59.95. Three superb runs in three days. Clearly her track season promises much.

Men's 1500

Michael East drew heat one and the race went out as follows. 30.39, 63.56, 95.87, 2:8.37, 2:40.42, 3:9.70, 3:35.9(25.79!), 3:48.36(last 100 12.87). Last 200 was 25.28. He was again, as in Munich, faced with a slowish race and with the problem of passing men operating at around a 39 second last 300(52 pace). At 3:49.31 he was only 1.05 down on the winner but that was only good enough for sixth. Note that a favourite for the title, Rui Silva was only third and because of the slow pace did NOT qualify for the final.

James Thie's heat benefited from knowing that a faster pace would go some way to guaranteeing faster loser places. 200 times were 29.41, 59.43, 89.32, 1:58.97, 2:28.92, 2:58.97, 3:26.24(27.47), and a winning time of 3:39.97. James found a 3:41.18 good only for seventh. Perhaps understandably he trailed the fast pace early on and moved up through the later stages to be but 1.41 behind the winner. A tough baptism to major racing but a P.B.

Women's 1500

Hayley Owens drew heat one with 200's as follows. 33.96, 68.42, 1:42.88, 2:16.28, 2:48.35, 3:20.65. Hayley manages a creditable 4:15.25 for seventh place. Just outside her P.B.

Kelly Holmes race went 32.54, 66.42, 1:39.78, 2:13.62, 2:47.80, 3:21.42, and ran 1/100ths behind the winner for 4:09.99. Come the final, with the new record holder Jacobs(sub 4) in the race the 200's went 30.96 with Goreleva in a 6m lead then 62.71 with Goreleva's lead slightly reduced. By 600, she had only a metre lead, the 800 was reached in 2:08.80. Shortly after Jacobs went into the lead and at 1000 the time was 2:42.65, she led at 1200 in 3:15.2 for a win in 4:01.67. Bell time was 3:30.87 and last lap was 30.80. Phew!!! Kelly started with some caution, worked her way through the field but with Jacobs approaching 31 seconds for the final lap she could not be caught. Kelly passed Rozenberg on the inside with 100 to go for a 4:02.66, P.B. and a National Record.



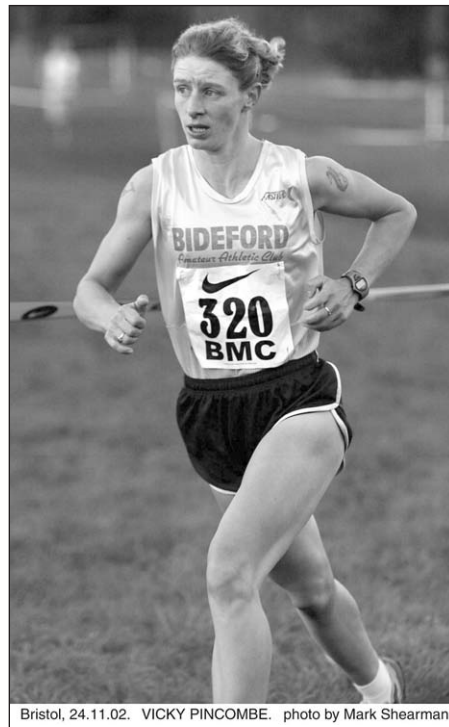
UK EUROPE 800/1500 2002



Bristol, 24.11.02. CAROLINE HOYTE (206), CATHERINE DUGDALE (203) and LUCY VAUGHAN (214). photo by Mark Shearman.



Bristol, 24.11.02. CRAIG PETERS. photo by Mark Shearman.



Bristol, 24.11.02. VICKY PINCOMBE. photo by Mark Shearman.



Bristol, 24.11.02. Start of the under 11 boy's/girl's race. photo by Mark Shearman.

The world rankings for last year are not yet complete. As at late January there are bound to be errors and omissions but the figures shown here are accurate enough, I suggest, to give an indication of the standing of British, middle-distance runners vis-à-vis those of the leading European nations.

Men 800

A number of countries can offer equal, or better, rankings in the top 100, arguably the level of 'class' athletes. From here however, the "quality" of British men outstrips all others shown listed. This is despite the perhaps lower overall quality compared with previous years. It may be of course that other European countries have similarly suffered a decline but judged on 2002 figures the UK can be proud of its position.

Men 1500

Note that the lists for this event are not as deep. Again the UK shows a distinctive lead over all others except the Spanish. Note also the "elitist" rankings of Portugal, nothing between 94 and 202. Both Germany and Russia have lists that fall right away after their leading pair.

Women 800

The Ukraine and Romania have been added. Clearly Russia is the way out leader. Nearly twice as many women listed as the second country, the UK. Note Russia has no less than fifteen women in the top 100. The Ukraine has eight but nothing after that. Spain cannot match it's men list. Indeed few can except Russia and the UK.

Women 1500

A much closer match between the UK and Russia with the latter having no less than eighteen in the top 100.

Overall there can be little doubt that BMC racing programme goes a long way to establishing the standing of the UK against its European cousins. Without its ability to produce fast times a different story would emerge.



800m Men World ranking: 2002

<i>UK</i>	<i>Germany</i>	<i>France</i>	<i>Russia</i>	<i>Spain</i>	<i>Holland</i>	<i>Belgium</i>	<i>Italy</i>	<i>Poland</i>	<i>Portugal</i>
30	12	5	13	8	33	15	49	63	19
56	43	22	34	64	44	53	98		67
75		31		84	70				89
85		58		96					94
		68							
		80							
107	146	126	119	104	165	154	150	110	173
136	199	131		114			172		
160				116					
176				118					
179				122					
185				141					
196				171					
216	229	219	240	220	260	210	209		252
236	246	272	254	258		211	261		273
245	249	274	271	276		215			
279	268								
281									
284									
293									
296									
310	343	355	312	302	324	335	307	322	
315	357	364	331	318	342		316		
392			380	347	346		348		
			386	372			362		
			398				393		
							394		
							397		
414	409	422	402	414	440	403	436	446	454
415	412	426	431	449	476	469		478	468
419	413	474	444	473					
430	420	496	452	492					
477	445		483						
484	461		496						
502	545	503	523	548	563	553	501	515	500
504	567	504	535	564			544	533	
544	598	507	558				583	569	
549	599	522	562						
556		525	658						
574		560	572						
590		580							
		584							
		597							
620	652	627		656	661	614	609	608	
648	666	660				644		623	
654	674	690				647			
677	679	693							
699	681	694							
		696							
717	733	710	742	725				729	
720	746	724	792	771					
758	753	740		777					
770	760	757		787					
780	767								
	783								



800 Women World Ranking: 2002

<i>UK</i>	<i>Germany</i>	<i>France</i>	<i>Russia</i>	<i>Spain</i>	<i>Holland</i>	<i>Belgium</i>	<i>Italy</i>	<i>Poland</i>	<i>Portugal</i>	<i>Ukraine</i>	<i>Romania</i>
17	13	19	7	4	46	11		67	36	32	53
21	28	23	9	62	93			78	59	34	94
24	35	70	10	68				91	82	41	
26	64	71	22	96						55	
84	90		25							60	
			33							79	
			42							87	
			49							97	
			54								
			61								
			63								
			80								
			85								
			86								
			99								
120	138	105	104	130	131		106	100	114	123	109
139	154	156	107	144	155		170	187			
151	157	180	110	196			178	199			
163		182	112								
191		189	117								
192			128								
			133								
			165								
			169								
			186								
			190								
229	218	211	209	257	240	207	202	231			235
238	224		210		267		236	234			248
254	250		226				294	237			
270	287		260					255			
280	297		262								
285			269								
			276								
			283								
			288								
			291								
301	345	305	309	354	372		365	316	361	359	
315	359	324	313		391			333	368		
319	383	326	321					334			
320		363	328					383			
336		374	331								
338		396	352								
344			382								
355			389								
364			390								
376			398								
387											
400	439	446	409	418	411	419	423	401		432	
413	445	451	414	467	436	428	437	425			
	462		422	471		436	443				
			424			435					
			442								
			450								
			455								
			468								



1500m Men World Ranking: 2002

<i>UK</i>	<i>Germany</i>	<i>France</i>	<i>Russia</i>	<i>Spain</i>	<i>Holland</i>	<i>Belgium</i>	<i>Italy</i>	<i>Poland</i>	<i>Portugal</i>
11	48	7	13	8	33	15	49	63	19
24	72	9	34	64	44	53	98		67
29		19		84	70				89
54		23		96					94
95		56							
		64							
		76							
		78							
		94							
107	112	101	119	104	165	127	119	106	
123	141	103	135	108	197	153	131	117	
137	174	109		110		167	162	134	
164		176		113			187	154	
178		192		118				178	
183				139				189	
199				150					
				179					
204	235	224	248	210	230	223	239	297	202
224	286	265	253	225	254	246	252		
231	299		290	233	284		273		
232				240	288		277		
238				242					
268				243					
270				265					
278				298					
292									
303	310	324	307	319	313	308	311		321
307	345	332	322	341		318	362		329
320	348	358	324	344		323	367		
337	354	369	343	350		338	368		
320	355	375	387	352		361			
382	383			370					
390	395			371					
393	397			379					
396				384					
400	401	422	404	413	427		419	465	
408	406	489	425	446	448		443	480	
409	429		450	458	479		452	484	
417	466		482						
432	467		488						
441	491		490						
445	498								
456									
463									
469									
479									
504		502	511	505	501		524	513	521
512		506	542	529	566				526
538		521	549	534					530
540		546	553	550					
568		547		554					
577		568		558					
		569		565					



1500 Women World Ranking: 2002

<i>UK</i>	<i>Germany</i>	<i>France</i>	<i>Russia</i>	<i>Spain</i>	<i>Holland</i>	<i>Belgium</i>	<i>Italy</i>	<i>Poland</i>	<i>Portugal</i>	<i>Ukraine</i>	<i>Romania</i>
8	42	57	5	17	58	62		30	11	23	2
13			10	27				46		72	15
45			16	29				47		96	18
68			21	49				91			35
88			22								55
89			25								
95			33								
97			38								
			40								
			44								
			50								
			54								
			63								
			65								
			71								
			73								
			74								
			80								
102	109	196	108	148			137	104	147	105	
122	114	199	118					112	151	163	
138	150		128					140	174		
160			131					162			
			143					164			
			145					175			
			157								
			159								
			161								
			165								
			169								
			176								
			177								
243	225	206	218	208	239			257	210	248	200
279	260	224	219	277	242			283	252		241
296	271	228	255	281	249			295			290
299		231		297	258			298			
		235			268						
		236			280						
		270									
328	325	308	302	353	349	333	315	303	371		309
339	340	342	319		398	359	350	361			346
355	354	344	330			364	385	365			381
357	367	358	351			393		377			
382	368		390					380			
387								399			
397											
400	406	436	423	402	450	401	421	415	403	440	425
412	416				465	473	426	427		464	485
417	419				476	497	437	441			
480	449				482		452	477			
	469						481				
							483				
							489				
526	509	533	534	548		540	557	512		512	
535	551	555		558				520		532	
542											
550											



BMC member, Huw Lobb (Membership No. 3783), coached by Phil O'Dell very successfully as a junior, now with Frank Horwill at Battersea Park Track, was a surprise third place in the senior men's National CCC. He celebrated next day by winning a 20-mile race in 1 hour 48 mins. He commented, "I don't see why I can't get prize money for my training runs. I treated this race as an acceleration run – 7 slow, 7 steady, 6 flat out". .

Eighty-two athletes and visiting coaches attended the Ardingly College residential course on 28th/30th March, with the 12 staff coaches, a total of 94. Double the number on last year's course.

Letter from a young, female number, "Can you recommend a BMC coach in my area? I am training with a local group at the moment, but, having attended the Ardingly College course last year I realize that there is more to training than just running around the houses every day."



Watford, 14.8.02. LOUISE WHITTAKER (201), SHARON MORRIS (202) and TINA BROWN (61). photo by Mark Shearman.



Bristol, 24.11.02. ROB WHALLEY. photo by Mark Shearman.

A report from an overseas Milers' Club training in South Africa suggests that the British athletes there have a reputation for being, "A bunch a whingers and babies, and when they had a touch of "the runs" they insisted on being rushed to hospital!" We hope this description does not include BMC members.

Athletes noted for deliberately taking the lead in British Grand Prix races and slowing the pace down so that they can win on their sprint finish, have a shock coming to them. They won't get in to the "A" races. The Grand Prix organizers have compiled a blacklist of such runners. It's quite simple really, the only tactics admired are DO-ARE-DIE.

How many serious 1500 metre runners do a 1200 metres time trial once a week in 2mins.55 secs minus? Jack Lovelock did this once a week in 1936 to win the Olympic title in world record time. He ran three-quarters of a mile (That's longer than 1200m) in 3mins and wrote in his diary, "This is becoming easy". Let's have a go this year to break the UK 1500m record of 3:29.6, it's EIGHT YEARS OLD!

Is your club planning to hold a special track meeting? Why not ask the BMC to put on an invitation race? If athletes are invited within a hundred mile radius of the venue the total cost in fares will be around £300, prizes should be timed-based, e.g. 1st prize - £100, if a sub 4-minute mile - £200, if sub 3:55, £400. The same scale for the 800 metres. We need to know the date and venue 12 weeks beforehand. Organising fee is £50. DON'T USE THE BMC NAME IF WE ARE NOT INVOLVED IN RACE ORGANISATION. One other thing, ONLY BMC MEMBERS CAN RUN IN ANY RACE ORGANISED BY THEM. This applies to any local club member who is NOT a BMC member. We need the subs to keep us going.

Relay Records

Records, by their very nature, are difficult to come by. Some however are within reach and shown below those relating to middle-distance events. Also the year in which set (some are well covered with dust!) and the approximate average times needed to break the record.

Men			
<i>4 x 800</i>			
World	7:03.89	1982	4 x 1:46
U.K.	As above		
UKJ	7:26.2	1995	4 x 1:52
<i>4 x 1500</i>			
World	14:38.8	1977	4 x 3:40
UK	15:04.6	1976	4 x 3:46
UKJ	15:52.0	1997	4 x 3:58
Women			
<i>4 x 800</i>			
World	7:50.17	1984	4 x 1:58
UK	8:19.9	1992	4 x 2:5
UKJ	8:39.6	1996	4 x 2:10
<i>4 x 1500</i>			
World	17:09.75	2000	4 x 4:17
UK	17:41.0	1997	4 x 4:25
UKJ	18:38.0	1997	4 x 4:39





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We will be present at the BMC Grand Prix meetings at Eton and Watford

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2003

Nike

Grand

Prix

Arrangements for the 2003 Nike Grand Prix are well under way. We are retaining 4 of the venues from last year for the fifth race we are back at our favoured Scottish venue of Glasgow following last years move to Edinburgh. Last years series continued to set high standards, but as ever we are looking to see what we can do to improve things. There are a number of things that we are keen to address and we have decided to publish a set of race terms. The aim of this is to make it clear to everyone what the purpose of the Grand Prix series is and what the BMC expects of competitors. A theme of the race terms would be 'commitment'. We expect that athletes are committed to our races from the moment that they make an entry, This is also partially about turning up for races that you have entered but also concerns the way in which you race. The Grand Prix and other BMC races are there to help people achieve fast times and to do that we need people who are prepared to commit to a fast pace and some front-running. As an incentive we are introducing a £100 spot prize for those leading at 1200m in a 1500m race faster than 2.55 (men) or 3.20 (women). The same prize applies to those leading at 600m in an 800m race if they are faster than 78.5 (men) and 91 (women). We also intend to take account of attitude to racing when it comes to seeding the next meeting. This may mean promotion for those who ran bravely in one of the lower order races and demotion for those who deliberately slow races. We will be carefully watching races and making videos so that we can make this work.

BMC Cross-Country

As will be observed from the captions to some of the photographs in this issue the BMC, through the offices of Mike Downes, organized a cross-country event late last year. It was essentially a "short-course" event to appeal to middle-distance runners and was well supported.

The City Mile Trophy

This item has gone astray. If any reader knows of its location please contact the editor or any officer of the club.

N.B. WATFORD G.P.
entries: rupert.waters@tiscali.co.uk





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Red flora raises energy levels, making the sluggish less sluggish and putting extra life into stiff legs. 'Toro Toro'.

