## BMC

NEWS
Official Journal of the British Milers' Club

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## $\frac{13}{2}$

The British Milers' Club
sponsored by NIKE
Founded 1963
BMC VISION 2000
"to strive to win all four middle distance gold medals for Britain in the 2000 Olympics and at each successive games"

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| BMC Directors | Tim Brennan <br> Steve Mosley | 01628415748 |
| :--- | :--- | :--- |
| 2000 BA ENDURANCE INITIATIVE | 02920306733 |  |
| BMC Director | Mike Down | 01179733407 |
| 2000 GOLD STANDARD MEETINGS |  |  |
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| Watford | Philip O'Dell (Men) | 01234415748 |
|  | Liam Cain (Women) | 01438712170 |
| Loughborough | George Gandy | 01509230176 |
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| Northern Ireland | Malcolm McCausland | 02871349212 |
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|  | Dave Arnold (Tonbridge) | 01732355539 |
|  | Chris Carter (Brighton) | 01273503446 |

## JOURNAL

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The training articles expressed in this journal do not necessarily reflect the opinions of the National Committee. They are published as part of the BMC's policy of a liberal approach to diverse training theories.

## MEMBERSHIP

Membership is limited to athletes who have achieved the required qualifying times, and to Coaches. Associate membership is granted to those possessing special qualifications likely to benefit the club.
Members receive the BMC News twice a year. They are eligible for reduced entry fees to BMC races and courses and preference in BMC race-seeding. Members are eligible to wear the BMC "White" Vest. Members with the BMC "Gold" Standard are eligible to wear the BMC "Gold" Vest.
All applications to join the BMC should be sent to the Membership Secretary with a cheque for $£ 25$ ( $£ 30$ overseas) stating vest size and enclosing an A4 SAE. Annual subscriptions of $£ 15$ (overseas $£ 20$ ) are due 1st January each year and should be sent to the Treasurer.

## MERCHANDISE

BMC vests (gold/white - S/M/L/XL - £10), BMC T-shirts (S/M/L/XL - £10) and BMC ties (£5) are available from the membership secretary, William Anderson.
Back issues of BMC News ( $£ 2.50$ each) are available from the Treasurer, Pat Fitzgerald. Please make all cheques payable to "The British Milers' Club" and enclose an A4 SAE.

## INTERNET

BMC Web Site
BMC E-mail
http://www.british-athletics.co.uk/bmc/ bmc@british-athletics.co.uk

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All pictures by Mark Shearman

(the Gold Standard times were the BMC membership times prior to 1995)
ELITE Standard

| Men | $1: 49.0$ | $3: 43.0$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| :--- | :--- | :--- | :--- | :--- |
| Women | $2: 05.0$ | $4: 20.0$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |

(the Elite Standard times are how we judge the success of Vision 2000).

## Chairman's Notes

## CHAIRMAN'S NOTES <br> \section*{by Dr Norman Poole}

The start of a millennium has always been considered by people as a new dawn, a time for the birth of new ideas, inspiration, action and new discoveries and the beginning of an age of greater energy and achievement.

I hope that this is the case for you and that we in the BMC are helping you to draw closer to these ideals.

A man who has done more than anybody in encouraging such thoughts and actions within our organisation is Frank Horwill. As we all know, Frank was the founder of the BMC in 1963 and yet in this new millennium he is still as active as ever in many areas of work within the Club.

He is seen as a man of action and inspiration by all who come into contact with him, as was the case at the recent Ardingley Young Athletes Endurance Course which he organised. Part sponsored by the Foundation for the Arts and Sport, the Course was very well attended by 60+ athletes and coaches and Frank was reported to be very much 'on form'.
Although we are organising a greater number of similar training days and competitions on a regional basis we know that an even greater energy is required in this area.
It is good to report the continuing strong support from Nike into this new millennium and we look forward to further new discoveries, such as Nic Andrews, during the BMC Nike GP Series this year. Although four of this year's venues are well established, Glasgow was a new and successful venture for us in 1999. With the inclusion of London

Marathon Endurance Initiative events in the Glasgow GP this year we are sure of a greater number of entries and more success.

An honour of which all of us in the BMC are justifiably proud is to have been asked to stage the 2000 AAA Men and Women's 10K Track Championships in conjunction with the LMEI competitions and the BMC Nike GP at Watford on July 22nd. This we take as a mark of the high standard of our race meeting organisation and an acknowledgement of the excellent working relationship that we have with UK Athletics. An achievement that we are proud of and perhaps a new dawn for the BMC.

I also think it has been a positive step for UK Athletics and the London Marathon organisation to place all of the 2000 LMEI races within the BMC race programme. At the request of UK Athletics we have moved two of our traditional mid week GP dates to Saturdays. Great consideration to the views of our membership will be given before this change is also agreed for the 2001 season. During the 2000 season Mike Down, the recently appointed LMEI Organiser, will be encouraging more of our top senior and junior athletes to compete in the LMEI competitions. If these events are to make a significant move forward an improvement in the racing performance of our athletes has to start here in the UK. This can only be achieved with a spirit of unity in our support for this initiative.

I look forward to meeting up with you during the forthcoming season.

British Milers' Club Records (as at 1st April 2000)

BMC Members' Record
by a paid-up BMC member in a BMC race
"BMC Record"
by anyone
in a BMC race

BMC Club Record
by a paid-up BMC member in any race world-wide

Men
M600
M800
M1000
M1500
M Mile
M2000
M3000
M 2 Mile
M4000
M5000
M10000
M2000SC
M3000SC

1:17.4 Andrew Hart 1999 1:46.7 James McIlroy IRE 1998

2:19.4 Andrew Hart 1997 3:37.5 Anthony Whiteman 1997 3:56.35 Anthony Whiteman 1996
5:11.0 Walter Wilkinson 1972
7:51.4 Rob Whalley 1997
8:34.5 Ian Gillespie 1997
11:03.2 Rob Whalley 1998
13:41.08 Rob Whalley 1997
29:49.2 John Lisiewicz 1994
5:34.8 Stuart Stokes 1999
8:29.09 Christian Stephenson 1999

1:17.4 Andrew Hart 1999
1:45.2 * Patrick Ndururi KEN 1997
2:19.4 Andrew Hart 1997
3:37.5 Anthony Whiteman 1997
3:56.35 Anthony Whiteman 1996
5:11.0 Walter Wilkinson 1972
7:51.4 Rob Whalley 1997
8:34.5 Ian Gillespie 1997
11:03.2 Rob Whalley 1998
13:28.6 * Mizan Mehare U20 ETH 1998
29:32.8 * David Taylor 1997
5:34.8 Stuart Stokes 1999
8:29.09 Christian Stephenson 1999

1:15.0+ Seb Coe 1981 1:41.73 Seb Coe 1981 2:12.18 Seb Coe 1981 3:29.77 Seb Coe 1986 3:47.33 Seb Coe 1981 4:53.06 Jack Buckner 1987 7:32.79 David Moorcroft 1982 8:13.51 Steve Ovett 1978 10:28.7+ David Moorcroft 1982 13:00.41 David Moorcroft 1982 27:30.3 Brendan Foster 1978 5:34.8 Stuart Stokes 1999 8:18.91 Roger Hackney 1988

## Women

W600
W800
W1000
W1500
W Mile
W2000
W3000
W 2 Mile W5000
W10000

1:29.4 Linda Staines 1997
2:01.93 Diane Modahl 1998 2:44.9 Jo White 1980
4:10.7mx Sonya Bowyer 1996
4:30.77 Joanne Pavey 1997
6:12.4mx Dianne Henaghan 1998
8:58.2x Joanne Pavey 1998 not known
15:43.99 Angela Newport 1999
34:44.9 Heather Heasman 1997

1:29.4 Linda Staines 1997
2:00.7 * Shireen Bailey 1985 2:44.9 Jo White 1980
4:10.7mx Sonya Bowyer 1996 4:30.77 Joanne Pavey 1997 6:12.4mx Dianne Henaghan 1998 8:58.2x Joanne Pavey 1998 not known
15:43.99 Angela Newport 1999
33:33.7 * Theresa Duffy IRE 1997

* denotes non-member

1:26.5 Kirsty Wade 1985
1:57.14 Kelly Holmes 1997
2:32.55 Kelly Holmes 1997
3:58.07 Kelly Holmes 1997
4:19.41 Kirsty Wade 1985
5:37.00 Christine Benning 1984
8:27.40 Paula Radcliffe 1999
9:32.07 Paula Radcliffe 1999
14:43.54 Paula Radcliffe 1999
30:27.13 Paula Radcliffe 1999

## BMC News....News....News...

## BMC 2000 RACE PROGRAMME

Our 2000 Race Programme is designed to build on the successes of last year and will be once again in three tiers:
i) BMC NIKE Grand Prix;
ii) BMC Gold Standard Meetings;
iii)BMC Regional Races

## BMC NIKE GRAND PRIX

The 2000 BMC NIKE Grand Prix will again be run on similar lines to previous years. For the first time we have an entirely unchanged set of venues, but this year the last three meetings will be held on Saturday evenings. This is at the request of Norman Brook of UK Athletics who wants to include the meetings as part of Olympic selection process.

The Grand Prix meetings are:

## Wed 14th June Wythenshawe

Wed 5th July Cardiff
Sat 22nd July Watford
Sat 19th Aug Solihull
Sat 2nd Sept Glasgow
There are three Grand Prix categories, Men, Women and Overall, covering $800 \mathrm{~m}, 1,500 \mathrm{~m}$ and 1 Mile. There will be four Grand Prix meetings and a Grand Prix Final. At each GP meeting there will be four events, M800, W800, M1500, W1500. At the Grand Prix Final, the Men's $1,500 \mathrm{~m}$ will be replaced by a Mile. The overall prizes in the combined men's and women's Grand Prix are: first $£ 1,000$, second $£ 600$, third $£ 400$, fourth $£ 200$, and fifth $£ 100$.

There will be total prize money of $£ 250$ for each event at each meeting - first prize being $£ 100$, second $£ 75$, third $£ 50$ and 4 th $£ 25$. An athlete that wins events at all five rounds of the Grand Prix could therefore win $£ 1,500$.

In addition, a bonus of $£ 100$ will be paid to any BMC member who breaks and still holds the BMC members' record at the end of the season, with a winning performance at a BMC NIKE Grand Prix Meeting.

## GRAND PRIX SCORING

Points can be scored at any distance in the four BMC NIKE Grand Prix meetings and the final, the best four meeting scores counting towards the overall men's and women's Grand Prix. An athlete may also include one score from a London Marathon Endurance Initiative race that takes place at a BMC NIKE Grand Prix meeting.
The points system will be the same as last year. Equal points will be available for 'time' and 'position', 21pts being the notional maximum for each category. First place will count 20 points, 2nd place 19 points, 3rd place 18 points down to 1 point for 20th place. 'Positions' will be decided on time, taking all races in account,
but the winner of any race, 'A', 'B', 'C' etc., will get a 1 point bonus
'Time' points will be awarded as follows:

|  | 21 pts | step | 1 pt |
| :--- | :--- | :--- | :--- |
| M800 | $1: 46.0$ | $1 / 2 \mathrm{sec}$ | $1: 56.0$ |
| W800 | $2: 00.0$ | 1 sec | $2: 20.0$ |
| M1500 | $3: 36.0$ | 1 sec | $3: 56.0$ |
| W1500 | $4: 05.0$ | 2 secs | $4: 45.0$ |
| M Mile | $3: 54.0$ | 1 sec | $4: 14.0$ |
| W Mile | $4: 25.0$ | 2 secs | $5: 05.0$ |

The ' 21 points level' is approx. world Top 50 standard and the ' 1 point level' is our BMC entry standard. Times will be rounded 'down' to the 'step' below that time, thus a Men's 800 m in 1:47.7 would score 17 points and $1: 55.7$ would score 1 pt .

## GRAND PRIX ENTRIES

All BMC Members are eligible and encouraged to enter the BMC NIKE Grand Prix, and it is suggested that they vary their events above and below their specialist distance, making use of LMEI races where possible.

Athletes are asked to register with the meeting organiser 8 days before the event. As start-lists and seeding will be done 72 hours before the meeting, Grand Prix entries will not be accepted on the day.

Entry fees for members are $£ 2$ per race. Nonmembers and members behind with their subscriptions will be allowed to run but their entry fee will be $£ 7$ per race, and they will not be given priority in the seeding. Non-members are not eligible to win a prize in any of the overall Grand Prix categories.
Limited overseas athletes are encouraged to run - care will be exercised to ensure that they 'enhance' rather than 'distort' the meeting. Overseas athletes are eligible to join the BMC as Associate Members.

## GRAND PRIX SEEDING

Race seeding will be done by the meeting organiser in conjunction with the BMC Committee. In case of dispute, current BMC merit rankings will be used.

Promising U23 athletes will be given priority in the seeding and any athlete that wins the ' B ' race in a BMC NIKE Grand Prix meeting will be given the option to run in the ' A ' race at the next Grand Prix Meeting. For obvious reasons, members who are behind with their subscriptions will not get priority in the seeding.

## LONDON MARATHON ENDURANCE INITIATIVE

Mike Down has been re-appointed by UK Athletics to co-ordinate the race programme for the Endurance Initiative, working entirely within
our BMC race programme for 2000. The LMEI Grand Prix will therefore be held during the following meetings:

| Wed 14th June | Wythenshawe |
| :--- | :--- |
| Sun 25th June | Battersea Park |
| Wed 5th July | Cardiff |
| Sat 22nd July | Watford |
| Sat 19th Aug | Solihull |
| Sat 2nd Sept | Glasgow |

Points will be scored on the same basis as the BMC National Grand Prix as follows:

|  | 21 pts | step | 1 pt |
| :--- | :--- | :--- | :--- |
| M3000 | $7: 40.0$ | $2^{1} / 2$ secs | $8: 30.0$ |
| W3000 | $8: 50.0$ | 5 secs | $10: 30.0$ |
| M5000 | $13: 20.0$ | 5 secs | $15: 00.0$ |
| W5000 | $15: 00.0$ | 10 secs | $18: 20.0$ |
| M10000 | $27: 40.0$ | 10 secs | $31: 00.0$ |
| W10000 | $31: 40.0$ | 20 secs | $38: 20.0$ |

## BMC NIKE GP FINAL, INCORPORATING THE 2000 BMC CHAMPIONSHIPS

The BMC NIKE Grand Prix Final will be held at Glasgow on Saturday 2nd September. Events will be 800 m and 1 Mile (Men)/1,500m (Women) and points can be scored towards the overall BMC NIKE Grand Prix in the same way as other rounds. To qualify for the 'A' race in your chosen event, you should be:
i) in the Top 10 of the overall Grand Prix standings after the 4th meeting,or
ii) have won an 'A' race at any of the previous Grand Prix meetings, or
iii) have run a BMC 'Elite' (see page 2) standard in that event at any of the previous Grand Prix meetings
Remaining places in the ' A ' races will be decided on the current national rankings. Like last year, the Grand Prix Final will incorporate the BMC Championships. The BMC Champions for 2000 will be the BMC members who set the fastest times in the 800 m and Mile races at the Grand Prix Final in Glasgow.

## GOLD STANDARD MEETINGS

Put on in conjunction with the promoting clubs, these meetings take place every two or three weeks to provide high class races in preparation for championships and the BMC NIKE Grand Prix. These meetings are open to all members but BMC Gold Standard members, i.e. sub 1:52/3:49/2:12/4:30, will find the ' A ' races paced appropriately.

| Stretford | Mike Harris | 01614367981 |
| :--- | :--- | :--- |
| Watford | Tim Brennan | 01628415748 |
|  | Liam Cain | 01438712170 |
| Loughborough | George Gandy | 01509230176 |

These meetings will always include high quality 3 k races. The Stretford races will also include $1,500 \mathrm{~m}$ and $2,000 \mathrm{~m}$ steeplechases.

## BMC News....News....News...

## REGIONAL RACES

For BMC members, i.e. sub 1:56/3:56/2:20/ 4:45 (M800/M1500/W800/W1500) athletes, paced BMC races will take place at the following venues:
Rosenheim Lg Ray Thompson 01737554450 Finsbury Park John Sullivan 02077901961 Woodford Green John Sullivan 02077901961 Sutcliffe Park Ron Allison 02088589380 Brighton Chris Carter 01273503446
Solihull Maurice Millington 01213538273 North East Phil Hayes 01207570161 East Cornwall Chris Coleman 01736740616 Wales Steve Mosley 02920306733 Scotland Brian McAusland 01567830331
N Ireland Malcolm McCausland 02871349212

## BMC MILE OF MILES

Local sponsors have provided prize money for Mile races in the 'Mile of Miles' including bonuses for performances under 4:00 (men) and 4:40 (women).
$\begin{array}{lll}\text { 4th June } & \text { Battersea Park } & \text { M Mile, W Mile } \\ \text { 23rd July } & \text { Par } & \text { M Mile, W Mile }\end{array}$

| 16th August | Tooting Bec | M Mile, W Mile |
| :--- | :--- | :--- |
| TBA | Mile | South West |
| TBA | Mile | South West |
| TBA | Mile | South West |

The BMC will put up further prize money of $£ 100$ for U23s and juniors, male and female, for the most wins (in their own age group) throughout the summer.

## BMC RECORD BREAKERS

The 'Record Breakers' series will attempt to set new BMC Records as follows:
25th June Battersea Park M800, W800 20th August East Kilbride M2000

Other events may be added at short notice within the Watford and Stretford meetings if athletes so request. Prize money of $£ 100$ will be awarded for each race where a new BMC members' record is set, provided that the record still stands at the end of the season.

## 2000 NATIONAL TRAINING DAY

It is intended to hold this in October 2000. For further details please contact Frank Horwill on 02075153472.

## RECOMMENDED INTERNET SITES

Athletics News Sites
i. Track \& Field Athletics Online - http://www.athletics-online.co.uk/running.htm (soon to be sportscreen.com)
ii. On Running - http://www.onrunning.com/
iii. Athletics Net - http://www.athleticsnet.com/
iv. Yahoo - http://uk.sports.yahoo.com/ headlines/sport/athletics.html

## Federation Sites

i. BMC - http://www.british-athletics.co.uk/bmc/ - our own site!
ii. UK Athletics - http://www.ukathletics.org/ - official site of the national governing body
iii. IAAF - http://www.iaaf.org/
iv. Scottish Athletics Federation - http://www.saf.org.uk/
v. Northern Ireland Athletics Federation - http://www.niathletics.org/

Information Sites
i. UK Running Track Directory - http://www.runtrackdir.com/ - contains details on every track in the UK
ii. UK Track \& Field All-Time Lists - http://members.aol.com/martinrixx/index.htm
iii. Track \& field all-time performances homepage - http://www.algonet.se/~pela2/ - deep all-time world lists
iv. 800 m home page - http://personal.computrain.nl/eric/m800/ - everything you wanted to know about 800 m
v. 800 m - the site - http://www. $800 \mathrm{~m} . c \mathrm{cjb}$.net - another 800 m site
vi. 1500 m site - http://www.usuarios.iponet.es/acarras/athletics/1500.html
vii. Bob Sparks' Home Page - http://easyweb.easynet.co.uk/~rsparks/ - includes Sub 4 chronicle

## Club Sites

i. UK Athletics Club Website Directory - http://www.runtrackdir.com/ukclubs/ - this lists all clubs known to have a presence on the web
Training Sites
i. Frank Speaking - http://www.serpentine.org.uk/advice/coach/coach.htm - numerous articles from BMC founder Frank Horwill (on Serpentine RC site)
ii. Sports Coach - http://www.brianmac.demon.co.uk

## NATIONAL ENDURANCE WEEKEND

The eighth National Endurance Weekend will take place in November, venue TBA. For further details please contact Norman Poole on 0161 9808358.

## 2000 ANNUAL GENERAL MEETING \& CONGRESS

This will be held in the autumn, probably in conjunction with one of the above events. For further details please contact Peter Thompson on 01313177320 .

## BMC E-MAILING LIST

To receive news of BMC events and full BMC results as they happen throughout the summer, BMC members on E-mail can join the BMC Mailing List. To subscribe to this free of charge service please send an e-mail to bmc@britishathletics.co.uk.

## 2000 SUBSCRIPTIONS

Your subscriptions were due on 1st January 2000. If you have not already paid by standing order or direct debit, please could you send your cheque for $£ 15$ ( $£ 20$ overseas) made payable to the BMC, together with any change of address, to the BMC treasurer Pat Fitzgerald.

## RECOMMENDED SERVICES

$i$ Leisure Pursuits Group, for warm-weather training trips. Telephone 01256471016.
ii Body Language II, custom competition and training apparel for clubs and individuals. Contact Lesley Graysmark on 01452619486.
iii Athletics International, for the best coverage of international results. Write to Mel Watman, 13 Garden Court, Marsh Lane, Stanmore, Middlesex HA7 4TE.
iv Peak Performance, a UK technical athletics journal. Write to Peak Performance, 1st Floor, 5 Charterhouse Buildings, Goswell Road, London EC1B 1HH.
$v$ Peak Running Performance, a US technical athletics journal. Write to Peak Running, 6150 Nancy Ridge Drive, San Diego, CA 92121.
vi Ultrafit Magazine, a bi-monthly journal on all aspects of fitness. Write to Simone Kiburn, Ultrafit Magazine, Champions House, 5 Princes Street, Penzance TR18 2NL, phone 0173650204.
vii Sports Tours International, for warm-weather training trips. Write to Vince Regan, Sports Tours International, 91 Walkden Road, Walkden, Worsley, M28 5DQ or phone 01617038161.
viii Len Lewis, for an excellent second-hand, noobligation, book-search service. Please ring any evening 01938552023 or write to Len Lewis, 3 Aubet Drive, Guilsfield, Welshpool, Powys, SY21 9LX.

## Nic Andrews

## by Jason Henderson

SOUTH DEVON is an unlikely setting for arguably the most exciting developments currently taking place on the British middledistance scene.
A young man called Nic Andrews and his rookie coach Eddie Bairstow are quietly laying the foundations for what could be Britain's first Olympic 800m win since Steve Ovett in 1980.
Significantly, they are being advised by Peter Coe, Sebastian Coe's father and coach, and have already experienced considerable success and startling progress on an average weekly mileage of no more than 25 miles.
Last summer Nic, then 17 , won a silver medal at the European Junior Championships in Latvia. It is of further significance that he finished closer to the winner, Russia's Yuriy Borzakovskiy, than most senior athletes did at either last summer's European Cup in Paris or
last winter's indoor races, which included the European Indoor Championships in Ghent.
Add to this Eddie's self-confessed status as a novice coach - and the novel group of pensioners and teenagers who attempt to match strides with Nic during seafront sessions - and the story becomes even more remarkable.
Beneath the country bumpkin image of a training group that can only afford - both in time and petrol - to get to a proper track once a week (and that includes in the summer too), there lies an athlete and coach that have the intelligence, confidence and ability to reach the very top.
Or the top of the medals rostrum in Athens 2004 , to be precise.
Nic teamed up with Eddie's South Devon AC group in 1995 and quickly began to knock chunks off his best 800 m time of $2: 17$.

In 1996 he ran 2:07.1 -

Nic Andrews wins the ' $B$ ' race at last year's BMC Watford Grand Prix which was good enough to reach the English Schools but then, in 1997, ran 2:01 in his first race of the year at Millfield School. His season's target had been 2:02.

He went on to win the AAA Under-17 title that year and ran 1:56.2 at Portsmouth. And the year ended with Athletics Weekly running an article in their October 15 issue - a piece that now proudly hangs in a frame in Eddie's Paignton house.
In 1998 Nic's progress temporarily slowed and he ran 1:54. But 1999 saw his most dramatic improvement yet, as he shattered this best by five seconds in a season that included:

- Running 1:49.08 to win the B-race at Watford's BMC Nike Grand Prix on June 23.
- Winning the English Schools' 800m title after a thrilling battle with Stephen Frost and Chris Bolt at Bury St Edmunds.
- A silver medal from the European Junior Championships in Riga, Latvia.
- And a 400 m PB of 49 seconds dead on September

28, in the familiar surroundings of Exeter Arena.
By now, following a request from both Nic and Eddie, Peter Coe had been periodically providing comments, advice and inspiration to them since June 1998.
"Nic and I really appreciate his interest," says Eddie. "He's been there and done it. He makes me realise, in the best possible way, how much further we've got to go. He provides valuable experience and expertise which I am keen to acknowledge. He has become part of the 'team' that is helping Nic move forward. We are very grateful."
Eddie admits that he views the Coes - both Peter and Seb - as ideal role models.
Following the adage that quality should always come before quantity, the relatively light workload that Eddie gives Nic is reaping dividends. A glance at the training schedules that accompany this article are testimony to the fact that an 800 m runner does not have to log up mega miles to succeed. Although Eddie stresses that, despite the speed-based training schedule having suited Nic, it might not be for everybody.
Nic's average weekly mileage has risen from 17.81 (from the period September 1998 to May 1999) to 22.47 (from September 1999 to 12 Mar 2000) - an increase of 26.12 per cent. And this is all part of a carefully constructed plan that hopes to see Nic reduce his PB by two seconds a year - culminating in a time of, hopefully, around 1:42 in 2004.
It's little surprise, listening to Eddie's description of Nic's training times and mileages, that the 46 -year-old is a maths teacher. Nic, who lives in nearby Teignmouth, also studies maths, along with other A-levels in physics and technology - which he hopes will lead to a place at Exeter University.
The duo are not considering the Olympics as a goal for this summer - at all. Instead they are aiming for the World Junior Championships in Santiago, Chile, in October.
Already Eddie and three other South Devon club-mates (none of whom are related to either the athlete or his coach) "have been stashing away our money," says Eddie, to save up for the trip.

It is, if you like, the humble beginnings of a Nic Andrews fan club!
Here are some of the training philosophies that Eddie and Nic have used and are continuing to utilise in the run-up to Chile:

- Nic trains on the track just once a week, even during the summer - but also always all year round. "The track is 30 miles away," says Eddie. "So we only have the chance to get to it once a week.
- So instead we use the seafront and dodge dogs and people on bikes. This is grassroots athletics. In fact it's not even that, it's tarmac athletics. It is reality."
- Eddie follows two main ideas, with regards racing: 1.'Don't leave your best runs in training'. And 2. 'Do your best races in championships'.
- Breaking convention, Eddie does not agree with the idea that an athlete should automatically have an end-of-season break.
"I don't plan one (a break) in at a specific place," he says. "The ideas behind this are: (a) If the athlete, in my case Nic, is running well and isn't tired, then why stop? If the athlete doesn't need a break, why take one just because it is a particular time of year?
"And (b) Every year Nic has had one or two weeks off over the winter period. These have been when I've noticed that he's running too tired ("too" because athletes often run tired. "Too tired" could be put as stale') or when he's picked up a bug. The advantage of this system, for me, is it puts the break when it is needed.
"The athlete, and coach, don't feel that they are losing time: there's no sense of frustration. I can see, though, in future years, when the season will be more intensive, that we'll start using a programmed break as a recuperative and preventative measure."
- Nic's training group consists of veterans and teenagers, of mixed abilities but with just one other person running under two minutes for 800 m .
- Nic takes Boots A-Z multi-vitamins. Special emphasis is placed on chromium and zinc, although Eddie adds: "The only supplements' Nic takes are his Shreddies."

Nic doesn't drink alcohol. "You cannot do that and succeed," says Eddie.
Nic enjoys a normal social life and spends the majority of his time either running, studying or spending time with his girlfriend, Natasha, from the Ukraine, who met him on a school trip to Devon a couple of years ago. She visited Devon again last year and decided to stay to do Alevels.
"I don't know about the studying bit," adds Eddie. "I don't think he does much of that!"

- Cross country running plays NO part in their training schedule. They do no specific hill sessions, although acknowledge the usefulness of being in an area where there are plenty of hills - and therefore incorporate them into their steady runs.
- Nic and Eddie put great importance on tactics. "In 1999 he led most races," says Eddie (including the European Junior Championships). "But the year before he hung back - so has proved he can do both.
"Last year we tried to follow the tactics that Seb Coe used when he was younger. Seb went to the front and stayed there until somebody went past. We were pushing the envelope of how fast he could run last year and taking the view if they want to win they'll have to run faster."
Or, as Peter Coe might say: 'Speed hurts. Sustained speed kills!'
- Eddie has been coaching Nic for five years and says he has: "Never repeated a training programme." And adds that schedules are based on a six-week rota.
- Nic was awarded a Polar heart rate monitor last year by UK Athletics, Athletics Weekly and, of course, Polar. The athlete, however, only uses
the monitor to check if he is ill,' says Eddie, adding that the athlete and coach prefer to use their instincts and judgement on whether he is training hard enough or too hard.
- He is also assisted by Puma, although the company missed a great opportunity to get the young Briton together with Wilson Kipketer when the world record-holder appeared at the CGU Indoor Grand Prix in February.
- Eddie videos most of Nic's races and studies them over and over. They have watched the final 100 m from last summer's European Junior Championships, as one would expect, quite a few times!
- As well as being something of a disciple of Peter Coe, Eddie also follows the ideas put forward by Frank Horwill and said the lectures by Abdelkader Kada, the coach of Hicham El Guerrouj, at a BMC weekend last winter were invaluable.
- When they're not winning, Nic and Eddie are determined to draw positive learning experiences from rare poor performances. At last winter's CGU AAA senior Indoor Championships, for example, Nic qualified for the final with the best time - 1:51.90 - but after getting bumped around in the final he tailed off to finish last in 2:01.
"Brendan Foster said once that the one common experience of all athletes is losing," says Eddie, who added that after the heat at Birmingham's NIA: "We were too elated and didn't consider beforehand how physical the final might be. We didn't have enough alternate race plans."
"Next year we're determined to give the indoors a big go and show people that Nic can really run indoors."


## NIC ANDREWS' TRAINING LOG

| November 1999 |  |
| :---: | :---: |
| Mon 22 | 4M easy |
| Tue 23 | Track session at Exeter. $2 \times 4 \times 300 \mathrm{~m}$ differentials. Kicks on whistle, with times: 41.9, 39.7, 41.5, 44.1. Ave. 41.8. And 40.9, 40.9, 44.5, 40.9. Ave 41.8. Total Ave 41.8. (3.2 miles total) |
| Wed 24 | 4M easy \& weights |
| Thu 25 | 1 M warm-up. Paignton seafront. $4 \times 1 \mathrm{~km}$. Target 2:45-2.50 (with 800 m jog recovery). Ran: 2:39.0, 2:46.1, 2:39.9, 2:34.4. Ave 2:39.85. 0.8M warm-down. ( 5.5 miles total) |
| Fri 26 | 3M easy |
| Sat 27 | rest |
| Sun 28 | 0.5 M warm-up. 4 M good, easy speed. 0.5 M warm-down. |

Total week's mileage: 24.7m
Mon 29 3.5M easy
Tue 30 Exeter Open Meeting. Windy, so did 100 m and 200m. 100m 11.3 (equalling PB set at Exeter Open Sept 99); 200m 23.0 (PB). Good warm ups/downs. (2M total)

## December

Wed $1 \quad 4 \mathrm{M}$ easy \& weights
Thu $2 \quad 4.8 \mathrm{M}$ hilly. Handicap run. Target 28min. Ran 27:17 easing down over last half mile. (Pushing a Mini car up hills earlier in the day!) Fri 3 4M easy
Sat 4 rest
Sun 5 Paignton. 7.5M run. Target time $<45 \mathrm{~min}$. Ran 42:16 0.2M warm up/0.3M warm down. (8M total)

Total week's mileage: 26.3M

Mon 6 Easy 4.1M recovery run
Tue 7 Exeter. $10 \times 200 \mathrm{~m}$ with $100 \mathrm{~m} / 90$ secs recovery. 5 mins rest then 5 x 200m. Target 28/29secs. Windy on back straight. Ran: 29.0, 27.8, 29.0, 28.0, 27.2, 27.7, 28.5, 27.7, 26.8, 27.4. (Ave for first 10: 27.91). Then 27.0, 27.5, 27.1, 26.8, 26.6. (Ave for last five: 27.0). Overall average: 27.6. Looked comfortable. (4.2M total)

Wed $8 \quad 4 \mathrm{M}$ easy \& weights
Thu $9 \quad 1 \mathrm{M}$ warm-up. Paignton seafront. $3 \times 1 \mathrm{M} .400 \mathrm{~m} / 4$ mins recovery. Averaging 5:01.3. 1M warm down. ( 5.8 total)
Fri 10 5M easy
Sat 11 rest
Sun 120.5 M warm-up. 6 M quick. 0.5 M warm-down
Total week's mileage: 30.1M
Mon 13 4m hilly. Very easy
Tue 14 Exeter, 34 F and frost on track. $50 \mathrm{~m}, 100 \mathrm{~m}, 150 \mathrm{~m}, 200 \mathrm{~m}, 300 \mathrm{~m}$. 15 mins , then back down $300 \mathrm{~m}, 200 \mathrm{~m}, 150 \mathrm{~m}, 100 \mathrm{~m}, 50 \mathrm{~m}$ (two mins recovery). Times: 6.4, 12.0, 18.3, 25.3, 39.7, 39.4, 25.8, 19.1, 12.5, 6.5. (2.7M total)

Wed 15 4M easy
Thu 16 Paignton seafront. 200/400/1km/400/200. Quick. Targets: <26 <60 $<2: 50$. Ran $25.0,57.2,2.40 .8,58.0,25.3$. 1.2 M run back( 5 M total)
Fri 17 4M easy
Sat 18 Rest
Sun 19 1M warm-up. 3M fast. 1M warm-down. Ran hard
Total week's mileage: 24.7M

- Despite admitting his coaching inexperience, Eddie is continuing to learn his trade with gusto and enthusiasm.
He has drawn on almost 20 years' of running experience himself, although boasts the modest half-marathon best of 78 minutes. With only a club coach level 1 qualification when Nic broke through as an under-17, Eddie has now achieved his level 2 coaching qualification and has started the senior coach course.
- Nic and Eddie are by no means doing everything that they can at the moment with regards Nic's athletic development. But this allows scope for future improvement.
"There are lots of things you'd think top class runners would have to do that we don't do yet, as Nic is still improving without them," says Eddie.
"Nic's never been physiologically tested, for example. We don't know his VO2 max. He's never been blood tested. But there's time for all this later."
Training is not geared for the Olympics this year, Eddie stresses. "Our aim all along has been for the 2004 Olympics. Training is simply not geared for $1: 42 / 3$ at the moment, it's geared for $1: 47$. We want to run 1:42 in 2004 but a lot of things can go wrong between now and then.
"If we can knock one to one-and-a-half seconds off this year then we'll be thrilled. The last thing we want is for people to remember Nic as a good junior."

Nic plans to come out, as usual, in May for the traditional Millfield School early season BMC meeting. He hopes a good performance there will win him selection for the U20 team for the Road to Sydney' meeting at Loughborough on May 21.
"He'll then disappear throughout June and July," says Eddie, "temporarily emerging for the English Schools' Championships and then on to the AAA senior Championships and Olympic trials before the AAA U20 Championships and World Juniors trials two weeks later
"Nic will have to run the qualifying time and be selected if he is to go to the World Juniors," said Eddie. "We won't be taking anything for granted."


NIC ANDREWS' TRAINING DIARY

| 98/99 |  |  |  |  |  | 99/00 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Week | Race | Long Run | Distance | Cumul. D | Month | Week | Race | Long Run | Distance | Cumul. D |
| Sep. | 31-6 | 8001.59 .4 .1500 m 4.22 .8 | 5.0 | 16.1 |  | Sep. | 30-5 | 800 m 1.51 .7 | 4.0 | 17.1 |  |
|  | 7-13 |  | 6.0 | 15.8 |  |  | 6-12 | Ide \& 800/400. 49.3 | 4.3 | 18.3 |  |
|  | 14-20 |  | 5.0 | 17.9 |  |  | 13-19 |  | 3.9 | 17.6 |  |
|  | 21-27 | SEAA 3km 9.21 | 3.0 | 17.3 | 67.1 |  | 20-26 |  | 4.8 | 21.8 | 74.8 |
| Oct. | 28-4 | 10km. 35.19 | 6.2 | 22.8 |  | Oct. | 27-3 | 100 11.3. 40049.0 | 4.1 | 17.6 |  |
|  | 5-11 |  | 4.8 | 20.2 |  |  | 4-10 | cold | 4.0 | 21.5 |  |
|  | 12-18 | 3km 9.16 | 6.5 | 20.9 |  |  | 11-17 | 3 km . 9.03 | 5.5 | 23.2 |  |
|  | 19-25 | Teign relay 21.02 | 5.5 | 22.0 |  |  | 18-24 |  | 6.4 | 21.7 |  |
|  | 26-1 |  | 0.0 | 0.0 | 153.0 |  | 25-31 | 800 m 2.00 .7 | 5.0 | 23.9 | 182.7 |
| Nov. | 2-8 |  | 4.5 | 17.5 |  | Nov. | 1-7 |  | 4.8 | 21.5 |  |
|  | 9-15 | 3 km | 4.8 | 19.2 |  |  | 8-14 | 3km 9.14 1st senior | 6.0 | 26.5 |  |
|  | 16-22 |  | 5.6 | 21.4 |  |  | 15-21 |  | 6.3 | 27.2 |  |
|  | 23-29 | 100/200/400. 50.7 | 5.0 | 19.6 | 230.7 |  | 22-28 |  | 4.0 | 25.0 | 282.9 |
| Dec. | 30-7 |  | 6.2 | 25.1 |  | Dec. | 29-5 | 10011.320023 .0 | 7.5 | 26.3 |  |
|  | 8-13 | recovery week. 3 km 9.22 | 4.1 | 17.2 |  |  | 6-12 |  | 6.0 | 30.1 |  |
|  | 14-20 |  | 5.6 | 24.7 |  |  | 13-19 |  | 4.0 | 24.7 |  |
|  | 21-27 |  | 5.0 | 19.3 |  |  | 20-26 | 800 reps 2.02.6/1.59.4 | 5.5 | 23.8 |  |
|  | 28-3 |  | 6.0 | 19.1 | 336.1 |  | 27-2 |  | 5.0 | 25.8 | 413.6 |
| Jan. | 4-10 | sore throat | 4.5 | 11.8 |  | Jan. | 3-9 | Indoors 1.53.77 | 4.0 | 18.2 |  |
|  | 11.17 |  | 4.0 | 17.4 |  |  | 10-16 | 2 km 6.12. 1st Sen man | 5.5 | 26.6 |  |
|  | 18-24 |  | 4.8 | 16.1 |  |  | 17-23 |  | 5.0 | 26.3 |  |
|  | 25-31 | Lanzarote | 4.0 | 22.3 | 403.7 |  | 24-30 | Indoors 1.51.70 | 4.3 | 16.5 | 501.2 |
| Feb. | 1-7 |  | 4.0 | 18.5 |  | Feb. | 31-6 | Indoors 1.58.20 | 7.5 | 21.6 |  |
|  | 8-14 | 3km 9.58 | 4.4 | 16.1 |  |  | 7-13 | Teeth out. Nil | 0.0 | 0.0 |  |
|  | 15-21 | Indoors 1.56.44 | 4.1 | 11.6 |  |  | 14-20 | 4.2 m treadmill 26.30 | 6.2 | 26.2 |  |
|  | 22-28 | 200 m 23.6 .400 m 50.3 | 3.9 | 16.4 | 466.3 |  | 21-27 | 5 m 27 mins | 5.0 | 26.9 | 575.9 |
| Mar. | 1-7 |  | 5.6 | 18.6 |  | Mar. | 28-5 | 11.5/23.2/50.7 Ex Open | 7.5 | 27.0 |  |
|  | 8-14 |  | 4.0 | 17.5 |  |  | 6-11 | 3 km . 9.17 1st Sen man | 6.0 | 26.3 |  |
|  | 15-21 |  | 4.0 | 23.1 |  |  | 12-18 | $2 \times 10 \times 200$ Av 27.2 |  |  |  |
|  | 22-28 |  | 4.0 | 15.4 | 540.9 |  |  |  |  |  |  |
| Apr. | 29-4 | 800 m 1.59 .0600 m 1.22 .6 | 4.0 | 15.9 |  | Apr. |  |  |  |  |  |
|  | 5-11 | 8001.59 .140053 .3 | 5.0 | 19.5 |  |  |  |  |  |  |  |
|  | 12-18 | 8001.56 .8 | 4.8 | 19.3 |  |  |  |  |  |  |  |
|  | 19-25 | ill start of week. 100/200 | 4.8 | 11.3 |  |  |  |  |  |  |  |
|  | 26-2 |  | 4.2 | 16.6 | 623.5 |  |  |  |  |  |  |
| May. | 3 | Millfield. 800 m 1.51 .6 |  |  |  | May. |  |  |  |  |  |
|  |  | Totals | 162.9 | 623.5 |  |  |  |  | 142.1 | 629.2 |  |
|  |  | Averages | 4.65 | 17.81 |  |  |  |  |  |  |  |

## Vision 2000 Statistical Review

## by Matthew H Fraser Moat, Vice Chairman BMC

One of the principal ways we set out to achieve Vision 2000 was "by providing competition opportunities for athletes so that they can progress to the next level of achievement". To assess the success of Vision 2000, we present the following statistics from the BMC race programmes 1994-1999.

M800: Throughout the period we have seen steady progression at all levels. What is particularly pleasing is that our standards in 1999 at 10th, 20th, 30th and 100th were our best ever. Regrettably Battersea Park was being resurfaced in 1999 and so our June meeting, which provided many of the very fastest performances in 1997 and 1998, could not take place.

| M800 | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 5}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1st | $1: 46.83$ | $1: 46.4$ | $1: 47.7$ | $\mathbf{1 : 4 5 . 2}$ | $1: 46.6$ | $1: 46.96$ | 5th |
| 5th | $1: 49.3$ | $1: 48.2$ | $1: 48.3$ | $\mathbf{1 : 4 6 . 8}$ | $1: 47.69$ | $1: 47.8$ | 2nd |
| 10th | $1: 49.8$ | $1: 49.4$ | $1: 48.5$ | $1: 48.3$ | $1: 48.3$ | $\mathbf{1 : 4 8 . 1}$ | 1st |
| 20th | $1: 50.9$ | $1: 50.0$ | $1: 49.3$ | $1: 49.8$ | $1: 49.1$ | $\mathbf{1}: 49.06$ | 1st |
| 30th | $1: 51.69$ | $1: 50.3$ | $1: 50.0$ | $1: 50.2$ | $1: 49.8$ | $\mathbf{1 : 4 9 . 5 3}$ | 1st |
| 50th | n/a | $1: 51.5$ | $1: 51.4$ | $\mathbf{1 : 5 1 . 0}$ | $1: 51.37$ | $1: 51.1$ | 2nd |
| 100th | n/a | $1: 53.7$ | $1: 53.2$ | $1: 53.1$ | $1: 53.3$ | $\mathbf{1 : 5 2 . 9 0}$ | 1st |
|  |  |  |  |  |  |  |  |
| 1:49.0 | 3 | 8 | 15 | 12 | 17 | 19 | 1st |
| $1: 52.0$ | 41 | 61 | 68 | $\mathbf{7 7}$ | 57 | 70 | 2nd |
| $1: 56.0$ | n/a | 183 | 180 | 192 | 192 | $\mathbf{2 1 3}$ | 1st |
|  |  |  |  |  |  |  |  |

M1500: 1999 was lacking slightly at the very sharp end (again, no Battersea meeting) but best ever standards at 20th, 30th and 50th bode well for 2000.

| M1500 | 01994 | 1995 | 1996 | 1997 | 1998 | 1999 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1st 3 | 3:40.35 | 3:42.1 | 3:39.1 | 3:37.5 | 3:39.0 | 3:39.85 | 4th |
| 5th 3: | 3:41.65 | 3:43.0 | 3:41.2 | 3:41.6 | 3:39.7 | 3:41.3 | 3 rd |
| 10th | 3:43.3 | 3:44.2 | 3:42.1 | 3:43.1 | 3:41.2 | 3:42.0 | 2nd |
| 20th 3 | 3:45.05 | 3:45.9 | 3:44.7 | 3:44.4 | 3:43.85 | 3:43.52 | 1st |
| 30th 3: | 3:46.42 | 3:47.9 | 3:45.9 | 3:45.6 | 3:45.51 | 3:45.08 | 1st |
| 50th 3: | 3:48.27 | 3:50.2 | 3:47.7 | 3:47.9 | 3:47.5 | 3:47.0 | 1st |
| 100th | n/a | 3:54.2 | 3:52.3 | 3:51.5 | 3:54.7 | 3:52.8 | 3rd |
| 3:43.0 | 8 | 5 | 15 | 9 | 17 | 15 | 2nd |
| 3:49.0 | 56 | 40 | 61 | 63 | 55 | 70 | 1st |
| 3:56.0 | n/a | 128 | 149 | 149 | 115 | 142 | 3rd |

MMile: We don't really hold enough miles for the figures to be significant at the lower levels, but four of the eight sub-four races in the period took place within 6 weeks in 1998!

| M Mile | 1994 | $\mathbf{1 9 9 5}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | 1999 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1st | $4: 00.2$ | $3: 59.6$ | $3: 56.35$ | $3: 58.4$ | $3: 57.6$ | $3: 59.64$ | 5th |
| 5th | $4: 04.8$ | $4: 02.8$ | $4: 00.42$ | $4: 02.9$ | $3: 59.5$ | $4: 01.81$ | 3rd |
| 10th | $4: 09.1$ | $4: 04.3$ | $4: 02.3$ | $4: 03.8$ | $4: 01.1$ | $4: 08.64$ | 5th |
| 20th | n/a | $4: 09.9$ | $4: 05.13$ | $4: 11.2$ | $4: 04.50$ | $4: 16.34$ | 5th |
| 30th | n/a | $4: 12.6$ | $4: 08.59$ | $4: 17.2$ | $4: 09.24$ | $4: 29.82$ | 5th |
| 50th | n/a | $4: 18.6$ | $4: 13.2$ | n/a | 4.22 .3 | n/a | n/a |
|  |  |  |  |  |  |  |  |
| 4:00.0 | 0 | 1 | 3 | 1 | 7 | 1 | 3rd= |
| 4:10.0 | 10 | 20 | 37 | 17 | 31 | 12 | 5th |
| $4: 30.0$ | n/a | 77 | 83 | 47 | 61 | 30 | 5 th |

We list the times required to achieve the 1st, 5th, 10th, 20th, 30th, 50th, 100th in our rankings, and then the numbers of athletes inside our elite, gold and membership standards year-on-year: [Please note that 1994 was when we worked in co-operation with the Reebok Challenge. At the time we proclaimed it as our "best ever year"]

W800: In 1998 there was a slight upward trend, but 1999 was disappointing at the sharp end and standards are actually slightly down when compared to 1994. In earlier years the good performances tended to be in mixed races - in the 1998 Grand Prix, with 4 out of 5 races were inside 2:05, but this trend was not continued in 1999 giving Rachel Newcombe a comparatively easy victory in the Grand Prix overall.

| W800 | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 5}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1st | $2: 03.67$ | $2: 03.3$ | $2: 04.1$ | $2: 03.1$ | $\mathbf{2 : 0 1 . 9 3}$ | $2: 03.2$ | 3rd |
| 5th | $2: 04.75$ | $2: 06.1$ | $2: 04.9$ | $\mathbf{2 : 0 4 . 2}$ | $2: 04.61$ | $2: 05.48$ | 5th |
| 10th | $2: 06.0$ | $2: 08.27$ | $2: 07.1$ | $\mathbf{2 : 0 5 . 7}$ | $2: 06.8$ | $2: 06.91$ | 4th |
| 20th | $\mathbf{2 : 0 8 . 1}$ | $2: 10.0$ | $2: 09.2$ | $2: 08.7$ | $2: 08.4$ | $2: 09.04$ | 4th |
| 30th | $2: 10.4$ | $2: 11.4$ | $2: 10.3$ | $\mathbf{2 : 1 0 . 0}$ | $2: 10.5$ | $2: 10.2$ | 2nd |
| 50th | $\mathrm{n} / \mathrm{a}$ | $2: 15.7$ | $2: 12.4$ | $2: 13.2$ | $2: 13.8$ | $2: 11.81$ | 1st |
| 100th | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $2: 19.8$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathbf{2 : 1 7 . 0}$ | 1st |
|  |  |  |  |  |  |  |  |
| 2:05.0 | 5 | 3 | 5 | 6 | $\mathbf{7}$ | 3 | 5th= |
| 2:12.0 | 35 | 32 | 49 | 41 | 38 | 51 | 1st |
| 2:20.0 | $\mathrm{n} / \mathrm{a}$ | 83 | 102 | 85 | 90 | $\mathbf{1 2 2}$ | 1st |

W1500: This event bucks the trend somewhat. The 1994 Reebok races were really very good, and our races fell away badly in 1995. 1996 was better, 1997 went back slightly and 1998 showed a distinct improvement at all levels except at the very top. 1999 was so far and away the best ever that we have to wonder what we did right!

| W1500 | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 5}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | 1999 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1st | $4: 13.6$ | $4: 12.8$ | $4: 10.7$ | $4: 12.6$ | $4: 14.84$ | $4: 10.84$ | 2nd |
| 5th | $4: 14.9$ | $4: 22.1$ | $4: 17.1$ | $4: 18.6$ | $4: 19.9$ | $4: 11.9$ | 1 st |
| 10th | $4: 18.61$ | $4: 27.4$ | $4: 20.6$ | $4: 21.8$ | $4: 20.61$ | $4: 14.78$ | 1 st |
| 20th | $4: 25.32$ | $4: 33.8$ | $4: 23.0$ | $4: 25.4$ | $4: 23.0$ | $4: 20.8$ | 1 st |
| 30th | $4: 30.0$ | $4: 36.1$ | $4: 28.1$ | $4: 31.3$ | $4: 26.1$ | $4: 23.76$ | 1 st |
| 50th | n/a | $4: 42.8$ | $4: 37.3$ | $4: 38.9$ | $4: 35.7$ | $4: 31.5$ | 1 st |
| 100th | n/a | n/a | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |  |
|  |  |  |  |  |  |  |  |
| 4:20.0 | 10 | 2 | 9 | 6 | 6 | 17 | 1 st |
| 4:30.0 | 30 | 15 | 33 | 26 | 34 | 45 | 1 st |
| 4:45.0 | $\mathrm{n} / \mathrm{a}$ | 60 | 75 | 70 | 82 | 99 | 1 st |

Overall: For the second successive year we undoubtedly achieved our best ever year for the men's events. The women's $1,500 \mathrm{~m}$ was quite splendid, but the women's 800 m was disappointing. Of particular note is that three out of the four main events achieved highest ever standards at 50th place, and a different three achieved this at 100th place.

Conclusion: Taking the four main events, we have presented 10 statistics measuring depth for each event. Out of a possible 40 statistics, 38 of them have set new heights during the last three years. We can therefore conclude that the main thrust of Vision 2000, that of improving the standard of the BMC Race Programme, has been an unqualified success.


When the BMC Committee sat down in 1996 to map out our Vision 2000 document, their main priority was to produce a document from which we could obtain sponsorship of our Grand Prix Series.
Three years later, after three very successful years of support from NIKE, the BMC have succeeded in creating Britain's most successful domestic race series, to such an extent that it was acclaimed by speaker after speaker at the recent UKA conference, and performances in BMC races were at their highest ever levels in 1999.

However, 1999 also saw Britain's worst ever performance at a major championships Britain without a single finalist in the four middle-distance events.

The BMC News went to interview the two architects of Vision 2000, BMC President Glen Grant and BMC Vice Chairman Matthew Fraser Moat.

BMC News: Well, three years after Vision 2000 was launched, and Seville saw Britain have its worst ever games as far as middledistance is concerned. Was Vision 2000 a complete waste of time?
Fraser Moat: Certainly not. It provided a vision, a purpose, and above all, a sponsor. We always knew that four gold medals would be hard to achieve, but what mattered was whether we could provide a structure on which to build. Each year the depth of performances in BMC races has got better and better, we feel the environment IS right for champions to emerge and that therefore we have achieved the key stepping stone necessary to achieve Vision 2000.

Grant: Let's be honest, we were not expecting the crop of runners we had in 1996 to come through and suddenly get gold. Kelly yes, Paula yes, but otherwise they had not shown enough promise before so why should they now. The Grand Prix series was set up for athletes like Charlotte Moore and Nic Andrews to start in the ' C ' race, move up to the ' B ' race the next year, and then start winning the ' A ' races.
Fraser Moat: James Mcllroy stands out to me. Here we have a genuine medal prospect who three years ago could barely make our national Top 100. The progress of Andy Hart gives me great pleasure as well. Andy has been using our races now for eight years, and indeed only Ian Gillespie has ever run in more BMC races. Who would have thought back in 1992 that Andy would break through and become British No. 1 at 800 m for two consecutive years? Likewise it was good to see Helen

Pattinson break through to international class her first BMC race was back in 1994 at the Oxford Relays, and it was good to see Lynn Gibson finish off her career on a winning note in the 1998 Grand Prix.
Grant: I think that we must be grateful for what we have at present. If I have one criticism it is that too few athletes risk losing and play safe in races. I watch in vain to see a British athlete take a race and try to win it by destroying the others (Paula excepted). They always run for safe acceptable times instead of taking the lead and risking blowing up.

BMC News: How do you assess the BMC's performance in improving coaching knowledge?
Grant: I would say that the BMC News has been as good as ever, and Frank Horwill does his coaching newsletters and his young athlete's courses, and is a prolific writer in all the athletics magazines. There cannot be a British MD athlete who has not heard of five pace training, but it is a different matter as to whether they use it or not? You know what they say about leading horses to water . . .
Fraser Moat: The British world records are all gone. In many ways our message has been too widely published. The coaches to Aouita, Morceli, Komen, El Guerrouj and Ngeny have all gone on record as saying that they used Peter Coe's book at their start-point! I'm afraid that too many British coaches still regard Seb Coe's training as impossibly difficult which they aim to equal rather than surpass.

BMC News: What do you say to those British athletes who still refuse to run BMC races, preferring to chase times in Europe?
Fraser Moat: I have two words, "Your loss". Overseas athletes find our races attractive. Those that come over more than compensate for the no-shows.
Grant: Athletes who do not run in BMC races are kidding themselves because they will never get a better offer of support in this country than we can give them. Even if the times are not always world class many of the races are better than GP races in Europe. Also they can always make life harder for themselves by racing two races back to back over 800 m or a 1500 followed by an 800 to recreate the last part of a race.

BMC News: Why did we fail to get any finalists in 1999?
Fraser Moat: Well, we had a bit of bad luck. Both Kelly Holmes and Hayley Tullett were
unlucky to be edged out in difficult semi-finals, and John Mayock was tripped in his heat. It was only in the Men's 800 m that our athletes were truly inept. With only two to qualify, you have to keep at the front of your heat if you want to qualify - you just can't afford to rely on your finishing kick. Curtis Robb at least had the right idea, but he was unfortunately way off his best form by the time of the games.
Grant: Why no finalists . . . The athletes did not run fast enough.

BMC News: What is the relationship with UKA like?
Fraser Moat: Not bad - and getting better. The problem we face is that every two or three years the staff within the governing body completely change around. Just as you get to know someone, they get moved. The real problem is UKA's policy of making 12 month appointments. How can you possibly do longterm planning when you know you have to reapply for your role in 12 months time? It is sad that the former event specific roles are no more. Norman Brook does his best but he has too many hats on!
Grant: If athletics is to flourish then dialogue between the governing body and specialist clubs is vital. We will always be much closer to the need than they ever can be (even out here in Finland my E-mail from athletes is heavy). We will do our best to support UKA, for their part they must try to find us funds to do our job better. Fraser Moat: The other thing that impacts on middle-distance is this nandrolone issue. Each of these positive tests so monopolises the senior staff of UKA that almost nothing can get done on any other issue when the news of the latest positive is about to break.
Grant: I agree.
BMC News: With hindsight, what would you have done differently in Vision 2000?
Fraser Moat: Asked Nike for more money, so that we could have appointed a full-time coordinator. This would have freed up more of the committee's time, so that we could have done our mentoring of individual athletes more carefully. It saddens me that we have had a number of one-year wonders. People who do great things for a year or so, and then vanish. What happened to Rob Hooton, Rupert Waters, James Mayo? What happened to Jo Pavey? What happened to Dorothea Lee, Amanda Pritchard and Rachael Ogden? Why do they vanish? I don't know but it has much to do with injury, lifestyle, and the need to maintain an income.

Grant: I agree that it would have been nice to have had more money at the outset. I think however that we were not ready as a club for that. As officials we have grown up a lot in the past couple of years and we are now much more professional in our approach, especially in the way we delegate responsibility to get things done. I am not sure that we could have done much more in Vision 2000 at the time because we could not have delivered. Indeed we still have not delivered on the mentoring process and I think that some of our athletic failures stem from that. Although, I must say that we still have problem in UK in that there is more competition between coaches than there is between athletes. I now realise how lucky I was that Frank, Harry, Ron Holman, Conran Milton and others were willing to share their athletes and knowledge. As a team they were much stronger than they were individually.
Fraser Moat: This is where we have been let down so badly by the lottery funding. So much was promised, and very little has come through. Genuine Olympic prospects such as Curtis Robb and Ann Griffiths have been denied funding in Olympic year? Where is the logic in this? We have decisions about athletes' futures being taken by faceless bureaucrats who know nothing about the sport and even less about the athletes. The Wembley fiasco is just the tip of the iceberg. It is incompetance on the grandest scale and it shows that our present sports administrative structure needs gripping and overhauling by government. We have far too many touchy feely ideas wasting funding and not enough hard reality. Lottery Funding needs
a total rethink. At present a huge industry is growing up in the athlete support world but many of our best athletes do not get a penny. Somewhere there is something wrong with that. We also still do not have a house at altitude where athletes can go cheaply to train. This is a clear area where UKA should be involved. Perhaps Nike would buy us one instead!
Grant: That would be good. I think that the future of our sport needs far more vision about how it is run and the sports goods companies must have a major part to play - and not just by giving sponsorship. We are being left behind by other sports such as football, biathlon, triathlon and ice hockey. Although I said earlier that the governing body should support us, perhaps there is an argument that says, not only should they NOT support us, but that they are actually interfering in areas that are nothing to do with them. Possibly they should stick to rules, national teams and championships and let the marketplace take the rest. But to do this they have to loosen their grasp on the control functions to let others act for the sport. Why should we not do our own BMC deal with television for example. The idea that we all benefit from UKA is only true if we DO benefit. Are there other ways of running the sport? The middle distance

This is what we wrote in 1996:

## The Future

Making Things Happen running",
Firstly tured manner"

## WHAT WAS VISION 2000?

This is what we wrote in 1996:

## World Supremacy

In Moscow at the 1980 Olympics a BMC member won the Men's 800 m gold medal. Another BMC member won the Men's 1500 m gold medal. Sadly, the women's middle-distance events were won by two Russians. That was the closest the BMC got to achieving our oft-stated goal of raising the standard of British middle-distance to world supremacy - two out of the four middle-distance gold medals.

## Our aim, or as we shall call it, our Vision 2000 is:

"to strive to win all four middle-distance gold medals for Britain in the 2000 Olympics and at each successive games"
We have a tall task ahead of us. To make things happen we need to look at what we are doing now, and how we could do it differently or better.

## Strategy

The BMC must create an environment whereby athletes can develop from National Schools standard through to the point where the national federation takes over. It is clearly the role of the British Athletic
Federation (BAF) to look after the elite athletes within the UK.
The better job that BAF does with this the more that BMC can concentrate on raising the lower levels of ability - the less able that BAF proves to be the more that BMC must concentrate on providing a service right through to world class.
We will consult closely with BAF as to precisely where the dividing line for activity between BAF and BMC should be.
races organised by UKA have hardly benefitted UK athletes at all in recent years - they have been Kenyan dominated with too few places in the races for us. They compare poorly with Battersea (thanks to the vision and efforts of David Pamah) which has been a great help to UK athletes. This is not a criticism, just a question about established ideas and routines. We must keep thinking afresh. What if the BMC organised a Middle Distance equivalent of Wimbledon. Who should benefit from any profit? In this respect Vision 2000 was a good start with a fresh set of ideas. It has not failed if we produce from it the succesful athletes and the structure to sustain them. The lack of success so far only shows how deep into the pit we had gone. It is a longer climb back than Matthew and I first realised.
Fraser Moat: Whatever the outcome in Sydney, BMC members can be assured that Glen and I will be working hard, devising Vision 2004!

## WHAT DID WE PLAN TO DO?

The BMC's aim has always been "to improve British middle-distance
"by improving the standard of coaching knowledge so that athletes train and prepare for competition in a logical and struc-

We have consistently achieved this over the years by providing an internationally respected magazine to all members, coaches and athletes, that is up to date with all the best knowledge and advice. We run regular training days and BMC coaches stand ready to advise any coach or athlete on his/her way to success,
Secondly
"by providing competition opportunities for athletes so that they can progress to the next level of achievement"
For three years we have provided well over 150 races per year and athletes have been rewarded with an unparalleled number of personal bests. However this is proving insufficient on its own to raise standards to the desired level, and we now find that we must add:
Thirdly
"by ensuring that all the best British athletes compete regularly against each other at the edge of their ability in order for champions to emerge"

This we are now doing and we are starting to see positive results from the emerging generation. Statistics show that when a country develops great depth, then is the time that a true champion emerges. When you have to struggle that bit harder to be the best in your country, international competition becomes less difficult.

In providing a plan for how the BMC intends to conduct business, it is important to realise that the BMC cannot operate in isolation. BMC will continue to support the plans and ideals of BAF, the National Coaches and the National Event Coaches. They have the task of supporting the best athletes and the BMC must reinforce their efforts, filling in the gaps wherever possible.

The aim must be a seamless transition from club athlete to international with maximum support at every level. As they improve, the second tier of athletes must also play their part in helping the elite. They must expect to pacemake for the internationals and for each other, and to play their part in producing fast and aggressive races. Only in this way will athletes benefit fully from the collective ability of the BMC.

## Kelly Holmes

## by Trevor Frecknall

DON'T mention the O-word to Kelly Holmes if you happen to bump into her after she returns from South Africa early in June . . . and there's a fair chance you will because she plans to be busier than usual at a variety of domestic meetings.
"I'm not even thinking about the Olympics," says the Briton most likely to bring a middledistance medal back from Sydney. "My priority is to get through a really good winter and come out as strong as I can."

It's typical of the way the former soldier drives herself that she's extending her winter almost to midsummer's day. But, then again, it's easy to understand why she's unwilling to let go now she's on a training roll: her last good, injury-free winter was back in 1996-7.

Which in itself is, if you'll excuse the Colemanism, quite remarkable considering her training purple patch came between her biggest setbacks, at the 1996 Olympic Games and 1997 World Championships.

You'll recall that in the months leading up to Atlanta, she raced so formidably, she was favourite for the 1500 metres title and in the frame for a medal at 800 . Until she trained on at the GB team holding camp in Tallahassee despite being in pain.

A stress fracture of her left leg worsened so

dramatically that, after each of her races in Atlanta, she had to sit on a crate of ice packs in the mixed zone to rest before hobbling away for more treatment. In the circumstances, it was little short of a miracle that she finished fourth in the 800 m final. More incredibly, she then fought her way through to the final of the 1500, in which she jogged in an agonising 11th after the pain became simply unbearable on the final lap.

Against most expectations, she came back so strongly in 1997 that she set UK records at 1000 m and 1500 m on the way to the World Championships in Athens, where she was again the favourite. So imagine the devastation when, in a heat timed so early on a Saturday morning most British televiewers had not even had their breakfasts, she gradually eased down, moved to the outside of the track and briefly leaned against the perimeter fence before slowly walking away. You can imagine the scene outside of the medical centre as Britain's pack of national journalists clamoured to discover why they had not been warned she might break down again .. . while a few wanted to know how badly she was hurt.
So badly, it turned out, she considers herself lucky to have recovered sufficiently from a torn Achilles and ruptured calf muscle to finish second in the 1500 metres at the 1998 Commonwealth Games in Kuala Lumpur. The original operation to repair the damage was followed in January 1998 by another operation to remove scar tissue. Then her rehab "didn't go as well as expected." All in the winter when she ended her nine-and-ahalf years of Army service to concentrate on fulfilling her athletics ambitions.
Regrets? "No! Not at all. I had a very good nine-and-a-half years in the Army - something I wanted to do from when I was 14. I had two ambitions aged 14 - to join the Army and to get to the Olympic Games.
"The Army changed. I changed as a person. I just didn't think it was for me any more. I got out one so I could get over my injury problems, and two so I could run well at an Olympic Games. I can't honestly say I've made a living out of athletics. I'm not bothered. I want medals."

For a weaker character, two injury-wrecked majors would have
been catastrophic. Holmes herself acknowledges: "I was very close to packing up. In March-April 1998 it didn't seem I was getting back at all. It was a really hard struggle. I wanted to perform to see if I could get back to the levels I'd achieved previously, but it was going out of my hands. I ended up not doing anything properly."
"I'm not even thinking about the Olympics. My priority is to get through a really good winter and come out as strong

as I can."

As spring turned to summer and the majority were starting the 1998 track season, Holmes made a desperate phone call to Irish physiotherapist Ger Hartmann. "Basically he saved my career," she says. "He got me running again and virtually took over my training schedule."

And he made her progress so slowly, there was never a chance she would be at the European Championships in Budapest to attempt to add to the 1500 m silver medal won in 1994. But she was determined to make it to Kuala Lumpur - not so much to defend the Commonwealth title she'd won four years earlier in Victoria; she believed it was out of the question that she would be competitive.
"I went there to save something from the year and give me something to cling to ... to carry on," she says. Her time of 4:06.10 behind Kenya's Jackline Maranga was a far cry from her PB of 3:58.07 in June 1997, but "I was just happy to be on the track. For once in my life, I didn't care where I came. It was just guts that got me the silver medal."
But she's quick to emphasise she's rediscovered her hunger now: "I don't like just to take part. I'm not a person who can turn up at championships and be happy to be in the Great Britain team."

And she is acutely aware that, while she's been away, her strongest event had moved on: "In '97 I was the only woman outside China under four minutes. In '98 I was against people who had been running fantastically well all year. I certainly ended up being beaten by a better
athlete on the day who had performed very well through the season."

Into the 1998-9 winter, she kept the brakes on: "There was not the depth and intensity of training that I'm used to. I was holding back, holding back on everything to make sure I didn't get injured."

But she did - a pulled calf muscle in February "put me out for a month and a half. I decided there was no point in rushing things. But then the weeks become months and the months go past and suddenly the season is upon you." Which explains why she had no races between a second place finish in New Zealand in February (4:18.98) and third place (4:06.77) in the CGU Gateshead Classic on June 27.

She then surprised herself as much as anyone else by winning an 800 in Budapest in 1:58.86 on July 3. Then she clocked 1:58.24 for third in Stockholm and won the 800 at the CGU World Trials incorporating the AAA Championships before returning to the 1500 m with less success - sixth place in 4:04.58 in the IAAF Golden League meeting in Monaco, fifth in 4:08.22 in the CGU British Grand Prix at Crystal Palace despite the adrenalin generated by a full house in patriotic voice.

Behind the results was an uncertain athlete. Of Gateshead, she said: "I was so unsure of myself I ran a negative race. In the past I've always been a person who gets confidence from the training and takes that confidence into a race."

Of the highspot of her 1999 season, she says: "I don't know where the Budapest run came from. True, there was no pressure - no TV, no media. But I couldn't believe I could do that and feel so good."

And though she spent most of the summer training in Madrid to keep away from any domestic distractions, she says of the general
"I was so unsure of myself I

## ran a negative race. In the

past I've always been a person who gets confidence from the

## training and takes that

## confidence into a race."

build-up to the World Championships: "I didn't feel I'd got such confidence from my training as I normally do. Inside my head, I never got my head round the fact that I was strong."

She was in Seville, 24 hours from the opening

| Progression of Kelly Holmes <br> (born: April 19 1970) |  |  |
| :---: | :---: | :---: |
| Year | $\mathbf{8 0 0}$ | $\mathbf{1 5 0 0}$ |
|  |  |  |
| 1984 | $2: 15.1$ | $4: 35.3$ |
| 1985 | $2: 13.1$ | $4: 41.4$ |
| 1986 | $2: 11.0$ | $4: 26.9$ |
| 1987 | $2: 09.45$ | $4: 26.10$ |
| 1988 | - | - |
| 1989 | $2: 12.1$ | - |
| 1990 | - | - |
| 1991 | $2: 11.8$ | - |
| 1992 | $2: 03.94$ | $4: 27.7$ |
| 1993 | $1: 58.64$ | $4: 17.3$ |
| 1994 | $1: 59.43$ | $4: 01.41$ |
| 1995 | $1: 56.21$ | $4: 03.04$ |
| 1996 | $1: 57.84$ | $4: 1.13$ |
| 1997 | $1: 57.14$ | $3: 58.13$ |
| 1998 | - | $4: 06.10$ |
| 1999 | $1: 58.24$ | $4: 04.58$ |

ceremony, before she publicly announced she was opting for the 800 instead of her supposed strongest event. Her reason was simple: she didn't believe she had been able to get in enough training to be strong enough for the longer event.

And after she was eliminated in the semifinals, fourth in 2:00.77, she was philosophical: "Never mind, eh? I'm still walking. I've no regrets because an athlete can only go into what they feel best doing. I just need another winter behind me and come out as positive as I was before my injuries."

She has reverted to her original coach, Dave Arnold at Tonbridge, having spent last year being guided by Joe Dunbar, explaining: "There were reasons for our split the first time. It's 100 per cent better than it ever was before. We're working really well together."

So well, he even persuaded her onto the country for the first time since 1995-6, when she won the Inter-Services title. But even before the Reebok InterCounties Championships in Nottingham's Wollaton Park, she was adamant: "I hate cross country. Wet. Wind. Freezing cold. Mud. I really do not like running in mud."

It was dry, breezy, sunny and dry. But finishing ninth in the

4km world trial did not improve her enjoyment: "My legs hurt like lead. I will not be doing that again for a long time. Roll on the track season! I only ran to help my training and get that competitive edge. I was competitive - for the first 800."

But the real honing of that edge takes place in South Africa, where she is based from the end of March for two months. In another variation from last year, she has the company of two more of Arnold's athletes, Jeina Mitchell, who was fourth in the 800 final at last year's AAA Championships, and Jason Dupuy, Shaftesbury Barnet's 1:49.53 800m man. "It will benefit me and be good for them as well," said Holmes before they flew out - pausing only to have another 'MoT' from Hartmann.
"This winter has been very good but I am just taking every day as it comes. I'm training very well but you don't know what's round the corner."

Providing there are no setbacks, she plans to ease into the season with a few low-key 400 s and 3000s for Ealing, Southall and Middlesex AC before she ventures into IAAF Grand Prix fixtures. "I've not really planned a timetable as such. I'm hopeful of running in the European Cup at Gateshead but we'll see what happens."
And the Olympics in Sydney? "We'll see..."
But don't mistake caution for even a hint of cowardice in the Army's most famous former PTI. "I've still got the heart for it," she says.


## John Mayock

## by Jason Henderson

WHY do the critics of British men's middledistance running always seem to plunge their daggers into the wrong man? Instead of targeting the plodders and joggers, the athlete who seems to take more stick than most is, bizarrely, the best we have, the top of the crop: John Mayock.

Critics ask why he - and the rest of his middle-distance colleagues - cannot 'rule the world' as Coe, Cram and Ovett used to. But the much-maligned Yorkshireman has been Britain's No.l 1500m runner for five years and has a 1500 m best ( $3: 31.86$ ) which is faster than Coe and Ovett's earlier world records at the distance.
He is the fourth fastest Briton of all time over the 1500 m , but is constantly criticised for laying off the pace in grand prix races, not having a strong enough kick in championship races, and always, apparently, just doing enough to beat Anthony Whiteman.
Mayock rarely rises to the bait. Instead he

simply refutes his critics' snide comments with fact. "I don't see any of them running any faster," he says.

With two Commonwealth medals in recent years, he has been our most successful middledistance man. After winning the English Schools' cross country title in 1990, his real breakthrough came when he took part in the World University Games in Sheffield the following year, as a late replacement and running the 5000 m .
He took 5.39 seconds off his personal best in his heat and a further 22.16 seconds off to win gold in the final. A few months later, at the 1992 European Indoor Championships, he improved his 3000 m best from 8:01.54 to 7:53.11 in his heat and then to 7:48.47 in the final to take the silver medal behind Italy's Gennaro Di Napoli, with Jose Luis Gonzalez, of Spain, third.
During his career Mayock has shown durability, longevity ... and quality. In February 1998, in the Spanish city of Valencia, he outgunned an 'Armada' of three Spanish athletes to win an ultra-physical European Indoor 3000 m Championships.
After beating, among others, the then European outdoor 3000 m recordholder Manuel Pancorbo, Mayock was booed, jeered and whistled out of the arena by the partisan Spanish crowd. "If Mayock had chisels on his elbows then my chest would have been full of holes," said Pancorbo. While Mayock's reply was blunt. "This is athletics."

Despite his obvious talent for distance running (he was chosen for last winter's World Cross Country Championships in Vilamoura, but withdrew with a minor foot problem), he has chosen to concentrate on 1500 m and the mile.

In 1999 he had a clear win at the AAA Championships, but fell in his heat at the World Championships in Seville. Nevertheless he finished with season's bests of

3:33.97 and $3: 52.79$ for 1500 m and the mile
The recent indoor season saw him set three PB's and culminated in a bronze medal at the European Indoor Championships behind Mark Carroll of Ireland and Rui Silva of Portugal. While over 1500 m Mayock improved his best from 3:39.37 to 3:38.05, when fifth in Stuttgart. And he followed this in Ghent on February 11 by taking almost three seconds off John Gladwin's UK indoor 2000m record - his 5:02.53 also being good enough to beat a class

## "If Mayock had chisels

## on his elbows then

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field that included Million Wolde of Ethiopia.
Then, on the eve of the European Indoors, at the CGU Indoor Grand Prix in Birmingham, he raced Wilson Kipketer for the first time ever and ran a 1000 m PB of $2: 19.20$ behind the Dane's world record.
Mayock's recipe for success uses tried and trusted methods of training. "It's not rocket science," says Mayock. Indeed, there is nowt fancy about the Yorkshireman's schedule. "It's just blood, sweat and tears," he says, adding that he often rarely wears a watch, let alone a heart rate monitor. "I just go out the door and run," he says.
Allied to this simple approach are a few realistic beliefs too. The indoor season, he feels, is necessary. "Unless you spend the whole winter abroad training on the track."
During last winter he placed second in the 3.9 km race at the Great North Cross Country races at Durham. But he explains: "Running on the mud's okay. But you need more than stamina to keep up with the likes of El Guerrouj."

Mayock's preparation for the European Indoors in Ghent and the World Cross Country Championships in Vilamoura was not too dissimilar to the training he did prior to Valencia in 1998. It was also not that much different to the training he has done during winters when he has not raced indoors.

## JOHN MAYOCK'S TRAINING DIARY

## SUNDAY <br> am: $\quad 13$ miles

## MONDAY

am: $\quad$ Hills -1.5 miles warm-up; $6 \times 2 \times 200 \mathrm{~m}$ (brisk jog back recovery and 1:30-2:00min between sets)
pm: $\quad 5$ miles
TUESDAY
am: $\quad 6$ miles
pm: $\quad 5$ miles
WEDNESDAY

| $\boldsymbol{a m}:$ | 6 miles |
| :--- | :--- |
| $\boldsymbol{p m}:$ | Circuits and weights - 2 miles warm-up; 1hr circuits; 30 min weights; 2 miles warm- |
|  | down |

THURSDAY

| am: | 6 miles |
| :--- | :--- |
| pm: | 5 miles |
| FRIDAY |  |
| am: | 6 miles |
| pm: | 5 miles |

SATURDAY
am: $\quad$ Track session $-400 \mathrm{~m}(1: 30 \mathrm{~min}$ rec) $600 \mathrm{~m}(2: 00 \mathrm{rec}) 800 \mathrm{~m}(2: 30 \mathrm{rec}) 1000 \mathrm{~m}(2: 30$ rec) $800 \mathrm{~m}(2: 00 \mathrm{rec}) 600 \mathrm{~m}(1: 30 \mathrm{rec}) 400 \mathrm{~m}$. Times: $59.9,1: 31.9,2: 04.3,2: 36.0$, 2:04.2, 1:31.0, 57.0
pm: $\quad 5$ miles

Above is a typical week from John Mayock's training diary, January 2000
Mayock is coached by Peter Watson and Peter Elliott. He describes Watson as 'the motivator' and the man who puts in the hours, armed with a stopwatch, trackside at Cudworth's Dorothy Hyman. Elliott, the 1990 Commonwealth 1500 m champion, is more of an adviser. "More for fine tuning," explains Mayock, "telling me which sessions I should be doing."

Mayock was brought up in Barnsley, moved to Staffordshire to study, and has now moved back to Yorkshire - and a place called Tickhill near Doncaster - with his wife Lindsey and daughter Elizabeth. "I've got everything here apart from the sun," he says.

He's never been altitude training, but has everything else he needs in Yorkshire. He lives near to Watson, within striking distance of Elliott, his physio at Sheffield Wednesday Football Club, and his nutritionist Brian Welsby. In addition to this he is near a track, a train station and loads of loads of off-road running routes.

His week begins with a long run on a Sunday. He reckons he runs 'at about six-minute-mile pace', but hardly ever wears a watch and does 90 per cent of his steady running off-road including sections of ploughed fields and, unsurprisingly, lots of hills.

Morning sessions usually begin at about 9 am
and on Monday it's a session of hills on a coal tip at Barnsley. Watson oversees this session, together with his track and circuit training sessions. And Mayock will run 150-200m hill sprints wearing trainers on the compact, dustcovered surface. "The good thing is you never get puddles," says Mayock. "The rain just soaks in."

His afternoon runs start, at this time of year, no later than 4pm. "To catch the light," he says. He will then do some simple stretching exercises before his quality sessions, but rarely bothers before steady runs. "I'm the sort of guy who just goes out of the door," he explains.
"I never do much stretching yet never get injured. People who do lots of stretching always seem to get injured. The only time I can ever touch my toes is when I've been to see Gerard Hartmann (the Irish injury specialist) - and then I can put my palms flat on the floor."

Wednesday night's circuits session has 'nowt fancy' in it either. Some of his training partners include middle-distance runners Jonathan Stewart, Rob Scanlon and Sam Illidge. But at circuits Mayock mixes it with sprinters, youngsters and women.

The exercises are standard: press-ups, sit-ups etc., but after an hour Mayock heads to the free weights room to finish his session with bench presses, lateral pull-downs and other upper body exercises.
"I might get to the gym at 6 pm and I'll be

## FACTFILE

|  | FACTFILE |
| :--- | :--- |
| Born: | October 26, 1970, Barnsley |
| Height: | 1.77m Weight: 66kg |
| Club: | Barnsley AC |
| Coaches: | Peter Watson and Peter Elliott |
| International record: |  |
| 1989: | 29th World Cross; 2nd Euro |
|  | U20 5000m |
| 1991: | World University 5000m gold |
| 1992: | Euro Indoor 3000m silver; |
|  | World Road Relay bronze; 7th |
|  | World Cup 5000m |
| 1993: | 6th World Indoors 3000m <br> 1994: <br>  <br> Commonwealth 1500m bronze; |
| 4th Euro Cup 5000m |  |

## National championships:

AAA 1500m champion 1995-6 and 1998-
9; AAA U20 3000m 1988; AAA Indoor 3000m 1992; UK 1500m 1997

## Personal bests:

800m 1:47.8 (1998); 1500m 3:31.86
(1997); Mile 3:50.32; 2000m 4:56.75
(1999); 5000m 13:26.97 (1992). Indoors:

1000m 2:19.20 (2000); 1500 3:38.05
(2000); Mile 3:56.68 (2000) \& 3:55.57
(when dq'ed in 1992); 2000 5:02.53
(2000, UK record); 3000 7:43.31 (1997, UK record)
away by 7.30 pm ," he says. "There's no chat. No messing about. Just straight down to it."

Thursdays and Fridays are for 'steady running'. Although Mayock admits he runs as fast as he feels. Given his cross country and $3000 / 5000 \mathrm{~m}$ background, he has formidable reserves of endurance.

Saturday, surprisingly, features the only track session of the week. Although Mayock increases this to two a week during the presummer phase, usually at the expense of his hill reps.

Apart from the session shown in the accompanying schedule, other typical track work-outs include: $10 \times 300 \mathrm{~m}$ ( 1 min recovery) in $43-44$ seconds or $5 \times 800 \mathrm{~m}$ ( 3 min recovery) in around two minutes each.
Mayock is quick to point out that conditions at Cudworth - where he trains - during the winter months are hardly ideal. "Peter Elliott calls me Suzanne Charlton - after the BBC weatherwoman - cos that's all I ever talk about," he says. "But it's true, I'm afraid."

Mayock's goal for the year is to succeed in Sydney. He believes he can win a medal and maybe, just maybe, if he does that, the critics might leave finally him alone.

## James Mc|lroy

by Jason Henderson
WHEN James McIlroy sensationally broke through on to the international middle-distance scene in 1998, he was immediately earmarked as the BMC athlete most likely to fulfil 'Vision $2000^{\prime}$ and win an Olympic 800 m or 1500 m title.

But the 23-year-old's road to Sydney has been anything but trouble-free.

Since the BMC's first glimpse of James, at Wythenshawe's BMC Nike GP meeting in 1998, he has run for Ireland in the European Championships, switched coaches and joined Kim McDonald's Teddington-based management stable, before finally choosing
to run for Great Britain - a decision that was confirmed by the IAAF at a council meeting on February 12-13.

It's been a hectic couple of years for the multi and hyper-talented James. After previous incarnations as a golfer (he played for Ireland's under-18 team) and as a soccer player (he had trials with Doncaster Rovers), not to mention as a javelin thrower and triple jumper, he found his niche as a middle-distance runner in 1998 when he improved his best time from 1:51.8 to 1:48.4 in one go, and then by another three seconds in as many months.

James was born in Larne, Northern Ireland, on December 30 1976 and has always had a British passport. The reason he ran for Ireland internationally in 1998 was quite simple: "They asked first," he said.
James's modest 1:51 PB, which was set at the 1997 BMC Nike GP Watford, was slaughtered during May of 1998 when he ran 1:48.4 in Dublin, on a date that still puzzles the statisticians (ie. they're not sure when). The following month, on June 3, James stunned a top BMC field at a chilly Wythenshawe Park to win in 1:47.71.
'Who was this guy?' Athletics Weekly asked at the time. Only the Wythenshawe organiser and BMC chairman Norman Poole seemed to know, having told $A W$ a week before the race that someone called 'Jazz' McIlroy was lined up to run in the A-race. While BMC vice-chairman Matthew Fraser Moat later admitted that the previous year James had contacted him to ask where he could find a BMC coach. Matthew had recommended Frank Horwill who then recommended Sean Kyle.
A few days after Wythenshawe British selectors were left kicking themselves when James made his international debut for Ireland, at the European Cup second league match in Lithuania. He won a slow $1500 \mathrm{~m}(4: 03)$ with a 51 -second last lap and then turned out in the long jump, too, when his country found themselves a man short in that event!
"I can't wait forever," James said at the time, explaining the decision
to run for Ireland, even though he had dual nationality and could have chosen Great Britain. "If you get an offer from one place you're not going to wait to get one from elsewhere." The fact is, few, if any, British officials were aware of McIlroy's performance in Dublin ... until it was too late.

While his coach at the time, Sean Kyle, added: "I don't care if my athletes compete for Burkino Faso as long as they fulfil their athletic potential.'

On June 14 at Battersea Park James ran a Northern Ireland and BMC members' record of 1:46.7 to finish second behind Patrick Ndururi, but ahead of Andy Hart, Anthony Whiteman and John Mayock. And then on June 19 he competed again for Ireland, winning an 800 m in Estonia in 1:47.60.

In Nice, though, on July 16 James shattered his best again to run 1:45.32, followed by an emphatic victory at Gateshead, again over 800m, in 1:46.87.

At the European Championships in Budapest, James - still a novice at the distance - finished a creditable fourth in 1:45.46, with world record-holder Wilson Kipketer trailing in eighth and last.

## The time placed James

> third in the UK all-time list,
> behind Seb Coe and Steve

Cram but ahead of

## Steve Ovett and Peter Elliott.

He then wrapped up his first whirlwind season at the Ivo van Damme meeting in Brussels, with 1:45.83 for sixth (European champion Nils Schumann was fourth behind the winner Japhet Kimutai). And then ran a mile at the BMC Nike Grand Prix final in Solihull finishing a tired second in $3: 59.48$ to Kenya's Edwin Maranga - but significantly experimenting with a distance many feel could be his best one day.

Last year wasn't fantastic for James. He


James spent the first few months of this year training in Melbourne with the runners who are also in Kim's international management agency, such as Ngeny. His racing didn't go fantastically well, with a 1:48.54 for eighth over 800 m in Melbourne at the start of March, well behind the winner David Lelei's 1:43.97. And Kim has reappraised James's targets, saying that it will be a reasonable achievement for James simply to reach an Olympic final this year (no mean feat in itself!), rather than win the world's biggest event in only his third season at international level.
James has been exposed to 'too much, too soon', according to Kim. And he is now being eased, rather than thrust, into international competition.

Not that this 'softly softly' approach is, well, all that soft. Because part of James new training regimen sees him mixing it with Kenyan athletes such as Ngeny - the Kenyan who gave Hicham
began by winning the Scottish indoor 800 m and Irish indoor 400 m titles, had a run-out in the Irish Cross Country Championships and then spent pre-season training in Cyprus with Sean.

On June 10 he ran 1:46.28 in Helsinki and was beaten into fifth place by, among others, fellow Irishman James Nolan. But by now James had decided he wanted to run for Great Britain. He also joined Kim McDonald's management and coaching group during 1999. But his fortunes didn't improve as he then spent most of the summer absent from the international scene.

He returned in Brussels on September 3, running 1:47.69 to place 10th in a predictably redhot post-World Championships race where the first four men (led by Kipketer) ran under 1:43.

Two days later, though, he showed something like his true form with an impressive $2: 15.57$ in Rieti, finishing fourth in the same race that his new training partner, Noah Ngeny, broke Sebastian Coe's long-standing world record of 2:12.18 with 2:11.96.

The time placed James third in the UK alltime list, behind Coe and Steve Cram but ahead of Steve Ovett and Peter Elliott. Three days after Rieti, at a cold low key BMC Watford meeting, James ran 1:47.1, easily beating Commonwealth 1500 m champion Laban Rotich. And that was 1999.

El Guerrouj such a fright last year in Rome, when both men went under the world mile record - clocking 3:43.13 and 3:43.40 respectively.

After training in Melbourne, James travelled back to Ireland and was due to spend the immediate pre-season at another camp that Kim has organised - at Stanford University in the United States.

James is one of the friendliest, chattiest athletes you will meet, but did not want to be interviewed for BMC News. It is not that he was being uncooperative, merely that he is a modest chap who doesn't want to create unnecessary hype with words of confidence that could too easily be interpreted as brash bravado.

Afterall, the pressure is great enough anyway when you are being billed as the Briton most likely to take on the Africans at the Olympic Games in Sydney.

The expectation is only there because James' potential is so dazzlingly obvious. But all great champions must first wrestle with adversity before they can achieve greatness. And James has had to contend with, not so much adversity, but certainly frustration with his own form since the heady days of summer '98.

As his former coach, Sean, said in 1998: "If James gets anything wrong then you know he'll get it right next time. But he's going to look at a
lot of people's backsides before they take a look at his."

And if the likes of El Guerrouj and Ngeny are one day looking at the McIlroy's backside - and the back of his Great Britain vest - then there's no doubt in the slightest - it'll be well worth the wait.

## Obituary

## BILL BOWERMAN 1911-1999

In 1964 Bowerman's system of training was revealed. He had practised it for 10 years before at Oregon University with great success. In 1962 four of his athletes broke the world record for $4 \times 1$ mile with 16:09. His athletes were to break the American junior and senior 5 k records, the national threequarters of a mile and 2,000 metres records and also the 20 k record. He coached one sub 4-minute miler every year for 20 years.

His system of training was as follows:
a) A pace was fixed at the start of each month on the track. For example, 75 -seconds per 400 in December.
b) Each month the pace increased by 2 seconds.
c) The total number of repetitions were twice the racing distance in the first week, three times in the second, twice in the third and three times in the fourth. For example, if the athlete was training for the mile, he might do $8 \times 400$ in the first week and $12 \times 400$ in the second.
d) The recovery time (jog) after repetitions followed a weekly pattern: -1st week - jog same distance of rep. 2nd week - Jog half distance of rep. 3rd and 4th weeks - Jog a quarter distance of rep. If we use rep. 400s as an example, this would be: $-8 x 400$, jog 400 1st week. 12 x 400 , jog 200 2nd week. $8 \times 400$ jog 100 3rd week. $12 \times 400$ jog 100 4th week. e) Track training occurred twice a week all-year-round.
f) Fartlek was done four times a week of which two were severe.
g) The rep. distances used ranged through $100 \mathrm{~m}, 200 \mathrm{~m}, 300 \mathrm{~m}$ and 400 m to 600 m .
h) If the selected pace on the track could not be achieved in all sessions for the entire month, the month had to be repeated before moving on to a faster month.
i) A deviation from the above plan was given to advanced athletes where the track session started at a set pace and each repetition got faster, for example, $8 \times 400$ (75-72-70-68-66-64-62-60).

## Hayley Tullett

By Jason Henderson

HAYLEY TULLETT is a miler, let's get that straight for starters. It was always thus and will always be that way. After the excellent form she showed last winter over 3000 m (indoors) and 4000 m (over the country) you'd be forgiven for asking the question: "So, when are you moving up to 5 km , Hayley?"

Over the past couple of years her polite 'never' and patient explanation has gradually turned into a weary, 'Oh, not that question again. I keep telling everyone there's no way I'm ever going to move up to 5000 m . All right!"

If you look at her achievements over 1500 m , you'll probably agree, though, that there's no reason in the world to move up in distance. Hayley is still a novice at 1500 m , yet has a geniune chance of reaching the Olympic 1500m final this summer in Sydney.

Her rise to the top of the British middledistance tree has been swift. In 1995 she was a virtual unknown in Wales, but improved to rank fifth in the UK over 800 m and 12 th at 1500 m in 1996. During the winter of 1997 she popped up on the cover of Athletics Weekly when she outsprinted Diane Modahl to win the British

indoor 800 m title and trial for the World Indoor Championships in Paris.
She went out in the semis in Paris and consolidated during the summer with fourth ( 1500 m ) and fifth $(800 \mathrm{~m})$ places in the World University Games, together with seventh place in the European Cup 800 m in Munich.
In 1998 she ran a Welsh indoor record of 2:01.52 at the start of 1998 , but her season was ruined by a knee injury. The problem led to her Wales deselecting her for the Commonwealth Games in Kuala Lumpur when she failed to prove her form.
She returned with a venom in 1999, placing 40th in the short-course race at the World Cross Country Championships in Belfast (finishing behind Amy Waterlow, Angela Newport and Helen Pattinson). And then went on to enjoy an injury-free season which began by running 9:49.73 when finishing second to Paula Radcliffe's UK record-breaking two miler at Loughborough on May 23, followed by a win in the BMC Nike Grand Prix at Wythenshawe on June 9.

Initially coached by Phil Banning, by now she was being coached by Mark Rowland, a man who ran 8:07.96 to win 3000 m steeplechase bronze behind Kenyans Peter Koech and the winner, Julius Kariuki, at the 1988 Seoul Olympics. It is a time that only Tom Hanlon, with $8: 12.58$ in 1991, has been able to get anywhere near.
Clearly Mark knows how to get the very best out of yourself on the day it matters. That is, by running a British record in an Olympic final. But the two-miler at Loughborough was the first time Mark had seen Hayley run on a track and the season before, in 1998, Hayley admits he had never heard of her.

The argument for sticking at 1500 m , due to the fact that she has no where near tapped her potential is becoming apparent. And during the rest of the summer of 1999 she showed further glimpses of her ability.
One such occasion was in the European Cup in Paris where she finished an excellent fourth in a tactical 1500 m (beating women who were much faster on paper) and then achieved the qualifying mark for the World Championships in Seville with 4:06.80 in Gateshead - finishing just behind Kelly Holmes and ahead of Paula Radcliffe and Helen Pattinson.
At the AAA Championships she secured her place for Seville with a $4: 08.06$ win and then ran 4:09.06 at the CGU British Grand Prix at Crystal Palace - in the latter finishing once again right on Kelly's heels.

In Seville, at her first major outdoor champi-
onships, she ran a lifetime best of 4:05.72 in her heat and very narrowly missed a place in the final. It was an impressive - if slightly frustrating - end to her breakthrough year.

The recent winter has seen Hayley looking even stronger. Indoors she went No. 2 on the UK all-time lists with 4:26.50 for fifth in Stuttgart. Over 3000 m she ran $8: 54.63$ for third in Erfurt and then ran 8:55.31 for seventh in the European Indoor final (after nine minutes in her heat).
Over the country she won the short-course race at Cardiff's Reebok Challenge and then powered to victory in the short-course race at the Reebok UK Inter-Counties and World Trial at Nottingham. At the World Championships in Portugal she finished 39th.
Hayley puts her current vein of form down to a stable, happy lifestyle and says she owes much to the two men in her life: her coach and Ian Tullett, a pole vaulter who she met while warmweather training in Portugal in 1996 and who she has since married.
Her career is built on relationships built to last and that includes her love affair with 1500 m , too. As for twelve-and-a-half laps? She just doesn't fancy it in the slightest. Simple as that.

|  | FACTFILE |
| :---: | :---: |
| Hayley Tullett (nee Parry) |  |
| Born:Height: | February 17, 1973, Swansea |
|  | 1.66 m ; Weight: 55 kg . |
| Coach: Mark Rowland. |  |
| Personal bests: 400 : 55.6 (1997); 800: |  |
| 2:02.18 (1997); 1500: 4:05.72 (1999); 1M: |  |
| 4:48.88 (1995); 3000: 9:14.5 (1999); 2M: |  |
| 9:49.73 (1999). Indoors: 800: 2:01.52 |  |
| (1998); 1000: 2:47.53 (1996); 1M: |  |
| 4:26.50; 3000: 8:54.63 |  |
| Achievements: |  |
| 1996 | Welsh 800 m and 1500 m champion |
| 1997 | sf World Indoors; 7th 800 m |
|  | European Cup; 4th 1500m and |
|  | 5th 800 m World University |
|  | Games; UK 800m indoor |
| 1998 | ht 800 m European Indoors |
| 1999 | 40th World Cross Country |
|  | Championships (4km); 4th |
|  | 1500m European Cup; ht 1500m |
|  | World Championships; AAA |
|  | 1500m champion; |
| 2000 | 39th World Cross Country |
|  | Championships; 7th Europea |
|  | Indoor Championships; UK 4km |
|  | Cross Country champion |

## FACTFILE

Hayley Tullett (nee Parry)
Born: February 17, 1973, Swansea
Height: 1.66m; Weight: 55kg
Coach: Mark Rowland

2:02.18 (1997); 1500: 4:05.72 (1990); 1M:
2:02.18 (1997); 1500: 4:05.72 (1999); 1M
48.88 (1995); 3000: 9:14.5 (1999); 2M:

9:49.73 (1999) Indoors: 800: 2:01.52

4:26.50; 3000: 8:54.63
Achievements:
1996 Welsh 800m and 1500m champion 5th 800m World University Games; UK 800m indoor champion; 2nd UK 800m 40th World Cross Country Championships (4km); 4th 1500m European Cup; ht 1500m World Championships; AAA 1500m champion;
2000 Championships; 7th European Cross Country champion

## Anthony Whiteman

## by Jason Henderson

THERE's no place like home, but South Africa comes a close second according to Anthony Whiteman. The 28-year-old missed most of 1999 due to injury but returned in March of this year to clock an Olympic qualifying time of 3:36.39 for 1500 m in Cape Town. Anthony doesn't just race well there either, he also trains well there. In fact, he wouldn't train anywhere else.

The 1997 World University champion is not the only runner holding this view. During his most recent visit, for seven weeks in February and March, he was joined by around 20 top British middle and long distance runners, including: Keith Cullen, Rob Denmark, Christian Stephenson, Rod Finch, Andrew and Allen Graffin, Jason Lobo, Sam Haughian and Justin Swift Smith.
"There's a real mix," said Anthony, "from 800 m men such as Jason and Justin to people preparing for marathons such as Keith." And it's not only Britons who train there too, for the reigning Olympic 800 m and 1500 m champion Svetlana Masterkova was also there at the same time Anthony was. "Although we soon drove her away," he joked. "We were a bit too raucous for her!"

The place in question, to be specific, is Potchefstroom - a place where he spent six of his seven weeks. And if Anthony fulfils the BMC's 'Vision 2000' and produces the best performance of his life in the Olympic 1500m final in Sydney on September 29, then this small South African town, which is as difficult to spell as it is to find on the map, will have had a large part to play in his success.

Anthony's recent visit was his fifth since 1997 (he went twice in 1998, when the World Cup was held in South Africa). The benefits are many and varied, with the main advantages being the climate and the fact the camp (which Anthony describes as a mini-version of Loughborough University's campus) is situated at 1500 m altitude.
"Most sessions are done wearing nothing more than shorts," he said, on his return to England in April - and full of a cold! "But the heat is not too hot that it's distressing.
"Everything's within walking distance, there are a few shops so you don't get bored and the physiotherapy is great - it cost me about $£ 75$ recently for 10 visits, the money goes further over there due to the strength of the pound."

Not that he is injured at the moment. Last summer, around the time of the European Cup, Anthony had a scan on a painful right ankle that revealed two stress fractures - one old and one new. The injury was linked to a tight left hamstring that was triggered by imbalances

when he ran. "I broke all my own rules," he recalled, "by running the most miles I'd ever run in my life when I knew I was carrying an injury. When you have a good year like I did in 1998 you feel you're unstoppable."

After six weeks without running a step he made a desperate, but ultimately doomed attempt, to return in time for the World Championships. As a result he has come back hungrier for success this year.

Another reason Anthony favours South Africa as a pre-season training venue is that the time difference is favourable. That is, there is little or no jet lag. When he first arrived there this winter he raced almost immediately, running 1:47.71 for 800m at Potchefstroom (Feb 14), followed by a disappointing 3:42.44 for 1500 m in Stellenbosch (Feb 18) and then an improved 3:41, feeling good, in Port Elizabeth (Feb 25).

He then went into a three-week period of hard training, with the above mentioned athletes (Mastervoka excepted!) and did the following sessions, as advised by his coach Alan Storey:

- $6 \times 1000 \mathrm{~m}+400 \mathrm{~m}$ (with 40 seconds rest after the 1000 s and 400 jog, or two minutes' rest, after the 400 s). Kilometres are run in around 2:54, with 400 s in about 63 seconds - at altitude remember.
- Another 'favourite' session involves running 100 m in 15 seconds, followed by a 15 -second rest - which is repeated for 20 minutes. "It's
harder than it sounds," Anthony added, pointing out that it is also faster than four-minute-mile pace due to the acceleration and deceleration needed at the start and finish of each 100 m .
- $3-4 \mathrm{~km}$ at 3 km per kilometre pace, then $12 \times 400$ ( 45 seconds recovery) in 65 s , speeding up to 61 s . (Anthony did nine 400s in this session).
- Anthony and his group also run hill sessions on the only hill in Potchefstroom - over a railway bridge. A typical session will be $8-10 \times 300 \mathrm{~m}$ (with a jog back recovery). He runs these efforts in around 45 seconds, sometimes as fast as 41 .
- All sessions are done on a grass track and he jokes that he has only stepped on Potchefstroom's all-weather surface a handful of times. "You don't want to be doing these horrible winter sessions on tartan, do you?" he explained. - Anthony's mileage during the period was 50 mpw when racing, increasing to $76,80,75$ and then dropping to 50 and then 35 in the final week.

During the tapering period he ran two more races, both in Pretoria - an 800 m in 1:47.61 (Mar 24), where he took to the track moments after Michael Johnson set a world 300 m record, and then the 1500 m Olympic qualifying mark (Mar 31), as mentioned earlier.

During the latter race, he had no idea what pace he was running at. "There was no clock!" he said. And had to trust his pacemaker's judgement. Luckily that man was Swift Smith, and splits of just under 58 , just over 58 (reaching 800 m in around $1: 56.6$ ) and 1200 m in $2: 54.6$ proved spot on. Although Anthony added that he ran the 400 m from 900 m to 1300 m 'a little too fast', in about 56.1!

Anthony is now planning his summer with confidence. "The European Cup, the Trials, the British Grand Prix..." he said. And at the time we spoke he was toying with the idea of visiting Potchefstroom again. "With the Olympics being so late," he explained.

Anthony can talk, by his own admission, 'about Potchefstroom all day long'. But last August there was one place he'd much rather have been: the World Championships city of Seville.

Injury prevented him going there, so did he seek solace in the familiar comfort of Potchefstroom, or his home in England? "No, I went to Barbados!" he said.

- Potchefstroom, a university town, is situated about 120 km south-west of Johannesburg, and at a similar altitude to Boulder (Colorado) as well as Davos and St.Moritz (Switzerland). For more information on the "Potch Altitude Training Camp" see http://www.mailsurf.com/altitude/ potchefstroom.html.


## UK Merit Rankings

## compiled by Peter Matthews

THIS is the 32nd successive year that I have compiled annual merit rankings of British athletes. As usual these are an assessment of form during the outdoor season. The major factors by which the rankings are determined are winloss record, performances in the major meetings, and sequence of marks.

I endeavour to be as objective as possible, but form can often provide conflicting evidence, or perhaps an athlete may not have shown good enough results against leading rivals, or in very important competition, to justify a ranking which his or her ability might otherwise warrant.

I can only rank athletes on what they have actually achieved. Much depends on having appropriate opportunities and perhaps getting invitations for the prestige meetings. Difficulties also arise when athletes reach peak form at different parts of the season or, through injury, miss significant competition. Also, increasingly, many of our top athletes are competing overseas instead of in domestic meetings, which makes comparisons of form difficult.

Once again it should be pointed out that the rankings are by no means necessarily the order in which I think the athletes would have finished in an idealised contest, but simply my attempt to assess what has actually happened in 1999.

I hope that I have not missed many performances, but I would be very pleased to receive any missing results at 10 Madgeways Close, Great Amwell, Herts SG12 9RU.

For each event the top 12 are ranked. On the first line is shown the athletes name, then their date of birth followed, in brackets, by the number of years ranked in the top 12 (including 1999) and their ranking last year (1998), and finally, their best mark prior to 1999. The following lines include their best six performances of the year, followed, for completeness, by significant indoor marks indicated by ' $i$ ' (although indoor performances are not considered for the rankings). Then follow placings at major meetings, providing a summary of the athlete's year at the event.

## MEN

## 800 METRES

1 Mark Sesay 13.12 .72 (2y, - ) 1:46.05'97
1:45.68, 1:46.80, 1:47.48, 1:47.49, 1:47.95, 1:48.03
1 LI, 7 BMC Wyth, 7 Cork, 2 Thessaloniki, 5 Budapest, 6 Riga, 1 AAA, 1 Thurrock, 6 BGP, 4h2 Worlds, 3 v USA
2 Curtis Robb 7.6.72 (7y, - ) 1:44.92'93
1:45.51, 1:45.60, 1:46.79, 1:47.69, 1:47.81, 1:48.1
1 BL3 (2), 2 Cork, 3 Budapest, 1 Riga, 3 AAA, 3 Thurrock, 5 BGP, 6 h 4 Worlds, 1 BMC Stret $31 / 8,6 \mathrm{v}$ USA 3 Jason Lobo 18.9.69 (4y 3) 1:47.29'97 1:45.82, 1:47.20, 1:47.53, 1:48.08, 1:48.69, 1:48.82 7 EvSA, 2 BL1 (1), 3 E.Clubs, 5 Cork, 5 Riga, 2 AAA, 2 Thurrock, 7 BGP, 2 Cup, 5 h6 Worlds, 5 v USA 4 Andy Hart 13.9.69 (4y, 1) 1:45.71'98 1:46.11, 1:46.85, 1:47.35, 1:47.72, 1:47.82, 1:48.83; 1:47.17i 3 Tartu, 1 BMC Wyth, 7 ECp, 2 Riga, 4 AAA, 8 Barcelona, 10 BGP
5 James Mcllroy IRE 30.12 .76 (1y, -) 1:45.32 '98
1:46.28, 1:47.1, 1:47.69, 1:48.02, 1:51.79; 1:52.73i
3 Ljubljana, 5 ECp 1A, 5 Helsinki, 10 Brussels, 1 BMC Watford 8/9
6 Paul Walker 2.12.73 (5y, 5) 1:46.4'97 1:47.89, 1:48.50, 1:48.70, 1:48.86, 1:48.99, 1:49.11; 7 Enskede, 1 BL2 (2), 6 Istanbul, 5 AAA, 6 Växiö

7 Justin Swift-Smith 28.8.74 (2y, -) 1:47.9' 97
1:48.24, 1:48.77, 1:48.80, 1:48.87, 1:49.14, 1:49.17 1 BL1 (1), 1 CAU, 2 BMC Wyth, 8 BMC Watford, 10 Cork, 6 BMC Solihull, 7 AAA, 6 Thurrock, 1 BMC Cardiff, 3 Cup, 1 BMC Final, 1 v FRA
8 Alasdair Donaldson 21.6.77 (2y, 12) 1:48.6'98
1:48.10, 1:48.43, 1:49.02, 1:49.05, 1:49.18, 1:49.36
1 B.Univs, 2 LI, 1 BL1 (2), 5 BMC Wyth, 3 BMC Watford, 1 AAA23, 1 U23H, 5h3 Eur23, 4 Cup, 1 WG, 4 v FRA
9 Matt Shone 10.7.75 (2y, 8) 1:48.33'98
1:47.99, 1:48.95, 1:49.14, 1:49.53, 1:49.63, 1:49.68
5 LI, 1B BMC Wyth, 1 Welsh, 1 IR, 3r2 Budapest, 6 AAA, 4 Haapsalu, 4 BMC Cardiff, 1 Cup, 2 WG, 9 BMC-Final, 3 v FRA, 4 BMC Watford 8/9, BL1: 3,2,2,-

## 10 Bradley Donkin

6.12.71 (3y, 2) 1:46.86'98

1:48.06, 1:49.15, 1:49.25, 1:49.33, 1:50.0, 1:50.08; 1:49.94i
$4 \mathrm{LI}, 8$ CAU, 3 BMC Wyth, 2 BMC Watford, 7 Belfast, 6 BMC Stretford, 4 BL1 (3), 8 AAA, 6 Haapsalu, 8 Hechtel, 3 BMC Final, 4 BMC Stret $31 / 8$
11 Neil Speaight 9.9.78 (1y, -) 1:50.46'98
1:48.1, 1:48.42, 1:49.01, 1:49.64, 1:49.79, 1:49.95
3 B.Univs, 3B BMC Wyth, 4B BMC Watford, 4 AAA-23, 3 BMC
Stretford, 4h1 Eur23, 2 BMC Cardiff, 4 BMC Final, 2 HCI
12 Eddie King 26.11.75 (3y, 6) 1:48.22'97
1:48.00, 1:49.20; 1 Belfast, 3 BMC Solihull

I was a nearly year for British 800 m running, three men broke 1:46 and went to the World Championships, but were unable to progress from the first round. Sesay, who had missed a year in 1998, having burst through to rank second in 1997, took the AAA title and, just, top ranking. It was particularly good to see the return of Robb, last ranked in 1996, when he was no. 1 for the third time. He was $4-3 \mathrm{v}$ Sesay and had the two fastest times of the year, but was not able to sustain his form. Lobo was again 3rd; he was ahead of Robb at the AAAs, but did not have the depth of times of the other two. Hart slipped to 4th after two years at the top and I have included Mcllroy in 5 th place as he decided to compete for Britain, although he had opted for Ireland until the last month of the season. Swit-Smith had an excellent series of domestic results, including winning the BMC series, and he beat Donaldson $3-1$ and Shone 4-2; Donaldson beat Shone 3-2. Speaight, the one newcomer to the rankings, made the biggest improvement, but mention must be made of the most exciting new talent - but not yet quite making the senior rankings - 17 year-old Nic Andrews, whose briliant season included the European Junior silver medal as well as all the major domestic junior honours; he brought his best down from 1:54.0 in 1998 to 1:49.08 in 1999.

## 1500 METRES - 1 MILE

## John Mayock 26.10.70 (8y, 1) 3:31.86'97,

 3:50.32M '963:33.97, 3:34.17, 3:35.66, 3:52.79M, 3:36.13, 3:36.43; 5 Seville, 3 Bratislava, 5 Nuremberg, $4 \mathrm{ECp}, 2 \mathrm{GhCl}$, 10 Lausanne, 10 Rome, 3 Nice, 1 AAA, 7 BGP, 2B Zürich, dnf s2 Worlds, 9 Brussels, 7 GPF
2 Anthony Whiteman 13.11.71 (4y, 2) 3:32.34'97, 3:51.90M '98
3:37.02; 12 Nuremberg
3 Neil Caddy 18.3.75 (5y, 6) 3:39.1/3:55.84M '96 3:57.35M (3:40.7), 3:40.70, 3:40.83, 4:00.3M, 3:45.56, 3:46.01 4 Belfast, 2 AAA, 10 Malmö, 9 BGP, 1 BMC Carn Brea 4 Jonathan McCallum 19.11.75 (1y, -) 3:43.82'98 3:40.87, 3:41.92, 3:44.36, 3:44.96, 3:45.19, 3:45.34 $4 \mathrm{LI}, 8$ BMC Wyth, 1 South, 5 Belfast, 11 BMC Solihull, 3 AAA, 12 Malmö, 12 BGP, 1 WG
5 Richard Ashe 5.10 .74 ( $1 \mathrm{y},-$-) 3:41.2/3:59.98M '96 3:41.8, 3:41.83, 3:42.16, 3:44.95, 3:46.88, 3:48.26 5 B BMC Watford, 5 BMC Solihull, 4 AAA, 2 BMC Watford $11 / 8,3 \mathrm{v}$ FRA
6 Spencer Barden 31.3.73 (3y, 8) 3:39.64/3:58.5M '98 3:42.94, 4:00.96M, 3:43.55, 3:43.70, 3:43.96, 3:44.33
1 BL1 (1), 2 LI, 9 E.Clubs, 8 Cork, 8 WUG, 7 AAA 4 Växjö, 2 Cup, 2 Biella
7 Andrew Graffin 20.12.77 ( 1 y, - - 3:45.3/4:02.05M '98 3:59.64M, 3:42.0, 3:42.65, 3:44.73, 3:44.79, 3:45.32 2 B.Univs, 1B LI, 1 BMC Watford, 5 AAA-23, 9 AAA, 4 BMC Cardiff, 4 BMC Watford $11 / 8,1$ BMC Final, 6 v FRA
Joe Mills 9.7.72 (1y, -) 3:45.4'98
3:42.23, 3:43.7, 3:44.5, 3:44.97, 3:47.49, 3:47.54
2 BL1 (2), 3C BMC Watford, 7 BMC Solihull, 8 AAA, 3 WG, 1 Cup, 2 BMC Strefford 31/8, 1 BMC Watford 8/9 9 Yacin Yusuf 20.12.77 (1y, - ) 3:53.0'95
3:44.00, 3:44.91, 3:44.99, 3:45.60, 3:46.87, 3:47.52
1 B.Univs, 3 LI, 4B BMC Wyth, 12 Athens, 2 AAA-23,

1 U23H, 8 Eur23, 6 BMC Cardiff
10 Matt Dixon 26.12 .78 ( 1 y , -) 3:43.5'97
3:43.34, 3:44.06, 3:45.85, 3:46.70, 3:47.38
8 LI, 3 BMC Watford, 1 AAA-23, 5 U23H, 12 Eur23, 3 Cup, 5 WG 11 Tom Mayo 2.5.77 (2y, 10) 3:41.244:00.02M '98
3:41.8, 3:42.38, 3:44.2, 3:44.62, 3:46.05, 3:46.66
$9 \mathrm{LI}, 10$ BMC Wyth, 4 AAA-23, 8 BMC Solihull, 9 h2 AAA, 13 (fell) BMC Cardiff, 3 BMC Watford $11 / 8,1$ Mid, 5 v FRA, 1 HCl 12 Glen Stewart 7.12.70 (2y, -) 3:38.66/3:59.56M '96 3:41.95, 3:42.6, 4:08.64M; 6 BMC Solihull, 1 BMC Stretford 3/8, 8 BMC Final
James Thie 8B BMC Solihull, 1 BMC Streetford 3/9, 2 BMC Carn Brea
Eddie King 26.11.75 ( $0 y$, - ) 3:46.37'98
3:43.29, 3:44.08, 3:45.84, 4:07.75M; 3:40.24i, 3:41.92i, 3:42.68i,
3:44.05i
4 Belfast, 7 BMC Wyth, 2 BMC Watford, dns AAA
nr Gareth Turnbull IRE 14.5.79 3:42.8 '97,
4:07.4M '98
3:41.3, 3:42.20, 4:00.16M, 3:43.61, 3:43.86 3:44.23
2 Belfast, 2 BMC Wyth, 3 Cork, 7 WUG, 7 Eur23, 1 BMC Cardiff, 2 BMC Final, 1 BMC Stret 31/8
$M=1$ mile time ( 1500 m times in brackets).

Mayock was a class apart, top for the fifth successive year, although he ent back a little in world terms. Whiteman ran just once - for 12th place, but his time of 3:37.02 meant that he had to be ranked 2nd (for the fourth successive year) as nobody else broke 3:40! Caddy returned from injury with some decent runs at the end of the year, but most of the previous year's top men, such as McKay, Yates and Lough, were missing from contention this time. The 10th best was $3: 42.37$, easily the lowest since 1979 (best was 3:38.02 in 1986) and this could well have been Britain's worst ever year at the event in world terms. Six men are new to the rankings after three new men in 1998 and five in 1997; it must be hoped that they will continue to progress strongly.

## 3000 METRES (NOT RANKED)

Rob Whalley 11.2.68 7:51.4 '97
7:53.45, 8:04.21, 8:12.09; 8 Belfast, 1 BMC Solihull, 8 BMC Cardiff
Glen Stewart 7.12.70 8:02.63'97
7:55.15, 7:58.39, 8:02.39; 1 BMC Wyth, 5 ECp, 10 GhCl
John Nuttall 11.1.67 7:36.40' 96
7:55.18, 8:34.51M (8:02.4); 2 BMC Solihull, 9 BGP
Michael Openshaw 8.4.72 7:58.92 '98
7:55.35, 7:58.16; 2 BMC Wyth, 7 BMC Solihull
Kris Bowditch 14.1.75 7:56.12'98
7:55.61; 8:07.70i, 8:15.78i; 2 Belfast
Adrian Passey 2.9.64 7:48.09'89
7:56.49; 3 BMC Solihull
Julian Moorhouse 13.11.71 7:59.44 '98
7:56.88; 8:07.29i, 8:07.67i; 3 BMC Wyth
Rod Finch 5.8.67 7:53.99i' $94,7: 59.07$ ' 98


7:56.93, 7:59.31; 8 BMC Wyth, 4 BMC Solihull
Mark Miles 24.3.77 8:27.32i ' 96
7:57.21; 5 BMC Solihull
Sam Haughian 9.7.79 8:27.50'97
7:57.24, 8:16.68; 4 BMC Wyth, 1 U23H

## 5000 METRES

1 Rob Denmark 23.11.68 (9y, 9) 13:10.24'92 13:24.86, 13:34.17, 13:41.28, 13:42.12, 13:44.48 4 Cork, 1 AAA, 8 Hechtel, 11h2 Worlds 2 Jon Brown 27.2.71 (8y, 2) 13:19.03 '98 13:23.35, 13:37.85, 13:44.93
4 AAA, 5 Hechtel
3 Karl Keska 7.5.72 (3y, 1) 13:26.37'98 13:23.07, 13:39.43, 13:45.49
5 AAA, 4 Hechtel
4 Keith Cullen 13.6.72 (4y, 3) 13:17.21'97 13:26.42, 13:36.49, 13:41.87, 13:45.28, 13:53.92, c.13:58+ 13 St Denis, 2 AAA, 12 Hechtel, 13 h 1 Worlds
5 Matt O'Dowd 13.4.76 (1y, -) 13:44.83' 97 13:37.00, 13:37.54, 13:40.54, 13:42.54, 13:48.45, 13:52.63 4 LI, 5 Cork, 4 WUG, 3 AAA, 19 Hechtel
6 Adrian Passey 2.9.64 (3y, -) 13:20.09 '97 13:44.97, 13:45.98, 13:46.15, 13:46.20, 13:59.40 dnf Melbourne, 12 Portland, 9 Eugene, 12 Nuremberg, 18 Oslo, dns AAA
7 John Nuttall 11.1.67 (9y, -) 13:16.70 ‘95
13:46.01, 13:48.07; 6 AAA
8 David Heath 22.5.65 (1y, -) c.14:45
13:47.95, 13:49.03, 13:51.15, 13:52.18, 13:59.37, 14:15.09 2 LI, 7 AAA, 1 BL1 (4), 13B Hechtel, 1 Cup, 4 v FRA 9 Nick Comerford 23.4.66 ( $1 \mathrm{y},-$ ) 13:52.7'98 13:50.83, 13:58.66, 13:58.78
8 AAA, 2 v FRA
10 Michael Openshaw 8.4.72 (1y, -) 14:04.87 '98 13:51.26, 14:01.37; 1 LI, 4 ECp
11 Glynn Tromans 17.3.69 (3y, 12) 13:48.0 '97
13:44.27, 13:56.35; 1 BMC Watford, 8h1 AAA
12 Rob Whalley 11.2.68 (2y, -) 13:41.08 ‘97
13:47.65, 14:03.71, 14:11.84; 9 AAA, 3 Ashford

$\square$enmark returns to rank top for sixth time (a record for the event), previously 1991-5. His AAA victory and respectable run in Seville sealed this honour, although Keska and Brown, who is second for the fouth time, beat him in Hechtel. Cullen also ran well under 13:30 and O'Dowd ran consistently well to rank 5 th. The standard dropped off after that, but there was little between the rest in the rankings. Nuttall made a welcome retum; he was last ranked when he was top in 1996. The highest newcomer was Heath, at the age of 34 , following up his most successful cross-country season. While the standard in depth does not compare to previous glories, 10th best at 13:46.01 was up from the $13: 48.5$ of 1998 (although it was under 13:40 each year 197792). 30 men under 14 minutes was considerably up on just 15 men in 1998, although still well short of the peak of 49 in 1988 .

10,000 METRES
1 Keith Cullen 13.6.72 (2y, -) 27:53.52 '98 5 Eur Challenge 27:50.33
2 Glynn Tromans 17.3.69 (3y, 5) 28:31.71'98 15 Eur Challenge 28:21.07, 7 AAA 29:14.87 3 Paul Evans 13.4.61 (7y, -) 27:47.79'93

2 (1) AAA 28:34.62, 1 Cup/South 29:22.87 4 David Taylor 9.1.64 (3y , 10) 29:11.79'97
5 AAA 29:00.04
5 Richard Nerurkar 6.1.64 (9y, -) 27:40.03 ، 93 6 AAA 29:06.69
6 Nathaniel Lane 10.4.76 (1y, -) 30:13.15'98
11 Palo Alto 29:01.17, 13 AAA 30:26.00, 14 NCAA 30:50.57 7 Dominic Bannister 1.4.68 (2y, -) 28:45.87'97
11B Eur Challenge 29:05.97
8 Andres Jones 3.2.77 (1y, ) 30:06.01'96
8 AAA 29:17.69, 11 Eur23 30:14.31
9 Nick Jones 10.7.74 (1y, -) 0
1 CAU 29:23.71
10 Mark Steinle 22.11.74 (3y, -) 29:07.33 '95
2 CAU 29:32.48, 2 Cup 30:18.26
nr Dermot Donnelly now IRE 23.9.70 (3y, 3) 28:38.56'97 7B Eur Challenge 28:32.15

Brown did not finish in Seville, and as this was his only 10 km track race, he is not ranked, after three years at the top. Cullen was easily our astest, and Tromans improved his best, but just three under 29 minutes is a devastating indictment of the collapse of our once-proud distance running standards. For the fourth successive year the 10 th best was the worst since the mid-1960s (allowing for 6 miles conversions in the 1960s). 29:08.66 in 1996, 29:17.65 in 1997, 29:24.15 in 1998 and now 29:32.48. In 1986 it was 28:11.07 - yes, well over a lap faster. Now we have to go back to 1961 to find a lower standard.

## 3000 METRES STEEPLECHASE

1 Christian Stephenson 22.7.74 (2y, 1) 8:32.76 '98
8:29.09, 8:38.71, 8:39.12, 8:44.42, 8:54.44, 8:55.91 1 Enskede, 1 BMC Wyth, 6 ECp, 1 AAA, 1 BL2 (4), 2 Lough
2 Craig Wheeler 14.6.76 (2y, 3) 8:42.83'98
8:34.67, 8:47.83, 8:47.94, 8:53.49, 8:54.21, 9:01.60
3 LI, 1 CAU, 2 BMC Wyth, 2 AAA, 13 Casablanca, 4 Lough, 2 v FRA
3 Justin Chaston 4.11.68 (9y, -) 8:23.90 ‘94 8:33.62; dnf/1 Houston
4 Andrew Hennessy 24.8.77 (1y, -) 9:07.6'98 8:39.71, 8:49.08, 8:57.48, 9:01.00, 9:01.34, 9:09.32 1 Philadelphia, 3 Palo Alto, 1 South, 2 AAA-23, 10h1 Eur23, 6 v FRA, 1 HCI
5 Stuart Stokes 15.12 .76 (3y, 8) 8:55.64 '97 8:48.21, 8:50.40, 8:53.52, 8:54.21, 8:55.31, 8:57.03
2 CAU, 7 BMC Wyth, 3 AAA, 3 Lough, 2 Cup, 5 v FRA
6 Andy Coleman 29.9.74 (3y, 7) 8:52.35'98 8:47.30, 8:48.78, 8:53.57, 8:58.96xH
3 CAU, 3 BMC Wyth, 6 BMC Watford, 4 AAA 7 Charlie Low 9.10.74 (2y, -) 8:54.46'97 8:55.28, 8:59.27, 8:59.62, 8:59.69, 9:06.69; 8:48.12xH 1 BMC Watford, 6 AAA, 1 Cup, 8 Lough, BL1: -,1,1,1 8 Donald Naylor 5.9.71 (1y, -) 9:03.61'98 8:47.89, 8:55.61, 8:55.95, 8:59.47, 9:01.63, 9:06.33 3 BL2 (1), 4 CAU, 4 BMC Wyth, 7 AAA, 7 Lough 9 Ben Whitby 6.1.77 (2y, 2) 8:41.79'98 8:50.88, 8:59.29; 9:10.83
5 Wyth, 1 AAA-23, 12 h2 Eur23
10 David Mitchinson 4.9.78 (1y, -) 9:10.65 '97 8:52.58, 8:53.43, 9:03.88, 9:05.80, 9:14.57; 8:50.73xH 1 B.Univs, 2 LI, 6 BMC Wyth, 2 BMC Watford, 4 AAA-23,


6 U23H, 6 Lough
11 Ewan Malloch 4.8 .76 (1y, -) 9:12.66 '98 8:54.70, 8:56.01, 9:01.0, 9:03.62, 9:07.6, 9:13.79 $1 \mathrm{C} / \mathrm{O}$ v H/Y, 2 North, 1 IR, 5 AAA, 5 Lough 12 Andy Morgan-Lee 1.3.69 (3y, 9) 8:50.40'96 8:54.64, 9:02.46, 9:02.83, 9:04.4, 9:07.83
1 LI, 8 BMC Wyth, 1 sf Derby, BL1: -,2-, 2 $x H$ run with one hurdle missing

Sephenson, continuing his advance, retains his top ranking, but he, like he others, needs to race more at the event, and he was held back from doing so by injury. Both he and Wheeler ran very well at Wythenshawe, but thereafter could not get within ten seconds of those times. Chaston gave a glimpse of his talent, with one race in the USA. Hennessy made the biggest improvement, but again his best time was a long way ahead of his other times. Stokes beat Coleman 2-1, both men making decent improvement. The overall standard remains, even more than distance running in general, depressingly bleak, although the 10th best was marginally better than in 1998, but still lower than at any time since the 1960s.


## WOMEN

## 800 METRES

1 Kelly Holmes 19.4.70 (7y, -) 1:56.21 '95
1:58.24, 1:58.86, 1:59.72, 1:59.72, 1:59.76, 1:59.85, 1:59.86, 2:00.77 1 Budapest, 6 Paris, 1 AAA, 3 Stockholm, 4 s 1
Worlds,3 Rovereto, 1 v USA
2 Diane Modahl 17.6.66 (15y, 1) 1:58.65 '90
1:59.72, 2:00.43, 2:00.46, 2:00.73, 2:00.80, 2:00.83
1 Mito, 1 Osaka, 2 E.Clubs, 10 Athens, 5 ECp, 3 GhCl ,
5 Lausanne, 3 Zagreb, 5 Malmö, 2 BGP, 4h1 Worlds, 2 Rovereto, 9 Berlin, 7 GPF, 2 v USA
3 Tanya Blake 16.1.71 (3y, 2) 2:00.10 '98 2:01.87, 2:02.11, 2:02.37, 2:03.03, 2:03.2mx, 2:03.70
1 BMC Watford, $2 \mathrm{GhCl}, 1$ Riga, 1 Salamanca, 2 AAA, 4 BGP, 2 v FRA, 4 v USA
4 Ann Griffiths 20.8.65 (6y, -) 1:59.81'94 2:03.5, 2:03.94, 2:04.41, 2:04.56, 2:08.46
1 BMC Stretford 22/6,3 AAA, 7 Barcelona, 8 BGP
5 Rachel Newcombe 25.2.67 (2y, 7) 2:03.28 '98
2:03.80, 2:04.02, 2:04.40, 2:05.25, 2:05.74, 2:05.96
2 CAU, 1 BMC Wyth, 1 BL2 (1), 2 BMC Watford, 4 GhCl ,
3 Budapest, 1 BMC Solihull, 6 AAA, 2 Fana, 1 Haapsalu,
8 Hechtel, 1 BMC Cardiff, 4 v FRA, 1 BMC Final
6 Jeina Mitchell 21.1.75 (3y, -) 2:03.36 ‘97
2:04.30, 2:04.43, 2:05.69, 2:05.97, 2:06.10, 2:06.84
1 LI, 3 CAU, 1 BedI, 5 Istanbul, 8 Budapest, 4 AAA, 3 Fana, 7 BGP, 1 Sth IC
7 Emma Davies 9.10.78 (2y, 4) 2:02.39 '98
2:04.00, 2:05.48, 2:06.13, 2:06.38, 2:06.42, 2:06.89
1 B.Univs, 5 LI, 3 Florø, 2 BMC Wyth, 3 BMC Watford, 1 AAA-

23, 5s1 WUG, 1 U23H, 4h1 Eur23, 1 WG, 2 Sth IC, 1 HCI
8 Paula Fryer 14.7.69 (5y, -) 1:59.76 '91
2:04.4, 2:05.18, 2:06.21, 2:06.4, 2:06.86, 2:07.22
1 CAU, 6 BMC Wyth, 1 BL1 (1), 1 North, 2 BMC Stretford 22/6, 1 IR, 9 Budapest, 6 Riga, 5 AAA, 7 Haapsalu, 1 Nth IC, 2 Cup
9 Hayley Tullett 17.2.73 (4y, 11) 2:02.18'97
2:02.92; 2 Riga
10 Christa Salt 17.6.64 (1y, - 2:06.97' 96 2:06.15, 2:06.16, 2:06.60, 2:06.70, 2:06.80, 2:06.90
1 Geneva, 2 Swiss, 2 Bellinzona
11 Vicky Sterne 12.10 .68 (5y, 10) 2:04.63' 96
2.06.89, 2:07.40, 2:07.52, 2:07.66, 2:08.76, 2:09.46 7 E v SA, 3 B.Univs, 5 BMC Wyth, 4 BMC Watford, 3 Belfast, 2 IR, 6 Solihull, 2 BL1 (3), 2 BMC BMC Cardiff
12 Mary McClung 19.12.71 (1y, -) 2:05.64 '95
2:07.88, 2:07.91, 2:07.92, 2:08.07, 2:08.84, 2:08.92
1 Scot E, 2 LI, 1 Scot, 4 Belfast, 2 h1 AAA, 2 WG, 1 Cup, 5 BMC Final, BL1: -,1,1

- Jennifer Ward 3 BMC Wyth

HImes returned to rank No. 1 at the event for the fifth time, with Modahl and Blake each moving down a place. Modahl, who ties Chris Boxer's ecord 15 years ranked at 800 m , ust ducked under 2 minutes at the end of the season (for a record 10 years achieving this feat), atter a series of times just above that. Next fastest was Tullett, but she was difficult to rank as she only had one race at this distance. As well as Holmes, two other former sub-2 minute runners retumed to the rankings: Girifths, top ranked in 1991, was back for the first time since 1995, and Fyer, 2nd in 1992, was in for the first time since 1993. Newcombe won the BMC series and consolidated her position with a series of strong runs, moving ahead for the time being of her Welsh rival, Emma Davies, and beating Mitchell $3-1$. 10th best at $2: 06.12$ is the worst since 1976 .

## 1500 METRES

1 Kelly Holmes 19.4.70 (6y, 1) 3:58.07 '97, 4:28.04M '98 4:04.58, 4:06.77, 4:08.2, 4:18.98
2 Auckland, $3 \mathrm{GhCl}, 6$ Monaco, 5 BGP
2 Hayley Tullett 17.2.73 (3y, -) 4:08.98 '97
4:05.72, 4:06.80, 4:08.06, 4:09.6, 4:12.10, 4:14.1
1 BMC Wyth, 4 ECp, 4 GhCl, 1 AAA, 7 BGP, 6h1 Worlds, 10 Rieti, 3 BMC Watford 8/9
3 Paula Radcliffe 17.12.73 (6y, 2) 4:05.81'98, 4:24.94M '96 4:06.71, : :07.77, c. $4: 38 \mathrm{M}+$, c. $4: 41.5 \mathrm{M}+$
$5 \mathrm{GhCl}, 3 \mathrm{v}$ USA
4 Helen Pattinson 2.1.74 (2y, 4) 4:12.61 '98, 4:41.65M '97 4:06.72, 4:08.71, 4:10.1, 4:10.24, 4:11.41, 4:12.17
1 LI, 4 BMC Wyth, 4 Thessaloniki, 8 GhCl, 3 Casablanca, 2 AAA, 4 Barcelona, 8 BGP, 11 h 2 Worlds, 6 v USA
5 Ann Griffiths 20.6.65 (4y, -) 4:07.59'92
4:10.84, 4:12.90, 4:18.50, 4:23.3
1 sf Wigan, 1 BMC Final, 1 v FRA, 5 v USA
6 Angela Newport 21.10.70 (7y, 6) 4:09.29، 94 4:11.79, 4:16.39, 4:17.07, 4:17.63
2 LI, 2 IR, 1 BMC Solihull, 2 BMC Final
7 Hayley Haining 6.3.72 (1y, -) 4:19.83'91
4:14.78, 4:15.85, 4:23.7


1 Grangemouth, 4 BMC Final
8 Joanne Colleran 1.9.72 (3y, 10) 4:18.17 '98 4:16.24, 4:18.14, 4:18.22, 4:21.1mx, 4:21.41, 4:23.72; 4:15.68i 6 Philadelphia, 4 CAU, 3 BMC Wyth, 4 Cork, 5 Budapest, 5 v FRA
9 Susan Scott 26.9.77 (1y, -) 4:20.37'98
4:16.16, 4:21.44, 4:21.78, 4:22.03, 4:23.10, 4:23.37 5 LI, 6 CAU, 7 Cork, 1 AAA-23, 5 BMC Solihull, 5 U23H,
8h2 Eur-23, 5 BMC Final, 3 v FRA, 1 HCI 10 Kelly Caffell 10.2.79 (1y, -) 4:29.79'98 4:16.64, 4:20.98
1 B.Univs, 3 LI, dnf Cork
11 Alex Carter 1.4.80 (1y, -) 4:25.3'98
4:19.23, 4:20.56, 4:21.67, 4:23.40, 4:23.48, 4:26.66
1 Nth-J, 6 BMC Wyth, 1 AAA-J, 2 JI4, 9 EJ
12 Bev Hartigan 10.6.67 (8y, -) 4:05.66 '90 4:19.63, 4:21.71; 4:29,26i
7 BMC Wyth, 6 Cork

$-1 \begin{aligned} & 0 \\ & B\end{aligned}$Imes was top for the sixth successive year (tying Chris Boxer's record six No.1s at 1500 m ), and Radcliffe drops a place after three years at no. 2. Moving into that place is Tullett, who made great progress and was unlucky to miss the World final by just one place after her pb in Seville. Pattinson also maintained her progress with four personal bests in 1999. Griffiths was last ranked at this event in 1994. The top six were particularly strong, and although the standard declined thereafter, there was still a welcome mprovement over 1998. Colleran beat Scott 2-1. Caffell looked most promising in May, so it was a disappointment that her season was curtailed by injury.

## 3000 METRES (NOT RANKED) <br> Paula Radcliffe 17.12.73 8:35.28'97

8:27.40, 8:31.61, 8:34.81, 9:28.6+eM, 8:46.19, $8: 48.91+, 9: 30.5+\mathrm{eM}(8: 51.9), 9: 32.07 \mathrm{M}(8: 54.0)$ 1 LI, 7 Oslo, 4 Rome, 3 Zürich, 4 GPF
Angela Newport 21.10.70 9:14.1 '94
9:07.5mx, 9:12.6, 9:13.71, 9:28.2+
1 Lough $12 / 5,7$ ECp
Hayley Tullett 17.2.73-0
9:49.73M (9:14.5); 2 LI
Hayley Haining 6.3.72 9:12.28' 91
9:51.38M (9:14.0), 9:14.05; 3 LI, 1 BMC Solihull Sarah Young 2.1.70 9:04.27 '98
9:10.4mx, 9:57.03M (9:18.0), 9:20.9, 9:32+ 1 BMC Street, 4 LI
Jilly Ingman 17.8.78 9:19.4mx '98 9:12.37mx, 9:16.3+, 9:24,7mx, 9:28.21, 9:28.42 5 BMC Solihull, 2 BMC Cardiff, 1 AAA Andrea Whitcombe 8.6.71 8:58.59 '91
9:12.9mx, 9:20.1, 9:45.1
Caroline Walsh 29.4.80 9:43.3'98
9:13.4mx, 9:20.38; 9:28.6, 9:36.11
7 EJ, 4 Cup
Helen Pattinson 2.1.74 9:22.97 '98 9:16.3mx, 9:17.3; 1 Lancs Hayley Yelling 6.3.72 9:26/12'96 9:19.52, 9:33.4, 10:21.50M (9:40.2), 9:44.1 10 LI, 1 BL 3 (1), 2 BMC Solihull

Paula Radcliffe's brilliant season, included a British and Commonwealth record at 3000 m , but second best was 40.1 seconds slower.

No longer a championship event. + during 5000m, $M=2$ Miles.

## 5000 METRES

(Previously ranked 1982-90, 1992, 1995-8) 1 Paula Radcliffe 17.12.73 (5y, 1) 14:45.51 97
4:43.54, 14:48.79, 14:54.61, 14:59.65, 15:10.4+, 15:25.24+
3 Hengelo, 1 ECp, 2 BGP, 8 Berlin
2 Hayley Haining 6.3.72 (1y, -) 16:36.66'93 15:46.05, 15:48.98, 15:56.59
1 AAA, 9 BGP, 3 v FRA
3 Angela Newport 21.10.70 $(2 y, 5)$ 15:50.59 '98
5:43.99, 15:53.71, 16:36.07 1 BMC Wyth, dnf AAA, 9 Hechtel, 2 Ashford 4 Lucy Elliott 9.3.66 (3y, -) 15:34.40'97 15:37.76, 16:24.54, 17:13.52* 21 Portland, 2 Victoria, 3 Cork 5 Jilly Ingman 17.8.78 (1y, -) 16:35.86 '98 15:59.00, 16:00.78, 16:04.47
2 BMC Watford, 10 Eur23, 4 v FRA
6 Tara Krzywicki 9.3.74 (2y 4) 15:48.1mx/ 15:53.28 '98
5:54.35, 16:11.01, 16:17.53
BMC Wyth, 7 WUG, 4 AAA
7 Sarah Young 2.1.70 (3y, 3) 15:45.08'98 16:02.66, 16:11.50, 17:26.52*
8 Cork, 2 AAA, 5 v FRA
8 Birhan Dagne 7.10.77 (2y, 7) 15:55.81'98 15:56.16, 16:04.75, 17:40.75*


9 Cork, 1 BMC Watford, 3 AAA
9 Katie Skorupska 3.11.78 (1y, -) 16:41.9 '96
15.55.64, 16:16.77, 16:36.1, 16:37.1

2 B.Univs, 1 Ox v C, 3 BMC Wyth, 1 O/C v H/Y, dnf Eur23
10 Amy Waterlow 29.7.78 (2y, 9) 15:57.45'98
15:59.04, 16:09.22, 16:17.94, 16:23.10, 16:31.37
3 B.Univs, 4 BMC Wyth, 4 BMC Watford, 13 Eur-23,
1 Ashford
11 Bev Jenkins 6.2.70 (1y, -) 0
16:08.96, 16:36.48, 16:44+, 17:54.76*
2 CAU, 5 BMC Wyth, 11 Cork
12 Liz Yelling 5.12.74 (3y, 6) 15:50.85'98 16:16.48, 16:21.60; 7 BMC Wyth, 4 BMC Watford -Emma Ford 6 BMC Watford

* one lap extra

Radcliffe set a Commonwealth record at Crystal Palace, and is top for the fifth time, and was again a class apart from the rest, indeed 2nd best was nearly a lap behind. AAA champion Haining made big progress and takes second ahead of Newport, with Elliott, who had one good time, in 4th. There was little between those ranked 5th to 11th; Young was the most difficult to rank as she did not beat 16 minutes, but had win-loss advantage over several of those who did.

## 10,000 METRES

1 Paula Radcliffe 17.12.73 (2y, 1) 30:48.58 '98
2 Worlds 30:27.13, 1 Eur Challenge 30:40.70
2 Tara Krzywicki 9.3.74 (2y, 5) 34:37.04'98
19 Eur Challenge 33:04.55, dnf WUG
3 Lucy Elliott 9.3.66 (1y, -) 0
7 Burnaby 33:12.8
4 Birhan Dagne 7.10.77 ( $2 y$, 11) 34:38.11' 98
2B Eur Challenge 33:24.46, 9 Eur23 34:28.70
5 Bev Jenkins 6.2 .70 (1y, -) 0
1 AAA 33:58.81
6 Angela Joiner 14.2.69 (2y, 3) 33:30.27 '98
2 AAA 34:23.01
7 Lucy Wright 17.11.69 (2y, -) 33:41.16'97
8B Eur Challenge 34:23.04
8 Debbie Sullivan 24.1.72 (1y, -) 36:06.37'98 3 AAA 34:30.16
9 Sheila Fairweather 24.11.77 (2y, 10) 34:39.98 '98
10 Eur23 34:32.70, 4 AAA 34:46.96, dnf B.Univs
10 Beth Allott 9.2.77 (1y, -) 0
5 AAA 34:59.67, 11 Eur23 34:59.79

$D^{2}$adcliffe's run at the World Championships was quite simply one of the greatest in the history of the sport. She had taken eight seconds off her national record at the European Challenge and to take another 13 seconds off in the searing heat and humidity of Seville was stupendous. Sadly the second best British runner was over two and a half minutes (or more than two laps) slower.

## What is a good BMC member?

## by Frank Horwill

WHEN you join the BMC you cease to be just a club runner, you become an evangelist with the avowed aim of improving British middle-distance running.
How can you do this? In 1963 to 1973, all members were asked to make a commitment that in one race a year they would go out and cover the first three-quarters of the event faster that they had ever done before. Now, at that time, this meant that some 500 members were involved in 500 races that produced extraordinary times out of the blue. The writer can recall some of them. In 1969, Martin Wales, the national police mile champion, in a mile race at Paddington, zoomed off and covered the first three laps in under 3minutes, and this was in a freak hailstorm! The result was that five runners finished inside 4 mins .04 secs., a rarity in those days.

In 1971, Wayne Tarquini hurled through 1,100 yards in 2 mins. 25 secs at Broomfield Park Southgate an ash track which was uphill one way! The result was that the track record of 4 min .05 secs was reduced to 3 mins .57 secs by Dick Quax of New Zealand. The same year, Christine Brace, in the W.A.A.A. junior championship 1500 metres final, covered the first 800 metres in 2 mins. 16 secs., and went on to win in a championship best time of 4 mins. 29 secs.
So, pick a race now and decide that you will shake the living daylights out of the field!
Next comes your support for BMC races put on for YOUR benefit by regional secretaries and others. This calls for studying the BMC fixture list and contacting the race organiser at least 7 days beforehand. And, if you say you are going to run, TURN UP! Don't be like the ill-mannered louts who failed to appear in the PETER COE and FRANK HORWILL miles on the last two occasions they were held.

Finally, BMC courses (either day or weekends) are put on at a financial loss to the club, it is therefore amazing that some BMC members choose to support training camps put on by ex-internationals where profit is the major aim, and ignore our nationally renowned, highly educative and rewarding week-ends.

Now, there are some who are anti-BMC, like the half-wit track referee in Yeovil who disqualified a whole BMC mile field because it was paced! This
moronic individual has not read the AAA Rules on the subject. According to his philosophy, non of the current world records would be recognised as most of them were hared. There are also some who think that the BMC threatens local club status and that leagues are to be died for. Important as they may be, not a single winning time in the 800 and 1500 metres has found its way into the Top 50 rankings for the last five years! BMC races are always so listed.
When the likes of Dave Moorcroft, Dave Hemery, Roger Simons, Bryan Smith and Adam Walker, all prominent U.K. Athletics officials, sang BMC praises at the Manchester conference in November 1999, you should be proud to be a BMC member.
Of course, paying your subs. on time is a must. Some think it's a burden until they want to run in a particular race, usually the " A " race. They get a shock when turned down and an even bigger shock when they try to enter the " B " race and the entry fee is doubled. Don't be like the female who wanted to run in the Grand Prix final at Glasgow but couldn't until she paid $£ 35$ arrears for her subs! WE MUST HAVE YOUR SUBS ON TIME TO KEEP GOING!
Remember, be an evangelist.


| British Milers' Club Junior Records (as at 1st April 2000) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | BMC J unior Members' Record | BMC J unior Record | BMC J unior Club Record |
|  | by a paid-up BMC junior member in a BMC race | by any junior in a BMC race | by a paid-up BMC junior member in any race world-wide |
| Junior Men |  |  |  |
| M800 | 1:47.69 Simon Lees 1998 | 1:47.69 Simon Lees 1998 | 1:45.77 Steven Ovett 1974 |
| M1000 | 2:23.4 Justin Swift-Smith 1993 | 2:23.4 Justin Swift-Smith 1993 | 2:20.0 Steven Ovett 1973 |
| M1500 | 3:42.2 Paul Wynn 1983 | 3:42.2 Paul Wynn 1983 | 3:40.90 David Robertson 1992 |
| M Mile | 3:59.4 Steven Ovett 1974 | 3:59.4 Steven Ovett 1974 | 3:59.4 Steven Ovett 1974 |
| M3000 | no mark under 8:05.0 | 7:53.40 * Mizan Mehare U20 ETH 1998 | no mark under 8:05.0 |
| M5000 | 14:07.29 Chris Thompson 1999 | 13:28.6 * Mizan Mehare U20 ETH 1998 | no mark under 14:00 |
| Junior Women |  |  |  |
| W800 | 2:06.5 Rachel Hughes 1982 | 2:04.6 * Janet Lawrence 1977 | 2:02.0 Jo White 1977 |
| W1000 | no mark under 2:50.0 | no mark under 2:50.0 | 2:38.58 Jo White 1977 |
| W1500 | 4:20.0 Bev Hartigan 1986 | 4:16.4 * Julie Holland 1984 | 4:13.40 Wendy Sly 1976 |
| W3000 | 9:25.95 Amber Gascoigne 1998 | 9:25.95 Amber Gascoigne 1998 | 9:09.14 Lisa York 1989 |
| W5000 | no mark under 16:30.0 | 16:30.38 * Louise Kelly 1998 | no mark under 15:00.0 |
|  |  | * denotes non-member |  |

## Training myths destroyed

## by Frank Horwill

OWEN ANDERSON, PhD., coach, author of LACTATE - LIFT-OFF, and a noted athletics columnist, has used the slide-rule of scientific research to debunk many of our cherished beliefs. Here are some of his findings, which may get you hot under the collar.
THE LYDIARD SYSTEM OF ENDURANCE TRAINING is out! Wasteful of time and energy, and inadequate speed preparation. Makes you wonder how Snell won three Olympic gold medals and broke four world records. Anderson argues that high mileage is a weak promotor of fitness and what's needed instead is the creation of a BASE OF STRENGTH AND SPEED which can be

15 mins! However, a group of endurance runners who improved their $\mathrm{VO}_{2}$ max by 5 per cent failed to enhance 5 k race times, while another group with stagnant $\mathrm{VO}_{2}$ max figures improved their times by 3 per cent due to using EXPLOSIVE STRENGTH TRAINING. In the same piece of research, runners logging 70 mpw failed to improve race times at all, while those on 45 mpw improved by 30 seconds. Going beyond 70 mpw has no noticeable impact on improving the $\mathrm{VO}_{2}$ max.
We have to ask at this point whether Dave Bedford's world 10 k record on 180 mpw and Ovett's 1980800 metres gold medal on 140 mpw could have been achieved on half that
words, they did years of INTENSE work not weeks of consecutive high mileage.
HEART-RATE MONITORING IS OUT! The heart is not in the driving seat in an endurance race. The muscles and nerves don't wait for the heart to tell them what to do - it's the other way around. What's more, the heart can be a terrible indicator of actual exercise intensity, since it is subject to the whims of weather, psychological state, hydration status, sleep patterns, and other factors. Use your heart rate to guide your training only if - at your major race of the season - you care only about your heart rate during your effort, not your finishing time.

LACTATE TESTING is questionable! Endurance athletes comforted themselves by embracing the pseudo-science of measuring blood-lactate levels at various running-training speeds. The aim was to establish lactate threshold velocity, i.e. the speed above which lactate began to accumulate rather steeply in the blood. Once this speed was identified, one could carry out heavy quantities of training AT one's threshold, which was believed to be the best intensity for further lifting lactate-threshold velocity.
The problem is, we now know,
developed by using functional strength training (moves which mimic the motion of running, often in combination with added resistance), co-ordination-promoting exercises, gradually more challenging explosive work, and increasing doses of race type running. Apparently, the 100 miles a week formula leads to one injury every two months.
THE JACK DANIELS' PERIODISED BLOCKS OF TRAINING are out! The idea of allocating six-week training blocks to specific tasks has much attraction. But Daniels does not exceed 5 k speed (95 per cent $\mathrm{VO}_{2}$ max) throughout his endurance build-up scheme. Also, the hill running block is not the best way to improve running economy.
A HEAVY EMPHASIS ON $\mathrm{VO}_{2}$ MAX DEVELOPMENT AND HIGH MILEAGE is out! The $\mathrm{VO}^{2}$ max is a poor predictor of performance. Is it? The writer has coached five sub 4minute milers and they all had figures of 75 to $80 \mathrm{mls} . \mathrm{kg} . \mathrm{min}$. And, if you use the $15-$ minute run Balke Test and an athlete runs exactly 5,000 metres, that's a predicted $\mathrm{VO}_{2} \max$ of $67.5 \mathrm{mls} . \mathrm{kg} . \mathrm{min}$., which means he can run 5 k in
amount?
ANAEROBIC TRAINING is out! Tradition has it that we developed our aerobic systems over a 6-months period and then ice the cake with a layer of speed work, which was supposed to boost our anaerobics enzymes. But, the fact is that anaerobic processes contribute very little to a fast 10 k or 5 k , and such work is aimed totally at the muscles, nervous-system development is left out, as though nerves have nothing to do with enhancing movement speed. One wonders how Tom Courtney won his 1956 Olympic 800 metres gold medal and equalled the world half-mile record doing 10x330yds three times a week during the winter and a session of $6 x 880 y d s$ at anaerobic speeds

Apparently, Gebrselassie and Tergat, do not have high concentrations of anaerobic enzymes in their muscle cells. Their ability to produce blinding speed at a variety of distances is because they posses exceptional functional strength, which they convert into amazing running power by fine-tuning their nervous systems so that they react quickly and with high levels of co-ordination and efficiency. In other
that lactate threshold speed is a MODERATE stimulus for threshold improvement. To truly improve it you need to expose your muscles to LARGE AMOUNTS OF LACTATE, so that they can get really efficient at clearing it out. Work ABOVE your threshold, that's between 5 k and 10 k pace for 20 minutes, to be precise, 2 -seconds per 400 m slower than for your best 5 k time or established 5 k time.

TEMPO TRAINING TO BOOST LACTATE THRESHOLD has limited results! This is running for 30 -minutes at slightly slower than at/ 10 k speed, the good thing about it is it's sustained.
We now come to what Frank Horwill advocated in 1976, training at $10 \mathrm{k}, 5 \mathrm{k}$ and 3 k speeds and mile pace, are THE sessions to boost the lactate threshold, and circuit training scores better over tempo runs for swelling the LT.

LONG RUNS AT SLOWER-THANMARATHON PACE are questionable. Not much point doing a 22 -miler at 7 -minutes a mile and hoping that on race day you will run 6:30miles. This may be psychologically good if
in addition to the long run the target marathon time is run weekly for nine miles and a mile is added each week up to 18 miles, provided the pace is achieved.

Well, that's the debunking part over. Now, we come to what's in.

NEURAL TRAINING - You require a nervous system which can foster your fastest possible movement speeds by forcing your muscles to work as quickly as possible - yet with tremendous co-ordination and efficiency. How can you do this? Very simple, really, very high speed movement, explosive strength training, and strength training, which temporarily de-stabilises the body. Before and or after normal endurance training, run up 20 metres and sprint 30 metres increasing the distance by 10 metres a time to 80 metres. Light weights with many reps. Hopping 25 metres on each leg.
$\mathrm{vVO}_{2}$ max and TRAINING AT $\mathrm{vVO}_{2}{ }^{2}$ max This stands for velocity at $\mathrm{VO}_{2}$ max. It means that the amount of oxygen you use depends on how you use it efficiently. Two runners may have the same $\mathrm{VO}_{2}$ max of $70 \mathrm{mls} . k g . m i n$. , but one can run longer at maximum than the other. That's $\mathrm{vVO}_{2}$ max. How can you boost it?
(1) Run for 6 minutes' duration as far as possible. Let's say you are world class and run 2400 metres (6 laps). You now have 6-minutes' rest.
(2) Run half the distance achieved on the 6minute run in 3 minutes. In this example, this will be 1200 metres (3 laps). Take 3-minutes

Rest and repeat as many times as possible.
If you don't want to go through that lot, here's a simplification. Add 2-seconds per 400 m to your best 1500 metres time and run for 3 -minutes at that speed. If your best 1500 m is 4 mins (64/400), you run for 3-minutes at $66 / 400$ with 3 -minutes' rest. This will be about 1,100 metres.

INTENSE TRAINING TO LIFT LT - We've discussed this already. 2000 metre intervals at 10 k pace, 1600 s at $5-\mathrm{k}$ pace, 1000 s at 3 k pace and 3-minute reps at $\mathrm{vVO}_{2}$ max, and 2-minute blast-outs at close to maximum effort.

STRENGTH TRAINING - As stated, circuit strength training lifts $\mathrm{LT}, \mathrm{VVO}_{2}$ max, and economy. Functional strength training improves fatigue resistance and enhances efficiency of movement. Running with a weighted vest is part of functional training.

SPECIFICITY - The oldest rule in the game. If you want to run 10k in sub 27-minutes, you have to make a start at running 400 s in 64 seconds with good rest, then keeping to the same recovery gradually extend the distance from 400 to 800 to 1600 metres. If you want to run 3:30/1500, you have to get the feel of 56seconds per 400 with good rest. With the same rest extend the rep to 500 s then 600 s then 800 s, etc. It might take you a year or two to get there, BUT YOU WILL KNOW WHAT WORLD CLASS RUNNING FEELS LIKE.

## Maximising your potential

1) HAVE A TARGET to aim at in six or twelve months' time. This might be a time target, e.g. Breaking 14-minutes for 5 k . Or, it could be a status target, e.g. Making the County team in cross-country. The target MUST be realistic and not a pipe-dream. Not much point talking about breaking four minutes for the mile if you have not yet broken four minutes for 1500 metres.
2) DECIDE HOW MUCH TIME EACH WEEK YOU CAN DEVOTE TO TRAINING. There are 24 hours in a day, we sleep eight hours, work eight hours, have three hours to consume food and perhaps require three hours a day to travel to and from work. We have, therefore, two hours a day in which to train, at the very least, one hour. Most of us do not work on Saturday or Sunday, we can consider training TWICE on those days, each session ten hours apart, e.g. Saturday at 11am and 9 pm . Sunday at 9 am and 7 pm . We can do in week-ends what takes us four days during the week.
3) DECIDE WHAT YOUR TARGET INVOLVES IN THE ALLOCATION OF AEROBIC AND ANAEROBIC RUNNING. This calls for logical conclusions built around - STAMINA, SPEED and STRENGTH. No marathoner will spend all his/her training time doing sprint training, nor a sprinter doing all long-distance running! It would be illogical. THINK OUT YOUR TRAINING CAREFULLY.
4) WINTER-TIME IS VITAL TO YOUR TARGET. If your run 4,000 metres 10 laps) on the Balke Test ( 15 minutes of running) on the first Sunday in October, and 12 weeks later you can still only run 4 k , and a further 12 weeks on that figure remains the same YOUR WINTER HAS BEEN A WASTE OF VALUABLE TIME. During the winter you need some incentives - running at least one cross-country race a month provides this, or you may choose to run indoors AT YOUR WEAKEST EVENT to build up confidence. If your 800 metres time is two minutes and you can only run 4 min . 15 secs for 1500 metres, it is your Achilles heel!
5) IGNORE EXTREME VIEWS PROPAGATED BY "EXPERTS". Such views as, "You must do 100 miles a week to succeed, " or "I can get super fit on 20 miles a week," need careful analysis. The first (100mpw)
may be all at seven minutes a mile, while the latter (20mpw) may be all at 4.5 minutes a mile via repetition running. Both get some sort of results, however, there are other ways.
6) REMEMBER THE PHYSIOLOGICAL FACTS. These have been obtained from the world's greatest physiologists from Astrand's time (1939) to Constill today. Endurance is best increased by work between 80 and 100 per cent of the $\mathrm{VO}_{2}$ max. Never forget these figures: - 80 per cent $\mathrm{VO}_{2}$ max. is your halfmarathon speed; 90 per cent is your 10 k speed; 95 per cent is your 5 k speed and 100 per cent is your 3 k speed. If your 1500 m speed is 5 mins ( $80 / 400$ ), all the other speeds will be about four seconds per 400 m slower, i.e. 3 k (84), 5 k (88), 10k (92), and half-marathon (96). As the time per 400 slows with each distance, the DURATION OF RUNNING INCREASES, especially when doing repetition running, e.g. 3 k speed $(100 \%)-16 \times 400$ in 84 secs, 100 jog. 5 k speed $(95 \%)-7 \mathrm{x} 800$ in $2: 56100$ jog. 10k speed $(90 \%)-6 \times 1$ mile in 6:08 50 m jog; half marathon speed ( $80 \%$ ) - Run nine miles at 6:24/mile.
7) NEVER LOSE SIGHT OF PURE SPEED. Speed is rate of stride $x$ length of stride. The first is improved by running up and sprinting 30 metres, the run up is not less than 20 metres. The Russians call this "pure speed". The legs are moving at maximum speed, but you will NOT be travelling at maximum speed until the stride-length increases 30 metres farther on. Increased stride length comes from increased legstrength. Hopping regularly is a great strengthener, especially up gradients.
8) EAT REGULARLY AND CORRECTLY. Moderate meals every four hours = Greater physical output. Think fruit, vegetables, fish whole grain cereals, lean meat.


## Nike Running Clubs

Nike Running Clubs

## Athletics on the Internet

## by Tim Grose

THESE DAYS the Internet seems to be everywhere. Every time you turn on the radio every other advert seems to be for a dot.com this or a .co.uk that. There is a largely false impression that all you have to do is to setup a website and you will become an instant millionaire.

This maybe true if you do everything at the last minute or sell books from a river beginning with $A$ but the Internet is much more than these so called e-commerce sites. It really just provides a quick and accessible medium for anyone to publish anything about anything and thus for everyone else to find out about it.

In recent months the number of sites providing information about athletics and running in the UK is growing fast and some commercial sites backed up by sizeable corporate finance are starting to emerge. So are they any good and what is around? This article provides a summary of what is currently available and what each tries to achieve.

The athletics websites have been classified into five main categories:

- News sites - the main focus of these is to provide news about the sharp end of the sport and they tend to be commercial sites that are principally there to make money and/or advertise the backer's goods.
- Federation sites - these are the sites, usually official ones, of the governing bodies of our sport.
- Information sites - these are usually run by enthusiasts on a non profit making basis and provide detailed information on things like ranking lists and running tracks.
- Club sites - these can vary from a simple one page site giving the name and address of the secretary to more grand affairs where you can find out everything you could possibly want to about your local club.
- Training sites - these are ones that contain information on training

NEWS SITES
Onrunning
http://www.onrunning.com


This site launched in early 2000 and is run by Brendan Foster's View From company. It aims to provide something "For Every Runner" and after a shaky start when it suffered from a lack of content is now starting to improve. The forthcoming fixture list is one of the most comprehensive around and quite a few open track \& field meetings are included. The results and news service are however largely restricted to top-class national and international events. You can now also purchase View From kit online with apparently $20 \%$ off the normal price.

## Athletics Net

## http://www.athleticsnet.com

Athletics Net launched just a few days after onrunning and is run by CGU, the sponsors of UK Athletics, and solely concentrates on
national standard events which really is its downfall. The flash graphics unfortunately do not conceal the lack of content - for instance only three articles in the last 2 weeks does not make for a site that one would want to check every day. The events section is even more sparse and curiously in March tells us that the indoor season has begun when of course it has finished and the "coming soon" section mentions 3 events which are all in August!

## Track \& Field Athletics Online

http://www.athletics-online.co.uk/running.htm
This was the original athletics news website in the UK and until recently was single-handledly run by Paul Halford from his bedroom in Newport. Paul has put a tremendous amount of effort into the site and should be congratulated on taking what started as an extension to his training diary into a full-blown news site. The site is in the process of coming under the Sportscreen http://www.sportscreen.com stable of sporting websites so it will be interesting to see which of the above three proves to be the best in the run up to Sydney.

Another good source for news of athletics in the UK is Yahoo http://uk.sports.yahoo.com/ headlines/sport/athletics.html who devote a whole
page to headline news items and with their feed coming straight from Reuters and the Press Association, the items are always up to date.

Other sites worth visiting for news include Sporting Life http://www.sporting-life.com, The Times http://www.the-times.co.uk and the BBC News site http://news.bbc.co.uk.
The IAAF site : http://www.iaaf.org and the UK Athletics one http://www.ukathletics.org also carry news and are covered in more detail below.

However none of the sites currently get anywhere close to matching Athletics Weekly for the depth of news and results coverage that they provide so it will be interesting to see whether the current holding page at http://www.athletics-weekly.co.uk grows into a proper site.

## FEDERATION SITES

## British Milers' Club

http://www.british-athletics.co.uk/bmc
The BMC has had a site for a few years but unfortunately it is in need of some attention, as it has not seen too many updates recently which is partly due to the demise of the British Athletics site described below. If nothing else, it does at least remind you of the BMC fixture list. If anyone would like to host the site or has some good ideas for livening it up, please contact Matthew Fraser Moat.

## UK Athletics

http://www.ukathletics.org
This is the official site of the national governing body UK Athletics and, according to them, is currently undergoing a bit of an upheaval. At the moment, as well as giving you the contact details of Dave Moorcroft and his cohorts (but not Dave's email address), it also provides headline news items, results and a diary of the major UK meetings, UK and world records, top 10 event ranking lists and athlete biographies. The biographies cover just about every current athlete who has represented the UK in senior competition and are very detailed but do seem to lack any pictures of the stars.

## International Amateur Athletic Federation

 http://www.iaaf.org

The official site of the International Amateur Athletics Federation contains a lot of information but it can be a bit hard to find what you require until you are familiar with the layout.

One useful feature is that you can download the rulebook - did you know, for instance, that a track is measured 30 cm from the curb. Email and website details are also given on all the approximate 200 member federations but for those not versed in foreign tongues, Alta Vista translations,
http://babelfish.altavista.com/cgi-bin/translate can be useful if not always totally accurate.

## British Athletics

http://www.british-athletics.co.uk
This is the unofficial site of British Athletics and was setup by Costos Zacharides (known as Zac). It was in its heyday about two years ago when there was talk of it becoming the official site of the former British Athletics Federation but with their demise this never came off. The site is now virtually closed and most of what is left on it is well out of date. It does however continue to hold a very strong position, as many mistakenly believe it is an official site and so many sites continue to link to it.

Other federation sites of particular interest are the Scottish Athletics Federation http://www.saf.org.uk, the recently created Northern Ireland Athletics Federation one http://www.niathletics.org and the Athletic Association of Ireland http://www.athletics ireland.ie.

## INFORMATION SITES

UK Running Track Directory
http://www.runtrackdir.com
This site is run by Tim Grose - the author of this article and former editor of the BMC News. It contains details on all the 550+ running tracks in the UK from the major stadia like Crystal Palace to the old disused cinder track in the local park. For each track, the address, maps of the location, map references, telephone numbers, opening times, facilities, clubs that use it and a short history is given. Pictures and diagrams of each track showing the position of all the fieldevent facilities have recently started to be added. For historians there is also a section on tracks that no longer exist. The site is rather a labour of love and is extensively researched but Tim (email tim@runtrackdir.com) very much appreciates people sending him information about the tracks you know about.

## UK Track \& Field All-Time Lists

http://members.aol.com/martinrixx/index.htm
This provides a tremendous resource and is run by National Union of Track Statisticians member, Martin Rix. All events and age groups are listed on the site and in the main events the lists for seniors are well over 100 deep. All UK sub 4 milers are listed which now number 144. A certain Roger Bannister is now equal 89th but regrettably most of the very best times date from the 1980s. Martin is always quick to update the lists and if you can spot a mistake you will probably get a prize!

Track \& field all-time performances homepage
http://www.algonet.se/~pela2/


This site which is hosted by Peter Larsson contains deep all-time world ranking lists for all events. The depth of coverage is very impressive with, for instance, 1000 sub 1:45.00 800s listed.

Other statistical sites of particular interest are: The 800 m home page http://personal.computrain.nl/eric/m800/800m - the site http://www. $800 \mathrm{~m} . \mathrm{cjb}$.net.

For $1500 \mathrm{~m} / \mathrm{mile}$ there is: The 1500 m site http://www.usuarios.iponet.es/acarras/athletics/15 00.html and the site of Bob Sparks http://easyweb.easynet.co.uk/~rsparks/ which contains a sub 4 chronicle.

## CLUB WEBSITES

There are more and more clubs now with a web
presence and rather than listing a selection of them, please refer to the UK Athletics Club Website Directory http://www.runtrackdir.com/ ukclubs which contains about 800 links and is continually updated. If your club has a site that is not listed please contact Tim Grose tim@runtrackdir.com

## TRAINING SITES <br> \section*{Frank Speaking}

http://www.serpentine.org.uk/advice/coach/coach.htm
No fewer than 37 of Frank Horwill's training articles, many of which have appeared in previous BMC News, are available on the Serpentine RC website.


## Sports Coach

http://www.brianmac.demon.co.uk
This site is hosted by Brian Mackenzie - a senior UK athletics coach and contains information on just about everything to do with training and coaching. A selection of articles includes ones on heart-rate monitors, training for speed and a description of plyometrics. There is even an online calculator for the Balke and Kosmin tests as regularly featured in past BMC news.

## GETTING TO VENUES

Last year Steve Mosley and Tim Brennan received well over one thousand telephone calls between them. About a quarter of them were merely to ask directions to the meeting. We therefore take this opportunity to print directions for Watford, Cardiff and Solihull.

## For Watford

From the South or West
From the M25 Junction 19, follow the slip road to the roundabout. Go straight over on the A41 and almost immediately filter left for the A405 North. At the roundabout turn second left down the A405. Follow this for a mile to the first set of traffic lights. Turn left into Horseshoe lane. This is signposted for the sports centre. The sports centre and track are 400 m down the road on the right.
From the North and East
From the M1 Junction 6 turn left down the A405. After half a mile at a set of traffic lights turn right into Horseshoe lane. This is signposted for the sports centre. The sports centre and track are 400 m down the road on the right.

## For Cardiff

Travel directions from East and West
M4 J33 (Cardiff West services) turn onto A4232 (Dual carriageway). Follow road for 4-5 miles. Turn left onto B4267 (sign post Cardiff Athletic Stadium). Track is 200 m up road on right
Track - phone 029-2022 5345
From train station (both taxi rank and bus station are in front of main foyer)

Walking (Approx 2 miles - 15mins)
From main foyer of station. Turn left onto Wood street by National rugby stadium. Follow road over river and keep straight on. At Jeff White garage fork left and under railway. Ninian Park football ground is on left. Track is visible straight ahead.
By train.
At Cardiff central details for Cardiff City Line will be available. Get off at Ninian Park (journey time approx 5 mins ).Ninian Park football ground is on left. Track is visible straight ahead.
Hotels. Recommended B\&B's are in Cathedral road ( 5 min walk from town centre \& train station) - Just over the road from Institute of sport and flat parkland Cathedral Hotel - 029-2023 6511

## For Solihull

Travel directions.
From M42 - J5 travel north on Solihull by-pass (A41).
Take 1st left and then 2 nd exit off island along Warwick Road. Continue to roundabout then turn left along Lode Lane. Next island take 3rd exit into Blossomfield Road. Track and parking 300 yds on the left. Additional parking in Princes Way. Solihull Railway Station on opposite side of Blossomfield Road via Birmingham New Street Station.
Norman Green Athletic Centre, Blossomfield Road, Solihull. B91 1NB
Track - phone 01217054474

## For more detailed information see: http://www.runtrackdir.com

## Afraid to race

by Brendan Hackett

YOU hang back early on and settle in;"Better not go off too fast you think. I don't want to blow up". The race develops and you think; "I will wait until 150 m to go before making my move". But the leaders make their move earlier than that. As they battle it out up front you at last start your run for home. You pick off a couple of tiring runners and your late surge brings you into third. If only you had moved earlier or stayed a little closer to the front. Maybe next time!

Are you a runner like this or maybe you know somebody like the fellow who finished fifth. He did all right considering he had the flu, had a late night and hasn't done any track work for the past month. How do you know so much about him? Well he told you all this in the warm-up and in case you weren't listening you overheard him telling some others in the shower after the race.

At least these runners got to the race. There are the runners who rarely race despite the fact that they are flying in training. Runners of this type check the results and based on their recent time trial or their pb of a few years ago estimate where they would have finished.

These athletes are familiar to all of us. Although they appear different, they are in reality quite similar. Something is holding them back, one seems to be a bit too cautious, the second makes excuses for his or her less than satisfactory performance and the third avoids finding out exactly how he or she rates.

They are all to some degree afraid.
Fear of failure is one of the main reasons for underachievement in sport. Why are people afraid to fail or afraid to make a move that could be the winning of the race? When you compete you are taking a risk. You are putting yourself up against others, you are testing yourself and unlike training you have an audience. So you are taking a social risk. There is a threat to your self-esteem.

Self-esteem is how you feel about yourself. It is your sense of worth. Self-esteem is based on two interlinking beliefs:

## 'I am capable and I am valuable (likeable)'.

The development of these beliefs is a life long process. The extent to which you believe these two thoughts is a measure of your self-esteem. Most of your beliefs are formed in your early years. Comments and actions of others, particularly those closest to you or whose opinion you value play a large part in the formation of your beliefs. This is especially true of beliefs about yourself.

For most people their sense of self worth is based primarily on the opinions of others. Now you can see why racing is so threatening. When
you compete, you risk criticism, failure, embarrassment and disappointment. If your performance doesn't go well you wonder what others like your mates, your coach or your parents will think of you. Most people are over-concerned about what others think of them. So instead of taking risks or making winning moves many athletes play safe or make excuses about their performance. They do this as a means of selfpreservation.

In addition to the fear of others' comments or opinions you can easily become your own biggest critic. This is often a symptom of low self-esteem and can be extremely destructive. An athlete like this is never content. Athletics is about setting yourself a challenge and the pursuit of conquering that challenge. Training, racing, coaching, achievement and setbacks are all parts of that journey. It is a useful exercise to remind yourself often of the reasons why you are involved in athletics. If you are not sure or suspect that it is for reasons other than personal challenge then re-evaluate your participation in sport.

Unfortunately some people are involved to please others. On the other hand, some coaches and officials are involved for the gratification of their own ego. If people like this are in your circle it is very difficult to develop a healthy self-esteem. Self-esteem is bolstered in a caring environment where the fear of ridicule or embarrassment is absent. Parents, teachers and coaches can be primary builders of self-esteem by the way they treat their charges. Encouragement and confidence- building is an ongoing process and it is the best way to combat the fear that is in most people.

The central message that should be relayed to every athlete is;
'Doing your best is what is most important. The most important person to please is yourself" ${ }^{\prime \prime}$.

This sounds simple but it is the essence of good coaching
Like most things in sport prevention is better than cure. If you are dealing with an athlete or you are an athlete that did not enjoy the benefits of positive encouragement and consequently are held back by fear,then what steps can you take to improve your situation?

- It is impossible to change a situation that you are not aware of. That is why creating awareness is the first step. If you identify with any of the examples given here and think that fear is an issue holding you back then find out more about it. Reading and talking to somebody encouraging can build your awareness of the impact of
fear. When choosing to talk about your fears you must feel safe so take time to choose the right person.
- Set targets that are challenging to you and not based on somebody else's opinion. Try and get into an environment where you feel comfortable. Train with people who are for the most part positive. Work with a positive encouraging coach. If you are a coach then develop an attitude that praise and encouragement are what bring out the best in people. We have a saying in Ireland
"Praise the young and they thrive".
That applies to every age.
- It is also necessary for the athlete to develop a more positive approach. Adopt the attitude that doing your best is the most important thing. It is a rare person that is totally fear free. Of course we want to look good in others' eyes but if you can live by the attitude that;
"You can please some of the people all of the time, and all of the people some of the time but you will never please all of the people all of the time", then you will remove a lot of self imposed pressure.
- With regard to race specific fears it is imperative that you work on a variety of tactics in training. Practice leading, try kicking from further out than you normally do or whatever is relevant to you. Try these different tactics in low-key races. It requires a change of attitude to experiment in races. You will know what you are trying and it is the only way you are going to find out if a different approach has potential for you.
- Avoid making excuses, take responsibilities for your actions. If you go to a race then have a goal in mind. If you are not feeling well then don't race. If you toe the line that means you are ready to reach your goal. Seek challenges and be prepared for setbacks. You have good days and bad days-that is sport. The poem below illustrates this very well. It is about taking risks and having courage which is the opposite to fear.

[^0]
# New, yet not so new 

## A modern view of coaching

## by Wilf Paish

SHOULD we believe much of what we read and hear then all that we have done in the past to help prepare athletes should be banished to the history books? I frequently have the opportunity to listen to young graduates in sports science, some of whom I helped to prepare for their various degrees, who inform me that sports' science is progressing at an alarming rate. Perhaps they are just poor History students?

I have kept my finger on the pulse of developments in most scientific aspects of sport. I believe that it is information technology that has improved to make us all more aware. In recent editions of Athletics Weekly UK Athletics listed as one of the reasons for coach revalidation was to make sure coaches keep up to date with modern trends. This set my trend of thought to examine how much has really changed in the basic principles associated with sound athletics coaching. I came to the conclusion that it was very little.

There is no doubt that a knowledge of "plyometrics" has helped us to develop more powerful athletes. It has given a time, hence a speed component, to the greater forces, which we have developed through strength training. In the texts which I read, and practical sessions which 1 observe, across a very wide spectrum of sports, a common denominator is frequently "bounding", using the jumps decathlon tables which 1 introduced in the early 1960s. The seeds for the idea came when 1 was studying at medical school when we were introduced to "long" and "short" term energy provision in the early 1950s.

As an avid collector of almost anything I purchased a number of early newspapers known as the London Illustrated Sporting News dating from the $1850 \mathrm{~s} / 60 \mathrm{~s}$. In these papers I read of the exploits of the professional "leapers", who were mainly based in the North Of England, and the distances which they recorded in a whole series of "sequence" jumping events. Events such as two hops a step and a jump, four hops and a jump etc. provided the base for the final concept. Then with a basic knowledge of percentile rankings the "Jumps Decathlon" was born. I am happy to say that it still has a place in our training today.

When I look at the etchings on Ancient Greek pottery, and view some of my historical films from the early days of cinematography, I note that the basic movements for all of the throwing events remain the same. This is hardly surprising since the techniques are imposed by
the human anatomy, which has hardly changed over many, many centuries. I admit that styles such as the Fosbury Flop have changed, but the basic mechanics of impulse is the same now as when the first person jumped to clear an obstacle.

Of course our records continue to improve, that will always be the case mainly because of advances made in fields other than coaching/training methods. I need not remind readers that progressive resistance training, still the basic for all strength development, came to us via an ancient Greek culture where Milo of Croton carried a bull calf each day. As the calf got heavier so too did the carrier get stronger! Should any of our current coaches deem to use the systems employed by the muscle men such as Muller, Sandow and Maxick from the 1890s then their prodigies would improve. Indeed, I still produce Olympians using elastics and medicine balls as training aids taken from ideas, which I got from texts written in this very period.

I had much to do with medallists, in middle and distance events from the last Olympics in Atlanta; something, which I do not believe any other coach in the UK can state. In terms of the Olympics, what can be more recent than that?

I know what they did in training since I helped with their schedules and their preparations leading up to the Games. I can assure all of your readers that most of it was based upon the work done by A.V. Hill during the 1920s together with his ideas if intermittent running, and the subsequent modifications by researchers immediately before World War two.

I still have the opportunity to listen to Coach Education of today. I can honestly say that 1 hear nothing new. A factor supported by many other outstanding coaches of my era. There is certainly a lot more jargon, less emphasis on the art of coaching. Considerably more research taken from Web.Sites much of which would stand up to careful analysis. The science of coaching is extremely easy to validate. It only needs a carefully planned questionnaire. While the marking might take time, there isn't really a limit on the number, which could be validated at one sitting.

But, coaching is about an art. The art of producing athletes whom continue to improve. This is a factor, which is virtually impossible to measure, and validation would be a very time consuming and costly venture. It would be a very time consuming and costly venture. It would mean an experienced and well-qualified
validator observing a coach working with a group of athletes. Incidentally, the system which I used for the many coaches which I validated. Critics would say, such evidence can be gleaned from the ranking lists. An idea which I would wholly support.

As a trained educator, I fully endorse the idea that coach education MUST NOT remain static. I must also insist that as long as the basic knowledge was sound in the first place little has progressed since any of our current coaches were first validated. That is unless we infer that what we did in the past was not sound. Society has changed, rules regarding safety at work and play have changed, so too has the litigation fuelled environment in which we must operate. However, to use philosophical changes as the sole justification for the proposed revalidation is "False Logic" as 1 hope 1 have outlined.

During the 1980s/1990s we moved away from Coach Education towards coach validation. All education was linked to manuals with validation relating only to those pages. When I look back through the programme of lectures, workshops, training days etc, in which I was involved during the $1950 \mathrm{~s} / 1980$ s there was ample opportunity for any coach who wished to take advantage of it. I was often one. Hence the period I have been forced to take in the wilderness. However, to ignore the work done by men like Tom McNab, John Anderson, Harry Wilson, Frank Horwill, Peter Coe and a whole host of people who, although in the twilight of their careers, still have much to offer the sport, is one sure way to limit progress.

The way to revalidate coaches is through education, motivation, communication, mentoring etc. Then to take a leaf from our amateur pilots' log books. A coaching log book would form a simple, efficient cost affective document which 1 am sure all coaches would be proud to keep. The log book, would be the means by which the coaching "Licence" would be issued for an honest fee. This would more than cover the cost of any insurance cover. That is, as long there isn't a hidden agenda associated with revalidation, something experienced by those already forced through the process.


## All-Time World Distance Relay Lists

compiled by Alan Sigmon Men

## $4 \times 800 \mathrm{~m}$ Relay

| 7:03.89 | Great Britain |  |
| :---: | :---: | :---: |
| 7:04.70 | South Africa |  |
| 7:04.89 | St. Patrick's School Alumni (Kenya) |  |
| 7:06.5 | Santa Monica TC (US) |  |
| 7:07.40 | Soviet Union |  |
| 7:08.0 | University of Chicago Track Club (US) |  |
| 7:08.1 | Soviet Union |  |
| 7:08.5 | Federal Republic of Germany |  |
| 7:08.96 | Arizona State (US) |  |
| 7:09.1' | Kenya |  |
| 7:10.03 | Santa Monica Track Club |  |
| 7:10.14 | Bud Light Track America (US) |  |
| 7:10.3 | Federal Republic of Germany II |  |
| 7:11.1 | Byelorussia (Sov) |  |
| 7:11.17 | Penn State (US) |  |
| 7:11.3 | Italy |  |
| 7:11.42 | Belarus |  |
| 7:11.6 | South Africa |  |
| 7:11.62 | Great Britain II |  |
| 7:11.96 | Russia |  |
| 7:12.0 | Kenya "A" |  |
| 7:12.15 | VfB Stuttgart (FRG |  |
| 7:12.2' | Great Britain |  |
| 7:12.1' | Federal Republic of Germany |  |
| 7:12.2 | Great Britain |  |
| 7:12.29 | Villanova |  |
| 7:12.29 | Santa Monica Track Club (US) |  |
| 7:12.62 | Georgetown (US) |  |
| 7:12.62 | Santa Monica Track Club (US) |  |
| 7:12.66 | Great Britain |  |
| 7:12.7 | Russia (Sov) |  |
| 7:12.81 | Richmond University |  |
| 7:12.96 | Santa Monica TC |  |
| 7:13.1 | Ukraine (Sov) |  |
| 7:13.2 | Russia (Sov) |  |
| 7:13.4 | Leningrad (Sov) |  |
| 7:13.40 | Athletic Attic (US) |  |
| 7:13.48 | Arkansas |  |
| 7:13.5' | Soviet Union |  |
| 7:13.6 | France |  |
| 7:13.7 | Olympic Training I |  |
| 7:13.7 | United States |  |
| 7:13.87 | Arkansas |  |
| 7:13.9 | Kansas State (US) |  |
| 7:13.94i | Global Athletics \& Marketing (US) |  |
| 7:13.95 | Georgetown (US) |  |
| 7:13.96 | MTV Ingolstadt (FRG) |  |
| 7:14.21 | VfB Stuttgart (FRG) |  |
| 7:14.3 | Moskva (Sov) |  |
| 7:14.3 | Russia | 3 |
| 7:14.34 | Florida (US) | 1 |
| 7:14.37 | Emmendin (FRG) | 2 |
| 7:14.48 | Bud Light |  |
| 7:14.54 | George Mason |  |
| 7:14.6' io | Santa Monica Track Club |  |
| 7:14.64 | Virginia (US) |  |
| 7:14.65 | Penn State (US) |  |
| 7:14.65 | Fiamme Azzurre (Ita) |  |
| 7:14.72 | Abilene Christian |  |
| 7:14.78 i | Reebok Enclave (US) |  |
| 7:14.86 | Arkansas | 2 |
| 7:14.89 | Nebraska |  |
| 7:14.9 | University of Southern California (US) |  |
| 7:14.9' | United Kingdom | 2 |
| 7:14.9 | Kenya |  |


|  | London | 30 Aug 82 |
| :---: | :---: | :---: |
|  | Stuttgart | 6 Jun 99 |
|  | Stutgart | 6 Jun 99 |
| Mt. SAC | Walnut | 26 Apr 86 |
|  | Moskva | 5 Aug 84 |
| King | Durham | 12 May 73 |
|  | Podolsk | 12 Aug 78 |
|  | Wiesbaden | 13 Aug 66 |
|  | Tempe | 7 Apr 84 |
| IAC | London | 5 Sep 70 |
|  | Tempe | 7 Apr 84 |
| Sun Angel | Tempe | 7 Apr 84 |
|  | Wiesbaden | 13 Aug 66 |
| Spart | Moskva | 25 Jul 79 |
| Penn | Philadelphia | 27 Apr 85 |
| Euro R | Sheffield | 5 Jun 92 |
| Euro R | Portsmouth | 5 Jun 93 |
|  | Johannesburg | 30 Apr 73 |
|  | London | 30 Aug 82 |
| Euro R | Portsmouth | 5 Jun 93 |
|  | Mombasa | 17/18 Jun 78 |
| NC | Krefeld | 26 Jul 86 |
|  | London | 22 Jun 66 |
|  | Fulda | 13 Jun 68 |
| Euro R | Sheffield | 5 Jun 92 |
| Penn | Philadelphia | 24 Apr 82 |
| Penn | Philadelphia | 24 Apr 92 |
| Penn | Philadelphia | 24 Apr 82 |
| Sun Angel | Tempe | 2 Apr 83 |
| Euro R | Portsmouth | 5 Jun 93 |
| Spart | Moskva | 25 Jul 79 |
| Penn | Philadelphia | 24 Apr 82 |
| Mt. SAC | Walnut | 27 Apr 85 |
| Spart | Moskva | 25 Jul 79 |
| NC | Tbilisi | 15-7 Sep 78 |
| Spart | Moskva | 25 Jul 79 |
| Sun Angel | Tempe | 2 Apr 83 |
| Penn | Philadelphia | 24 Apr 82 |
|  | London | 22 Jun 66 |
| Coeur | Bourges | 23 Jun 79 |
|  | Eugene | 1 Aug 70 |
| Coeur | Bourges | 23 Jun 79 |
| Penn | Philadelphia | 24 Apr 99 |
| Drake | Des Moines | 24 Apr 70 |
| N Bal Inv | Boston (Rox) | 6 Feb 00 |
| Penn | Philadelphia | 27 Apr 85 |
| NC | Krefeld | 26 Jul 86 |
|  | Dortmund | 30 Jul 83 |
| Spart | Moskva | 25 Jul 79 |
| Euro R | Sheffield | 5 Jun 92 |
| Penn | Philadelphia | 24 Apr 93 |
| NC | Dortmund | 30 Jul 83 |
| S Ang. | Tempe | 6 Apr 85 |
| Penn | Philadelphia | 27 Apr 96 |
|  | Houston | 16 Feb 80 |
| Penn | Philadelphia | 24 Apr 82 |
| Penn | Philadelphia | 25 Apr 87 |
|  | Vigevano | 28 Sep 91 |
| Penn | Philadelphia | 29 Apr 95 |
| N Bal Inv | Boston (Rox) | 6 Feb 00 |
| Penn | Philadelphia | 25 Apr 87 |
| Drake | Des Moines | 26 Apr 85 |
| Col R | Los Angeles | 13 May 66 |
| IAC | London | 5 Sep 70 |
| Euro R | Sheffield | 5 Jun 92 |

(Peter Elliott 1:49.14, Gary Cook 1:46.20, Steve Cram 1:44.54, Sebastian Coe 1:44.01) (Gideon van Oudtshoorn 1:46.9, Hezekiel Sepeng 1:45.2, Jurgens Kotzé 1:48.3, Johan Botha 1:44.3) (David Kiptoo 1:46.4, Joseph Tengelei 1:48.2, William Chirchir 1:45.7, Japhet Kimutai 1:44.6 (James Robinson 1:49.8, David Mack 1:46.7, Earl Jones 1:45.2, Johnny Gray 1:44.8) (Leonid Massunov —, Aleksandr Kostetskiy _ , Vasiliy Matvetev _ , Viktor Kalinkin __) (Leonid Masunov —, Aleksandr Kostetskiy $\quad$, Vasiliy Matvetev $\longrightarrow$, Viktor Kalinkin
(Tom Bach 1:50.5y, Ken Sparks 1:47.1y, Lowell Paul 1:48.0y, Rick Wohhhuter 1:44.8y) (Vladimir Pololyakov $1: 47.0$, Nikolay Kirov $1: 47.6$, Vladimir Malozemlin 1:47.0, Anatoliy Reshetnyak 1:46.5) (Manfred Kinder 1:46.9, Walter Adams 1:47.5, Dieter Bogatzki 1:47.9, Franz-Josef Kemper 1:46.2) (Pete Richardson 1:47.5, Eddie Davis 1:47.8, Treg Scott 1:48.1, Mike Stahr 1:45.6)
(Naftali Bon 1:49.8y, Hezekiah Nyamu 1:49.8y, Thomas Saisai 1:46.6y, Robert Ouko 1:45.4y) (Charlie Taliaferro 1:50.2, Scott Rider 1:48.0, Mark Handelsman//sr 1:46.2, Jeff West 1:45.7)

Williams 1:49.0, Randy Stephens 1:48.3, Jack McIntosh 1:47.2, James Mays 1:45.7)
(Bodo Tümmler 1:47.6, Harald Norpoth 1:47.4, Jörg Balke 1:47.2, Herbert Missalla 1:48.1)
(Vance Watson 1:49.3, Steve Shisler 1:47.9, Chris Mills 1:48.5, Randy Moore 1:45.5) (Andrea Giocondi _ , Alberto Barsotti _ _, Giuseppe D'Urso __, Andrea Benvenuti __) (Vaid Talonov _ _, Mikhail Ryabukhin __, Igor Borisov _ _, Dmitri Sereda __) (Donald Timm -, Clyde de Marigny -, Marcello Fiasconaro , Danie Malan ) (Rob Harrison 1:47.83, Steve Caldwell 1:49.04, Chris McGeorge 1:45.91, Graham Williamson 1:48.84) (Sergey Melnikov _ , Sergey Samoylov _ , Andrey Loginov _ , Aleksey Oleynikov __)
(Andreas Baranski __, Hans Allmandiger __, Herbert Wursthorn __, Matthias Assmann __) (Graeme Grant 1:49.5y, Mike Varah 1:48.9y, Chris Carter 1:48.0y, John Boulter 1:48.2y) (Bodo Tümmler 1:49.4y, Walter Adams 1:47.5y, Harald Norpoth 1:50.0y, Franz-Josef Kemper 1:47.7y) (Matthew Yates 1:49.2, Martin Steele 1:45.9, Kevin McKay 1:48.4, Steven Heard 1:48.6) (Marcus O’Sullivan/Ire 1:50.2, Mike England/US 1:46.6, John Hunter/Ire 1:46.5, John Marshall/US 1:49.0) (Christian Cushing-Murray 1:50.8, Tracy Baskin 1:48.4, George Kersh 1:45.8, Johnny Gray 1:47.2) McKithen 1:49.5,_ Caton 1:47.9, Brian McNelis 1:46.1, John Gregorek 1:49.2) (Charlie Taliaferro 1:50.7, Johnny Gray 1:49.5, Jeff West 1:45.5, David Mack 1:47.0) (Steven Heard 1:49.6, David Sharpe 1:48.7, Matthew Yates 1:48.0, Curtis Robb 1:46.4)
(Edwin Koech/Ken 1:49.4, Phil Norgate/UK 1:48.5, Henry Kimalel/Ken 1:47.1, Sosthenes Bitok/Ken 1:47.1) (Mark Handelsman/Isr 1:50.9, David Mack 1:47.1, Jeff West 1:48.1, Johnny Gray 1:46.9)
(Vladimir Malozemlin__, Belokov [Viktor Belokoskov?]__ , Vladimir Sheronov__, Valeriy Abramov__)
(James Mays 1:48.2, Phillip Rolle 1:48.4, Randy Stephens 1:48.6, Jack McIntosh 1:48.2) __ Jones/US 1:50.9, Tom Moloney/Ire 1:49.3, Randy Stephens/US 1:46.7, Stanley Redwine/US 1:46.6) (Aleksandr Ustantsev 1:51.0y, Remir Mitrofanov 1:49.2y, Oleg Raiko 1:47.0y, Vadim Mikhailov 1:48.8y) (Roqui Sanchez 1:49.1, Joël Riquelme 1:47.8, Philippe Dupont 1:48.9, Roger Milhau 1:47.8) (Marcel Philippe 1:49.1y, Dean Bjerke 1:50.4y, Ralph Schultz 1:48.9y, Lowell Paul 1:47.8y) (Todd Harbour 1:48.3, Gerald Masterson 1:47.3, Evans White 1:49.6, Rob Casselman 1:48.5) (Ryan Stanley/US 1:49.9, Sharif Karie/Som 1:48.6, James Karanu/Ken 1:46.3, Seneca Lassiter/US 1:49.1) (Dale Alexander 1:50.7y, Dave Peterson 1:48.8y, Bob Barratti 1:50.3y, Ken Swenson 1:46.5y) (Joey Woody 1:49.34, Karl Paranya 1:48.31, Rich Kenah 1:48.48, David Krummenacker 1:47.81) (__ Pedati 1:49.4, _ Frenshaw [or Franshaw?] 1:48.5, Kevin King 1:48.9, Miles Irish 1:47.2) (_ Modlmair __, __ Steller __, Hans-Peter Ferner __, Hans Lang __) (Herbert Wursthorn__ , Andreas Baranski__, Hans Allmandinger__, Matthias Assmann__)
(D__ Volodin __, T__ Voytetskiy _, O__ Stepanov _, A__ Oleynikov __) (Dedric Jones 1:49.3, Lewis Lacy 1:48.0, Steve Adderly 1:50.5, Scott Peters 1:46.5) (Harald Olbrich _ _, Reinhard Aechtle __, Ulrich Hilderbrandt _ _ Ulrich Karck __ (Jack McIntosh/US 1:49.8, James Mays/US 1:47.8, Michael Shea/US 1:50.5, Frank O'Mara/Ire 1:46.4) (Miklós Árpási/Hun 1:50.81, Alex Morgan/Jam 1:46.64, Ibrahim Aden/Som 1:48.95, Julius Achon/Uga 1:48.14) (Gerald Masterson _ , Don Frichtel _ , __ Rafferty _ _, Johnny Gray 1:47.6y) (Theo Hodge 1:50.2, Ray Brown 1:46.7, Darrell Earman 1:49.5, John Hinton 1:48.3) (Steve Balkey 1:51.4,___Anderson 1:49.4, Chris Mills 1:46.1, Ray Levitre 1:47.8) (Riccardo Cardone _ , Davide Tirelli __, Andrea Benvenuti _ , Giuseppe D’Urso __) (Peter Engelbrecht/SA 1:49.7, Ozzie Mdziniso/Swa 1:49.7, Thomas Korir/Ken 1:49,5, Savieri Ngidhi/Zim 1:45.9) (Elliot Gaskins 1:50.66, Kevin Murphy 1:49.19, Mike Schroer 1:48.23, Bryan Woodward 1:46.70 (Doug Consiglio/Can 1:51.3, Gary Taylor/UK 1:48.7, __ Moncrieffe/Can 1:47.5, L__.Brown/US 1:47.4) (Paul O'Callaghan/Ire 1:49.8, Glen Cunningham/US 1:46.8, Regis Humphrey/US 1:49.6, Jean Verster/RSA 1:48.6) (John Link 1:51.7y, Bruce Bess 1:49.7y, Dave Buck 1:48.2y, Dennis Carr 1:47.8y) Martin Bilham 1:50.0y, David Cropper 1:49.0y, Mike MacLean 1:48.4y, Peter Browne 1:50.0y) (Lukas Sang 1:52.9, Jonah Birir __, Nixon Kiprotich _ _, Joseph Chesire __)

## $4 \times 1500 \mathrm{~m}$ Relay

14:38.8 West Germany
14:40.4 New Zealand
14:45.63 Soviet Union
14:46.16 Larios (Spain)
14:46.3 a United States
14:48.2 a France
14:49.0 France
14:50.2 New Zealand
14:50.2 Arkansas
14:50.82 South Africa
14:52.81 Villanova
14:52.81 Arkansas
14:53.34 Georgetown (US)

|  | Köln | 16 Aug 77 |
| :--- | :--- | :--- |
|  | Oslo <br> NC | 22 Aug 73 |
|  | Leningrad | 4 Aug 85 |
| Coeur | Madrid | 5 Sep 97 |
| Courges | 23 Jun 79 |  |
|  | Bourges <br> Saint-Maur | 23 Jun 79 |
|  | 25 Jun 65 |  |
| Auckland | 17 May 75 |  |
| Penn | Philadelphia | 27 Apr 85 |
|  | Port Elizabeth | 15 Oct 84 |
| Penn | Philadelphia | 28 Apr 84 |
| Penn | Philadelphia | 30 Apr 94 |
| Penn | Philadelphia | 27 Apr 91 |

[^1]| 14:53.43 | Arkansas | 2 | Penn | Philadelphia | 28 Apr 84 | (David Swain/UK 3:47.1, Tom Moloney/Ire 3:43.0, Gary Taylor/UK 3:43.1, Paul Donovan/Ire 3:40.3) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14:53.8 | France | 1 |  | Colombes | 2 Oct 71 | (Robert Leborgne 3:43.8, Jean-Pierre Dufresne 3:43.6, Raymond Zembri 3:43.4, Jacques Boxberger 3:43.0) |
| 14:54.84 | Arkansas | 1 | Penn | Philadelphia | 28 Apr 90 | (Gilbert Contreras/US 3:47.1, Eric Henry/US 3:42.1, Johan Boakes/UK 3:41.9, Reuben Reina/US 3:43.5) |
| 14:55.31 | Arkansas | 1 | Penn | Philadelphia | 26 Apr 86 | (Keith Iovine/US 3:48.6, Gary Taylor/UK 3:46.2, Espen Borge/Nor 3:45.7, Doug Consiglio/Can 3:44.9) |
| 14:56.8 a | British Milers Club (UK) | 3 | Couur | Bourges | 23 Jun 79 | (Alan Mottershead 3:45.0, Geoffrey Cooper 3:44.5, Steve Emson 3:42.7, Roy Wood 3:44.6) |
| 14:57.87 | Arkansas (US) | 1 | Penn | Philadelphia | 30 Apr 88 | (Eric Henry 3:47.5, Reuben Reina 3:48.0, Matt Taylor 3:43.5, Joe Falcon 3:38.9) |
| 14:58.0 | German Democratic Republic | 1 |  | Potsdam | 23 Jul 63 | (Manfred Matuschewski 3:44.0, Jürgen May 3:45.5, Siegfried Herrmann 3:44.1, Siegried Valentin 3:44.4) |
| 14:58.62 | Georgetown (US) | 2 | Penn | Philadelphia | 30 Apr 88 | (Ethan Frey 3:48.5, Grelle 3:43.6, John Trautmann 3:46.7, Mike Stahr 3:39.8) |
| 14:58.72 | Penn State (US) | 2 | Penn | Philadelphia | 26 Apr 86 | (Bob Hudson 3:46.2, Mark Overheim 3:42.2, Eric Carter 3:47.6, Steve Shisler 3:42.8) |
| 14:58.81 | Auburn (US) | 3 | Penn | Philadelphia | 26 Apr 86 | (Matt Parker 3:44.4, Bob Sheehan 3:48.9, Brian Abshire 3:42.8, Brian Jaeger 3:42.8) |
| 14:59.06 | TV Wattenscheid NC (Ger) | 1 | NC | Rhede | 9 Jul 95 | (_ Elferich _ , _ Ostendarp _ , Torsten Kallweit _ . Rüdiger Stenzel _ _ ) |
| 14:59.1 | Pro Patria (Ita) | 1 |  | Bergamo | 18 Sep 79 | (Carlo Grippo _ , Gaetano? Erba _ , Fulvio Costa _ , Vittorio Fontanella _ _ ) |
| 14:59.35 | Villanova | 1 | Penn | Philadelphia | 28 Apr 79 | (Dean Childs/US 3:48.6, John Burns/US 3:45.8, Amos Korir/Ken 3:44.3, Sydney Maree/RSA 3:40.7) |
| 14:59.57 | Indiana (US) | 3 | Penn | Philadelphia | 30 Apr 88 | (Charles Marsala 3:42.2, Keith Allen 3:49.4, Jim White 3:46.0, Mark Deady 3:42.0) |
| 15:00.23 | Villanova | 1 | Penn | Philadelphia | 24 Apr 93 | (Ken Nason/Ire 3:46.7, Mike Going 3:46.0, Brad Sumner 3:43.8, Louis Quintana 3:43.7) |
| 15:01.12 | Vfl Wolfsburg (FRG) | 1 | NC | West Berlin | 21 Jul 85 | (Jens Becker _ Wolfgang Schreiber __, Eckhard Rüter _ _ Uwe Becker _ _ ) |
| 15:01.35 | Villanova | 1 | Penn | Philadelphia | 26 Apr 80 | (Carey Pinkowski/US 3:49.1, Dean Childs/US 3:46.5, Amos Korir/Ken 3:46.4, Sydney Maree/RSA 3:39.4) |
| 15:01.5 | LG Bayer Leverkusen (FRG) | 1 |  | Flensburg | 1 Aug 81 | (Peter Belger _ , Paul-Heinz Wellmann _ , Karl Fleschen _ _ Harald Hudak _ _) |
| 15:01.62 | Arkansas | 1 | Penn | Philadelphia | 25 Apr 92 | (Gilbert Contreras/US 3:45.7, John Schiefer/US 3:43.4, Niall Bruton/Ire 3:46.9, Graham Hood/Can 3:45.6) |
| 15:01.96 | Villanova | 1 | Penn | Philadelphia | 25 Apr 81 | (Ken Lucks/Can 3:49.7, Marcus O'Sullivan/Ire 3:48.3, John Hunter/Ire 3:43.8, Sydney Maree/RSA 3:40.2) |
| 15:01.97 | Wisconsin (US) | 2 | Penn | Philadelphia | 24 Apr 93 | (Brian Dameworth 3:52.9, Donovan Bergstrom 3:41.4, Jason Casiano 3:43.4, Jerry Schumacher 3:44.3) |
| 15:02.08 | Arkansas | 1 | Penn | Philadelphia | 26 Apr 97 | (Mike Power/Aus 3:45.4, Ryan Wilson 3:42.1, Phillip Price 3:50.1, Seneca Lassiter 3:44.5) |
| 15:02.09 | Arkansas | 2 | Penn | Philadelphia | 25 Apr 81 | (Tom Moloney/Ire 3:46.9, Gary Taylor/UK 3:44.3, Randy Stephens/US 3:45.7, Frank O'Mara/Ire 3:45.2) |
| 15:02.6 | Poland | 1 |  | Athinai | 5 May 76 | (Henryk Szordykowski, Józef Ziubrak, Michal Skowronek, Henryk Wasilewski) |
| 15:02.63 | Providence | 3 | Penn | Philadelphia | 24 Apr 93 | ( _ Jackson/_(US?) 3:49.0, Mark Carrol//re 3:43.9, Mark Burdis/Ire 3:43.9, Andy Keith/UK 3:40.0) |
| 15:02.70 | Georgetown (US) | 2 | Penn | Philadelphia | 28 Apr 90 | (_ McCracken 3:47.2, Steve Holman 3:41.1, Peter Sherry 3:45.2, John Trautmann 3:49.2) |
| 15:02.8 | Villanova | 1 | Penn | Philadelphia | 24 Apr 82 | (Mike England 3:44.7, Marcus O'Sullivan/Ire 3:46.1, Ross Donoghue 3:50.1, John Hunter/Ire 3:41.9) |
| 15:02.91 | Villanova | 1 | Dogwood | Knoxville | 10 Apr 81 | (Ken Lucks/Can 3:48.8, Marcus O'Sullivan/Ire 3:48.3, John Hunter/Ire 3:45.1, Sydney Maree/RSA 3:40.8) |
| 15:03.0 a | United States | 1 | Cour | Bourges | 19 Jun 77 | (Mike Slack 3:45.4, Phil Kane 3:41.5, Steve Lacy 3:49.1, Mike Manke 3:46.0) |
| 15:03.0 | Villanova | 1 | Penn | Philadelphia | 24 Apr 76 | (Gary Trojanowski/US 3:48.0, George Mackay/US 3:45.8, Phil Kane/US 3:46.7, Eamonn Coghlan/Ire 3:42.5) |
| 15:03.2 | George Mason | 2 | Penn | Philadelphia | 27 Apr 85 | (_ Ismail/_ 3:48.4, _ Black/US 3:46.6, Ibrahim Okash/Som 3:46.3, Abdi Bile/Som 3:41.9) |
| 15:04.07 | Georgetown | 2 | Penn | Philadelphia | 26 Apr 80 | (_ Reilly 3:49.7, Kevin Byrne 3:50.3, John Gregorek 3:41.3, JamesDeRienzo 3:42.8) |
| 15:04.07 | Providence | 2 | Penn | Philadelphia | 30 Apr 94 | (David Healy/Ire 3:48.4, _ Jackson/_ 3:46.6, Andy Wedlake/UK 3:49.5, Andy Keith/UK 3:39.6) |
| 15:04.14 | Michigan | 2 | Penn | Philadelphia | 26 Apr 97 | (Jay Cantin/Can 3:44.2, Don McLaughlin/US 3:46.6, Scott MacDonald/Can 3:49.9, Kevin Sullivan/Can 3:43.4) |
| 15:04.2 | France | 1 |  | Versailles | 28 Jun 61 | (Jean Clausse 3:49.3, Robert Bogey 3:45.1, Michel Jazy 3:44.4, Michel Bernard 3:45.4) |
| 15:04.20 | Georgetown (US) | 2 | Penn | Philadelphia | 28 Apr 79 | (_ Ledder 3:48.6, John Gregorek 3:44.7, Kevin Byrne 3:46.4, Jim DeRienzo 3:44.5) |
| 15:04.6 | Great Britain | 2 |  | Athinai | 5 May 76 | (Jim McGuinness _ , Erwin Hartel__, Adrian Weatherhead __ Glen Grant _ _) |
| 15:04.7 | Wisconsin (US) | 3 | Penn | Philadelphia | 27 Apr 85 | (_Ames 3:49.6, John Easker 3:41.8, Kris Herdt 3:50.4, Tim Hacker 3:42.9) |
| 15:04.7 | Italy | 1 | Euro R | Sheffield | 5 Jun 92 | (Davide Tirelli _ , Fabio Olivo _ , Alessandro Lambruschini_ , Gennaro Di Napoli_ |
| 15:05.0 | Kenya | 2 |  | Auckland | 17 May 75 |  |
| 15:05.1 | Sporting CP (Portugal) |  |  | Lisboa | 17 Jun 92 | (António Monteiro _ . João Junqueira _ , Carlos Monteiro _ , Paulo Estiveira _ _ ) |
| 15:05.2 | LAC Quelle Fürth (FRG) | 2 |  | Flensburg | 1 Aug 81 | (_ Huschke _ , Christoph Herle _ , Klaus-Peter Nabein _ P Patriz Ilg _) |
| 15:05.29 | Western Kentucky | 2 | Dogwood | Knoxville | 10 Apr 81 |  |
| 15:05.38 | Arkansas | 1 | Penn | Philadelphia | 29 Apr 95 | (Ryan Wilson/US 3:47.9, Mike Morin/US 3:46.1, Jason Bunston/Can 3:46.6, Graham Hood/Can 3:43.8) |
| 15:05.5 | Dartmouth (US) | 4 | Penn | Philadelphia | 27 Apr 85 | (_ McGright 3:49.5, Jim Sapienza 3:45.3,_ O'Neal 3:48.0, Mike Fadil 3:42.7) |
| 15:05.7 | Villanova | 1 | Dogwood | Knoxville | 28 Apr 79 | (Dean Childs/US 3:47.1, Amos Korir/Ken 3:47.7, Sydney Maree/RSA 3:47.2, Don Paige/US 3:43.7) |
| 15:05.71 | adidas (Spain) | 2 |  | Madrid | 5 Sep 97 | ( J_ Moro _ _ Reyes Estévez _ , Enrique Molina _ Carlos García _ _) |
| 15:05.8 | Athletics West (US) | 1 | Mt. SAC | Walnut | 29 Apr 84 | (Ron Addison 3:50.0, Vince Draddy 3:44.3, Larry Mangan 3:43.1, Richie Harris 3:48.4) |
| 15:06.0 a | Penn State (US) | 3 | Penn | Philadelphia | 28 Apr 79 | (Tom Rapp 3:50.6, Bob Snyder 3:42.7, Mike Wyatt 3:46.6, Larry Mangan 3:46.1) |
| 15:06.0 | ASV Köln (FRG) | 3 |  | Flensburg | 1 Aug 81 | ( _ Jaroschek _ _ Henning von Papen _ . Manfred Nellesen _ . Thomas Wessinghage __) |
| 15:06.08 | Arkansas | 4 | Penn | Philadelphia | 24 Apr 93 | (Teddy Mitchell/US 3:51.9, Mike Morin/US 3:40.0, John Schiefer/US 3:49.7, Niall Bruton/Ire 3:44.5) |
| $4 \times 1$ Mile Relay |  |  |  |  |  |  |
| 15:49.08 | Ireland | 1 |  | Dublin | 17 Aug 85 | (Eamonn Coghlan 4:00.2, Marcus O'Sullivan 3:55.3, Frank O'Mara 3:55.6, Ray Flynn 3:56.98) |
| 15:59.57 | New Zealand | 1 |  | Auckland | 2 Mar 83 | (Tony Rogers 3:57.2, John Bowden 4:02.5, Mike Gilchrist 4:02.8, John Walker 3:57.07) |
| 16:02.4 | New Zealand | 1 |  | Auckland | 3 Feb 72 | (Kevin Ross 4:01.0, Tony Polhill 4:02.0, Richard Tayler 4:01.0, Dick Quax 3:58.4) |
| 16:05.0 | Oregon TC | 1 |  | Eugene | 30 May 68 | (Roscoe Divine/US 4:03.2, Wade Bell/US 4:01.0, Arne Kvalheim/Nor 4:03.3, Dave Wilborn/US 3:57.5) |
| 16:08.54 | Athetics West "Red" (US) | 1 | Oregon | Eugene | 4 May 84 | (Dan Aldridge 4:03.4, Doug Padilla 4:04.7, Tom Smith 4:01.9, Chuck Aragon 3:58.6) |
| 16:08.9 | Oregon | 1 | WCR | Fresno | 12 May 62 | (Archie San Romani 4:03.5, Vic Reeve/Can 4:05.4, Keith Forman 4:02.3, Dyrol Burleson 3:57.7) |
| 16:09.6 | West Germany | 1 |  | West Berlin | 24 Jun 69 | (Walter Adams 4:05.0, Bodo Tümmler 4:07.0, Harald Norpoth 3:58.9, Jürgen May 3:58.7) |
| 16:10.6 | Villanova | 1 | Penn | Philadelphia | 27 Apr 74 | (Tom Gregan/Ire 4:05.4, Brian McElroy/US 4:04.2, Eamonn Coghlan/Ire 4:00.9, John Hartnet//re 4:00.1) |
| 16:11.57 | Athletics West "White" (US) | 2 | Oregon | Eugene | 4 May 84 | (Larry Mangan 4:04.2, Randy Wilson 4:03.8, Richie Harris 4:05.1, Jim Spivey 3:58.5) |
| 16:11.65 | Arkansas | 1 | Penn | Philadelphia | 25 Apr 98 | (Phillip Price/US 4:04.8, Matt Kerr/Can 4:01.2, Mike Power/Aus 4:02.9, Seneca Lassiter/US 4:02.8) |
| 16:14.0 | Belgium | 1 |  | Audenaarde | 9 Sep 69 | (Gilbert van Manshoven _ _ Johnny Dumon _ . André de Hertoghe _ , Rudi Simon __) |
| 16:14.1 | University of Texas El Paso (Kenya) | 1 | Tex R | Austin | 3 Apr 76 | (Joseph Gichongeri 4:05.2, James Munyala 4:05.9, Frank Munene 4:05.5, Wilson Waigwa 3:58.5) |
| 16:14.4 | Manhattan | 2 | Penn | Philadelphia | 27 Apr 74 | (Pete Squires/US 4:05.9, Matt Centrowit/US 4:04.4, Joe Savage/US 4:03.3, Tony Colon/PR 4:00.8) |
| 16:15.12' | Iowa State | 1 | Drake | Des Moines | 24 Apr 81 | (Johnson Sirma/Ken 4:06.6m, Yobes Ondieki/Ken 4:03.4m, Richard Kaitany/Ken 4:01.4m, Bob Verbeeck/Bel 3:58.1m) |
| 16:15.5 | Tennessee | 1 | Dogwood | Knoxville | 15 Apr 77 | (Sam James 4:03.8, _ Young 4:07.5, John Wright 4:02.7, _ Lapp 4:01.5) |
| 16:16.2 | Villanova | 2 | Dogwood | Knoxville | 15 Apr 77 | (Mark Belger 4:04.1, _ Burns 4:07.6, Ed Takacs 4:01.9, Phil Kane 4:02.6) |
| 16:16.67 i | New York Athletic Club (US) | 1 | Dartm'th | Hanover, NH | 10 Jan 93 | (Brad Horton 4:07.2, J__ Smith 4:07.3, Brad Schlapak 4:02.8, Bill Burke 3:59.4) |
| 16:16.7 | Athletics West | 1 |  |  | 81 |  |
| 16:16.9 | Villanova | 1 | Dogwood | Knoxville | 14 Apr 78 | (Dean Childs/US 4:04.2, Ray Flynn/re 4:08.9, Mark Belger/US 4:01.4, Don Paige/US 4:02.4) |
| 16:17.35' | Colorado | 1 | Drake | Des Moines | 30 Apr 83 | (__ Carr 4:06.1m, __ Bannister/UK 4:03.0m,__ Brown 3:59.3m, Mark Scrutton/UK 4:03.3m) |
| 16:17.4 | Western Kentucky (UK) | 1 | Drake | Des Moines | 26 Apr 75 | (Erwin Hartel 4:07.5, Chris Ridler 4:03.7, Tony Staynings 4:05.5, Nick Rose 4:00.7) |
| 16:18.3 | Kansas State (US) | 1 | Drake | Des Moines | 23 Apr 76 | (__ Perez 4:13.2, Keith Palmer 4:03.5, Don Akin 4:01.8, Jeff Schemmel 3:59.8) |
| 16:18.3 | Western Michigan | 2 | Dogwood | Knoxville | 14 Apr 78 | (__ Karasiewicz 4:06.8, Bob Lewis 4:06.2, Jeff Zylstra 4:08.6, Tom Duits 3:56.6) |
| 16:18.66' | Indiana | 2 | Drake | Des Moines | 24 Apr 81 | (_ Van Winkle 4:06.7m, Jim Spivey 3:57.9m, _ Shelton 4:06.1m, _ Wellman 4:02.3m) |
| 16:19.0 i | Villanova (US) | 1 | Dartm'th | Hanover, NH | 17 Jan 76 | (George MacKay 4:09.0, Don Paige 4:01.6, Mark Belger 4:05.3, Phil Kane 4:03.1) |
| 16:19.2 | Eastern Michigan | 3 | Dogwood | Knoxville | 14 Apr 78 | (_ Helms 4:05.2, Ed Grabowski 4:08.4, Maurice Weaver 4:02.8, _ Jones 4:02.8) |
| 16:19.4 | Arkansas | 1 | Kansas | Lawrence | 22 Apr 77 | (Terry Baker/_ _ _ Aspel/_ _ Mike Clark__ _ Niall O'Shaughnessy/Ire 4:01.6) |
| 16:19.6 | Bowling Green State (US) | 1 | Drake | Des Moines | 27 Apr 73 | (_ Danforth 4:07.5, _ Vermilyea 4:07.7, Craig Macdonald 4:04.2, Dave Wottle 4:00.7) |
| 16:19.65' | Arkansas | 1 | Drake | Des Moines | 25-26 Apr 80 | (Randy Stephens 4:03.1m, Mark Muggleton 4:02.1m, _ Anderson 4:06.9m, Frank O'Mara/Ire 4:01.0m |
| 16:19.73' | Iowa State | 1 | Drake | Des Moines | 28 Apr 89 | (_ Hollens/_ 4:10.1m, Roland Pauwels/Bel 4:02.9m, Brett Carney/US 3:58.7m, Jon Nuttall/UK 4:02.3m) |
| 16:19.75' | Eastern Michigan | 2 | Drake | Des Moines | 30 Apr 83 | ( $\_$Lezevich 4:03.7m, _ Reighard 4:03.7m, _ Shamiey 4:01.8m, _ Henriksen 4:04.6m) |
| 16:19.76 | Ireland II |  |  | Dublin | 17 Aug 85 | (?, ?, ?, ?) |
| 16:19.8 | Illinois | 1 | Drake | Des Moines | 29 Apr 77 | (_Fritz 4:08.4, _ Eicken 4:03.9, Craig Virgin 4:04.9, Jeff Jirele 4:02.6) |
| 16:20.0 | Wisconsin (US) | 2 | Drake | Des Moines | 23 Apr 76 | (_ Schumacher 4:05.5, _ Lyndgaard 4:05.8, Mark Johnson 4:07.2, Steve Lacy 4:01.4) |
| 16:20.09 | Michigan |  | Penn | Philadelphia | 25 Apr 98 | (Jay Cantin 4:04.3, John Mortimer 4:07.4, Don McLaughlin 4:09.8, Kevin Sullivan/Can 3:58.5) |
| 16:20.4i | Philadelphia Pioneer Club | 2 | Dartm'th | Hanover, NH | 17 Jan 76 | (Julio Piazza 4:09.0, Karl Thornton 4:03.2, Charlie Maguire 4:07.8, Greg Fredericks 4:00.4) |
| 16:20.7' | University of Texas El Paso | 1 | Texas | Austin | 2-5 Apr 80 | (_Rathedi/_4:06.0m, _Lelieveld/Hol 4:03.7, Peter Lemashon/Ken 4:06.5m, Suleiman Nyambui/Tan 3:58.8m) |
| 16:20.76' | Iowa State | 1 | Drake | Des Moines | 27 Apr 90 | (Roland Pauwels/Bel 4:06.7m, Jon Brown/UK 4:04.4m, Jon Nuttal//UK 3:59.8m, Jonah Koech/Ken 4:04.2m) |
| 16:20.9 | Providence | 2 | Drake | Des Moines | 29 Apr 77 | (Kevin Byrne 4:07.6, _ Crooke 4:05.8, _ O'Shea 4:07.7, _ Savoie 4:03.8) |
| 16:20.9 | Penn State | 4 | Dogwood | Knoxville | 14 Apr 78 | (Mike Wyatt 4:06.3, _ Felice 4:06.0, Bob Snyder 4:01.5, Tom Rapp 4:07.1) |


| 16:20.91 ${ }^{\text {' }}$ | Bowling Green | 2 | Drake | Des Moines | 25-26 Apr 80 | (_ Housley 4:06.3m, _ Anich 4:04.4m, _ Pullom 4:03.0m, Kevin Ryan 4:01.5m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16:21.0 | Villanova | 1 | Dogwood | Knoxville | 11 Apr 75 | (Mark Belger/US 4:08.1, Ken Schappert/US 4:07.9, Tom Gregan/Ire 4:04.4, Eamonn Coghlan/Ire 4:00.6) |
| 16:21.1 | British Miler's Club (UK) | 1 | BMC | Oxford | 10 Jul 93 | (Andrew Pearson 4:09.7, Ian Gillespie 4:01.7, Paul Larkins 4:04.2, John Nuttall 4:05.5) |
| 16:21.4 | Navy (US) | 3 | Penn | Philadelphia | 27 Apr 74 | (__ Bateman 4:06.2, __ Gilmore 4:04.4, Jeff Kramer 4:01.7, Jim Kramer 4:09.1) |
| 16:21.4 | Texas | 2 | Kansas | Lawrence | 22 Apr 77 | (_ Maldonardo 4:05.8, _ Mason 4:02.0, _ Waters 4:07.9, _ Craig 4:05.7) |
| 16:21.6 | Manhattan | 2 | Drake | Des Moines | 27 Apr 73 | (_ Bruce 4:07.3, _ Lovett 4:11.0, Mike Keogh/Ire 4:04.2, Tony Colon/PR 3:59.1) |
| 16:21.7 | Illinois | 1 | Drake | Des Moines | 23 Apr 82 | (_ Dickson 4:02.1m, _ Reynolds 4:05.5m, _ Stevens 4:03.5m, Jon Schmidt 4:04.9m) |
| 16:21.76 ${ }^{\text {' }}$ | Illinois | 3 | Drake | Des Moines | 25-26 Apr 80 | (_ Stevens 4:08.0m, _ Bissel 4:03.4m, Dave Ayoub 4:05.7, Jon Schmidt 3:59.0m) |
| 16:21.8 | William \& Mary | 4 | Penn | Philadelphia | 27 Apr 74 | (__ Moore 4:10.5, __ Clark 4:05.7, __ Collins 4:07.6, Ron Martin/UK 3:58.0) |
| 16:21.8 | Kansas State | 2 | Tex R | Austin | 3 Apr 76 | (Don Akin 4:04.7, __ Davis 4:08.5, Jeff Schemmel 4:02.8, Keith Palmer 4:05.8) |
| 16:22.0 | Indiana | 5 | Penn | Philadelphia | 27 Apr 74 | (__ Wysong 4:09.0, Pat Mandera 4:08.1, __ Hayes 4:05.0, Steve Heidenreich 3:59.9) |
| 16:22.2 | Duke (US) | 1 | Texas R | Austin | 14 Apr 73 | (Scott Eden 4:09.7, Roger Beardmore 4:04.1, Steve Wheeler 4:04.5, Bob Wheeler 4:03.8 |
| 16:22.35 i | New York Athletic Club |  |  |  | 93 |  |
| 16:22.6' | Penn |  |  |  | 76 |  |
| 16:22.6 | Drake | 3 | Drake | Des Moines | 29 Apr 77 | (_ Thomas 4:08.1, _ Bell 4:04.9, _ Minor 4:05.9, _ Nansel 4:03.7) |
| 16:23.0 | Missouri | 2 | Texas R | Austin | 14 Apr 73 | (__ Watson 4:09.7, __ Visk 4:08.4, Dave Rogles 4:03.5, Charlie McMullen 4:01.2) |
| 16:23.2 | Oklahoma State | 3 | Texas R | Austin | 14 Apr 73 | (?, ?, John Halberstadt/SA 4:04.7, Mike Manke 4:01.4) |
| 16:23.16 | Stanford (US) | 3 | Penn | Philadelphia | 25 Apr 98 | (Michael Stember 4:05.9, Jonathan Riley 4:03.5, Jason Lunn 4:11.4, Gabe Jennings 4:02.4) |
| 16:23.2 | Michigan State | 3 | Dogwood | Knoxville | 15 Apr 77 | (_ Pullen 4:09.5, _ Moore 4:07.6, Stan Mavis 4:02.4, Herb Lindsay 4:03.7) |
| 16:23.6 | Villanova | 1 | Calif R | Modesto | 23 May 70 |  |
| 16:23.7 | Murray State | 4 | Dogwood | Knoxville | 15 Apr 77 | (_ Charleston 4:08.9, _ Keener 4:09.4, Dave Warren/UK 4:03.0, _ Brewer 4:02.4) |
| 16:23.8 | New Zealand | 1 |  | Dublin | 17 Jul 61 | (Gary Philpott 4:12.9, Murray Halberg 4:02.5, Barry Magee 4:07.2, Peter Snell 4:01.2) |
| 16:23.8 | Kansas State | 1 | Drake | Des Moines | 26 Apr 74 | (__ Settle 4:06.8, Keith Palmer 4:04.4, Don Akin 4:02.8, Jeff Schemmel 4:09.8) |
| 16:24.0 | Bowling Green | 1 | Kansas | Lawrence | 20 Apr 73 | (_ Danforth 4:10.0, _ Vermilyea 4:07.2, Craig Macdonald 4:04.9, Dave Wottle 4:01.9) |

## Women

| $4 \times 800 m$ Relay |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7:50.17 | Soviet Union | 1 | MCC | Moskva | 5 Aug 84 | (Nadezhda Olizarenko _ _ , Lyubov Gurina _ _ , Lyudmila Borisova _ _ , Irina Podyalovskaya _ _ ) |
| 7:51.62 | Soviet Union II | 2 | MCC | Moskva | 5 Aug 84 | (Nina Ruchayeva __ , Ravilva Agletdinova __ , Nadezhda Zvagintseva _ , Valentina Zhukova ___) |
| 7:52.24 | Soviet Union | 1 |  | Leningrad | 4 Aug 85 | (Yekaterina Podkopayeva __, Nadezhda Zvyagintseva _ _ , Nadezhda Olizarenko _ . Ravilva Agletdinova _ _ ) |
| 7:52.3 | Soviet Union | 1 |  | Podolsk | 16 Aug 76 | (Tatyana Providokhina 1:58.4, Valentina Gerasimova 1:59.2, Svetlana Styrkina 1:57.3, Tatyana Kazankina 1:57.4) |
| 7:54.10 | German Democratic Republic | 1 | NC | Karl-Marx-Stadt | 6 Aug 76 | (Elfi Zinn __ , Gunhild Hoffmeister __ , Anita Weiss __ , Ulrike Klapezynski __) |
| 7:56.6 | RSFSR (Sov) | 1 | NC | Donyetsk | 8 Sep 80 |  |
| 7:56.6 | Ukraine (Sov) | 2 | NC | Donyetsk | 8 Sep 80 |  |
| 7:56.9 | Leningrad (Sov) | 3 | NC | Donyetsk | 8 Sep 80 |  |
| 7:57.08 | Russia | 1 | Euro R | Portsmouth | 5 Jun 93 | (Olga Kuznyetsova _ _ Natalya Betekhtina _ _ , Olga Burkanova__, Svetlana Masterkova _ _ ) |
| 7:57.21 | Romania | 2 | Euro R | Portsmouth | 5 Jun 93 | (Liliana Salageneau _ , Mitica Constantin _ _, Violeta Beclea _ , Laura Itcou _ _) |
| 7:58.5 | Lithuania (Sov) | 4+ | Sov Ch | Donyetsk | 8 Sep 80 | (Anna Kastetskaya, __ Bislyte __ , Laima Simonaviciute __ , Laima Baikauskaite __) |
| 7:59.6 | RSFSR (Sov) | 1 | Spart | Moskva | 24 Jul 79 | (Olga Miniyeva _ , Maria Yenkina _ , Nadezhda Olizarenko _ , Yekaterina Poryvkhina _ _) |
| 8:00.84 | RSFSR (Sov) | 1 | NC | Bryansk | 19 Jul 87 | (Nina Ruchayeva _ , Nadezhda Loboyko _ , Olga Nelyubova _ , Lyubov Gurina _ _) |
| 8:01.63 | Moskva (Sov) | 2 | NC | Bryansk | 19 Jul 87 | (Galina Afonina __ , Irina Podyalovskaya _ _ , Vera Dodika _ _ , Lyubov Kiryukhina __) |
| 8:01.9 | Leningrd | 1 | NC | Tbilisi | 16-18 Sep 78 | (Tatyana Providokhina _ , Lyudmila Veselkova _ , Olga Dvirna, Natalya Kuznyetsova _ _ ) |
| 8:02.0 | RSFSR (Sov) | 2 | NC | Tbilisi | 16-18 Sep 78 | (Nina Kovylina _ , Valentina Ilyinkh _ , Zoya Rigel _ , Giana Romanova _ _) |
| 8:03.2 | Ukraine (Sov) | 2 | Spart | Moskva | 24 Jul 79 |  |
| 8:03.85 | Belarus | 3 | Euro R | Portsmouth | 5 Jun 93 |  |
| 8:04.9 | Leningrad (Sov) | 3 | Spart | Moskva | 24 Jul 79 |  |
| 8:05.2 | Moskva (Sov) | 4 | Spart | Moskva | 24 Jul 79 |  |
| 8:05.24 | Bulgaria | 1 |  | Sofia | 30 Aug 75 | (Nikolina Shtereva 1:59.5, Liliana Tomova 2:02.1, Rosita Pekhlivanova 2:01.6, Svetla Zlateva 2:02.0) |
| 8:06.28 | Ukraine | 4 | Euro R | Portsmouth | 5 Jun 93 | (Alla Kovpak _ , Yelena Storchevaya _ , Yelena Zavadskaya _ _ Inna Yevseyeva _ _ ) |
| 8:08.6 | Bulgaria | 1 |  | Sofia | 12 Aug 73 | (Svetla Zlateva 1:58.8, Lilian Tomova 2:01.7, Tonka Petrova 2:03.5, Stefka Yordanova 2:04.6) |
| 8:09.3 | Lithuania (Sov) | 5 | Spart | Moskva | 24 Jul 79 |  |
| 8:12.5 | Moskva | 3 | NC | Tbilisi | 16-18 Sep 78 |  |
| 8:15.7 | Russia | 1 | Euro R | Sheffield | 5 Jun 92 | (Irina Samarokova _ , Olga Burkanova _ , G _ Reshnikova _ , Yelena Didilenko _ _) |
| 8:16.0 | Soviet Union | 1 | Coeur | Bourges | 19 Jun 77 | (Lyubov Ivanova 2:03.9, Tatyana Provodokhina 2:03.6, Svetlana Styrkina 2:04.5, Tatyana Kazankina 2:04.0) |
| 8:16.8 | Federal Republic of Germany | 1 |  | Lübeck | 31 Jul 71 | (Ellen Tittel 2:03.5, Sulvia Schenk 2:05.7, Christa Merten 2:05.9, Hildegard Falck 2:01.7) |
| 8:16.97 | Germany | 5 | Euro R | Portsmouth | 5 Jun 93 | (Simone Weidner __, __ Bruhns __, __ Muck _ _ Christine Wachtel __) |
| 8:17.09 | Athletics West (US) | 1 | Mt SAC | Walnut | 24 Apr 83 | (Sue Addison 2:06.8, Lee Arbogast 2:02.0, Mary Decker 2:01.5, Chris Mullen 2:06.8) |
| 8:18.71 i | Russia | 1 |  | Moskva | 4 Feb 94 | (__ Zaytseva _ , Olga Kuznyetsova _ _, Yelena Afantsyeva __ , Yekaterina Podkopayeva _ _ ) |
| 8:19.3 | Italy | 2 | Euro R | Sheffield | 5 Jun 92 | (Nadia Falvo _ _, S__ Savi _ . Nicoletta Tozzi _ , Fabia Trabaldo __) |
| 8:19.47 | South Africa |  |  | Johannesburg | 13 Feb 85 | (Helga van Wermeskerken _ _, Ermyntrude Vermeulen _ _ Yvonne Goosen __, Elize Fouche _ _) |
| 8:19.9 | United States | 1 | Coeur | Bourges | 24 Jun 79 | (Robin Campbell 2:04.7, Joetta Clark 2:03.7, Chris Mullen 2:06.8, Essie Kelley 2:04.6) |
| 8:19.9 | Great Britain | 3 | Euro R | Sheffield | 5 Jun 92 | (Ann Williams [Griffiths] 2:06.9, Paula Fryer 2:03.8, Yvonne Murray 2:06.7, Diane Edwards [Modahl] 2:02.5) |
| 8:20.22 | Tennessee | 1 | Penn | Philadelphia | 27 Apr 84 | (Karol Davidson/US 2:06.8, Alisa Harvey/US 2:05.4, Cathy Rattray/Jam 2:04.7, Joetta Clark/US 2:03.4) |
| 8:20.64 | Athletics West | 1 | Ore R | Eugene | 4 May 84 | (Lee Arbogast 2:06.0y, Sue Addison 2:07.3y, Jill [Haworth] Jones 2:09.1y, Mary Decker 2:01.2y) |
| 8:20.66 | Villanova (US) | 2 | Penn | Philadelphia | 27 Apr 84 | (Debbie Grant 2:06.6, Veronica McIntosh 2:06.0, Joanne Kehs 2:05.3, Patty Bradley 2:02.8) |
| 8:20.73 | Great Britain | 6 | Euro R | Portsmouth | 5 Jun 93 | (Paula Fryer 2:04.4, Lynn Gibson 2:05.7, Linda Keough [Staines] 2:08.8, Diane Modahl 2:01.8) |
| 8:21.2 | United States | 2 | Coeur | Bourges | 19 Jun 77 | (Julie Brown __, Sue Latter ___, Johanna Foreman _ _, Wendy Knudson ___) |
| 8:21.39 | Italy | 7 | Euro R | Portsmouth | 5 Jun 93 | (Nadia Falvo _, Nicoletta Tozzi _ _, Elisa Rea _ , Fabia Trabaldo __) |
| 8:21.61 | China | 1 | NC | Beijing | 5 Jun 91 | (Jiang Shulin _ _ Xin Yuyin _ , Zhang Yumin _ _ Zhen Lijuan _ _ ) |
| 8:22.0 | France | 1 | Coeur | Bourges | 31 May 75 | (Chantal Jouvhomme 2:08.0, Martine Rooms 2:06.0, Madeline Thomas 2:05.8, Marie-Françoise Dubois 2:01.6) |
| 8:22.26 | Stanford Track Club |  |  |  | 82 |  |
| 8:22.6 | Federal Republic of Germany | 1dq | IAC | London | 5 Sep 70 | (Christa Merten 2:09.0, Rosemarie Klute 2:07.4, Ellen Tittel 2:05.6, Hildegard Janze 2:00.6) |
| 8:23.0 | Soviet Union II | 2 |  | Podolsk | 16 Aug 76 |  |
| 8:23.2 | Romania | 3 | Coeur | Bourges | 19 Jun 77 |  |
| 8:23.35 | Florida | 1 | Penn | Philadelphia | 26 Apr 86 | (Sa__ Braasch 2:06.7, So__ Brasch 2:06.6, Susan Nash 2:05.9, Chris Crowther 2:04.2) |
| 8:23.36 i | Russia II | 2 |  | Moskva | 4 Feb 94 | (Yelena Goncharova _ _ Olga Maryina __ , Natalya Betekhtina ___, Lidia Vasilevskaya ___) |
| 8:23.8 | Great Britain | 1 | Inv | Colombes | 2 Oct 71 | (Joan Allison 2:05.8, Sheila Carey 2:05.2, Pat Lowe [Cropper] 2:08.2, Rosemary Stirling [Wright] 2:04.6]) |
| 8:24.02 | Kentucky | 2 | Penn | Philadelphia | 26 Apr 86 | (S__ Hoover 2:04.4, Elisa Frosini 2:06.6, Lisa Breiding 2:07.1, K__ Hawkins 2:06.0) |
| 8:24.27 | Arizona State (Int) | 1 | Penn | Philadelphia | 30 Apr 94 | (Jackie Gayle/Jam 2:09.4, Janice Nichols/US 2:03.5, Lade Akinremi/Nig 2:09.6, Kim Toney 2:01.75) |
| 8:24.34 | Villanova | 3 | Penn | Philadelphia | 26 Apr 86 | (Michelle DiMuro 2:09.4, Celeste Halliday 2:06.8, Joanne Kehs 2:06.0, Debbie Grant 2:02.2) |
| 8:24.72 i | Villanova | 1 | NCAA | Oklahoma City | 14 Mar 87 | (Gina Procaccio 2:07.8, Debbie Grant 2:03.8, Michelle DiMuro 2:07.5, Celeste Halliday 2:05.7) |
| 8:24.8 | Soviet Union | 2 | Coeur | Bourges | 31 May 75 |  |
| 8:25.0 | Great Britain | 1 | IAC | London | 5 Sep 70 | (Rosemary Stirling [Wright] 2:07.4, Georgena Craig 2:10.0, Pat Lowe [Cropper] 2:04.2, Sheila Carey 2:03.4) |
| 8:25.22 | Villanova | 2 | Penn | Philadelphia | 30 Apr 94 | (Jen Rhines/US 2:11.2, Tosha Woodward/US 2:03.1, Becky Spies/US 2:08.4, Abby Hunte/Ire 2:02.49) |
| 8:25.28 | Villanova (US) | 1 | Penn | Philadelphia | 30 Apr 88 | (Kathy Franey 2:09.2, Vicki Huber 2:04.2, Michelle DiMuro 2:04.3, Celeste Halliday 2:07.5) |

$4 \times 1500 \mathrm{~m}$ Relay

| 17:18.10 | Villanova |
| :---: | :---: |
| 17:22.30 | Providence (Ireland) |
| 17:22.58 | Villanova |
| 17:22.72 | Wisconsin (US) |
| 17:22.82 | Tennessee (US) |
| 17:29.32 | Villanova |
| 17:30.10 | Villanova |
| 17:33.79 | Villanova |
| 17:36.60 | Colorado (US) |
| 17:37.15 | University of Wisconsin (US) |
| 17:37.21 | Colorado (US) |
| 17:37.51 | Villanova |
| 17:38.34 | Stanford (US) |
| 17:39.12 | Providence (Ire) |
| 17:39.43 | Brigham Young University |
| 17:39.52 | UC Irvine |
| 17:39.72 | Wake Forest University (US) |
| 17:40.30 | Wisconsin (US) |
| 17:40.43 | Michigan |
| 17:41.0 | British Milers Club National Squad (UK) |
| 17:41.05 | Arkansas |
| 17:41.62 | Georgetown |
| 17:42.40 | Georgetown (US) |
| 17:42.54 | Reebok Enclave (US?) |
| 17:43.14 | Stanford (US) |
| 17:43.33 | Villanova (US) |
| 17:43.39 | Wisconsin |
| 17:47.87 | Cal Poly SLO |
| 17:48.29 | Villanova |
| 17:48.52 | Stanford (US) |
| 17:48.76 | Virginia (US) |
| 17:49.33 | Tulane |
| 17:51.24 | Villanova |
| 17:53.95 | Cornell |
| 17:54.37 | Reebok Enclave (US) |
| 17:54.50 | Providence |
| 17:54.52 | Georgetown (US?) |
| 17:55.51 | Villanova (US) |
| 17:56.05 | Arkansas |
| 17:58.41 | Kentucky |
| 18:00.08 | Indiana |
| 18:00.17 | Providence |
| 18:00.28 | Providence |
| 18:00.63 | Villanova |
| 18:01.02 | Auburn |
| 18:01.58 | Auburn |
| 18:02.36 | Colorado (US) |
| 18:03.14 | Indiana (US/__) |
| 18:03.40 | Reebok Enclave |
| 18:05.07 | Colorado (US) |
| 18:05.12 | North Carolina |
| 18:05.56 | Providence |
| 18:05.97 | Kentucky |
| 18:06.02 | Alabama |
| 18:06.05 | Dartmouth |
| 18:06.31 | Providence |
| 18:06.83 | Arkansas |

## $4 \times 1$ Mile Relay

18:39.58 University of Oreg
19:17.3 British Milers Club National Squad (UK)
19:23.38 $\quad$ Villanova
20:07.5 BMC Midlands
20:08.3 BMC North
20:12.48' University of Florida
20:16.2 BMC Junior Squad
20:20.5 San Jose Cindergals
20:22.9 BMC South West
20:23.24 i Rockford (Michigan) HS
20:28.0 $\quad$ Brighton HS, New York
20:31.27 i Bingham (Utah) HS
20:34.22 i Colonie Central (New York) HS
20:34.4 Ridgewood (New Jersey) HS 20:37.4, Rutland (Vermont) HS
20:41.51i North Quincy (Massachusetts) HS Agoura HS, Agoura Hills, Calif. (US)
20:49.8 Miramonte (California) HS
20:52.53 Agoura HS, Agoura Hills, Calif. (US)
20:52.9 State College (Pa.) HS (US)
20:53.3, North Hunterdon (HS), Annadale, NJ (US)
20:53.5, Orange Park (Fla.) HS (US)
20:54.0' Lake Braddock HS, Burke, Va. (US)
20:54.1 Orange Park (Fla.) HS (US)
20:55.6 Central HS, Valley Stream, NY (US)

27 Apr 90
26 Apr 91
26 Apr 91
28 Apr 89 27 Apr 90 27 Apr 90 25 Apr 97 26 Apr 91 28 Apr 95
26 Apr 96
23 Apr 96
23 Apr 99
25 Apr 97
29 Apr 94
26 Apr 96
27 Apr 90
23 Apr 99
26 Apr 91
23 Apr 99
24 Apr 98
29 Apr 94
30Apr 97
23 Apr 99
25 Apr 97
26 Apr 96
27 Mar 98
27 Mar 98
25 Apr 97
24 Apr 92
28 Apr 89
27 Apr 90
26 Apr 96
24 Apr 98
27 Mar 87
23 Apr 99
23 Apr 99
26 Apr 91
25 Mar 94
29 Apr 94
23 Apr 99
23 Apr 93
28 Apr 95
28 Apr 89
28 Apr 89
28 Apr 89
28 Apr 95
24 Apr 98
26 Apr 91
26 Apr 96
23 Apr 99
27 Apr 90
29 Mar 96
28 Apr 95
25 Apr 97
26 Apr 96
27 Apr 90
26 Apr 91
28 Apr 95
23 Apr 93
(Nnenna Lynch/US 4:25.8, Sonia O’Sullivan/Ire 4:13.5, Cheri Goddard/US 4:21.6, Kathy Franey/US 4:17.2) (Anita Philpott 4:19.6, Geraldine Nolan 4:23.4, Natalie Davey 4:23.9, Geraldine Hendricken 4:15.4) Michelle DiMuro/US 4:26.3, Sonia O'Sullivan/Ire 4:16.4, Kathy Franey/US 4:21.3, Vicki Huber/US 4:18.6) (Maureen Hartzheim 4:19.6, Pam Hinton 4:25.6, Mary Hartzheim 4:30.1, Suzy Favor 4:07.4) (Gina Wilbanks 4:22.1, Patty Wiegand 4:19.4, Valerie Bertrand 4:25.0, Jasmin Jones 4:16.3) Carmen Douma/Can 4:27.0, Kristine Jost/US 4:19.6, Carrie Tollerson/US 4:20.5, Krestina Sullivan/Can 4:22.2)
(Nnenna Lynch/US 4:21.5, Carol Haux/US 4:27.8, Cheri Goddard/US 4:24.3, Sonia O'Sullivan/Ire 4:16.5) (Tosha Woodward/US 4:22.7, Krestina Sullivan/Can 4:25.1, Jen Rhines/US 4:20.0, Becky Spies 4:26.0) (Carrie Messner 4:24.6, Muffy Raveling 4:27.8, Shayne Wille 4:24.8, Kelly Smith 4:19.4)
Stephanie Pesch 4:22.7, Beth Brewster 4:28.0, Janet Westphal 4:23.7; Jenelle Deatherage 4:22.8) (Kara Wheeler 4:29.9, Carrie Messner 4:26.9, Shayne Wille 4:20.6, Kelly Smith 4:19.8) (Carole Zajac/US 4:27.5, Jen Rhines/US 4:23.6, Vanessa Molloy/Ire 4:29.0, Becky Spies/US 4:17.4) (Dena Dey 4:22.9, Monal Chokshi 4:25.4, Sarna Renfro 4:24.8, Mary Cobb 4:25.2)
(Geraldine Nolan 4:27.3, Siobhan Gallagher 4:15.7, Sinead Delahunty 4:27.5, Geraldine Hendricken 4:28.6) (Jolee Gillespie/US 4:26.1, Laura Heiner/US 4:30.3, Margie Chan/HK 4:24.5, Sharolyn Shields/Can 4:18.5) (Maria Akraka/Swe 4:14.8, Rayna Cervantes/US 4:29.1, Brigid Sterling/US 4:34.2, Buffy Rabbit/US 4:21.4) (Janelle Kraus 4:24.9, Alison Anibaldi 4:25.7, Kelly Brady 4:27.0, Jill Snyder 4:22.1)
(Avrie Walters 4:25.4, Becky Schaefer 4:26.5, Janet Westphal 4:25.1, Jenni Westphal 4:23.3)
(Karen Harvey/US 4:27.1, Molly McClimon/US 4:24.0, Chris Szabo/US 4:27.8, Courtney Babcock/Can 4:21.5) (Elinor Doubell 4:33.0, Joanne Pavey 4:24.5, Michelle Faherty 4:22.3, Lynn Gibson 4:21.2)
(Tracy Robertson/Can 4:24.1, Karen Bockel/Ger 4:31.4, Amy Yoder/US 4:27.7, Jessica Koch/US 4:20.9) (Michelle Muething/US 4:25.6, Autumn Fogg/US 4:39.0, Maxine Clarke/US 4:26.9, Miesha Marzell/US 4:21.1) (Frances Lord 4:26.6, Joline Staeheli 4:22.4, Laura Sturges 4:30.6, Miesha Marzell 4:22.8)
(Sara Moore 4:24.5, Mary Cobb 4:20.2, Sarna Renfro 4:27.7, Monal Chokshi 4:30.7)
(Christine Gentile 4:24.7, Nnenna Lynch 4:23.2, Kate Fonshell 4:27.6, Cheri Goddard 4:27.8)
(Mary Hartzheim/US 4:27.8, Carole?_Harris/_ 4:32.7, Maureen Hartzheim/US 4:25.2, Suzy Favor/US 4:17.7)
(Melanie Hung _ Aeron Arlin _ , Teena Colebrook/UK 4:16.0, Stephanie Barrett __) (Krissy Jost/US 4:25.6, Jen Rhines/US 4:27.2, Carrie Tollefson/US 4:27.8, Krestina Sullivan/Can 4:27.7) (Julia Stamps 4:22.3, Sally Glynn 4:29.7, Sara Moore 4:31.2, Monal Choksi 4:25.3)
(Marianne Downey 4:34.6, Sandy Schuler 4:26.2, Shelly McBride 4:27.5, Michelle Rowen 4:20.5)
(Alison Lambert/US 4:27.2, Hanna Ritakallio/Fin 4:32.5, Katrina Gemmell/US 4:31.2, Hanne Lyngstad/Nor 4:18.4) (Krissy Jost/US 4:36.8, Carmen Douma/Can 4:26.4, Kristen Nicolini/US 4:29.7, Carrie Tollefson/US 4:18.3) (?, Jennifer Cobb 4:26.7, ?, ?)
(Cathy Stanmeyer 4:36.5, Kelly Rabush 4:26.7, Cheri Goddard 4:29.2, Julie Speights 4:22.0) (Marie McMahon/Ire 4:28.7, Natalie Davey/Ire 4:25.0, __ Harrington/US 4:32.4, Amy Rudolph/US 4:28.4) (Katrina de Boer 4:28.5, Autumn Fogg 4:25.4, Kathleen Linck 4:29.2, Kristen Gordon 4:31.4) (Becky Spies 4:30.5, Carol Zajac 4:32.9,_ Flowers 4:26.8, Cheri Goddard 4:25.3) (Catherine Allsopp/_4:28.7, Sarah Schwald/US 4:19.5, Megan Flowers/US 4:29.7, Trine Pilskog/Nor 4:38.2) (_ Kendall/US 4:35.1, __ Combs/US 4:29.1, Valerie McGovern/Ire 4:28.4, Denise Bushallow/US 4:25.8) (?,?,?, Michelle Dekkers/SA 4:27.7)
(Marie MacMahon/Ire 4:29.9, Natalie Davey/Ire 4:29.9, Maria McCambridge/_ 4:29.3, Amy Rudolph/US 4:31.2)
(Tamieka Grizzle/US 4:22.8, Kristen Nicolini/US 4:31.1, Ann McGranahnan/US 4:38.0, Carmen Douma/Can 4:28.5)
(Kelly Rabush 4:25.1)
(Charla Harrie 4:29.7, Janet Trujillo 4:25.8, Kathi Ward 4:36.4, Rachel Sauder 4:29.7)
(? ?, ?, Carrie Messner 4:22.2)
(?, Mary Beth Driscoll 4:22.2, ?, ?)
(Lisa Dressel __, __ McDonnell __, Shelly McBride __, Kari Bertrand __)
(Karen Godlock 4:26.7, __ Majek 4:35.5, __ Hayes 4:33.6, Blake Phillips 4:29.3)
(Maria McCambridge/Ire 4:24.7)
(?,__Stief/__ [not US] 4:19.4, ?, ?)
Natalie Davey/Ire 4:30.9, __ Malloy/_ 4:31.2, __ Burke/US 4:31.7, Amy Rudolph/US 4:32.5)
(__ Taylor 4:35.6, Sarah Schwald 4:24.5, Deena Drossin 4:35.3, __ Pillow 4:31.4)

20:58.9 BMC Devon \& Cornwall $\quad 5 \quad$ BMC $\quad$ Oxford

[^2]
## All-Time World Junior Lists

## DISTANCE RELAYS

Men's Junior $4 \times 800 m$

| 7:26.1 | British Miler's Club (UK) | 1 | BMC | Oxford | 2 Sep 95 | (Alan Tatham 1:53.8, David Stanley 1:51.9, Ally Donaldson 1:49.9, Andy Blackmore 1:50.6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7:31.4 | South Africa |  |  | Pretoria | 12 Oct 77 | (Willem Geyer _, Flippie Prinsloo _, Deon Bronkhorst _ , Henning Gericke __) |
| 7:32.7 | Fiamme Azzure (Ita) |  |  |  | 8 Oct 86 |  |
| 7:33.0' | Jackson HS, Cambria Heights, NY (US) | 1 |  | Jamaica, NY | 7 Jun 66 | (Julio Meade 1:54.3y, Bill Jacobs 1:57.3y, Sam Thomas 1:52.7y, Mark Ferrell 1:51.3y) |
| 7:33.0' | Boys HS, Brooklyn NY (US) | 2 |  | Jamaica, NY | 7 Jun 66 | (Mark Edmead 1:55.3y, John Henry 1:56.6y, Mike Randall 1:53.1y, Jim Jackson 1:50.6y) |
| 7:34.8 | York YS, Elmhurst, Ill (US) | 1 |  | Elmhurst, Ill | 7 May 85 | (Neal McNally 1:57.9, Bob Berger 1:54.1, Paul Taira 1:53.1, Ji m White 1:49.7) |
| 7:35.27 | East Coast Classic Team, NC (US) |  |  |  | 2 Aug 81 |  |
| 7:35.4 ${ }^{\text {' }}$ | Thornton HS, Harvey, Ill. (US) | 1 | Illinois St | Charleston, III. | 29 May 76 | (?, ?, ?, Donald White 1:49.5y) |
| 7:35.7' | Lyons Township HS, Lagrange, Ill. (US) | 2 | Illinois St. | Charleseton, Ill | 29 May 76 | (?, ?, ?, Dave Franson ___) |
| 7:35.89 | St. Jago Boys HS, (Jam) | 1 | Penn | Philadelphia | 26-28 Apr 90 | (?, ?, ?, _ Williams 1:51.9) |
| 7:36.2 | Liverpool Harrier Juniors (UK) | 1 |  | Leeds | 14 Aug 90 | (Matthew Birchall 1:56.8, Paul Walker 1:55.4, Chris May 1:54.2, Curtis Robb 1:49.9 [adds to 7:36.3]) |
| Men's Junior $4 \times 1500 \mathrm{~m}$ |  |  |  |  |  |  |
| 15:47.8 | CS Forestale (Ita) |  |  |  | 6 Oct 83 |  |
| 15:52.0 | British Miler's Club (UK) | 1 b | BMC | Watford | 30 Apr 97 | (Ross Fittall 4:03.2, Neil Speaight 3:56.7, Richard Vint 3:56.2, Lee Garrett 3:55.9) |
| 15:57.2 | Doncaster Club (Aus) |  |  |  | 17 Dec 89 |  |
| 16:00.30 | Il Skjalg (Nor) |  |  |  | 27 Jun 82 |  |
| 16:03.2 | British Miler's Club (UK) | 2 | BMC | Stretford | 30 Apr 96 | (Thomas Mayo 3:52.8, Alex Oldfield 4:05.5, Russell Cartwright 4:02.3, Andres Jones 4:02.6) |
| 16:03.7 | South Eugene HS, Eugene, Ore. (US) | 1 |  | Eugene, Ore. | 30 Apr 82 | (Eric Mason 4:05.6, John Chambers 4:05.1, Will Kimball 3:58.5, Matt McGuirk 3:54.5) |
| 16:04.3 | Blackburn Harriers (UK) |  |  |  | 15 Sep 79 | (John Blackledge _ , Kieran O'Connor _ _, Dean Jackson _ , Peter Livesey _ _) |
| 16:04.7 | Victoria Under-18 (Aus) |  |  |  | 17 Dec 89 |  |
| 16:07.7 | Stretford Athletic Club (UK) |  |  |  | 27 Sep 77 |  |
| 16:09.7 | Solihull \& Small Heath AC (UK) | 2b | BMC | Watford | 30 Apr 97 | (Paul Morby 4:01.5, Daniel Rowan 4:09.0, Gary Blackman 4:04.8, Simon Lees 3:54.7; adds to 16:10.0) |
| Men's Junior $4 \times 1$ Mile |  |  |  |  |  |  |
| 16:56.8 | British Miler's Club (UK) | 5 | BMC | Oxford | 10 Jul 93 | (Justin Swift-Smith 4:09.1, Eddie King 4:13.5, Simon Saxby 4:13.4, Daniel Furmidge 4:20.8) |
| 17:06.6 | South Eugene HS, Eugene, Ore. (US) |  |  | Eugene, Ore. | 7 May 76 | (Dirk Lakeman 4:16.9, Chris Nielsen 4:19.7, Bill McChesney 4:11.8, John Gustafson 4:18.2) |
| 17:10.7' | McCullough HS, The Woodlands, Tex. (US) | 1 | Woodlands, | Tex. | 1 Mar 86 | (Danny Green 4:22.5m, Scott Cramer 4:18.9m, Shawn Barnes 4:14.7m, Eric Henry 4:08.6m) |
| 17:11.7 | South Eugene HS, Eugene, OR (US) | 1 | Axeman R | Eugene, Ore | 9 May 75 | (John Gustafson 4:20.5, Bill McChesney 4:17.6, Steve McChesney 4:19.4, Chris Nielsen 4:14.6) |
| 17:12.2 | Essex Catholic HS, Newark, NH (US) | 1 |  | Highland Park, NJ | Jun 66 | (Jim McLoughlin 4:23.9, Art Martin 4:18.0, Fred Lane 4:14.8, Marty Liquori 4:15.5) |
| 17:12.6 | Catholic HS, Paramus, NJ (US) | 1 |  | Elizabeth, NJ | 22 May 73 | (__ Quinn 4:24.2, _ McDermott 4:17.9, __ Carney 4:15.6, Tom Coheeney 4:14.9) |
| 17:13.2 | Lompoc (California) HS (US) | 1 | Mt. SAC | Walnut | 27 Apr 73 | (Jim Schankel __, __ Fabing __, __Gilmore 4:14.2, Terry Williams ___) |
| 17:13.9 | British Milers' Club (UK) | 1 | BMC | Watford | 11 Jun 97 | (Louis Wells 4:19.1, Paul Fisher 4:20.6, James Thie 4:13.9, Neil Speaight 4:20.3) |
| 17:15.0 | Clairemont HS, San Diego, Ca (US) |  |  |  | 9 Jun 71 |  |
| 17:19.6 | Power Memorial HS, New York, NY (US) | 1 | Jersey | Rel | May 74 | (__ Stolba _ , Matt Centrowitz _ , _ Weaver __, __ Johnston __) |
| Women's Junior $4 \times 800 \mathrm{~m}$ |  |  |  |  |  |  |
| 8:37.71 | Vere Technical HS (Jam) | 1 | Penn | Philadelphia | 27 Apr 91 | (_ Howell 2:11.3, _ Williams 2:11.1, J__ Turner 2:12.1, Inez Turner 2:03.2) |
| 8:39.6 | British Miler's Club (UK) | 1 | BMC | Watford | 17 Jul 96 | (Rachael Ogden 2:09.9, Emma Davies 2:09.6, Ellen O'Hare 2:09.1, Dorothea Lee 2:11.0) |
| 8:43.4' | Blue Ribbon Track Club (US) | 1 | AAU | White Plains, NY | 28 Jun 75 | (Diane Vetter _ , Julie Stibbe _ _ Janis Vetter __, Debbie Vetter __) |
| 8:44.09 | Vere Technical HS (Jam) | 1 | Penn | Philadelphia | 29 Apr 89 | (_ Boothe 2:13.6, J_ Turner 2:10.7, Inez Turner 2:09.2, _ Smith 2:10.5) |
| 8:44.69 | Vere Technical HS (Jam) |  |  |  | 92 |  |
| 8:45.35 | Vere Technical HS (Jam) | 1 | Penn | Philadelphia | 27 Apr 90 | (?, ?, ? [first 3 legs all between 2:12.0 and 2:12.6], Inez Turner 2:07.9) |
| 8:45.7 | South Africa |  |  |  | 84 |  |
| 8:47.8' | Blue Ribbon Track Club (US) | 1 | AAU Jr | White Plains, NY | 25 Jun 75 | (Diane Vetter _ , Julie Stibbe _ _ Janis Vetter _ , Debbie Vetter __) |
| 8:48.5 | Australia Under 20 (Aus) |  |  |  | 19 Dec 89 |  |
| 8:50.09 | Vere Technical HS (Jam) |  |  |  | 91 |  |
| 8:52.89 | Vere Technical HS (Jam) |  |  |  | 94 |  |
| 8:53.05 | St Elizabeth HS (Jam) | 1 | Penn | Philadelphia | 25 Apr 97 | (_ Stewart 2:14.9, _ Harrison 2:13.5, _ Patterson 2:15.4, _ Gayle 2:09.3) |
| 8:53.1 | Havering Athletic Club Under 17 (UK) |  |  |  | 24 May 80 | (Sue Baxter _ _, Gisele Oughton _ _, Carolyn Wells _ , Paula Peterson __) |
| Women's Junior $4 \times 1500 \mathrm{~m}$ |  |  |  |  |  |  |
| 18:23.98 | New South Wales (Aus) |  |  |  | 24 Nov 90 |  |
| 18:34.58 | Victoria Under 18 (Aus) |  |  |  | 28 Mar 92 |  |
| 18:38.0 | British Milers' Club (UK) | 2 | BMC | Watford | 30 Apr 97 | (Ellen O'Hare 4:37.3, Camilla Waite 4:43.1, Rachael Ogden 4:43.5, Jodie Swallow 4:34.1) |
| 18:43.26 | New South Wales U nde 16 (Aus) |  |  |  | 26 Nov 88 |  |
| 18:52.5 | University HS, Irvine, Ca (US) | 1 | Mt. SAC | Walnut, Calif. | 23 Apr 82 | (Laura Sauerwein 4:48.7, Polly Plumer 4:28.1, Judy McLaughlin 4:55.7, Teresa Barrios 4:40.5) |
| 18:54.7 | Fiat Sud Formia (Ita) |  |  |  | 2 May 93 |  |
| 19:06.7 | British Milers' Club (UK) | 2 | BMC | Stretford | 30 Apr 96 | (Michelle Mann 4:40.4, Juliette Oldfield 4:40.8, Amanda Pritchard 4:47.6, Charlotte Goff 4:57.9) |
| 19:12.9 | British Milers' Club Under 17 (UK) | 3 | BMC | Watford | 30 Apr 97 | (Helen Pearson 4:49.7, Carley Wilson 4:45.7, Helen Bebbington 4:49.7, Sharon Whitby 4:47.8) |
| 19:32.7 | Millikan HS, Long Beach, Calif. (US) | 2 | Mt. SAC | Walnut, Calif. | 23 Apr 82 |  |
| 19:35.1 | Bristol Athletic Club (UK) | 4 | BMC | Watford | 30 Apr 97 | (Charlotte Coffey 4:53.1, Leanne Appleton 4:52.0, Paula Gowing 4:47.7, Stella Harrod 5:02.3) |
| Women's Junior 4 x Mile |  |  |  |  |  |  |
| 20:16.2 | British Milers' Club (UK) | 1 | BMC | Watford | 11 Jun 97 | (Caroline Walsh 5:13.1, Camilla Waite 5:05.5, Rachael Ogden 5:00.2, Jodie Swallow 4:57.4) |
| 20:23.24 i | Rockford (Michigan) HS | 1 | Nike Ind | Bloomngton | 11 Mar 00 | (Nora Culligan __, Linsey Blaisdel 5:02.x, Emily Blakeslee 5:08x, Kaelin Toadebusch 5:05.x) |
| 20:28.00' | Brighton HS, Rochester, NY (US) |  |  | Uniondale, NY | 11 Jun 85 | (Judy Dushay 5:11.6m, Rachel Hosmer 5:07.2m, Jennifer Shaver 5:09.8m, Stacy Prey 4:52.3m) |
| 20:31.27 i | Bingham (Utah) HS | 2 | Nike Ind | Bloomngton | 11 Mar 00 | (Jackie Zeigle 4:57.x, Laura Zeigle _ _ Jess Winters _ _ Lixa Paxton _ _ [order of last 3?]) |
| 20:34.4 | Ridgewood (NJ) HS (US) |  |  | Paramus, NJ | 17 May 83 | (Margaret Scutro 5:19.7, Beth Pringle 5:12.3, Mary Ellen Mileski 5:06.4, Patti Mileski 4:56.0) |
| 20:34.22 i | Colonie Central (New York) HS | 3 | Nike Ind | Bloomngton | 11 Mar 00 | (Jen Kramer 4:57.x, Kate Twarog _ , Nicole Susser _ , Ashleigh Bordwell __ [order of last 3?]) |
| 20:36.33 | Agoura, Agoura Hills, Calif. (US) |  |  |  | 92 |  |
| 20:37.4 | Rutland (Vt.) Rutland (US) |  |  |  | 84 |  |
| 20:41.51i | North Quincy (Massachusetts) HS | ? |  | Allston | 27 Feb 82 | (Mary Kate Kennedy 5:06.5, Linda Kennedy 5:15.0, Sheila Barnett 5:13.0, Nancy McCarthy 5:07.0) |
| 20:42.27 | Agoura HS, Agoura Hills, Calif. (US) |  |  |  | 91 |  |
| 20:49.8 | Miramonte HS, Orinda, Calif. (US) |  |  |  | 81 |  |
| 20:52.53 | Agoura HS, Agoura Hills, Calif. (US) |  |  |  | 92 |  |
| 20:52.9' | State College (Pa.) HS (US) |  |  |  | 81 |  |
| 20:53.3' | North Hunterdon (HS), Annadale, NJ (US) |  |  |  | 84 |  |

## All-Time World Indoors Lists

## Men's $4 \times 1$ Mile Relay Indoors

| 16:16.67 i | New York Athletic Club (US) | 1 | Dartm'th | Hanover, NH |
| :---: | :---: | :---: | :---: | :---: |
| 16:19.0 i | Villanova (US) | 1 | Dartm'th | Hanover, NH |
| 16:20.4 i | Philadelphia Pioneer Club | 2 | Dartm'th | Hanover, NH |
| 16:22.35 | New York Athletic Club |  |  |  |
| 16:24.4 i | New York Athletic Club | 3 | Dartm'th | Hanover, NH |
| 16:24.96 i | Westchester Puma | 1 | Dartm'th | Hanover, NH |
| 16:28.54 i | New York Athletic Club | 1 | Dartm'th | Hanover, NH |
| 16:28.8 i | Philadelphia Pioneer Club | 1 | Dartm'th | Hanover, NH |
| 16:29.5 i | Georgetown | 1 | Dartm'th | Hanover, NH |
| 16:30.9 i | Westchester Puma | 1 | Dartm'th | Hanover, NH |
| 16:31.7 i | New York Athletic Club | 2 | Dartm'th | Hanover, NH |
| 16:33.07 i | T Team | 1 | Dartm'th | Hanover, NH |
| 16:34.8 i | Indiana (US) | 1 |  | Bloomington |
| 16:36.08 i | Westchester Puma | 2 | Dartm'th | Hanover, NH |
| 16:36.1 i | New York Athletic Club | 1 | Dartm'th | Hanover, NH |
| 16:36.69 i | Westchester Puma | 1 | Dartm'th | Hanover, NH |
| 16:37.79 i | Nike Boston | 2 | Dartm'th | Hanover, NH |
| 16:38.54 i | Georgetown | 2 | Dartm'th | Hanover, NH |
| 16:39.4 i | University of Chicago Track Club |  |  |  |
| 16:39.5 i | New York Athletic Club | 2 | Dartm'th | Hanover, NH |
| 16:40.9 i | Georgetown |  |  |  |
| 16:42.7 i | Fordham | 3 | Dartm'th | Hanover, NH |
| 16:42.97 i | Westchester Puma | 1 | Dartm'th | Hanover, NH |
| 16:44.3 i | Westchester RR | 3 | Dartm'th | Hanover, NH |
| 16:44.3 @ i | Nike Boston |  |  |  |
| 16:46.2 i | Providence | 4 | Dartm'th | Hanover, NH |
| 16:50.63 i | Iona | 3 | Dartm'th | Hanover, NH |
| 16:51.1 i | Georgetown | 3 | Dartm'th | Hanover, NH |
| 16:52.2 i | Iona | 4 | Dartm'th | Hanover, NH |
| 16:54.2 i | Iona | 2 | Dartm'th | Hanover, NH |
| 16:54.75 i | Nike Boston | 1 | Dartm'th | Hanover, NH |
| Men's 4 x 800m Relay Indoors |  |  |  |  |
| 7:13.94i | Global Athletics \& Marketing (US) | 1 | N Bal Inv | Boston <br> (Roxbury) |
| 7:14.6' io | Santa Monica Track Club | 1 |  | Houston |
| 7:14.78 i | Reebok Enclave (US) | 2 | N Bal Inv | Boston <br> (Roxbury) |
| 7:16.59 i | Santa Monica Track Club (US) | 3 | N Bal Inv | Boston <br> (Roxbury) |
| 7:17.3' io | Wisconsin | 1 r 2 | Astro | Houston |
| 7:17.3' io | Illinois | 1 | Astro | Houston |
| 7:17.45 i | Clemson | 1 | NCAA | Indianapolis |
| 7:17.77 i | George Mason | 2 | NCAA | Indianapolis |
| 7:17.8 i | Soviet Union | 1 | Euro Ch | Sofia |
| 7:18.2' io | Villanova | 2 | Astro | Houston |
| 7:18.23 i | Florida (US) | 1 | NCAA | Indianapolis |
| 7:18.3' i | University of Chicago Track Club | 1 | M-D | Louisville |
| 7:18.67 i | University of Arkansas | 1 l 3 | NCAA | Oklahoma City |
| 7:18.77 io | Kansas (US) | 1 |  | Ames |
| 7:18.81' io | Eastern Michigan | 1 |  | Notre Dame |
| 7:19.0" io | Villanova | 1 |  | Notre Dame |
| 7:19.13 i | Eastern Michigan | 1 | NCAA | Indianapolis |

Note: Marks at Oklahoma City on 14 Mar 87 are of questionable distance.

## Women's $4 \times 800 \mathrm{~m}$ Relay Indoors

| 8:18.71 i | Russia | 1 |
| :---: | :---: | :---: |
| 8:23.36 i | Russia II | 2 |
| 8:24.72 i | Villanova | 1 |
| 8:25.5 i | Villanova | 1 |
| 8:26.04 i | Louisiana State University | 2 |
| 8:26.77 i | Wisconsin | 1 |
| 8:28.41 i | Wisconsin (US) | 1 |
| 8:28.67 i | Gazelle International (US) | 1 |
| 8:29.12 i | Villanova | 2 |
| 8:29.35 i | University of Florida (US) | 1 |
| 8:30.58 | University of Alabama | 2 |
| 8:31.30 | Brigham Young University | 3 |
| 8:31.95 | Villanova | 1 |
| 8:33.41 | Iowa State | 4 |
| 8:33.60 | Villanova (US) | 1 |
| Note: Marks at Oklahoma City on 14 Mar 87 are of que |  |  |
| Symbols |  |  |
| ' = converted mark; |  |  |
| $i=$ indoor mark; |  |  |
| $o=$ oversized indoor track; |  |  |
| $a=$ probably automatically timed, but 100ths not known |  |  |
| $y=$ individual leg run at imperial distance; |  |  |
| $m=$ individual leg run at metric distance |  |  |

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(Brad Horton 4:07.2, J___ Smith 4:07.3, Brad Schlapak 4:02.8, Bill Burke 3:59.4)
(George MacKay 4:09.0, Don Paige 4:01.6, Mark Belger 4:05.3, Phil Kane 4:03.1)
(Julio Piazza 4:09.0, Karl Thornton 4:03.2, Charlie Maguire 4:07.8, Greg Fredericks 4:00.4)
(Pete Squires 4:08.9, Ron Spiers 4:02.2, Tony Colon/PR 4:02.2, Ken Schappert 4:09.9)
(Luis Ostrolozaga 4:09.5, James De Rienzo 4:08.8, Marcel Philippe/Fra 4:08.0, Matt Centrowitz 4:02.3)
(Julio Piazza 4:05.4, Tony Waldrop 4:07.6, Charlie Maguire 4:14.3, Greg Fredericks 4:00.5)
(_ Ledder 4:12.4, _ Reilly 4:11.0, James De Rienzo 4:09.3, John Gregorek 3:56.8)
(Ron Speirs 4:03.0, Mike Roche 4:06.5, Marcel Philippe/Fra 4:10.3, __ Savage 4:11.9)
(John Gregorek, __ East/_, __ Collins ___, Bruce Bickford ___)
(Dan Hayes __, Pat Mandera __, Steve Heidenreich 4:05.1, Phil Wysong ___)
(?, Kevin King 4:05.3, ? Jim Gregorek 4:02.2)
(Luis Ostrolozaga __ ,Colon/__, Charles Bevier, Bill Krohn)
(__ O'Shea 4:06.6)
(Kieran Stack 4:04.5 ?)
```

(Joey Woody 1:49.34, Karl Paranya 1:48.31, Rich Kenah 1:48.48, David Krummenacker 1:47.81)
(Gerald Masterson _ _, Don Frichtel _ , __ Rafferty _ , Johnny Gray 1:47.6y) (Elliot Gaskins 1:50.66, Kevin Murphy 1:49.19, Mike Schroer 1:48.23, Bryan Woodward 1:46.70)
(Jean Destine 1:52.12, Albert Royster 1:50.37, Khadevis Robinson 1:46.19, Johnny Gray 1:47.91)
(__Curtis __, _ Baker __, Don Vandrey _ , Mark Winzenried __)
(Rob Mango - , - Kaemerer _, Lee LaBadie _ , Ron Phillips -_)
(_Radziwinski/US 1:51.0, Dave Wittman/US 1:49.7, Philip Greyling/RSA 1:48.6, Terrence Herrington/US 1:47.7)
(_ Anthony/US 1:52.7, Paul Gambrah/Gha 1:49.1, Ernie Barrett/Jam 1:48.8, John Cook/US 1:48.2)
(Valentin Taratynov _ , Vyacheslav Meshcherskikh _ , Aleksey Taranov __, _Semyashkin __)
(Amos Korir/Ken __, John Hunter/Ire __, Mike England/US __, Don Paige/US __)
(Dedric Jones 1:49.1, Lewis Lacy 1:49.7, Steve Adderly $1: 50.0$, Scott Peters $1: 49.4$ )
(Tom Bach 1:51.1y, Ken Sparks 1:51.5y, Lowell Paul 1:49.4y, Rick Wohlhuter 1:48.2y)
(_ Looney/Ire 1:49.9, M__ Taylor /US 1:49.9, _ Brown/US 1:49.3, _ Moncrieffe/Can 1:49.6)
(_Teal _—, __ Walters _ , Michael Cox _—, Handy __)
(__ Kerby __ ___ Mifsud __, John Griffiths/UK __, Mark Dailey __)
(Bruce Harris/US _ , Mike Seeger/US __, Quentin Howe/US __, Paul Rowbotham/UK __)
(_ Lowe/US __, Paul McMullen/US __, Greg Rhymer/US __, Tommy Asinga/Sur __)

6 Feb 00
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16 Feb 80 16 Feb 80 14 Mar 92
9 Feb 74 9 Feb 74
14 Mar 87 6 Mar 92 24 Feb 90 25 Feb 89 13 Mar 93

4 Feb 94
14 Mar 87
7 Feb 87
14 Mar 87
13 Mar 93
14 Mar 92
10 Feb 89
10 Feb 89
9 Mar 86
14 Mar 92
14 Mar 87
10 Mar 90
14 Mar 87
9 Mar 85


## Kim McDonald

## by Jason Henderson

DO you recognise this man? You should do. For he is arguably the most successful middle and long distance running coach Britain has ever had.

His name is Kim McDonald and he is not a man who courts publicity. Most of you will know him as an athletes' representative, or 'agent'. Few will be aware of his coaching credentials. The fact he spends nine months of the year out of the country doesn't help to improve his relative anonymity.

Athletes he has coached over the past decade or so include: Peter Elliott, Moses Kiptanui, Noah Ngeny, Sonia O’Sullivan and Daniel Komen. And that's just the tip of a very big iceberg.

Kim was a decent runner himself, although hardly up to the world record-breaking standards of the men and women he now coaches. Born in 1956 in Keighley, Yorkshire, he began running when he was 13 and in the early Seventies won the Yorkshire Schools' 800 m title in the same year that Sebastian Coe won the 1500 m title.

His own competitive career ended aged 28, cut short by bursitis of the heel, but with impressive PB's of 4:02 for the mile, 7:56 for

## "I saw Aguta doing a track

## session with Wilfred Kirochi

## and he had holes in the front

of his shoes. I watched him

and thought 'this guy's got a

## big heart'"

3000 m and 13:49 for 5000 m . Almost as soon as he'd 'retired' (he still runs almost every day) he set up business with John Bicourt, who still ranks 10th on the all-time UK steeplechase lists with 8:22.82.
"John and I got together," said Kim, "and sent out a questionnaire to all the best middle and long distance athletes in Britain, which at the time was quite a considerable number." From there Kim and John began representing athletes such as Dave Clarke, Colin Reitz, Nat Muir and Paul Davies-Hale. In 1985 the partnership split, but Kim began to represent Peter Elliott and

Thomas Wessinghage, the 1982 European 5000 m champion.
By 1985 athletes on his books included Steve Ovett, John Walker and Steve Scott. "When I started maybe 80 per cent of athletes weren't represented," said Kim. "Whereas now it's more likely that 90 per cent are represented. There's been a complete turnaround."
Note, at this stage Kim didn't coach any of the athletes he represented. The first athlete he coached was Peter Elliott, who he began to advise around 1986-7. "Then Wilfred Kirochi in 1989 and Douglas Wakiihuri and Julius Kariuki at the beginning of 1990. Then came Moses Kiptanui, who came to Teddington almost straight from the World Junior Championships, William Tanui and then on to Daniel Komen, Ngeny and Sammy Kipketer.
"I never intended to get into coaching," Kim said. "It was only due to a feeling of necessity, first with Peter and then with Kenyans."
People say that Kim is only a successful coach because the world's best athletes have fallen under his influence due to his role as their manager. To be frank, Kim does not care what people think, or how he is regarded, at least not openly. But he points out that the majority of his athletes have been plucked from obscurity and were unknowns before he catapulted them into the spotlight.

He cites the example of Lameck Aguta. "I saw Aguta doing a track session with Wilfred Kirochi and he had holes in the front of his shoes. I watched him and thought 'this guy's got a big heart'. I gave him some food until I came back (to Kenya) again in a couple of months' time and I asked him what his best for 5000 m was.
"He said 13:04 and I said to him, 'Do you realise Ondieki had run 13 minutes that year?' He had no realisation of what 13:04 was, but then again, of course, he had not run 13:04 he'd made the figure up.
"Basically he was at ground zero when I started helping him. We nicknamed him 'the project' and he went on to win the


Commonwealth Games $10,000 \mathrm{~m}$ and Boston Marathon before unfortunately being involved in a car accident."
During the Eighties Kim had been involved mainly with successful European and American athletes who he managed but didn't coach. It was in 1990 that he first started managing - and coaching - Kenyan athletes.
"Mike Boit, who was then commissioner for sport, came to me and said he (Kenya) needed help in that they were lacking international credibility and would I be involved?
"I said 'okay' and looked at the results of the national champs and I saw Moses' name there, who was a junior, and William Tanui's, so I said 'okay, I want to bring this group of athletes together in Teddington."
Kim, his partner Duncan Gaskell - a former

2:20 marathon runner - and an American associate, Tom Ratcliffe, usually visit Kenya around eight times a year to do their 'talent spotting'. Kiptanui and another Kenyan called Jimmy Beauttah act as co-ordinators in Kenya for 12 months of the year.
"I usually go to what I guess you'd call an open meeting which takes place in Kenya at the start of May each year. There might be 120 running 5000 m in four different races, or eight 1500 m races, so there's obviously a big pool of athletes.

So what training schedules does Kim currently feed Kenyans such as Ngeny, Wilson Kipketer and Komen, plus athletes such as top American distance runner Bob Kennedy and British 800 m man James McIlroy?
"There have been two main influences," he said, "Frank Horwill and Alan Storey. And then two other coaches were Dave Young and Dennis Quinlan. All four in their way were a positive influence on my career and certainly my coaching career."

Talking to Kim and you get begin to discover that he has been tapping the minds of top coaches and athletes since he began running at the age of 13 . He has stolen the best bits, discarded what he considers to be worthless and moulded it into perhaps the most successful training formula in the middle and long distance running world. He makes it sound so easy, too.
"Coaching isn't rocket science and it's just a matter of doing relatively simple things well," he said. "We've seen a lot of changes in the past 20 years. If you look at the numbers of athletes within clubs - what percentage of club members were running 100 miles per week then, compared to the percentage now, and I think you'd have to say a lot less now.
"And Ian Stewart, who I met yesterday, talks about the difference in cultural thinking and attitudes towards training and that the athletes are not as willing to train as hard now as they were. Whereas for Kenyans running is a way of life and it's their opportunity to go forward in life and make a good living for themselves and their family and their future.
"To have one 13 -minute 5000 m runner you've got to have several 13:10-13:20 men. Dave Moorcroft was perhaps an exception in his day but generally you need a pool of athletes and the bigger the pool the better - which is something you see in soccer.
"It would oversimplify it to say it's only Frank's multi-pace, multi-time system. I think we're all either fortunate or unfortunate to the people we're exposed to," he said, adding that when he was 16-17 he used to travel down from Yorkshire to stay at his grandmother's in Kent and visit Frank for coaching.
"If I haven't represented or coached all of the top middle-distance runners from the past two decades then I've at least known them and talked to them. Aouita is an example, El Guerrouj now, Morceli ... I've talked to them
about training. So the combination of people like Frank and Percy Cerutty add to my own experiences as an athlete, plus my own exposure to the world of athletics."
So what advice does Kim have for British middle and long distance runners who want to match strides with the Africans on the racing track? Easy, they have to learn to match strides with them on the training track first.
"One of the most important things for nonKenyans - whether it be Sonia in the past or athletes like Bob Kennedy - the reason they've been able to progress is what I call our integration system between Kenyans and non-Kenyans.
"An Italian coach last year told me he'd just come back from Boulder and I asked him who he'd trained with. He said just Italians - so the benchmark was an Italian. Whereas when Bob Kennedy is training with Daniel Komen, then Daniel Komen is Bob Kennedy's benchmark. Ryan Wilson, another US 5000 m runner, looks at people like Bob and Daniel and thinks these are normal human beings.
"James McIlroy trained with Noah Ngeny towards the end of last season, as well as being in the same race when Noah broke the world record in Rieti for 1000 m . He can see Noah is just a normal human being and doesn't live a different lifestyle.
"It has always amazed me over the years how few people have ever enquired about coming to watch or train with the athletes (in Teddington) although there have been a couple of exceptions - Darrius Burrows and Adrian Passey. They may not be the world's best athletes but at least they've taken the trouble to come and do some workouts with these great athletes."

Teddington is just one of several training centre epicentres that Kim is trying to develop and expand. The others include Nyahururu, Stanford University, Boulder and Melbourne.
"They've been specifically chosen," he explained. "Teddington is where I lived and trained; Nyahururu is where historically top athletes have trained in Kenya going back to the Seventies; Melbourne is where Ron Clarke and Herb Elliott trained; Stanford is one of the strongest US middle and long distance universities, it has good communications and we're working closely with Stanford to make it the

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middle and long distance running centre of America."

Which leaves us with a British centre of excellence that hardly any Britons use.
"The opportunity is there, but I don't think it's for me to go around recruiting other people's athletes. We don't live in a closed or secret environment here (in Teddington)."

Like most things in life, you just have to ask.

## A question of talent

## by Frank Horwill

MANY years ago, the writer was discussing with the then BAAB senior national coach, John Le Masurier, the future of British athletics. He said, "Finding athletes with talent, real talent, is difficult." What exactly is talent? And, where does work overtake talent? Dave Bedford, if asked to run 800 metres in sub 2-minutes at the age of 17 years, would not have done so. Indeed, he had a job to do this when 18. However, he went on to run 27:30.80 for 10k, a world record in 1973, and a UK steeplechase record of 8:28.6 two years earlier. However, his great career was to be curtailed when Juha Vaatainen ran a 53 -second last lap in the European Championships in 1971.

It's doubtful whether Bedford could have run a solo 400 metres in that time, let alone at the end of a 10k race. Clearly, Bedford's lack of basic speed talent was overcome for a short period by his voluminous training load of 300km ( 180 miles) per week at one stage during his training year. Volume does work wonders for some. His 1973 10k time ranks him fourth on the UK all-time lists. But, 25 years later the trend changes. In 1988, Said Aouita (MAR) ran 1:43:86 for 800 m , this was 2 years after he ran $3: 29.46 / 1500 \mathrm{~m}$, and in 1989 he recorded $7: 29.45 / 3 \mathrm{k}$, and $12: 58.39 / 5 \mathrm{k}$ in 1987 , and in 1986 he notched up 27:26.11/10k.

This was an unheard of range of ability. In times per lap it reads: -
$800 \mathrm{~m} 51.9 \mathrm{secs} / 400$
1500m 55.9/400
3,000 60/400
$5000 \quad 62.3 / 400$
The average difference in times per 400 metres is 3.4 seconds. Those who do not subscribe to the 4 -second rule, should take note! Note the 2 -second differential between the 3 k and 5 k average lap times. We are now in a position to say that a time of 48 -seconds minus for a flat 400 metres is a prerequisite for world class middle-distance performance from 800 metres to 10,000 metres for males and 52seconds minus for females. One may gasp with disbelief at these figures, and one could argue that times of 50 -seconds minus for males and 54 -seconds minus for female, will suffice it will to make the GB team!

But, making the GB team should not be the ultimate goal. After scaling Ben Nevis it becomes boring climbing the same height Everest must always be in the mind.

Then there is talent, a lot of it, which appears at a very young age and then disappears. Take the 14 -year-old girl who, in a BMC race at Aldershot in 1982 ran 2:06.5 for 800 metres and was never seen again. What happened to her?

She got injured and during that phase discovered other interests. Where was the allpowered United Kingdom Coaching Scheme to help her through this period? Her time still heads the UK under 15 years of age rankings. What of the under 17 female who ran 2:02.0 for 800 metres, 4:16.8 for 1500 metres and 9:26.4 for 3,000 metres? This girl was never to improve her 800 metres time, was never to make the top 20 UK senior 1500 metres ranking list nor the 3,000 metres one. What happened to her? Again, the mighty UK Coaching Scheme which was operational at the time, 1977, failed to follow up.

However, other outstanding teenagers would follow a different path. An under 13 years of age girl ran 2:14.8 for 800 metres in 1971, also a 4:47.6 1500 metres. She disappeared from the under 15 and 17 years of age rankings but came up in the under age 20 list with a 4:14 1500 metres in 1977, and in 1982 recorded 4:07.11 for 1500 metres.

Now, the argument for precocious and non precocious young athletes making world class standard is a fascinating one. When Sebastian Coe joined the BMC at 15 -years of age, he listed his 1500 metres time as $4: 25$; nine years later he recorded 3:31.95 and four years further on astoundingly ran 3:29.77. However, Mary Decker (USA), at 14 years-old ran 2:03.6/800 and a $4: 40.2 / \mathrm{MILE}$, and was given a US international vest to run against SENIORS in a Russia versus USA indoor match.

Eleven years later, aged 25 years, she set an American record of 1:57.60/800 and $3: 57.12 / 1500$ in 1983. Two years on, she reduced the American 800 metres record to 1:56.90. This was in spite of being injured for three years from 1975 to 1977 inclusive. Decker also had great endurance and recorded $8: 29.71 / 3 \mathrm{k}$ and $15: 06.53 / 5 \mathrm{k}$.

What's the bottom line? Quite simple, really: - We cannot afford to lose outstanding talent at a young age.
a) It may be necessary to appoint a Mr Trouble-shooter.
b) Coach and athlete must be made aware that although copious amounts of running training can dramatically improve performance, the pure speed factor if not inherent, must be acquired, if necessary by training with sprinters. The story of Derek Ibbotson comes to mind here. Outsprinted twice in the Combined Services mile championships, he concluded that he could not sprint and so spent a winter training with his club's sprinters. He broke the world mile record in 1957 (3:57.2).

c) The days of the one-pace runner are over and were over 20 years ago. Runners may boast of doing 100 miles per week for three months in the winter, and some coaches may swear that this is the only way forward, but the simple fact is if a male runner cannot run sub 48 -seconds for 400 metres or a female sub 52 seconds by the age of 25 years, their only refuge is in the marathon. Many who cannot record such times will still make the GB team, and many will be quite content with this and will by indignant if financial support does not drop from the heavens.
d) The acquisition of pure speed requires great will-power, improvements are measured in 1 or 2 seconds after much work, not so easy as improving one's 10 k time by 10 seconds after the same man hours of training. The athlete who accepts this as the price to pay will embrace greater success.
e) Similarly, the athlete who thinks that innate speed exonerates them from endurance work, is living in a fool's paradise. The days of the $400 / 800$ runner are over. The last of the Mohicans was in 1977, when Alberto Juantorena (CUB) ran 1:43.44/800 and 44.26/400. The average lap times in his 800 metres was 51.7 secs, 7.5 seconds slower per lap than his best 400 m time. Compare that to the 800/1500 metres type runner like Coe, who ran $1: 41.73$ with a best 400 m time of 46.8 secs . Two laps of 50.8 secs, each 4 -seconds slower than his best 400 m time. Yes, endurance still plays a major role.

## Training at various ages

## by Frank Horwill

MARY DECKER - At 16 years of age did the following weekly training in the summer:
Sunday 30 mins easy run.
Monday $20 x 440 y d s$ at 65 secs. with 2 mins recovery.
Tuesday 110yds $-220-330-440-550-660$, down again to 110 yds. Maximum effort with 110 yds walk recovery after each rep.
Wednesday $10 x 110 y d s$ in 13 secs; $10 x 220 y d s$ in 36 secs; $10 \times 110 y d s .2$ mins. rest after each rep.
Thursday $15 x 660 y d s$ in 107 secs . with 2 mins rest.
Friday REST
Saturday RACE.
Decker was then $5^{\prime} 3^{\prime \prime}(1.60 \mathrm{~m})$ and weighed 90 pounds ( 41 kg ).

Her annual progression was: -
Age $12-2: 15.8 / 800$, 5:04/mile.
Age $13-4: 55 / \mathrm{mile}$.
Age 14 - 2:03.6/800, 4:40.2/mile.
Age 15-2:02.4 indoors.880yds.
Age 16-2:26.7/1000m indoors - world best.
She married and became known as MARY
DECKER SLANEY, and went on to record the following:

- In 1980 she set a mile World Record of 4:21.68, and also ran 3:59.43/1500m.
- In 1982 she recorded $15: 08.26 / 5 \mathrm{k}$ a world record, and a USA record of $8: 29.71 / 3 \mathrm{k}$, also a world record mile in 4:18.08.
- In 1983 she set American records at 800 (1:57.60) and 1500 (3:57.12).
- In 1985 she lowered the American record in the 5 k to 15:06:53 and also reduced the American record for 800 m to $1: 56.90$.
- At 20 years, Decker was $5^{\prime} 6^{\prime \prime}$ tall and weighed 112 pounds. At 28 years of age she gave birth to a son. She was injured and unable to compete from 1975 to 1977 inclusive (3 years). She tested positive for a banned substance in 1998, aged 40 years.

GLENDA REISER (Canada) at 19 years of age did the following training:
WINTER (October/November)
Sunday 1 hour run.
Monday 3 mile run; 40 mins weight training; 3 mile run.
Tuesday $15 \times 400$ in 80 secs. With 100 m walk recovery. Then, 8 x uphill fast.
Wednesday Same as Monday.
Thursday Whistle fartlek (when coach blew whistle, she ran fast until he blew it again. Very hilly course.)
Friday Same on Monday.
Saturday RACE OR REST.

## WINTER (December /March)

Four runs of 9 miles each weekly. Two track sessions weekly: a) $10 \times 300$ in 50 secs with 200 -walk recovery. b) $5 \times 600$ in 100 secs with 400 fast walk rest.

## SUMMER

Sunday $4 \times 800$ in $2: 16$ with 200 walk recovery.
Monday A.M. Alternating miles, fast, easy, fast. P.M. $4 \times 800$ as on Sunday.

Tuesday A.M. 4 mile run. P.M. $14 \times 400$ in 67 secs with 100 m walk after each.
Wednesday A.M. Same as Monday. P.M. $26 \times 200$ in 33.5secs with 30 secs rest.

Thursday A.M. Same as Tuesday. P.M. $16 \times 100$ in 16 secs with 100 walk recovery.
Friday A.M. Repeat Monday. P.M. $4 \times 200$ in 26 secs with 200 walk recovery.
Saturday If no race - Tuesday A.M. repeated.
Glenda was $5^{\prime} 5^{\prime \prime}$ tall (1.65,) and weighed 115 pounds ( 52 kg ). Her best times were:- $57 / 400$, 2:05/800, 4:06.7/1500 and 4:34.9/mile. She became Commonwealth gold medallist in the 1974 Games in Victoria, winning the 1500 in 4:07.8. At one point, she held four Canadian titles at cross country, indoor 1500, outdoor 1500 , and 800 outdoors.

DAVE WOTTLE (USA) at 18 years of age was doing the following training:

## WINTER (October/November)

Sunday 10 mile run.
Monday 1 mile in 5 mins. 15 secs, 5 mins rest; $1 \times 880$ yds in 2:20; 2 mins rest; $1 \times 220 \mathrm{yds}$ in 28 secs, 2 mins rest; $1 \times 440$ in 70 secs; repeated in reverse order, i.e. the mile came last.
Tuesday $20 x 440 \mathrm{yds}$ in 70 with 60 secs rest.
Wednesday Strength training for 20 mins . 4 mile time trial.
Thursday 1 hour fartlek.
Friday Jogged 3 miles.
Saturday Jogged 3 miles.
WINTER (December/March)
Sunday 12 mile run.
Monday 5 mile jog; $4 x 1200 \mathrm{~m}$ in $3: 20$ with 400 walk recovery. 4 mile jog.
Tuesday 4 mile jog; 20x220 yds in 32 secs with 220 jog. 4 mile jog.
Wednesday 4 mile jog; 6x800 in 2:05 with 440 walk recovery. 4 mile jog.
Thursday 45 mins fartlek. $4 \times 440$ in 70 secs followed by 60 m sprint after each. $4 \times 440$ increasing speed every 50 yds , 60 secs rest. 4 miles jog.
Friday $\quad 5$ mile jog; 1.5 miles of fast 110 yds followed by slow 110.4 mile jog.
Saturday If no race, 12 miles slow.

## SUMMER TRAINING

Monday to Thursday
7 miles morning run at $6.5 \mathrm{mins} /$ mile.
Sunday 12 mile run.
Monday $2 \times 2$ miles in 9:48 and 9:30 with 20mins rest.
Tuesday 19x440yds (first six in 70secs, four in 68 secs, two in 67,2 in 66, and one each in $65,64,62,60$.) with 220 walk recovery.
Wednesday three quarters of a mile in $3: 03,1 \times 880$ in $2: 03 \mathrm{~m}, 1 \mathrm{x} 440$ in 49 secs . Good rest after each.
Thursday 2 mile jog.
Friday A.M. 4 miles. P.M. 4 miles.
Saturday A.M. 2 miles jog. P.M. RACE.
Wottle was $6^{\prime} 0^{\prime \prime} / 1.83 \mathrm{~m}$ tall, and weighed 138 pounds $/ 64 \mathrm{~kg}$.

His best times were: - 800/1:44.3, $1500 / 3: 36.2$, mile/3:53.3, 2 mile/8:40. He won the 1972 Munich Olympic 800 gold medal in $1: 45.9$ (The first 400 m he ran in 53.4 , the second 400 in 52.5).

JOHN WHETTON (GB), a BMC Vice President, at 28 years of age was training as follows:
WINTER
Two morning runs, one was a fartlek over a hilly course, and the other was a 5mile fast run. Two steady runs on grass, one at 12 miles and one at 5miles, in the evening. Two hill fartlek sessions a week. Six to seven training sessions a week totalling about 45 miles, the emphasis being on fast hill running.

## SUMMER

Two morning runs, one was 50 -minutes of hill fartlek, the other was $5 x 330 y d$ in $42-43$ secs with 110 jog recovery, repeated three times. He did three other track sessions, one of which was 1.5 minutes' duration at race pace twice, followed by 3 mins. 45 secs at race pace, then $2 \times 1.5 \mathrm{mins}$ at race pace, all to be completed within one hour on grass: A tough session was 3 x three-quarters of a mile in 3 mins .02 secs with 10 mins recovery. He also liked $50 \times 100 \mathrm{yds}$ very fast with 30 secs recovery several times a week before a major race.
In 1969, John won the European Championships 1500 in a lifetime best of 3:39.4. His best mile time was $3: 57.7$. He was an Olympic finalist in both the 1964 and 1968 Games in the 1500 m .

He was $5^{\prime} 10^{\prime \prime} / 1.77$ tall and weighed 148 pounds $/ 67 \mathrm{~kg}$. He is currently a lecturer in physiology at Nottingham University.


## A WONDERFUL MAGAZINE <br> from Wilf Paish

Currently I am not enjoying the best of health so a short spell in bed permits me to read every word of the Autumn edition. An opportunity to "read between the lines", a chance to see what might be intended together with an opportunity to let my own mind reflect on the issues which your magazine addresses. Congratulations to you all - IT IS THE FINEST MAGAZINE I HAVE READ ON ANY SPORT THIS YEAR.

As a founder member of the BMC, during a time when I had a great squad of middledistance runners based mainly from my house in Maidenhead and Windsor, several became internationals; I would like to highlight some of the wonderful articles.

Sadly, the pressures of my work as a national coach encourages me to concentrate more on the field events where we were, and still are, very a short of coaches. There has to be something wrong with our system, or good about me, which encourages people to travel many miles for coaching. I now only have three distance runners under my wing as opposed to 16 Field eventers.
Well done Frank on the obituary of Harry. You have accurately summed up a man I also knew well. History is a precise science which has a tendency to repeat itself (something I read between your lines)

During my eighteen years as a national coach I can honestly say that I never used my position to upset an existing coaching relationship. Rather I used the opportunity, which was often presented, as a chance to do some coach education. When in 1980, I relinquished this advantage I certainly experienced advances, from unethical coaches, which were made towards athletes with whom I had a coaching bond. Yes, very good athletes were poached.

In 1980, the year before your referenced AGM in Harlow, I resigned as a national coach, since I could not accept the coaching policy which was becoming more of a "National Socialist" philosophy, and unfortunately there are still hints of it today (reference revalidation). One of my main criticisms was that people were being elevated in status without having any proven credibility. An Olympic medallist is a unique person, so making the coach also unique. Success of prodigies is the only acid test of a coach.

There are many pearls of wisdom in "Enhancing performance through resistance training" by Phil Hayes. Most is sound and all contentious issues influenced by current researchers. NEW DOES NOT NECES-

SARILY MEAN BETTER. Many coaches confuse power and strength (force) all of which are clearly defined by the physicist. Less clearly defined is the meaning of strength endurance and speed endurance and without a full appreciation of both we can never recapture the "Golden Years" of Coe.
The "pièce de resistance" of the magazine is "Beware the Quango", especially the phrase "Think not what you can be, but what you can do". I also like the reference to South Africa where I had the opportunity to direct their Olympics preparations and know the influence which 1 had on their medal success. It will be interesting to see what happens for the year 2,000 Games. At times I sense that Frank is suggesting that there isn't a need to reinvent the wheel (as I believe the sport is trying to do) and also a further inference to credibility. Frequently, I find myself repeating a phrase "Brian Clough was seldom politically correct, but he could produce good football teams".

I fail to fully get the message (other than subserviance) from the article by my longstanding friend Gordon Surtees. The true hidden agenda is that we have never had a strategy for developing elite athletes. It has always been accidental. Money nor facilities have ever produced success. Only the interaction of GOOD people can bring about this. While 1 agree with Gordon that we must all put together for the benefit of the sport.

The debate must be "IS THE MODEL CORRECT?" Had our distance coaches functioned in football they would have had the sack at least an Olympics ago. In November 1999, I had the pleasure of listening to Peter Coe on "Middle Distance running". He outlined the near perfect model for success. I wonder if he, or any other coach/athlete of similar status have been asked for opinions in our attempts to reinvent the wheel?
"Plying to improve" is reflective of a journalist's approach to find the "Open Sesame". The basic fact is that the running action of Paula Radcliffe is unsound when the quality required is acceleration. In this respect she is almost indentical to Elana Meyer. Perhaps plyometrics will help in this respect, but is it too late for the 5,000 metres? Note I did not say the 10 nor the marathon where the acceleration required at times in the race is considerably less. I have observed many athletes during their eating both before and at major Games." Many roads lead to Rome" where most are influenced by palatability.

Frank, in "Mileage Business", is also close to his best. Reading between his lines I believe he
suggests that RECOVERY IS AN ESSENTIAL PART OF TRAINING and that SPECIFICITY IS A KEY FACTOR. There is little point running 100 miles a week when the athletes is in a permanent katabloic state. There is little point running at a 200 mtrs pace of 28 secs when racing speed is closer to 25 seconds.

Finally, I would like to comment on the letter concerning the use of drugs. Quite wrongly, many people believe that I condone their use. Nothing could be further from the truth. If a rule is there we must all uphold the rules. The well informed should debate "Are the rules correct?" For example, your stated definition of "doping" and "performance enhancing" is scientifically flawed. The doping rules are unethical in many ways. I need only to ask those readers who can to access the IOC website covering their recent conference.

In concluding this highly personal article I must again offer my congratulations to all of those concerned with the excellent production of the final issue of the millennium.

## From Frank Horwill

Phil Hayes' articles on the various forms of strength training for middle-distance runner was most interesting and raises a lot of questions. Here are a few observations: -

1) Suslov, former national M.D. coach of the Soviet Union, is of the opinion that strength training should not exceed 120 hours total in any one year. That's a little over 2 hours a week throughout the year. He alleges that if this amount is exceeded, athletes lose their endurance. In the winter, Soviet female distance runners engaged in strength training every other day; this would largely eat up the 120 hours allocation during the winter.
2) Bulking up for female distance runners who do weight-training is difficult, since the strength hormone testosterone is twenty times less in them. Given an equal amount of weight training, males would show a definite increase in muscle size, females would simply add tone to their musculature.
3) Much of the machine-operated leg-strength equipment in gyms is contra-indicated. For instance, runners do not sit and exert power horizontally, nor do they lie on their back and push weights up vertically with their legs. Even loose weights have come in for criticism: Max Jones believes that step-ups with weights has no relation to the running action, athletes do not exert force to reach the sky!
4) As long ago as 1965 , if became clear that when a group of middle-distance runner were given certain tests those with 800 metre times
sub 1:50 (male), and sub 2:05 (female) possessed either greater natural or acquired allround strength than their slower compatriots. For example, hopping 25 yards on each leg was achieved in 10 minus hops. Some of the longdistance brethren took 14 hops! When it came to the $40 \mathrm{yds}(36.6 \mathrm{~m})$ sprints, those with a good score on the hop test, were far faster than those with an inferior score. WE MUST TAKE NOTE OF THESE INDICATORS!
5) The case for strength training as a prophylactic against injury has not been emphasized enough. Time and time again, one hears qualified physios telling athletes that knee injuries are associated with weak quadriceps, that strained hamstrings are due to their not being 60 per cent as strong as the quadriceps. This is simple to test. Back trouble is linked with weak abdominals. If one sees the extent of the stomach mucles' attachment to the spine, there can be little doubt of this fact.
6) The Finns in 1970 suggested that when starting weight training there was considerable miniscule tearing of muscle fibres which could be quickly repaired by the ingestion of "a protein snack" immediately after strength-work. This could be a glass of milk ( $0.9 \mathrm{~g} / \mathrm{oz}$ ) or a handful of peanuts ( $8 \mathrm{~g} / \mathrm{oz}$.)
7) It has taken a hundred years for physiologists to realise that when we run only one leg is on the ground at a time! Therefore legs should be exercised ONE AT A TIME, not together! What a great discovery!! This is why hopping is such a great exercise, especially up slight gradients. Interesting to note that the great Russian female distance runners did 200 hops a week. Start with small amounts and progress each week, if you wish to avoid knee-injury.

## From Barry Watson

It will not take me two pages of writing to argue my point, which is that as Mike Gratton states "There is no such thing as junk mileage." I am amazed that theorists like Peter Coe seem to have so much credibility - it must have something to do with having a famous, superb athlete for a son! Mike, on the other hand, is a doer!

An easy run at any pace loosens the muscles, eases the aches and pains of the previous day's hard session and sets one up for a great session later on in the day.

It means that less time is necessary for stretching etc and is running-specific. A high mileage week adds to the confidence necessary to achieve good results. No one would argue that race-specific training is also necessary dependent on the athlete's event but continual stress or too much hard training, as 1 know to my cost, leads to inevitable slow down. The Bowerman theory of alternative hard/easy sessions is an excellent one and protects the athlete.

In Mike's case 1 am sure that he would credit his 2:09 marathon to the fact that he ran a considerable weekly mileage, so luck must have
included a degree of what Peter Coe would describe as "junk mileage". This was true in my own case. It is not just marathon runners who have benefited from so called "junk mileage" just look at the success of runners like Peter Smith, Steve Ovett, Dave Bedford and LasseViren.

Another great plus with easy running is that it is a marvellous stress remover - extremely important in the lives of today's full-time world class athletes. In Gordon Pirie's words to me when 1 was an aspiring international runner- "If you want to get to the top, get out there and race." (He didn’t say "run hard!").

## HIGH OR LOW MILEAGE: ARE WE REALLY TALKING ABOUT THE SAME THING? From Phil Hayes

In the last two editions of the BMC News we have had contrasting opinions expressed regarding the role of mileage. Both Peter Coe and Frank Horwill provide physiological evidence to support the idea that intensity is more important than volume. Mike Gratton by contrast, provided evidence of successful athletes who have used high volume training, arguing there is no such thing as junk mileage. This is a debate that has raged for many years. It appears to me that there are two issues that cloud the situation and require clarification before we can address the role of mileage.

## Why is mileage important?

We need to ask ourselves why do we want to examine the mileage? In order to progress the training of an athlete a coach needs to know the amount of training they are doing. The total amount of training (total training load) depends upon both intensity and volume. For example, is it better to do 50 miles / week at a brisk speed or 75 miles / week but slower? Currently it is not possible to make this comparison, because the interaction of volume and intensity cannot be calculated. Coaches have therefore resorted to quantifying training by volume, i.e. the mileage covered by the runner. It is important therefore to remember that this is a substitute for what we would actually like to know.
What constitutes mileage?
The second issue regards how we calculate the total mileage figure. After examining the
training schedule below answer the following questions:

1) What is the total mileage?
2) Why was the athlete successful on this schedule?

## What mileage figure did you get?

If you exclude the warm up / down and jog recoveries it adds up to 55 miles. When the warm up / down and jog recoveries are included it adds up to 76 miles.

Why do you think the athlete was successful?
Presumably if your total was 55 miles then the logical conclusion is that low mileage, high intensity training is the important factor. By contrast, if you calculated the mileage at 76 , then you may logically conclude that volume does have an important role.

## Who is correct?

Neither method is right or wrong, they are just different approaches. The figure that we calculate influences the conclusions we draw about why a programme has worked. The above example demonstrates that two people could end up arguing about the role of mileage, when in fact they have the same or similar programmes.

The point I am trying to make is that before we can compare the mileage of different schedules, we must calculate mileage in the same way. Comparisons are only meaningful when you compare like with like. Perhaps editors could recommend a standard method for use in their publication.

## Conclusion

To conclude, there are two key points to this article. Firstly, mileage is used because we cannot measure the total training load. Secondly, in order to compare the mileage used by different athletes we must compare like with like. Both of these issues are independent of the type, or amount, of training used.

## And finally...

Having hopefully clarified some issues on the topic, I'd like to leave you with a paradox. In order to prevent overtraining there has to be sufficient recovery in a training programme. Physiologists have demonstrated that light exercise is more effective in promoting recovery than complete rest. At what point does light recovery activity become junk mileage?

## EXAMPLE TRAINING SCHEDULE

|  |  | EXAMPLE TRAINING SCHEDULE |
| :--- | :--- | :--- |
|  | a.m. | p.m. |
| 1 | 5 miles steady | Weights -2 miles warm up / down |
| 2 | 5 miles steady | 4 miles threshold run -2 miles warm up $/$ down |
| 3 | 5 miles easy | 5 miles steady |
| 4 | 5 miles steady | $3 \times 1600 \mathrm{~m}(400 \mathrm{~m}$ jog $) 1$ _ miles warm up $/$ down |
| 5 | 5 miles steady | Flexibility and core stability work -2 miles warm up $/$ down |
| 6 | 5 miles steady | Hills $-20 \times 100 \mathrm{~m}$ (jog back) -2 miles warm up $/$ down |
| 7 | 15 miles steady | Rest |

## HIGH AND LOW MILEAGE From Glen Grant

The point is possibly being missed by the advocates of one method or another. What is required is to change the muscle cell so that it is specific for the activity you want to complete. It is quite clear that this can be done in a variety if ways. I spent many winters cross country skiing with virtually no running. After one of these I ran my fastest ever 400 relay leg of 47.8 . So much for Dave Moorcroft's comment at the National training weekend a few years ago that you must be "close to speed in the winter". You can make the adaptation in a number of ways - just reading the interviews in this edition proves this.

However, where a runner has two clear techniques, one for high speed and one for low/middle speeds then high mileage does not help with the neuromuscular coordination aspects required to run fast. In this case Dave's comment is completely true. He made a point of running fast every week and it worked. It is clearly no good having the world's best cell structure if you cannot use it to run fast enough to win. This was highlighted exactly by Dave Bedford. The fact is that 800 m running requires both a high aerobic capacity and a very high
speed capability to win. You CAN get the former by high mileage but at some stage you must cut loose and run at high speed for at least 15 weeks to create the specific anaerobic enzyme base required within the cell to cover the race requirements. Also if you have spent your youth gaining a huge aerobic capability then you only need to keep it rather than build it from first principles. Mike Gratton did not have that base when he was younger, neither did I - I was a long way behind Dave Moorcroft at 18. Mike and I both had to work at it for long periods.

What is clear is that during his career Sebastian did huge amounts of highly efficient Aerobic work during his repetition sessions (If the book is true) at close to threshold. $40 \times 200 \mathrm{~m}$ on an inclined slope, jogging back, for example. Try it it takes ages! Also much of his work was not at maximum speed and a large proportion of the session was clearly below threshold and aerobic. He therefore did not need the longer time running to change the cell structure. But does it matter. One man's meat is another's poison. What counts is that you make the change. That takes time and effort whichever way you do it (speak to Ian Stewart if you don't believe me). Why not try both ways of training and and see which suits? I did.

## LOST MEMBERS

We have no addresses for the following BMC members, their copies of the BMC News have been returned to us by the Post Office.
If anyone knows the whereabouts of the following, please contact Pat Fitzgerald at 47, Station Road, Cowley, Uxbridge, Middlesex UB8 3AB.

| 3035 | Chris Allan V40 | 2295 | Mark Fallows | 57 | Peter Milner |
| ---: | :--- | ---: | :--- | :--- | :--- | :--- |
| 1099 | Joan Allison | 499 | Brendan Foster | 135 | Alison Noble |
| 2879 | Nicola Andrews | 2841 | Liz Francis-Thomas | 3046 | Colin Palmer |
| 3220 | Mark Arndt | 2090 | David Fruin | 2647 | Simon Plummer U23 |
| 1585 | Leslie Bell | 2485 | Joanne Gardener U23 | 2833 | Andy Pratt |
| 2537 | Ilan Benisty | 1620 | Martin Gaskell | 1489 | Simon Rayner |
| 122 | Maurice Benn | 1266 | Philip Gerrard | 48 | Lawrence Reed |
| 2007 | David Benton | 2629 | Paul Gray II | 1930 | Garry Ribbons |
| 2842 | Karen Black | 59 | Derek Haith | 2876 | Mark Richardson |
| 2655 | Andrew Blackmore | 2035 | Roger Hamilton | 222 | Rita Ridley |
| 213 | John Boulter | 2657 | John Hancock V40 | 2391 | Matthew Roberts |
| 2606 | Paul Bristow | 2568 | Beverley Hartigan | 2167 | Ian Robinson |
| 2878 | Martin Broderick U23 | 2499 | Julian Hatcher | 2303 | David Rowbotham |
| 2709 | Emma Brooker U23 | 2801 | Dianne Henaghan | 2140 | Alaister Russell |
| 2507 | Gary Brown II | 2341 | Simone Hilton Wilson | 2297 | Simon Saxby |
| 2890 | Caroline Buckner | 3347 | Shona Hughes U20 | 1411 | Simon Scott |
| 1448 | Jack Buckner | 2471 | Kheredine Idessane | 1651 | Jeffrey Seddon |
| 2578 | David Bullock | 3165 | Dianna Jeffrey U17 | 2451 | Scott Selby U23 |
| 2534 | David Burke IRE | 2715 | Tony Johnston | 125 | Alan Simpson |
| 2535 | John Burke IRE | 47 | Elizabeth Joyce | 1135 | Wendy Sly |
| 1669 | Andrew Cawthorne | 2422 | Matthew Kloiber | 3376 | Wayne Smith |
| 223 | Iris Cook | 2538 | David Locker | 2345 | Ben Sutton |
| 2952 | Steven Crowe | 2571 | Rhonda MacPhee | 2763 | Natalie Tait |
| 2737 | Shane Daly IRE | 2256 | Larry Mangleshot | 2644 | Caroline Thomas |
| 2976 | Stefano DeTomaso | 3248 | Michelle Mann U23 | 107 | Valerie Tomlinson |
| 1713 | Rachel Disley | 2483 | Ian Manners | 2145 | Glyn Tromans |
| 3246 | Kate Doherty U23 | 2730 | Brett Mate | 2508 | David Tune |
| 2611 | Elinor Doubell | 2502 | Tony Mate | 1706 | Diana Watkins |
| 2469 | Paul Drake | 2691 | Stuart Maxwell | 2366 | Norrie Williamson |
| 3145 | Alexandra Ercolani | 1961 | Thomas McKean | 2588 | Nick Wood U23 |
| 2560 | Claire Falconer | 174 | William McKim | 3253 | Alison Wyeth W35 |



## From Tony Elder

Just received the Autumn edition of BMC News. Excellent magazine! Articles interesting as always, and I enjoyed the photospread especially as 1 took some of the photos!

May I suggest that the proof-reading could be improved? The omissions and errors threaten to spoil an otherwise first class journal. Can I bring just one error to your attention? In your list of Vice Presidents you list Iris Ridley - there is no such person! Iris and Rita Lincoln, whom I used to coach, and who are twins, both married. Rita became Rita Ridley and Iris became Iris Cook. Iris is an Australia with her husband and large family. Whether you want to call her Iris Lincoln or Iris Cook, I don't mind, but she isn't Iris Ridley! (Since retiring Rita has remarried, but will only be known to those in athletics and the BMC as Rita Ridley).

## From Jane Shields

May I bring to your attention an incorrect assertion that was continued within Harry Wilson's obituary (BMC News, Autumn, 1999).

Harry Wilson coached several international women athletes in the early to late 1980s, many of them my fierce rivals for major games places. May I point out that he did not coach myself, although I did approach him after the LA Olympics for coaching advice....however, he said no, due to the fact his group already included Christine Benning, Angela and Susan Tooby, Kirsty Wade, Jill Hunter etc - all my main rivals!

Harry was a very nice man. For the record it was Jim Madigan who guided me to an 8.45 3K performance in the 1983 World Championships and ultimately Alan Storey who provided the advice and motivation from 1985 onwards.

## APOLOGIES TO:

Mike Rezin and Peter Shaw omitted from list of Vice Presidents in Autumn 1999.

## A bit in reserve

by Derek Parker (BAF Senior Coach; BMC Coach)

ALTHOUGH aerobic endurance is a prime physiological requirement of the distance runner, the importance of speed involving the anaerobic processes must never be ignored.

Basic sprinting speed is necessary at all levels. For athletes with championship or international aspirations it is indispensable.

Speed describes the maximum velocity attainable by an athlete over a short distance of approximately 15 to 30 metres. It is best measured with a stopwatch by accelerating progressively over 20 to 30 metres before entering the timed maximum velocity phase and holding top speed for the 15 to 30 metres distance

We can evaluate the role of speed by considering the following example. If an athlete has a best time of 15 seconds for 100 metres he/ she cannot hope to run 400 metres in 60 seconds because this is the equivalent of $4 \times 100$ metres in 15 seconds with no recovery.

And if the athlete is incapable of running 400 metres in 60 seconds he/ she will never manage 800 metres in two minutes as this equals $2 \times 400$ metres in 60 seconds with no recovery.

So quite clearly the time it takes for an athlete to run 100 metres will influence the times he/ she will accomplish for other distances. This deduction is confirmed by the work of Nikolai Ozolin, coach to Valery Borzov, the 1972 Olympic Games gold medallist.

Ozolin articulated the concept of speed reserve. This shows that if two athletes possess similar endurance levels, the one with the greater speed reserve is more likely to triumph over his/ her rival in a sprint finish.

For example, an athlete capable of 1 minute 46 seconds for 800 metres covers each individual 100 metres in 13.2 seconds with no recovery. If his best time for one single 100 metres is 10.8 seconds a simple mathematical calculation reveals his speed reserve is 2. 4 seconds (13.2-10.8 = 2.4).

Conversely, an athlete capable of 100 metres in the same 1.46 seconds but with a 100 metres personal best of 11.5 seconds has a speed reserve of just 1.7 seconds ( $13.2-11.5=1.7$ ). Although the second athlete has considerable endurance he will be at a disadvantage in a sprint finish against the one with the superior 2.4 seconds speed reserve.

Also, apart from the fact that the runner with the 2.4 seconds speed reserve will be physiologically better equipped to triumph in a fast sprint finish he will have greater potential for further improvement.

This is because it is easier to develop endurance than speed. So, in training, especially at an early stage of a distance running career, it
is essential to devote time to increasing speed.
The advantage of superior speed reserve is equally applicable in races over longer distances. An athlete who runs 5000 metres in 15 minutes completes $50 \times 100$ metres in an average of 18 seconds without any recovery.

If one athlete capable of 15 minutes for 5 K has a personal best time of 11.8 seconds for 100 metres then his speed reserve is 6.2 seconds ( 18.0 $-11.8=6.2$ ). Another athlete with a fastest 100 metres of 13.8 seconds has a speed reserve of just 4.2 seconds (18.0-13.8 $=4.2$ ). So the advantage in a sprint finish quite clearly lies with the first athlete as he has the better speed reserve.

Again the first athlete will have the greater improvement capacity for improvement because it is easier to develop endurance than speed.

To a large extent speed is genetically determined by the composition of the muscle fibres which the athlete can do little about. White, fasttwitch muscle fibres are responsible for speed. They have a greater anaerobic capacity. Red, slow-twitch muscle fibres are responsible for endurance. They have a better aerobic capacity.

It is the relative percentages of red and white fibres in the muscle structure of each athlete which determines whether he/she is best suited for sprint or distance events.

Although the athlete with an inferior speed reserve to that of a rival is at a disadvantage he/ she must never meekly accept the inevitability of defeat.

Athletes should remember that the ability to produce a fast sprint finish when tired can often give the slower competitor the edge over one faster when both are experiencing deep feelings of fatigue in the closing stages of a race. This was aptly demonstrated in the 1998 Scottish crosscountry championship at Irvine when Robert Quinn won the title by outsprinting three faster rivals over the final 100 metres because he had set a gruelling pace over the previous 7.5 miles to draw the sprint sting from his speedier opponents.

Fast surges injected into brisk, steady-state running - along with gradual or sudden pace accelerations -- are other powerful weapons in the armoury of the psychologically committed athlete who does not intend to be outsprinted by speedier rivals in the final few metres of a competition.

The mental aspect is also important as very often victory goes to the person most eager to succeed and who possesses vast resources of courage, confidence, initiative, resilience, and self-belief.

So whatever natural levels of speed an athlete is endowed with he/ she must endeavour continually to improve sprinting ability.

Distance-running speed can be developed by ending repetition or steady runs with a few sprints over various distances e. g. 3 to $6 \times 30$ metres sprints from a flying start; or 'in-out-ins' in 30 metres segments over 90 metres x 3 repetitions; or 30 metres at 1500 metres pace increasing to 30 metres at 800 metres increasing to 30 metres full effort $x 3$ repetitions.

The following session is one I have used with international athletes to develop the main energy systems in a single work-out:

AEROBIC -- 6 miles at half-marathon pace followed by 3 to 5 minutes of easy running +
AEROBIC AND ANAEROBIC/LACTIC - 4 x 60 seconds at 1500 metres pace ( 60 seconds jog recovery) followed by 3 to 5 minutes of easy running +
ANAEROBIC/LACTIC - $4 \times 30$ seconds at 800 metres pace ( 30 seconds jog recovery) followed by 3 to 5 minutes of easy running +
ADENOSINE TRIPHOSPHATE/ CREATINE PHOSPHATE - $6 \times 5$ seconds full effort ( 30 seconds jog recovery between repetitions).

Good sprinting form must be emphasised with the athlete concentrating on driving the arms backwards and forwards on a sagittal plane. $\mathrm{He} /$ she should be conscious of attaining a good knee lift in response to the powerful driving action of the rear, fully-extended leg.

The knees and feet should point forwards to ensure that all force, movement, and effort are directed in a straight line from start to finish. There should be a 90 degrees angle between upper and lower arms with the fingers of the front, loosely-cupped hand reaching almost as high as the chin and the upper rear arm achieving parallelism with the running surface. By shortening the arm lever the entire arm action speeds up because short levers move faster than long levers.

Similarly the thigh of the front leg rises to a position parallel to the track and there is a 90 degree angle between upper and lower leg. The lower leg folds up behind the athlete as it swings backwards beneath the body in the recovery phase. It, too, becomes a short lever and consequently attains a faster momentum.

In the driving phase the rear leg is fully extended behind the body to provide the maximum power and leg thrust required to propel the body forwards at the maximum velocity. The head should be held still but not rigid with the eyes looking straight ahead as the athlete concentrates on maintaining form, technique, relaxation, and rhythm as he/ she sprints to and beyond the finishing line

## United Kingdom All-Time Lists

(as at 1st January 2000)
compiled by Martin Rix



| 3:38.2a James Espir | ENG | 17.10.58 | 3 | Inv | Louvain, BEL | 11 Jul 1980 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3:38.22 Peter Stewart | SCO | 8.08.47 | 1 | AAA | London (CP) | 15 Jul 1972 |
| 3:38.31 Matt Barnes | ENG | 12.01.68 | 6 | TSB/GP | London (CP) | 23 Jul 1993 |
| 3:38.52 Ray Smedley | ENG | 3.09.51 | 2 | AAA | London (CP) | 15 Jul 1972 |
| 3:38.56 Curtis Robb | ENG | 7.06.72 | 5 | EP | Rome, ITA | 26 Jun 1993 |
| 3:38.64 Simon Fairbrother | ENG | 28.03.68 | 3 | Inv | Verona, ITA | 17 Jun 1992 |
| 3:38.65 Ian Stewart | ENG | 22.09.60 | 4 | AAA | London (CP) | 8 Aug 1981 |
| 40 |  |  |  |  |  |  |
| 3:38.66 Glen Stewart | SCO | 7.12.70 | 1 | Sikijev | Ljubljana, SLO | 26 May 1996 |
| 3:38.68 John Kirkbride | ENG | 24.03.47 | 3 | AAA | London (CP) | 15 Jul 1972 |
| 3:38.7 Jim Douglas | ENG | 9.09.45 | 1 | vGRE,NED | Athens (NF), GRE | 27 Jun 1972 |
| 3:38.78 Mark Scruton | ENG | 28.05.59 | 1 | LCvAAA | Loughborough | 17 Jun 1984 |
| 3:38.8 Paul Lawther | NIR | 22.12.55 | 2 | UK | Cwmbran | 12 Jun 1977 |
| 3:38.9 Ian Hamer | WAL | 18.04.65 | 1 | BL2 | Cwmbran | 5 Aug 1989 |
| 3:38.93 Brian Treacy | NIR>IRL | 29.07.71 | 6 | CG | Victoria, CAN | 28 Aug 1994 |
| 3:39.0 David Lewis | ENG | 15.10.61 | 1 | BMC | Manchester (S) | 9 Aug 1983 |
| 3:39.06 Andy Keith | ENG | 25.12.71 | 2 | NCAA | New Orleans LA, USA | 5 Jun 1993 |
| 3:39.10 Alan Simpson | ENG | 22.05.40 | 1 | vPOL | London (WC) | 15 Aug 1964 |
| 50 |  |  |  |  |  |  |
| 3:39.1 Neil Caddy | ENG | 18.03.75 | 1 | BMC | Swindon | 14 Aug 1996 |
| 3:39.1 Rob Hough | ENG | 3.06.72 | 1 | BMC | Manchester (W) | 14 May 1997 |
| 3:39.12 Ian Stewart | SCO<ENG | 15.01.49 | 1 | vFRA | London (WC) | 1 Sep 1969 |
| 3:39.27 Dave Clarke | ENG | 1.01 .58 | 4 | Bisl | Oslo, NOR | 26 Jun 1982 |
| 3:39.29 Steve Halliday | ENG | 14.03.68 | 3 | Znam | Moscow, RUS | 10 Jun 1990 |
| 3:39.41 Chris McGeorge | ENG | 13.01.62 | 4 r 2 | WK/GP | Zürich, SUI | 13 Aug 1986 |
| 3:39.43 Mike Chorlton | ENG | 9.01.63 | 3 | AAAvLC | Loughborough | 17 Jun 1984 |
| 3:39.43 Alistair Currie | SCO | 24.05.65 | 5 | PTG/GP | London (CP) | 19 Jul 1985 |
| 3:39.45 John Whetton | ENG | 6.09 .41 | 1 | EC | Athens (NF), GRE | 20 Sep 1969 |
| 3:39.57 Mal Edwards | WAL<ENG | 7.01 .58 | 7 | Peugeot/GP | London (CP) | 8 Jul 1988 |
| 60 |  |  |  |  |  |  |
| 3:39.62 Steve Martin | NIR | 16.07.59 | 6 | Nike | London (CP) | 18 Aug 1984 |
| 3:39.64 Spencer Barden | ENG | 31.03.73 | 2 | CdB | Barcelona, ESP | 17 Jun 1998 |
| 3:39.66 Matt De Freitas | ENG | 19.09 .68 | 8 | Vaux | Gateshead | 30 Jul 1993 |
| 3:39.7 Bob Maplestone | WAL>USA | 15.07.46 | 3 | AAU | Seattle WA, USA | 17 Jun 1972 |
| 3:39.7 Mike Openshaw | ENG | 8.04.72 | 3 | BMC | London (BP) | 14 Jun 1998 |
| 3:39.8 Ian Gillespie | SCO | 18.05.70 | 2 | BMC | Swindon | 7 Aug 1997 |
| 3:39.84 Geoff Turnbull | ENG | 15.04.61 | 4 | LCvAAA-gst | Loughborough | 17 Jun 1984 |
| 3:39.85 Phil Banning | ENG | 10.10.50 | 1 h 3 | AAA | London (CP) | 1 Aug 1975 |
| 3:39.88 Gary Taylor | ENG | 1.06 .63 | 2 | Hot Springs AR, | USA | 11 Apr 1987 |
| 3:39.90 Sean Cahill | ENG | 4.03.58 | 7 | AAA | London (CP) | 8 Aug 1981 |
| 70 |  |  |  |  |  |  |
| 3:40.0 Tony Settle | ENG | 9.12 .53 | 2h1 | OT | London (CP) | 11 Jun 1976 |
| 3:40.01 Alan Mottershead | ENG | 16.05.55 | 2 | vFRA-B | Le Touquet, FRA | 18 Aug 1985 |
| 3:40.02 Jon Wild | ENG | 30.08.73 | 1 | Fayetteville AR, | USA | 24 May 1997 |
| 3:40.04 Stuart Paton | SCO | 24.05.63 | 5 | EdinG | Edinburgh | 17 Jul 1984 |
| 3:40.1 Ian Grime | ENG | 29.09.70 | 2 | BMC | Swindon | 14 Aug 1996 |
| 3:40.14 Gary Barber | ENG | 1.09.63 | 1 | Montréal, CAN | 8 Aug 1989 |  |
| 3:40.2 Andrew Pearson | ENG | 14.09.71 | 1 | LCvMC,RAF-gst | Loughborough | 11 Jun 1997 |
| 3:40.21 Dick Callan | ENG | 15.11 .55 | 5 | LCvAAA-gst | Loughborough | 17 Jun 1984 |
| 3:40.25 Gary Staines | ENG | 3.07.63 | 2 | AAAvLC | Loughborough | 14 Jun 1986 |
| 3:40.30 Mark Kirk | NIR | 18.01.63 | 13 | Peugeot/GP | London (CP) | 8 Jul 1988 |
| 80 |  |  |  |  |  |  |
| 3:40.33 Gary Marlow | ENG | 26.11.63 | 5 | Pearl | Belfast | 16 Jul 1990 |
| 3:40.4 John Boulter | ENG | 18.11.40 | 6 | AAU | New Brunswick, USA | 28 Jun 1964 |
| 3:40.41 Nick Rose | ENG | 30.12.51 | 1 | BMeat | London (CP) | 25 Aug 1980 |
| 3:40.48 Darren Spawforth | ENG | 1.08.69 | 2 | Reebok | Loughborough | 28 Jul 1992 |
| 3:40.50 Jon Richards | ENG | 19.05.64 | 6 | LCvAAA-gst | Loughborough | 17 Jun 1984 |
| 3:40.5 Barry Smith | ENG | 16.04 .53 | 3 | Cape Town, | RSA | 29 Mar 1976 |
| 3:40.53 Tony Blackwell | WAL | 2.11 .58 | 7 | AAA | London (CP) | 25 Jul 1982 |
| 3:40.53 Johan Boakes | ENG>SWE | 12.04.68 | 12 | DNG/GP | Stockholm, SWE | 2 Jul 1992 |
| 3:40.53 Jon Brown | ENG<WAL | 27.02.71 | 3 | Reebok | Loughborough | 28 Jul 1992 |
| 3:40.54 Eamonn Martin | ENG | 9.10 .58 | 8 | Talbot | London (CP) | 15 Jul 1983 |
| 90 |  |  |  |  |  |  |
| 3:40.56 Erwin Hartel | ENG | 28.07.51 | 3 | AAA | London (CP) | 2 Aug 1975 |
| 3:40.6 John Nuttall | ENG | 11.01.67 | 5 | NvdA | Hechtel, BEL | 7 Jul 1990 |
| 3:40.66 Simon Mugglestone | ENG | 24.01.68 | 9 | Bis//GP | Oslo, NOR | 14 Jul 1990 |
| 3:40.69 Gareth Brown | WAL | 29.12.61 | 6 | AAA | London (CP) | 21 Jun 1986 |
| 3:40.7 Mike Wiggs | ENG | 25.04.38 | 1 | Inv | Helsinki, FIN | 27 Aug 1964 |
| 3:40.7 Rob Whalley | ENG | 11.02.68 | 3 | BMC | Swindon | 14 Aug 1996 |
| 3:40.79 David Glassborow | ENG | 17.07.54 | 9 | AAA | London (CP) | 8 Aug 1981 |
| 3:40.81 Alan Salter | ENG | 22.04.60 | 9 | Talbot | London (CP) | 15 Jul 1983 |
| 3:40.87 Jon McCallum | SCO | 19.11.75 | 12 | MAI | Malmö, SWE | 2 Aug 1999 |
| 3:40.90 Dave Robertson | ENG | 4.08 .73 | 5 | Reebok | Loughborough | 28 Jul 1992 |
| 100 |  |  |  |  |  |  |
| 3:40.9a Ron Speirs | SCO | 18.05.52 | 2 r 2 | IC4A | Philadelphia PA, USA | 22 May 1976 |
| 3:40.9a David Rafferty | ENG | 1.06.54 | 1 | OhioV | Murray KY, USA | 3 May 1980 |
| 3:40.95 David Swain | ENG | 21.12.61 | 12 | GGala/GP | Rome, ITA | 22 Jul 1987 |
| 3:40.95 Philip Healy | NIR | 1.10 .70 | 11 | CCS | Cork, IRL | 22 Jun 1996 |
| 3:41.0 Walter Wilkinson | ENG | 2.11.44 | 4 | vPOL | Warsaw, POL | 12 Sep 1970 |
| 3:41.0 Craig Mochrie | ENG | 6.11.62 | 1 | LCvBU | Loughborough | 1 Jul 1987 |
| 3:41.0 Dave Heath | ENG | 22.05.65 | 1 | BSSFvMC | Loughborough | 25 Jul 1989 |
| 3:41.02 Steffan White | ENG | 21.12.72 | 2 | Reebok/BMC | Solihull | 21 Aug 1994 |
| 3:41.03 Mike Downes | ENG | 25.05.54 | 5 | AAA | London (CP) | 14 Jul 1979 |
| 3:41.04 David Warren indoors | ENG | 11.02.56 | 5 | Athl | Lausanne, SUI | 15 Aug 1980 |
| 3:40.24 Eddie King | NIR | 26.11.75 | 1 | AAA | Birmingham | 31 Jan 1999 |

3:38.86 Sean O'Neill 6 Jun 1987 - excluded as set after opting to represent Irish Republic
3:39.19 Green 28 Aug 1994 - excluded as set whilst representing Jamaica in Commonwealth Games
Men's 1 Mile
3:46.32 Steve Cram

| Steve Cram | ENG | 14.10 .60 | 1 | Bisl/GP | Oslo, NOR | 27 Jul 1985 |
| :--- | :--- | ---: | :--- | :--- | :--- | ---: |
| $3: 48.31$ |  |  | 1 | Bisl/GP | Oslo, NOR | 5 Jul 1986 |
| $3: 48.85$ |  |  | 1 | Bisl/GP | Oslo, NOR | 2 Jul 1988 |
| $3: 49.49$ |  |  | McVit | London (CP) | 12 Sep 1986 |  |

Steve Cram (325) winning the 1983 World Championships 1,500m


## Women

## Women's $\mathbf{8 0 0}$ Metres



1:59.05 Christina Boxer/Cahill ENG 25.03.5
40 performances to 1:59.36 by 5 athletes
1:59.67 Lorraine Baker ENG $\quad 9.04 .64 \quad 5 \quad$ ISTAF/GP
1:59.76 Paula Fryer $\quad$ ENG $\quad 14.07 .6942$ GGala/GP
$\begin{array}{lllll}\text { 2.00.10 Tanya Blake } & \text { ENG } & \text { 20.0.65 } & \text { EC }\end{array}$
2:00.15 Rosemary Stirling/Wright
10
2:0
2

## 2:00.30 Cherry Hanson/

## 2:003 2:00. 2:00. 2:01 $2: 01$ $2: 01$ $2:$ $2:$ 20 20 $2:$

2:00.6a $\begin{array}{r}\text { Jane Colebrook/F } \\ \text { 2:00.80 Yvonne Murray/ } \\ \text { Murray-Mooney }\end{array}$
$\begin{array}{lllll}\text { Murray-Mooney } & \text { SCO } & 4.10 .64 & 4 & \text { PTG/GP }\end{array}$ $\begin{array}{ll}\text { 2:01.1a } & \text { Ann Packer } \\ \text { 2:01.11 } & \text { Lynne MacDougall }\end{array}$ 2:01.2 Joan Allison CO>NZL 11.12.47 7OG Munich, 2:01.2 Christine Mc SCO $\begin{array}{llll}18.02 .65 & 2 & \text { Nike }\end{array}$ 2:01.2 Christine McMeekin/Whittingham

|  | SCO | 1.12 .56 | 1 | BL1 |
| :--- | :--- | :--- | :--- | :--- |
| 2:01.24 Chris Benning | ENG | 30.03 .55 | 1 | WAAA |
| 20 |  |  |  |  |
| 2:01.35 Liz Barnes/Laban | ENG | 3.08 .51 | 2 | Inv |
| 2:01.36 Gillian Green/Dainty | ENG | 24.11 .58 | 6 | R-W |
| 2:01.40 Janet Bell | ENG | 15.01 .59 | 7 | PTG/GP |
| 2:01.48 Lesley Kiernan/Foley | ENG | 9.08 .57 | 1 | UK |
| 2:01.50 Lillian Board | ENG | 13.12 .48 | 1 | EC |
| 2:01.65 Teena Colebrook | ENG | 18.12 .56 | 4 | OsloG |
| 2:01.66 Pat Lowe/Cropper | ENG | 15.09 .43 | 2 | EC |
| 2:01.67 Sonya Bowyer | ENG | 18.09 .72 | 4 | EP |
| 2:01.7 | Ann Middle | WAL | 8.03 .62 | 2 |
| Inv |  |  |  |  |
| 2:01.82 Linda Keough/Staines | ENG | 26.12 .63 | 8 | ASV/GP | 30

2:01.83 Amanda Crowe
2:01.86 Helen Thorpe/Daniel 2:01.87 Dawn Gandy ENG 28.07.65 5 vFRA,URS 2:01.93 Sue Bevan 2:02.0 Margaret Coomber $\quad$ SCO $\quad 13.06 .50 \quad 6 \quad$ vGDR,BUL 2:02.0 Jo White ENG 7.12.60 1 IA-21 2:02.0 Lynne Robinson/Duval ENG $21.06 .69 \quad 2 \quad$ Inv 2:02.18 Hayley Parry/Tullett WAL $\begin{array}{llll}17.02 .73 & 3 & \text { Lausit }\end{array}$ $\begin{array}{llllll}\text { 2:02.34 } & \text { Lynn Gibson } & \text { ENG } & 6.07 .69 & 7 & \text { Luco } \\ \text { 2:02.39 } & \text { Emma Davies } & \text { WAL } & 9.10 .78 & 4 \mathrm{~h} 2 & \text { CG }\end{array}$ 40
$\begin{array}{lllll}\text { 2:02.47 Abigail Hunte } & \text { ENG<USA } 12.05 .71 & 3 & \text { AAA }\end{array}$ 2:02.6 Evelyn McMeekin $\quad$ SCO $1.12 .56 \quad 1 \quad$ JCs 2:02.69 Natalie Tait 2:02.70 Janet Marlow/Wood $\quad$ ENG $\begin{array}{llll}9.12 .58 & 3 & \text { UK }\end{array}$

| Monte Carlo, MON | 9 Sep 1995 |
| :---: | :---: |
| Gothenburg, SWE | 13 Aug 1995 |
| Stockholm, SWE | 7 Jul 1997 |
| Birmingham | 16 Jul 1995 |
| Birmingham | 15 Jun 1996 |
| Madrid, ESP | 1 Jun 1996 |
| Stockholm, SWE | 30 Jul 1999 |
| Berlin, GER | 1 Sep 1995 |
| Atlanta GA, USA | 27 Jul 1996 |
| Helsinki, FIN | 25 Jun 1996 |
| Stuttgart, GER | 15 Aug 1993 |
| Bratislava, SVK | 10 Jun 1997 |
| Birmingham | 12 Jul 1997 |
| London (CP) | 7 Jul 1995 |
| Atlanta GA, USA | 26 Jul 1996 |
| Atlanta GA, USA | 29 Jul 1996 |
| Budapest, HUN | 3 Jul 1999 |
| Ljubljana, SLO | 26 May 1996 |
| Zürich, SUI | 4 Aug 1993 |
| Oslo, NOR | 10 Jul 1993 |
| Belfast | 24 Jun 1985 |
| Zürich, SUI | 21 Aug 1985 |
| Moscow, RUS | 17 Aug 1985 |
| Cork, IRL | 9 Jul 1985 |
| London (CP) | 2 Aug 1985 |
| Moscow, RUS | 7 Jun 1987 |
| Berlin, GER | 23 Aug 1985 |
| London (CP) | 19 Jul 1985 |
| Prague, CZE | 23 Jun 1987 |
| NOR | 14 Jul 1990 |
| Kuala Lumpur, MAS | 19 Sep 1998 |
| Zürich, SUI | 15 Aug 1990 |
| Zürich, SUI | 4 Aug 1993 |
| GER | 15 Aug 1993 |
| New York NY, USA | 22 May 1993 |
| Oslo, NOR | 4 Jul 1987 |
| Rome, ITA | 30 Aug 1987 |
| Lausanne, SUI | 15 Sep 1987 |
| Oslo, NOR | 27 Jul 1985 |
| ITA | 4 Aug 1979 |
| Berlin, GER | 15 Aug 1986 |
| Rome, ITA | 17 Jul 1991 |
| Helsinki, FIN | 10 Aug 1994 |
| Eugene OR, USA | 31 May 1998 |

GER 3 Sep 1972

| Oslo, NOR | 7 Jul 1982 |
| :--- | ---: |
| Bucharest, ROM | 25 Jul 1981 |


| Bucharest, ROM | 25 Jul 1981 |
| :--- | ---: |
| London (CP) | 28 Aug 1988 | Oulu, FIN


| London (CP) | 10 Jul 1987 |
| :--- | ---: |
| Tokyo, JPN | 20 Oct 1964 |
| London (CP) | 18 Aug 1984 | Leipzig, GER 1 Jul 1973


| Manchester (S) | 26 Aug 1978 |
| :--- | ---: |
| London (CP) | 28 Jul 1979 |
| Zürich, SUI | 10 Jul 1976 |


| Koblenz, GER | 31 Aug 1983 |
| :--- | ---: |
| London (CP) | 10 Jul 1987 |

Cwmbran 11 Jun 1977
Athens (NF), GRE 18 Sep 1969
$\begin{array}{lr}\text { Oslo, NOR } & 21 \text { Jul } 1984 \\ \text { Helsinki, FIN } & 12 \text { Aug } 1971\end{array}$
Villeneuve d'Ascq, FRA24 Jun 1995
$\begin{array}{lr}\text { Manchester (W) } & 28 \text { Aug } 1991 \\ \text { Cologne GER } & 1 \text { Aug } 1993\end{array}$
$\begin{array}{lr}\text { Kuala Lumpur, MAS } & 18 \text { Sep } 1998 \\ \text { London (CP) } & \text { 10 Jul } 1987 \\ \text { Ports } & \text { 19 Jun } 1988\end{array}$ Portsmouth 19 Jun 1988 $\begin{array}{lr}\text { Edinburgh } & 19 \text { Jul } 1991 \\ \text { Leipzig, GER } & 1 \text { Jul } 1973\end{array}$ Middlesbrough 13 Aug 1977 Manchester (W) 26 Jul 1989 Cottbus, GER 11 Jun 1997 $\begin{array}{lr}\text { Sheffield } & 14 \text { Aug } 1992 \\ \text { Kuala Lumpur, MAS } & 17 \text { Sep } 1998\end{array}$

## Birmingham $\quad 16$ Jul 1995

 Edinburgh 20 Aug 1978 Birmingham 16 Jul 1995 London (CP) 15 Jun 1980 Moscow, RUS $\quad 23$ Jul 1979 2:0250

2:02.83 Sue Morley 2:02.83 Mary Kitson $\begin{array}{ll}\text { 2.02.89 Wendy Sly } \\ \text { 2:02.9 } & \text { Sheila Carey }\end{array}$ 2:02.91 Carol Lightfoot/Shar
2:02.92 Debbie Russell

2:03.11 Mary Stewart/Cotton
2:03.15 Claire Raven
2:03.17 Cathy Dawson
2:03.18 Paula Newnham
2:03.18 Verona Elder
ENG><SCO 25.02.56 2



| Cwmbran | 11 Jun 1977 |
| :--- | ---: |
| Birmingham | 12 Jul 1997 |
| Victoria, CAN | 26 Aug 1994 |


| Birmingham | 26 Aug 1994 |
| :--- | ---: |
|  | 17 Jun 1978 |Fürth, GER 10 Jun 1979London (WC) 2 Jul 1966$\begin{array}{lr}\text { Helsinki, FIN } & 29 \text { Jun } 1994 \\ \text { Kuala Lumpur, MAS } & 18 \text { Sep } 1998\end{array}$


| 2:03.27 Jo Latimer | ENG>NZL | NIR | 30.01 .71 | 12 | WG |
| :--- | :--- | :--- | :--- | :--- | :--- |

Newcombe WAL<ENG 25.02.67 7s1 CG
2.03.30 Lisa York ENG $\quad 10.03 .70 \quad 3 \quad$ WelshG
2:03.36 Jeina Mitchell ENG 21.01.75 3 StockG
2:03.44 Tonia Howland
2:03.48 Angela Creamer
ENG $30.01 .56 \quad 4 \mathrm{~h} 4 \mathrm{OG}$
2:03.5 Una English ENG>IRL 14.08.70 4 DBFC
2:03.52 Vickie Lawrence $\begin{array}{lllll} & \text { SCO } & 9.06 .73 & 5 & \text { AAA }\end{array}$
2:03.67 Angela Davies/NewportENG $21.10 .70 \quad 1 \quad$ Reebok/BMC
2:03.88 Alison Parry/Wood WAL 19.06.66 2 WelshG
2:04.01 Liz McArthur SCO $\quad 6.11 .63$ 5 $\quad$ UlsG
2:04.1a Pam Piercy ENG $4.07 .37 \quad 4 \quad$ EC
$\begin{array}{lllll}\text { 2:04.1 } & \text { Zola Budd } & \text { ENG<>RSA 26.05.66 } & 1 & \text { JC2 } \\ \text { 2:04.12 } & \text { Penny Yule/Forse } & \text { ENG } & 7.06 .49 & \end{array}$
2:04.12
70
2:04.30 Bridget Smyth ENG 8.09.67 4 DCrest
2:04.4 Thelwyn Bateman WAL><ENG28.12.44 1 BMC
2:04.47 Karin Steer $\quad$ SCO $\begin{array}{lllll}4.02 .63 & 8 & \text { IAC }\end{array}$
2:04.50 Sue Smith ENG 9.09.53 5 vCAN,POL
2:04.5 Alison Wyeth
204.63 Vicky Stern
$\begin{array}{lllll} & \text { ENG } & 12.10 .68 & 2 & \text { Sikijev }\end{array}$
$\begin{array}{lllll}\text { 2:04.78 Pamela Whitter } & \text { WAL } & 10.08 .51 & 1 & \text { Debenham } \\ & \text { ENG } & 18.11 .59 & 3 & \text { CAU-nc }\end{array}$
:04.84 Pamela Whitter ENG 18.11.59 3 CAU-nc
2:04.85 Alyson Layzell WAL 16.12 .66 4 $\begin{array}{lllll} & \text { WelshG }\end{array}$
2:04.85
80
$2: 04.85$
2:04.85 Lisa Thompson
2:04.94 Karen Hutcheson/
Hargrave
2:04.95 Denise Kiernan
2:04.97 Jillian Jones
2:05.0 Joy Jordan

| SCO | 23.09 .65 | 5 | Sittard, | Gat |
| :--- | :--- | :--- | :--- | :--- |
|  |  | NED |  |  |

Cor,
8 Jun 1989
3 Jun 1978
9 Jul 1993
16 Sep 1962




# BMC Fixtures 2000 

## BMC NIKE GRAND PRIX

Overall Grand Prix Directors - Steve Mosley 02920306733 and Tim Brennan 01628415748

| Wed 14th June | GP1 | Wythenshawe <br> Wed 5th July | G82 <br> Cat 22nd July |
| :--- | :--- | :--- | :--- |
| GP3 | Cardiff <br> Watford | M800, W800, M1500, , 1500, W1500 <br> M800, W800, M1500, W1500 |  |
| Sat 19th Aug | GP4 | Solihull | M800, W800, M1500, W1500 |
| Sat 2nd Sept | GP5 | Glasgow | M800, W800, M Mile, W1500 |

Norman Poole
Steve Mosley Tim Brennan Philip O'Dell Liam Cain Maurice Millington Toby Gosnall Clare Tomkinson Keith Redpath John Montgomery Michael Johnston
(M800) (M1500)
(Women)
(Men)
(Women)
M800, W1 W800, WIS00) 01501823816 (M3000, W3000) 01426349966 01628415748 01234852038 01438712170 01213538273 01216894558 01509264750

01619808358 02920306733

## LONDON MARATHON ENDURANCE INITIATIVE

Mike Down 01179733407
Tue 11th July
Wed 14th June
Sun 25th June
Wed 5th July

## BMC YOUNG ATHLETE RACES

Mon 1st May
Sun 7th May
Sat 19th Aug

Stretford Wythenshawe Battersea Park Cardiff

M5000, W5000. M3000, W3000, M3000S/c M5000, W5000, M3000S/c M3000, W3000

Tue 11th July Sat 22nd July Sat 19th Aug Sat 2nd Sept

Stretford M5000, W5000
Watford M10000 Olympic Trial, W10000 Olympic Trial, M3000S/c Solihull M5000, W5000, M3000StC Glasgow M3000, W3000, M3000StC

## BMC RECORD BREAKERS

| Sun 25th June | Battersea Park | M800, W800, M2000, W4x1500 | Ian Chalk | 01794323322 |
| :---: | :---: | :---: | :---: | :---: |
| Sun 20th Aug | East Kilbride | M2000 | Roy Overend | 01357523411 |
| BMC MILE OF MILES |  |  |  |  |
| Sun 4th June | Battersea Park | M Mile, W Mile | Ian Chalk | 01794323322 |
| Sun 23rd July | Par | M Mile, W Mile | Chris Coleman | 01736740616 |
| Wed 16th Aug | Tooting Bec | M Mile, W Mile | Ray Thompson | 01737554450 |
| TBA | SW Grand Prix | M Mile | Mike Down | 01179733407 |
| TBA | SW Grand Prix | M Mile | Mike Down | 01179733407 |
| TBA | SW Grand Prix | M Mile | Mike Down | 01179733407 |

## Grand Prix Entries

## Please register 8 days before each meeting

 using the phone numbers listed. Entries can be accepted by e-mail via bmc@britishathletics.co.uk but must give a contact telephone number. email entries will not be accepted if received eight days or less before the competion. Athletes must state their event, best time, target time, most recent performances and a contact number Athletes' best 4 out of the 5 meetings count towards the BMC Nike Grand Prix.Results and standings throughout the senes will be posted on the BMC Web Site: http://www.british-athletics.co.uk/bmc/


## BMC GOLD STANDARD MEETINGS

North of England: Mike Harris: 01614367981

Tue 2nd May Tue 16th May Tue 30th May Tue 13th June Tue 27th June Tue 11th July Tue 25th July Tue 8th Aug Tue 22nd Aug Tue 5th Sept

Stretford M800, W800, M1500, M1500S/c, MW3000 Stretford M800, W800, M1500, M2000S/c, MW3000 Stretford M800, W800, M1500, M1500S/c, MW3000 Stretford M1500S/c
Stretford M800, W800, M1500, M1500S/c, MW3000 Stretford M800, W800, M1500, M2000S/c, MW3000, MW5000 Stretford M800, W800, M1500, M1500S/c, MW3000 Stretford M800, W800, M1500, W1500, M2000S/c, MW3000 Stretford M800, W800, M1500, W1500, M1500S/c, MW3000 Stretford M800, W800, M1500, M2000S/c, MW3000

## South of England: Men - Philip O'Dell 01234852038

Women - Liam Cain 01438712170

Wed 7th June Wed 12th July Wed 2nd Aug Wed 30th Aug Wed 6th Sept

## Midlands:

Wed 10th May Wed 24th May

01179733407 01913846592 01213538273 01213538273


$$
\begin{array}{ll}
\text { Watford } & \text { M800, M1500, W1500 }
\end{array}
$$

Watford M800, M1500, W800
Watford M800, M1500, W800, W1500
Watford $\quad$ M800, M1500, W800, W1500
Watford M800, M1500, W800


George Gandy 01509230176
Loughborough M800, W800, M1500, W1500
Loughborough M800, W800, M1500, W1500

## BMC REGIONAL RACES




[^0]:    To try is to risk failure.
    But risks must be taken, because the greatest hazard in life is to risk nothing.
    The person who risks nothing, does nothing, has nothing, and is nothing.
    They may avoid suffering and sorrow, but they cannot learn, feel, change, grow, love or live. Chained by their attitudes, they are a slave, they have forfeited their freedom.
    Only a person who risks is free.

[^1]:    (Thomas Wessinghage 3:38.8, Harald Hudak 3:40.2, Michael Lederer 3:42.6, Karl Fleschen 3:37.3) (Tony Polhill 3:42.9, John Walker 3:40.4, Rodney Dixon 3:41.2, Dick Quax 3:35.9) (Anatoliy Kalutskiy __, Pavel Yakovlev__, Anatoliy Legeda__, Igor Lotarev__) Anacleto Jiménez 3:40.9, Manuel Pancorbo 3:41.2, Alberto García 3:43.9, Isaac Viciosa 3:40.2 (Dan Aldridge 3:44.9, Andy Clifford 3:42.7, Todd Harbour 3:42.7, Tom Duits 3:35.8) (Didier Bégouin 3:44.5, Denis Lequement 3:44.3, Marcel Philippe 3:42.3, Philippe Dien 3:37.2) Gérard Vervoort 3:41.8, Claude Nicolas 3:44.2, Michel Jazy 3:40.8, Jean Wadoux 3:42.2 (Stuart Melville 3:41.5, Rodney Dixon 3:44.0, Dick Quax 3:48.5, John Walker 3:36.2) (Keith Iovine/US 3:48.8, Gary Taylor/UK 3:38.6, David Swain/UK 3:41.6, Paul Donovan/Ire 3:41.2) (Matthews Temane 3:39.5, Deon Brummer 3:45.x, Henning Gericke 3:43.x, Johan Fourie 3:42.x) (Sean O'Neill/Ire 3:47.6, Brian O'Keeffe/_ 3:42.7, John Keyworth/UK 3:43.9, Marcus O'Sullivan/Ire 3:38.7) (Jason Bunston/Can 3:47.6, Brian Baker/US 3:41.8, Niall Bruton/Ire 3:43.2, Graham Hood/Can 3:40.2) Rich Kenah 3:48.4, Peter Sherry 3:41.7, Steve Holman 3:40.0, John Trautman 3:43.2

[^2]:    3 May 85 (Brenda Bushnell 4:40.0, Leann Warren 4:39.6, Kathy Hayes 4:40.3, Claudette Groenendaal 4:39.7)
    3 May 85 (Cathie Twomey 4:39.6, Mary Rapp 4:40.0, Lee Arbogast 4:49.0, Jill Jones 4:51.9)
    10 Jul 93 (Jackie Hansford 4:56.5, Wendy Williams 4:48.8, Paula Gowing 4:47.7, Stella Harrod 5:02.3)
    10 Jul 93
    10 Jul 93
    10 Jul 93
    11 Jun 97
    23 Mar 74
    10 Jul 93
    11 Mar 00
    11 Jun 85
    11 Mar 00
    11 Mar 00
    83
    84
    27 Feb 82
    91
    81
    (Jenny Hawthorne/UK 5:04.2, Julie Swann/UK 4:56.0, Nilla Karlsson/Swe 4:57.3, Catherine Mijovic/UK 5:10.0) (Amanda Thorpe [Parkinson] 4:53.9, Jacqui Casey 5:09.8, Diane Brockley 4:57.8, Margaret Boleman 5:06.8)
    (Caroline Walsh 5:13.1, Camilla Waite 5:05.5, Rachael Ogden 5:00.2, Jodie Swallow 4:57.4)
    (Alison Barnes 4:57.6, Michelle Wannell 5:10.7, Melissa Watson 5:13.9, Clare Keller 5:00.7)
    Nora Culligan __, Linsey Blaisdel 5:02.x, Emily Blakeslee 5:08x, Kaelin Toadebusch 5:05.x)
    (Jackie Zeigle 4:57.x, Laura Zeigle _ , Jess Winters _ , Lixa Paxton __ [order?])
    (Jen Kramer 4:57.x, Kate Twarog __, Nicole Susser __, Ashleigh Bordwell ___ [order?])
    (Mary Kate Kennedy 5:06.5, Linda Kennedy 5:15.0, Sheila Barnett 5:13.0, Nancy McCarthy 5:07.0)

