

SwimNews

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**ALISON SHEPPARD
FASTEST SPRINTER
IN THE WORLD**

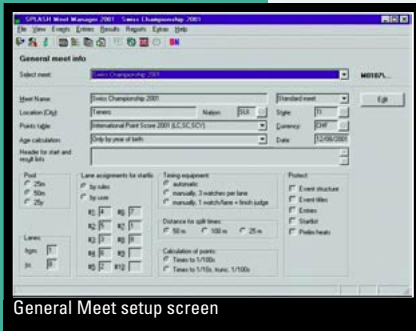
**400 IM WORLD RECORD
FOR BRIAN JOHNS AT CIS**

**MINTENKO BEATS
FLY RECORD AT US OPEN**

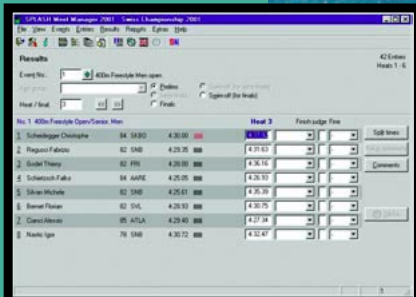
SwimNews

Splash 2002

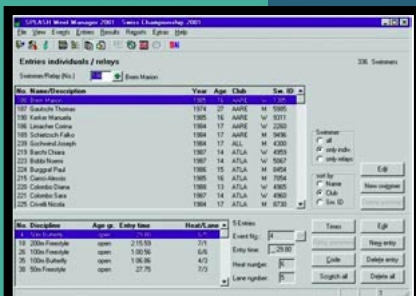
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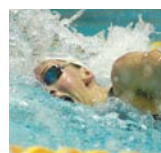
Contents January-February 2003

CONSECUTIVE NUMBER 273

VOLUME 30, NUMBER 1

FEATURES

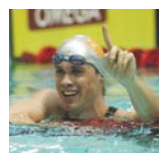
- 6 Australian SC Championships**
 Petria Thomas Wins Four, World Record for Welsh in 50 Back
- 8 British SC Championships**
 Davies and Sheppard Ready, Sweetenham Decries General Mediocrity
- 10 Canadian Open SC Nationals**
 Button Betters Fly Record, Seven Golds for Limpert
- 12 European SC Championships**
 Klochkova and Rupprath Win Most Prize Monies
- 25 World Cup 2003 Commentary**
 Rupprath and Sheppard Win World Cup
- 28 World Cup Personality: Alison Sheppard** **Nikki Dryden**
 Scottish Swimmer is the 100% Professional Athlete
- 30 Colwin On Coaching** **Cecil Colwin**
 Breathe Better—Swim Faster
- 41 Turnaround In Britain** **Ben Lafferty**
 Sweetenham + Atkinson + New Lottery Funds = International Success
- 42 Australian Personality: Denis Cotterell** **Nikki Dryden**
 Living for Swimming, His Swimmers Call Him the Energizer Bunny
- 44 Star Tips: On Breaststroke**
 Victor Davis Explains the Secrets of his Technique
- 46 Sport Science: Physiology** **Wayne Goldsmith**
 Heart Rate, Lactates, and All the Stuff For the Practising Coach
- 48 Canadian University Championships**
 UBC Extends Rule, World Record for Johns in the 400 IM
- 50 United States Open**
 Record for Mintenko in the 100 Butterfly
- 52 Australian Youth Olympic Festival**
 Australia Dominant, Nederpelt Wins Seven Golds
- 54 Reality Check**
 The Continuing Crisis



Cover: Marco Chiesa



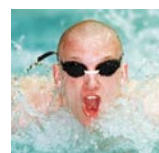
Petria Thomas



Thomas Rupprath



Denis Cotterell



Brian Johns

- | | | | |
|----|-------------------------------------|----|---|
| 3 | Contents | 23 | Canadian Short Course Records |
| 4 | About This Issue | 24 | Commonwealth Records |
| 5 | Calendar | 26 | World Cup Medallists |
| 7 | Results Australian SC Championships | 33 | Olympic Standards |
| 9 | Results British SC Championships | 34 | Canadian Short Course Age Group Records |
| 11 | Results Canadian SC Championships | 35 | Canadian Long Course Age Group Records |
| 14 | Results European SC Championships | 36 | World Championships and Olympic Order of Events |
| 17 | Record Setters | 38 | Results Combined East-West Championships |
| 18 | TOP (Tiny Olympic Prospects) | 40 | Results Canada Cup 1 |
| 20 | World Long Course Records | 49 | Results Canadian University (CIS) Championships |
| 21 | Canadian Long Course Records | 51 | Results US Open |
| 22 | World Short Course Records | 53 | Results Australian Youth Olympic Festival |

ABOUT THIS ISSUE

Due to circumstances beyond our control, we were substantially delayed with our first issue for 2003.

For months we have been working on the software that merges competition data files and generates rankings on our website (www.swimnews.com) and in print. We are not quite finished.

However, as late as we are, everything of importance is in the current issue.

We start with all the various short course championships throughout the world: Australia, Great Britain, Canada, and the US Open (long course). World, Commonwealth, and Canadian records tumbled and are recorded as they happened.

The World Cup series produced seven world records and the emergence of Alison Sheppard (GBR) as the top women's performer. This is a remarkable story as Sheppard lives and trains in Duncan, BC, and is married to her Canadian coach, Gary VanderMeulen. Their partnership has resulted in Sheppard becoming the fastest 50 freestyle both long and short course. The story is told on pages 28-29 by Nikki Dryden. Sheppard's improvement during the past years should be an inspiration to all.

Cecil Colwin tackles the topic of breathing. Everybody has to breathe but swimmers, like singers, need to train their breathing for effective performance.

Ben Lafferty explains how the British Turnaround resulted from new initiatives put in place by National Performance Director Bill Sweetenham and National Youth Coach John Atkinson.

Behind great athletes (Grant Hackett), an inspired coach is the main ingredient of success. Denis Cotterell is such a person, and Nikki Dryden spent some time with his program on the Queensland Gold Coast last spring and tells his story.

Victor Davis was Canada's greatest breaststroker, an Olympic, world, and Commonwealth gold-medal winner as well a world-record setter. He died in a tragic accident in 1989. Three months before his death, we were able to get Victor to explain how he prepared for the 200 breaststroke. When you read his words, it's obvious he knew what he was doing and, even rarer, he could explain it. The article was first published in our July 1989 issue.

Wayne Goldsmith writes on the latest information on the physiology of training and

Coach/Administrator

(Men's and Women's Swimming - Aquatics & Recreation Programming)

Contract position

Reporting to the Aquatics Supervisor, the successful candidate will be responsible for the continued development and growth of the University of Guelph Men's and Women's Varsity Swimming Programs. Specific duties include recruitment and training of student-athletes; design and delivery of a nationally ranked intercollegiate program; programming and staffing support for two swimming pools and other associated duties. The varsity program currently has some 50 elite student-athletes while the swimming pools operate approximately 19 hours per day, 7 days per week.

Requirements of the position include: a minimum university undergraduate degree, National Coaching Certification Program Level 3 coaching accreditation, current NLS, 3 to 5 years experience at the university level in Canada or the USA. Appreciation for the high demands placed on student-athletes who chose to pursue their sport in an internationally recognized academic institution. Experience in sport administration and a strong background in and knowledge of post secondary education is preferred. Proven ability to work within a team setting.

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practical applications on how you might gain an edge.

Brian Johns (UBC) led his university team to its fourth consecutive championships at the Canadian Interuniversity Sports (CIS) Championships, winning four individual and three relay golds. He broke the world record in the 400 IM. The story is on page 48 with a comparison of the splits for the top swimmers in Canada and the world since 1987.

The US Open was long course and with many of the top American swimmers missing, but a strong Canadian contingent won eight events, including Michael Mintenko in the 100 butterfly in a Canadian record of 52.44, bettering his own previous time of 52.58 from the Sydney Olympic final.

In January, the Australian Youth Olympic Festival was held in Sydney with teams from the

Pacific Rim for 18-year-olds or younger. Australia dominated, with Canada fifth in a field of six. Brittany Reimer was the top Canadian with two golds and four silvers.

TOP program results can be found on pages 18-19, with 624 entries taking part. This program is in its 20th consecutive year and has remained unchanged for all that period.

A lot of useful information is also available: records with splits for the World and Canada, as well as Commonwealth and Canadian Age Group.

Olympic Standards with the order of events in Athens, as well as the World Championships are also included.

Rankings will be back as soon as possible, including Making Waves, which will be expanded to allow additional swimmers to be featured.

CALENDAR

CANADIAN

April

- 4-6 Limpert Team Championships, NB
- 11-13 Etobicoke Pentathlon
- 12-13 Richmond West Coast, BC
- 18-20 Island Invitational, Victoria, BC
- 25-27 Ontario Div.1 Teams, Etobicoke
- Ontario Div.2 Teams, Thunder Bay
- Ontario Div.3 Teams, Sudbury

May

- 3-4 Alberta Open
- 3-4 West Coach Open, Richmond, BC
- 9-11 ROW Invitational, Waterloo
- 9-11 Hicken Invitational, Etobicoke
- 16-19 Hyack Invitational, New Westminster, BC
- 23-25 New Brunswick Championships
- 23-25 Age Group International, Etobicoke

June

- 30-1 Quebec Cup II, Montreal
- 30-1 Mel Zajac International, Vancouver, BC
- 30-1 Ontario Cup, London
- 30-1 ROD Classic, Regina, SK
- 31-1 Ken Dunn Championships, Halifax, NS
- 6-8 Kamloops Classic, BC
- 13-15 Moose Jaw Invitational, SK
- 20-22 Island Invitational, Victoria, BC
- 21-22 Hyack Invitational, New Westminster, BC
- 26-29 Man/Sask Championships, Regina, SK
- 27-29 Ontario Junior/SWAD, Brantford
- 26-30 World and Pan Am Trials, Victoria, BC

July

- 4-6 East Coast Championships, Saint John, NB
- 4-6 Alberta SR Championships
- 10-13 TAS BC Championship, Kamloops
- 11-13 Quebec Age Groups, Montreal
- 11-13 Alberta AG Championships
- 17-20 Canadian SWAD Nationals, Edmonton
- 24-27 Eastern Cup Montreal
- 27-29 Club Nationals, TBA

November

- 27-30 Canadian SC Nationals, Ste-Foy, QC

2004

February

- 19-22 Eastern Canadians, Halifax, NS
- 19-22 Western Canadians, TBA
- 20-22 CIS Interuniversity Champs

March

- 12-14 Canada Cup, TBA

May

- 28-30 Mel Zajac International, Vancouver

July

- 7-11 Olympic/Paralympic Trials
- 28-31 Club Nationals

INTERNATIONAL

April

- 1-5 Ukrainian Open Nationals
- 9-13 National Championships, Madrid, ESP
- 13-20 National Championships, St-Etienne, FRA

May

- 16-18 International Meet, Charleroi, BEL
- 16-18 Akropolis International, Athens, GRE
- 17-18 International Meet, Lisbon, POR
- 24-25 Grand Prix 2, Malmo, SWE

June

- 7-8 Golden Bear, Zagreb, CRO
- 7-8 Mare Nostrum 1, Rome, ITA
- 10-11 Mare Nostrum 2, Monte Carlo, MON
- 13-15 International Meet, Vienna, AUT
- 14-15 Mare Nostrum 3, Barcelona, ESP
- 17-18 Mare Nostrum 4, Canet, FRA
- 18-22 Scottish Open and AG, Glasgow, SCO
- 27-29 Vittel Cup Final, Caen, FRA
- 28-30 Estonian Championships, Taru, EST

July

- 1-4 Moscow Cup, RUS
- 11-13 Schwimmfest, Darmstadt, GER
- 17-20 ASA Championships, GBR
- 13-27 World Championships, Barcelona, ESP
- 27-30 ASA Age Group Nationals, Sheffield, GBR

August

- 31-3 ASA National Youths, GBR
- 31-3 European Juniors, Glasgow, SCO
- 6-10 National Championships, Athens, GRE
- 1-17 Pan American Games, Santo Domingo
- 14-17 British SC Championships, GBR
- 21-31 World University Games, Daegu, KOR
- 24-29 Asian AG Championships, TPE

October

- 4-18 All Africa Games, Abuja, NGR
- 18-19 Grand Prix 3, Stockholm, SWE

November

- 21-23 Grand Prix 4, Goteborg, SWE
- 24-25 World Cup 1, Daejeon, KOR
- 28-30 World Cup 2, Melbourne, AUS

December

- 5-6 World Cup 3, Durban, RSA
- 11-14 European SC Championships, Dublin, IRL

2004

January

- 9-10 World Cup 4
- 13-14 World Cup 5
- 17-18 World Cup 6
- Three European cities to be chosen from the following: Berlin, Moscow, Paris, Stockholm
- 30-31 World Cup 7, New York, USA

February

- 3-4 World Cup 8, Mexico City, MEX

- 7-9 World Cup 9, Rio de Janeiro, BRA

May

- 6-16 European Championships, Madrid, ESP

August

- 13-29 Olympic Games, Athens, GRE

October

- 1-7 Asian Championships, Doha, QAT
- 7-10 World SC Championships, Indianapolis, IN

December

- 9-12 European SC Championships, Vienna, AUT

2005

June

- 24-3 Mediterranean Games, Almeria, ESP

July

- 17-31 World Championships, Montreal, CAN

2006

March

- 15-26 Commonwealth Games, Melbourne, AUS

July

- 27-6 European Championships, Budapest, HUN

December

- 1-15 Asian Games, Doha, QAT

UNITED STATES

March

- 20-22 Women's NCAA Champs, Auburn, AB
- 27-29 Men's NCAA Champs, Austin, TX

April

- 1-5 Spring Nationals, Indianapolis, IN
- 6 USA vs AUS Dual Meet, Indianapolis, IN

May

- 15-28 Grand Prix 1, Ann Arbor, MI

June

- 5-8 Grand Prix 2, Charlotte, NC
- 19-22 SWAD Championships, Minneapolis, MN
- 27-29 Grand Prix 3, Santa Clara, CA

July

- 10-13 Grand Prix 4, Los Angeles, CA

August

- 5-9 Summer Nationals, College Park, MD

December

- 4-6 US Open, Federal Way, WA

2004

February

- 11-15 National Championships, TBA

July

- 7-14 US Olympic Trials, Long Beach, CA

December

- 2-4 US Open, San Antonio, TX

PETRIA THOMAS WINS FOUR World Record For Welsh In 50 Back

Two days after the conclusion of the Pan Pacific Championships in Japan, the Australian Short Course Championships were held over four days in Melbourne, leaving just barely enough time to fly home for the Australian team. Superstars Ian Thorpe and Grant Hackett gave the meet a miss but that only allowed some new swimmers a chance at top spot on the podium.

Top highlights were Matt Welsh sweeping the three backstrokes (50-100-200) with the 50 time in a world record of 23.31. The old mark was 23.42 by Neil Walker (USA) from 2000.

He combined with Jim Piper, Geoff Huegill, and Ashley Callus in a successful world record attempt on the third day in the 4x100 men's medley relay. Their time of 3:28.12 bettered the USA's previous time of 3:29.00 from Moscow last April during the Short Course Worlds, when the Aussies finished second.

For months there was talk of taking back the record from the Americans. As breaststroker Jim Piper said, "We've been talking about this amongst ourselves after we came second to them at Short Course Worlds last April."

Welsh gave the record a solid start with his lead-off of 50.95 (third fastest of all time). Welsh had been disqualified at the Commonwealth Games in the 200 back and again in the 100 back at Pan Pacs. His great performances in Melbourne made up somewhat for the earlier disappointments.

After the 50 world record, Welsh said, "As soon as the gun went I got a good reaction and a really good start and thought I could feel it (the record) was there."

"The race got better and better. As soon as I saw the time I thought 'Yes!' but then thought I'd better not celebrate too much as I had a habit recently of being disqualified."

(The record was subsequently bettered to 23.23 by Thomas Rupprath (GER) in late November.)

Welsh won the 100 back in 51.27 and the 200 back in

1:51.75, just off his best.

Australia has made it a specialty to better world records in time trials as it is allowed under FINA rules (Swimming Rule SW 12.4 page 129 of 2002-2005 FINA Handbook).

The meet was also the return to competition for Michael Klim after back surgery in February 2002. He won the 100 free in 48.22 and the 200 free in 1:45.71, well off his personal bests.

Klim was pleased with the results. "My back feels good. Training has been perfect and I'm really enjoying racing again."

He did not contest any fly events and when asked about that, Klim replied, "I'll be definitely swimming fly. Being the long course world record holder, there's a bit of a legacy there."

The other great performer at the championships was Petria Thomas with four individual wins (400 free, 50-100-200 fly, and a second in the 200 free). Thomas had a busy long course season with five golds and a silver at Commonwealths, and three golds and two silvers at Pan Pacs.

On the final day, Thomas bettered the Commonwealth record in the 100 fly, winning in 56.93.

Elka Graham won the 100 free in 54.10 and the 200 free in 1:55.93. The 100 was a surprise win as "I don't really consider myself a sprinter," Graham said. The 200 free was a typical effort, leading



Brooke Hanson won three golds

throughout the distance. "I'm so stoked for this one. I wanted to be under 1:56. It's now exactly 24 months until the Olympics, so I'll enjoy my break and go from there and see what happens."

Breaststroker Brooke Hanson had a great meet with three golds and a silver. She battled Leisel Jones in the 100 and 200. Jones touched her out in the shorter race by 3/100ths of a second with the winning time of 1:06.64. In the 200, Hanson had a solid win in 2:24.45 over Jones with 2:25.04. Hanson also won the 100 IM in 1:01.46.

Youngest national team member Alice Mills (born 1986) won the 200 IM in 2:12.49 for her first title, with seconds in the 100 free and 100 IM. She won golds on the Australian 4x100 free relays last summer at Commonwealths and Pan Pacs.

A new face is Stephen Penfold, winning the men's 400 free in 3:43.49 and the 1500 free in 14:41.84, the fourth-fastest Australian all time.

Kurtis MacGillivray (CAN), who has moved to Queensland to train in the same club as Grant Hackett with coach Dennis Cotterell, was fourth in the 400 free in 3:50.07, and fifth in the 1500 free in 15:20.01 (about 20 seconds faster than the winner at the Short Course Canadians in November).

The meet was held over four days, with prelims, semis, and finals for the 50s and 100s, and prelims and finals in the 200s and longer.



Petria Thomas won 400 free and swept the fly events

Marco Chiesa

2002 AUSTRALIAN SC CHAMPIONSHIPS

Melbourne, Sep 2-5 (25m)

MEN

50 METRES FREESTYLE

- 1 21.73 Callus Ashley,79
- 2 22.30 Dyson Andrew,82
- 3 22.31 Rickard Nathan,79
- 4 22.53 Walls Richard,77
- 5 22.61 Crook Nathan,79
- 6 22.67 Piper Steven,82
- 7 22.96 Flouch Casey,82
- 8 23.01 McDonald Raymond,83

100 METRES FREESTYLE

- 1 48.22 Klim Michael,77
- 2 49.06 Matkovich Antony,77
- 3 49.14 Dyson Andrew,82
- 4 49.22 Flouch Casey,82
- 5 49.46 Mewing Andrew,81
- 6 49.54 Clarke Jared,77
- 7 49.78 McDonald Raymond,83
- 8 49.83 Williams Nic,83

200 METRES FREESTYLE

- 1 1:45.71 Klim Michael,77
- 2 1:45.99 Cram Jason,82
- 3 1:46.48 Penfold Stephen,82
- 4 1:46.86 Matkovich Antony,77
- 5 1:48.34 Williams Nic,83
- 6 1:48.62 Krogh Joshua,82
- 7 1:48.62 Mewing Andrew,81
- 8 1:50.13 Flouch Casey,82

400 METRES FREESTYLE

- 1 3:43.49 Penfold Stephen,82
- 2 3:47.50 Krogh Joshua,82
- 3 3:49.07 Nederpelt Travis,85
- 4 3:50.07 MacGillivray Kurtis,84,CAN
- 5 3:53.01 Santacaterina Josh,80
- 6 3:53.03 Affleck Andrew,83
- 7 3:53.41 Glucina Matthew,85
- 8 3:54.70 Cleland Grant,78

800 METRES FREESTYLE

- 1 7:58.12 Semmens Ashley,84
- 2 7:58.32 Nederpelt Travis,85
- 3 8:00.09 Affleck Andrew,83
- 4 8:00.88 Santacaterina Josh,80
- 5 8:14.96 Mason Ryan,85
- 6 8:15.63 Cox David,78,GBR
- 7 8:16.34 Robertson Marcus,77
- 8 8:17.22 Minty Ryan,85

1500 METRES FREESTYLE

- 1 14:41.84 Penfold Stephen,82
- 2 15:09.17 Cleland Grant,78
- 3 15:12.19 Nederpelt Travis,85
- 4 15:14.83 Semmens Ashley,84
- 5 15:20.01 MacGillivray Kurtis,84,CAN
- 6 15:20.45 Affleck Andrew,83
- 7 15:27.88 Santacaterina Josh,80
- 8 15:34.98 Rackley Dylan,81

50 METRES BACKSTROKE

- 1 23.31 Welsh Matt,76
- 2 24.77 Anderson Ashley,84
- 3 25.42 Roliff Ethan,82
- 4 25.44 Taylor Joshua,84
- 5 25.60 Watson Josh,77
- 6 25.60 Spicer Matthew,81
- 7 25.69 De Kretser Rahmin,78
- 8 25.87 Short Liam,79

100 METRES BACKSTROKE

- 1 51.27 Welsh Matt,76
- 2 53.96 Spicer Matthew,81
- 3 54.26 Roliff Ethan,82
- 4 54.41 Burns Andrew,82
- 5 55.18 Pini Ryan,83,PNG
- 6 55.75 Short Liam,79
- 7 55.76 De Kretser Rahmin,78
- 8 57.09 Beaton Adam,83

200 METRES BACKSTROKE

- 1 1:51.75 Welsh Matt,76
- 2 1:56.01 Roliff Ethan,82
- 3 1:56.32 Burns Andrew,82
- 4 1:57.31 Lucas Adam,83

5 1:59.13 Anderson Ashley,84

6 1:59.20 Bush Mark,83

7 1:59.63 Bacon Mitchell,84

8 2:02.35 Beaton Adam,83

50 METRES BREASTSTROKE

- 1 27.75 Rogers Phil,71
- 2 27.78 Piper Jim,81
- 3 28.12 Crook Nathan,79
- 4 28.14 Rickard Brenton,84
- 5 28.22 Van Der Zant Robert,75
- 6 28.23 McBrien Steven,77
- 7 28.25 Riley Mark,82
- 8 28.33 Beasley James,82

100 METRES BREASTSTROKE

- 1 1:00.22 Rogers Phil,71
- 2 1:00.26 Piper Jim,81
- 3 1:00.61 Beasley James,82
- 4 1:00.82 Rickard Brenton,84
- 5 1:01.13 McBrien Steven,77
- 6 1:01.31 Riley Mark,82
- 7 1:01.45 Harrison Regan,77
- 8 1:01.96 McDonald Robert,81

200 METRES BREASTSTROKE

- 1 2:09.22 Piper Jim,81
- 2 2:10.49 Rickard Brenton,84
- 3 2:11.79 Trickett Luke,83
- 4 2:12.75 Tuckerman Ben,80
- 5 2:16.34 McDonald Robert,81
- 6 2:16.72 Comerford Rory,85
- 7 2:16.88 Church Jarrad,81
- 8 2:16.90 Leighfield Simon,73

50 METRES BUTTERFLY

- 1 23.37 Huegill Geoff,79
- 2 23.96 Pine Adam,76
- 3 24.35 Sharp Robert,84
- 4 24.60 Pini Ryan,83,PNG
- 5 24.61 Dodd Tim,84
- 6 24.65 Lee Henry,85
- 7 24.84 Gosper Richard,85
- 8 24.93 McIntosh Scott,85

100 METRES BUTTERFLY

- 1 51.45 Huegill Geoff,79
- 2 51.57 Pine Adam,76
- 3 53.12 Cohen Jason,82
- 4 53.50 Sharp Robert,84
- 5 54.11 Dodd Tim,84
- 6 54.23 Krogh Joshua,82
- 7 54.77 Brooks Paul,84
- 8 54.89 Fielding Shane,80

200 METRES BUTTERFLY

- 1 1:56.77 Krogh Joshua,82
- 2 1:58.61 Fielding Shane,80
- 3 1:58.68 Hall Matthew,82
- 4 1:59.25 Nederpelt Travis,85
- 5 1:59.62 Higgins Michael,80
- 6 2:00.60 Lee Henry,85
- 7 2:02.49 Dowling Grant,83
- 8 2:02.76 Maddock Ashley,85

100 METRES IND.MEDLEY

- 1 54.98 Van Der Zant Robert,75
- 2 55.13 Taylor Joshua,84
- 3 56.37 Cohen Jason,82
- 4 56.45 Short Liam,79
- 5 56.62 Fielding Shane,80
- 6 56.99 Higgins Michael,80
- 7 57.20 Bugledich Adam,79
- 8 1:03.67 Lee Henry,85

200 METRES IND.MEDLEY

- 1 1:59.05 Van Der Zant Robert,75
- 2 2:00.05 Lucas Adam,83
- 3 2:01.15 Anderson Ashley,84
- 4 2:01.66 Bacon Mitchell,84
- 5 2:01.72 Higgins Michael,80
- 6 2:02.64 Taylor Joshua,84
- 7 2:04.00 Henriksen Kim,79,NOR
- 8 2:04.62 Short Liam,79

400 METRES IND.MEDLEY

- 1 4:14.36 Bacon Mitchell,84
- 2 4:15.37 Lucas Adam,83
- 3 4:15.55 Steed Trent,77
- 4 4:18.03 Higgins Michael,80

5 4:20.13 Richards Andrew,83

6 4:21.38 Nederpelt Travis,85

7 4:23.00 Montgomerie Peter,83

8 4:27.99 Taylor Nathan,82

4X100 M MEDLEY RELAY

- 1 3:36.13 Yeronga Park
- 2 3:41.53 City of Perth
- 3 3:41.55 Melbourne Vicentre
- 4 3:42.50 Redcliffe Leagues
- 5 3:44.08 Carey Aquatic
- 6 3:44.92 Waterworx
- 7 3:47.06 Norwood
- 8 3:47.57 Swan Hills

4X100 M FREE RELAY

- 1 3:15.80 Nunawading
- 2 3:15.84 Yeronga Park
- 3 3:22.03 City of Perth
- 4 3:22.09 Commercial
- 5 3:27.82 Haileybury Waterlions
- 6 3:29.00 Melbourne Vicentre
- 7 3:29.05 Norwood

4X200 M FREE RELAY

- 1 7:16.39 Yeronga Park
- 2 7:19.01 City of Perth
- 3 7:19.43 West Coast
- 4 7:29.17 Nunawading
- 5 7:42.83 MLC Leander
- 6 7:43.86 Tattersalls
- 7 7:44.25 Aquadot
disq Swan Hills

WOMEN

50 METRES FREESTYLE

- 1 25.20 Engelsman Michelle,79
- 2 25.22 Guehrer Marieke,85
- 3 25.28 Chellingsworth Nichola,80
- 4 25.64 Creedy Rebecca,83
- 5 25.80 Tomlinson Louise,82
- 6 25.98 Reese Shayne,82
- 7 25.99 Hunt Cassie,82
- 8 26.05 Wilkie Teagan,85

100 METRES FREESTYLE

- 1 54.10 Graham Elka,81
- 2 54.69 Mills Alice,86
- 3 54.98 Reese Shayne,82
- 4 55.17 Thomson Kirsten,83
- 5 55.23 Ryan Sarah,77
- 6 55.88 Hunt Cassie,82
- 7 56.21 Munz Lori,79
- 8 56.49 Mitchell Melissa,87

200 METRES FREESTYLE

- 1 1:55.93 Graham Elka,81
- 2 1:57.00 Thomas Petria,75
- 3 1:57.36 Thomson Kirsten,83
- 4 2:01.44 Hunter Nicole,83
- 5 2:01.79 Mitchell Melissa,87
- 6 2:01.82 Tomlinson Louise,82
- 7 2:02.22 Walker Meagan,84
- 8 2:02.51 Crawford Heidi,82

400 METRES FREESTYLE

- 1 4:07.26 Thomas Petria,75
- 2 4:08.74 Pascoe Amanda,85
- 3 4:12.31 Wilson Belinda,84
- 4 4:12.80 Hunter Nicole,83
- 5 4:12.87 Walker Meagan,84

- 6 4:14.47 Murphy Briody,86
- 7 4:17.57 Smith Tammie,84
- 8 4:18.06 Weller Gabrielle,86

800 METRES FREESTYLE

- 1 8:23.48 Pascoe Amanda,85
- 2 8:38.18 Wilson Belinda,84
- 3 8:41.19 Murphy Briody,86
- 4 8:42.70 Affleck Jessica,86
- 5 8:42.98 Gorman Melissa,85
- 6 8:46.94 Walker Meagan,84
- 7 8:47.87 Smith Tammie,84
- 8 8:49.27 Hunter Nicole,83

1500 METRES FREESTYLE

- 1 16:18.35 Pascoe Amanda,85
- 2 16:38.56 Wilson Belinda,84
- 3 16:38.80 Ware Catherine,81
- 4 16:47.74 Kallu Sarah,86
- 5 16:48.49 Affleck Jessica,86
- 6 17:03.77 George Katherine,87
- 7 17:04.95 Gorman Melissa,85

50 METRES BACKSTROKE

- 1 28.29 Calub Dyana,75
- 2 28.47 Seah Nicole,86
- 3 28.70 Goh Rachel,86
- 4 28.76 Cockerton Amy,87
- 5 29.09 Morgan Melissa,85
- 6 29.20 Tucker Kelly,85
- 7 29.59 Scott Angela,86
- 8 29.75 Zimmer Tayliyah,85

100 METRES BACKSTROKE

- 1 1:00.34 Calub Dyana,75
- 2 1:00.45 Tucker Kelly,85
- 3 1:00.90 Seah Nicole,86
- 4 1:00.95 Leane Karina,85
- 5 1:01.09 Goh Rachel,86
- 6 1:01.43 Morgan Melissa,85
- 7 1:01.81 Adcock Frances,84
- 8 1:02.23 Zimmer Tayliyah,85

200 METRES BACKSTROKE

- 1 2:08.19 Tucker Kelly,85
- 2 2:08.70 Morgan Melissa,85
- 3 2:09.56 Leane Karina,85
- 4 2:12.45 Leane Tamara,83
- 5 2:13.70 Zimmer Tayliyah,85
- 6 2:13.76 Paton Sarah-L,86
- 7 2:15.24 Goh Rachel,86
- 8 2:17.18 Stubbins Kelly,84

50 METRES BREASTSTROKE

- 1 30.93 Hanson Brooke,78
- 2 31.38 Edminstone Jade,82
- 3 31.65 White Tarnee,81
- 4 31.72 Kasoulis Sarah,84
- 5 31.73 Jones Leisel,85
- 6 32.57 Foster Sally,85
- 7 32.88 Collins Lauren,86
- 8 33.23 Tomlinson Louise,82

100 METRES BREASTSTROKE

- 1 1:06.64 Jones Leisel,85
- 2 1:06.67 Hanson Brooke,78
- 3 1:07.40 White Tarnee,81
- 4 1:07.51 Kasoulis Sarah,84
- 5 1:09.83 Edminstone Jade,82
- 6 1:09.93 Regan Katie,81
- 7 1:10.74 Rychvalsky Rebekah,82
- 8 1:10.99 Collins Lauren,86

200 METRES BREASTSTROKE

- 1 2:24.45 Hanson Brooke,78
- 2 2:25.04 Jones Leisel,85
- 3 2:27.09 Waite Kelli,85
- 4 2:28.04 Kasoulis Sarah,84

4X100 M MEDLEY RELAY

- 1 3:39.71 Chandler
- 2 3:43.85 Carey Aquatic
- 3 3:48.70 Chandler B
- 4 3:50.69 Melbourne Vicentre
- 5 3:53.00 River City
- 6 3:53.49 Swan Hills
- 7 3:54.18 Nunawading
- 8 3:56.18 Redcliffe Leagues

4X200 M FREE RELAY

- 1 8:01.32 Chandler
- 2 8:08.39 Carey Aquatic
- 3 8:16.21 Chandler B
- 4 8:22.94 Redcliffe Leagues
- 5 8:28.26 Aquadot
- 6 8:28.45 Swan Hills
- 7 8:30.67 West Coast
- 8 8:32.90 Burnside

RATING SUMMARY OF TOP PERFORMANCES

1)	1035	23.31	50 back M	Matt Welsh
2)	1018	56.93	100 fly W	Petria Thomas
3)	996	1:55.93	200 free W	Elka Graham
4)	994	51.45	100 fly M	Geoff Huegill
5)	993	30.93	50 breast W	Brooke Hanson
6)	990	51.57	100 fly M	Adam Pine
7)	986	14:41.84	1500 free M	Stephen Penfold
8)	985	8:23.48	800 free W	Amanda Pascoe
9)	984	1:06.64	100 breast W	Leisel Jones
10)	983	2:08.19	200 back W	Kelly Tucker

DAVIES AND SHEPPARD READY Sweetenham Decries General Mediocrity

The British Short Course Championships in Cambridge were scheduled five weeks after the end of the Commonwealth Games in Manchester.

Bill Sweetenham, the national coaching supremo, called the results “abysmal” and blamed “complacency” for the results.

The scheduling of the competition five weeks after Commonwealths was deliberate to provide a test run for 2004, when the Olympics in August will be followed five weeks later by the Short Course Worlds in October.

Alison Sheppard was the top performer with her win in the 50 free in 24.53 (986 points). She also won the 100 free in 54.38 and the 100 IM in 1:01.86.

Sarah Price won all three backstrokes, in 28.69, 1:00.15, and 2:07.59, earning her the best senior swimmer award for her 200 back, with the best juniorswimmer award going to Stephanie Proud, who finished second with 2:10.88 in the same event.

Most wins were by Stephen Parry, who swept the backstrokes in 25.39, 53.15, and 1:54.49, and also the 200 and 400 IMs in 1:59.50 and 4:13.09. Better known as a flyer, Parry was second in the 200 fly with 1:57.36, obviously tired from a backstroke semi-final just seven minutes before.

James Hickman swept the fly events with 24.18, 51.74, and 1:53.91 (983 points), and won the top male award for his 200 fly swim.

David Davies, 17 years old, was top newcomer, winning the 1500 free in 14:54.60 and placing second in the 400 free in 3:48.44. Turning in 7:56.93 at the 800, he was well into the lead. After the race, Davies



Top performer Alison Sheppard

Marco Chiesa

said “I wanted to go under 15 minutes and it felt good, so I just went for it. I just keep working hard, enjoying what I’m doing and it’s paying off.” The battle was for second between Adam Faulkner (15:06.87) and Graeme Smith (15:06.97). Davies finished sixth in Manchester last August.

The performance by Davies received the Besford trophy from the swimming writers, as well as a cheque (£250) in memory of Joyce Cooper, the 1932 Olympian.

At the sprint end, the men’s 100 free was mediocre. British record holder Matthew Kidd was over four seconds off his best and failed to reach the finals. Matthew Bowe, 19, won the final in 50.15

Following on the Commonwealth success of 38 medals (11-10-17) for the combined teams from England, Scotland, and Wales, head coach

Sweetenham congratulated everyone involved in that competition but decried the results in Cambridge. “Olympic medals will not be won in 2004 but over the next eight to nine months,” Sweetenham explained. “As of now we have medal prospects in six events, five of them women’s. Only those ranked in the top six in the world at the end of 2003 will have a medal chance.”

Sweetenham said Cambridge was a “massive disappointment,” that with a handful of exceptions, coaches and swimmers had not used the event as a test run for 2004. People have laid down and had a rest between Manchester and here. “Athletes and coaches think I’m hard and push too much and expect improvements too fast. I think I’m going at a snail’s pace. I’m not going to applaud mediocrity. I’ve done that for the last two years. I’ve shown the sweeter side of my nature in trying to make people move on. Now I have to cut those days and it’s only those who are serious that I will support.

“We can’t beat America on numbers or facilities or money. We can’t beat Australia on money and facilities. The only way we can beat them is with the best coaches, more forward-looking and determined swimmers, and a superior system.

“We have moved forward tremendously—we are moving faster than any other country but it’s not good enough if we want these results to happen quickly. We have to move on faster and I need a group of people who are going to do that. We have as

good a management team as any in the world. We have the competition program in balance with the training. But I’m frustrated because I don’t think we are moving quickly enough.”

Sweetenham said every country’s weakness was their winter training. “If we only swim as fast at our trials in 2003 as we did in the Commonwealth Games, we are in huge trouble. We have to swim one percent faster.”

Sweetenham said that if Britain failed to win Olympic medals in Athens, his backside would be kicked. But he added “We will win medals in 2004. It’s going to take an almighty effort but it’s going to happen.”

He described the British age group program as a “massive flop.” Sweetenham plans to send four to six junior boys to live, train, and go to school on Australia’s Gold Coast. Two senior male swimmers would be invited to act as house parents and group leaders. “We want to provide a healthier lifestyle, high competitive challenge, and academic opportunities.”

Contributors: Anita Lonsbrough, Nick Thierry, Roger Guttridge (*Swimming*, ASA magazine)



Emerging distance star David Davies

Marco Chiesa

BRITISH SC CHAMPIONSHIPS

Cambridge, Sep 12-15, (25 M)

MEN

50 METRES FREESTYLE

- 22.36 Foster Mark,70
- 22.96 Morgan Owen,84
- 23.07 Scotcher Alex,80
- 23.40 Burnett Simon,82
- 23.42 Bowe Matthew,83
- 23.57 Chappels Seth,82
- 23.73 Kidd Matthew,79
- 23.85 Cook Gavyn,80

100 METRES FREESTYLE

- 50.15 Bowe Matthew,83
- 50.29 Scotcher Alex,80
- 50.89 Davenport Ross,84
- 51.00 Manley Andrew,77
- 51.03 Burnett Simon,82
- 51.06 Leith David,79
- 51.18 Chappels Seth,82
- 51.63 Salt Richard,83

200 METRES FREESTYLE

- 1:48.01 Salter James,76
- 1:48.50 Meadows Gavin,77
- 1:48.50 Burnett Simon,82
- 1:49.25 Scotcher Alex,80
- 1:50.99 Carry David,81
- 1:51.03 O'Brien David,82
- 1:51.85 Smith Graeme,76
- 1:54.34 Leith David,79

400 METRES FREESTYLE

- 3:46.14 Faulkner Adam,81
- 3:48.44 Davies David,85
- 3:51.08 Salter James,76
- 3:51.38 Smith Graeme,76
- 3:51.49 Meadows Gavin,77
- 3:52.02 O'Brien David,82
- 3:56.51 Webster Paul,84
- 4:02.84 Whitcombe Chris,83

1500 METRES FREESTYLE

- 14:54.60 Davies David,85
- 15:06.87 Faulkner Adam,81
- 15:06.96 Smith Graeme,76
- 15:19.78 Cole Michael,78
- 15:35.54 Alderton Chris,87
- 15:45.51 Bircher Alan,82
- 15:48.75 Herbert Thomas,85
- 15:53.88 Grosvenor Carl,85

50 METRES BACKSTROKE

- 25.39 Parry Stephen,77
- 25.45 Clay Matthew,82
- 25.53 Tait Gregor,80
- 26.13 Bowe Matthew,83
- 26.37 Tancock Liam,85
- 26.41 Barter Kevin,79
- 26.73 Burnett Simon,82
- 27.01 Thwaites Ian,80

100 METRES BACKSTROKE

- 53.15 Parry Stephen,77
- 53.82 Tait Gregor,80
- 55.31 Cooper Todd,83
- 55.37 Goddard James,83
- 55.40 Barter Kevin,79
- 56.60 Morgan Owen,84
- 57.65 Oxford Nathan,83

8 59.68 Burnett Simon,82

200 METRES BACKSTROKE

- 1:54.49 Parry Stephen,77
- 1:55.57 Tait Gregor,80
- 1:57.80 Goddard James,83
- 1:59.17 Barter Kevin,79
- 2:00.83 Oxford Nathan,83
- 2:00.86 Militis Simon,77
- 2:03.12 Powell Ian,85
- 2:06.57 Cowie Christian,79

50 METRES BREASTSTROKE

- 27.77 Mew Darren,79
- 27.96 Gibson James,79
- 28.48 Wolfarth Mark,82
- 28.68 Cook Chris,79
- 29.01 Tidey Chris,83
- 29.54 Lee Robert,83
- 29.59 Blythin Simon,82
- 29.79 Haynes Greg,80

100 METRES BREASTSTROKE

- 1:00.26 Mew Darren,79
- 1:00.80 Whitehead Adam,79
- 1:00.91 Edmond Ian,78
- 1:00.97 Cook Chris,79
- 1:01.81 Gibson James,79
- 1:03.19 Wolfarth Mark,82
- 1:03.68 Bartlett David,83
- 1:04.23 Scott Michael,80,HKG

200 METRES BREASTSTROKE

- 2:12.07 Turner Adrian,76
- 2:12.19 Edmond Ian,78
- 2:14.35 Mew Darren,79
- 2:15.55 Bartlett David,83
- 2:16.98 Wigg Darren,80
- 2:19.80 Branch Mark,87
- 2:23.42 Bouchere Damien,82

50 METRES BUTTERFLY

- 24.18 Hickman James,76
- 24.79 Cooper Todd,83
- 25.30 Chappels Seth,82
- 25.35 Bowe Matthew,83
- 25.68 Graves Mark,83
- 26.08 Houston Craig,85
- 26.08 Beresford Jason,83
- 26.40 Graves James,85

100 METRES BUTTERFLY

- 51.74 Hickman James,76
- 54.47 Cooper Todd,83
- 55.02 Graves Mark,83
- 55.20 Bennett David,81
- 56.44 Lewis Mark,83
- 56.46 Jones Chris,78
- 56.56 Beresford Jason,83
- 56.70 Tancock Ryan,83

200 METRES BUTTERFLY

- 1:53.91 Hickman James,76
- 1:57.36 Parry Stephen,77
- 2:00.27 Lewis Mark,83
- 2:01.99 Jones Chris,78
- 2:02.19 Wigg Darren,80
- 2:02.47 Edwards Matthew,86
- 2:02.81 Graves Mark,83
- 2:06.04 Webster Paul,84

100 METRES IND.MEDLEY

- 56.52 Turner Adrian,76
- 56.92 Edmond Ian,78

3 57.10 Leith David,79

- 57.19 Bowe Matthew,83
- 58.44 Lee Robert,83
- 58.55 Blythin Simon,82
- 58.70 Salt Richard,83
- 58.75 Thirlwell Andrew,86

200 METRES IND.MEDLEY

- 1:59.50 Parry Stephen,77
- 1:59.52 Turner Adrian,76
- 2:01.20 Tait Gregor,80
- 2:01.69 Leith David,79
- 2:01.84 Cole Michael,78
- 2:03.55 Scotcher Alex,80
- 2:04.28 Carry David,81
- 2:04.85 Wigg Darren,80

400 METRES IND.MEDLEY

- 4:13.09 Parry Stephen,77
- 4:15.92 Tait Gregor,80
- 4:17.37 Wigg Darren,80
- 4:17.80 Goddard James,83
- 4:18.07 Cole Michael,78
- 4:18.42 Davies David,80
- 4:23.83 Carry David,81
- 4:25.35 Thompson Christophe,83

WOMEN

50 METRES FREESTYLE

- 24.53 Sheppard Alison,72
- 25.36 Brett Rosalind,78
- 26.05 McNeilly Samantha,79
- 26.38 Cray Zoe,73
- 26.70 Douglas Julie,80,IRL
- 26.72 Beckett Julia,87
- 26.94 Morahan Rosie,88
- 26.98 Ramm Aimee,82

100 METRES FREESTYLE

- 54.38 Sheppard Alison,72
- 54.93 Pickering Karen,71
- 55.06 Legg Karen,78
- 55.28 Brett Rosalind,78
- 56.78 Belton Janine,79
- 56.85 Windeatt Claire,85
- 56.97 Cook Victoria,85
- 57.31 McNeilly Samantha,79

200 METRES FREESTYLE

- 1:57.56 Pickering Karen,71
- 1:58.39 Marshall Melanie,82
- 2:00.17 Legg Karen,78
- 2:01.78 Belton Janine,79
- 2:02.05 Nisbet Karen,81
- 2:02.07 Windeatt Claire,85
- 2:02.19 Cooke Rebecca,83

8 2:03.44 Cook Victoria,85

400 METRES FREESTYLE

- 4:08.58 Cooke Rebecca,83
- 4:14.76 Nisbet Karen,81
- 4:16.15 Payne Keri Anne,87
- 4:18.42 Shaw Rebecca,85
- 4:18.49 Chase Laura,87
- 4:22.09 Wicks Emma,88
- 4:22.70 Wyld Katherine,86
- 4:25.66 Prince Natalie,86

800 METRES FREESTYLE

- 8:27.66 Cooke Rebecca,83
- 8:40.49 Payne Keri Anne,87
- 8:49.18 Shaw Rebecca,85
- 8:52.92 Chase Laura,87
- 8:57.97 Wicks Emma,88
- 8:58.09 James Sarah,86
- 9:12.13 Brown Elizabeth,88

50 METRES BACKSTROKE

- 28.69 Price Sarah,79
- 29.01 Marshall Melanie,82
- 29.28 Cray Zoe,73
- 30.14 Beckett Julia,87
- 30.15 Lee Karen,82
- 30.38 Spofforth Gemma,87
- 30.48 Beechey Laura,85
- 30.67 Walsh Siobhan,85

100 METRES BACKSTROKE

- 1:00.15 Price Sarah,79
- 1:00.73 Marshall Melanie,82
- 1:02.46 Proud Stephanie,88
- 1:02.71 Dallas Charlotte,83
- 1:02.82 Sexton Katy,82
- 1:03.36 Lee Karen,82
- 1:03.84 Beechey Laura,85
- 1:04.16 Walsh Siobhan,85

200 METRES BACKSTROKE

- 2:07.59 Price Sarah,79
- 2:10.88 Proud Stephanie,88
- 2:12.71 Lee Karen,82
- 2:12.96 Sexton Katy,82
- 2:14.53 Beechey Laura,85
- 2:14.84 Don-Duncan Helen,81
- 2:15.45 Boyall Kayleigh,86
- 2:17.90 Walsh Siobhan,85

50 METRES BREASTSTROKE

- 32.37 Genner Rachel,82
- 32.75 Haywood Kate,87
- 32.88 Maxwell Charlotte,84
- 33.32 Greenshields Lauren,84
- 33.32 Balfour Kirsty,84
- 33.81 Callaghan Grace,89
- 34.15 Konowalik Amy,86
- 34.45 Kiff Michelle,83

100 METRES BREASTSTROKE

- 1:10.23 Haywood Kate,87

2 1:10.27 Balfour Kirsty,84

- 1:11.69 Greenshields Lauren,84
- 1:11.94 Konowalik Amy,86
- 1:12.43 Maxwell Charlotte,84
- 1:12.83 Callaghan Grace,89
- 1:13.17 Mullins Joanne,84
- 1:13.52 Martin Katie,82

200 METRES BREASTSTROKE

- 2:28.38 Balfour Kirsty,84
- 2:28.67 Greenshields Lauren,84
- 2:30.29 Konowalik Amy,86
- 2:33.59 Haywood Kate,87
- 2:33.61 King Jaime,76
- 2:35.48 Wood Laura,83
- 2:36.77 Kiff Michelle,83
- 2:37.09 Place Danielle,86

50 METRES BUTTERFLY

- 27.56 Brett Rosalind,78
- 28.15 Howells Gemma,84
- 28.29 Hancock's Karla,80
- 28.35 Winter Chloe,87
- 28.42 Ramm Aimee,82
- 28.87 White Alexa,79
- 28.87 Douglas Julie,80,IRL
- 28.94 Dunning Terri,85

100 METRES BUTTERFLY

- 1:00.30 Brett Rosalind,78
- 1:01.73 Howells Gemma,84
- 1:01.85 Pickering Karen,71
- 1:01.97 Dunning Terri,85
- 1:02.53 Savage Alexandra,85
- 1:03.46 Winter Chloe,87
- 1:03.52 Pyne Sarah,80
- 1:04.00 Thompson Rachel,84

200 METRES BUTTERFLY

- 2:14.47 Dunning Terri,85
- 2:15.29 Pyne Sarah,80
- 2:15.70 Thompson Rachel,84
- 2:18.15 Chase Laura,87
- 2:18.39 Howells Gemma,84
- 2:19.98 Edgar Siobhan,83
- 2:20.88 Stevens Lucy,82
- 2:22.16 Kneller Jessica,83

100 METRES IND.MEDLEY

- 1:01.86 Sheppard Alison,72
- 1:04.12 Savage Alexandra,85
- 1:04.42 Howells Gemma,84
- 1:04.60 Windeatt Claire,85
- 1:05.40 Morahan Rosie,88
- 1:05.65 Ridley Heidi,86
- 1:05.66 Mullins Joanne,84
- 1:05.72 Sexton Katy,82

200 METRES IND.MEDLEY

- 2:16.03 Savage Alexandra,85
- 2:17.27 Evans Kathryn,81
- 2:18.19 Windeatt Claire,85
- 2:18.20 Evanson Thea,79
- 2:18.24 Heyes Sarah,83
- 2:18.63 Mullins Joanne,84
- 2:20.84 Gretton Stephanie,83
- 2:20.98 Howells Gemma,84

400 METRES IND.MEDLEY

- 4:45.04 Cooke Rebecca,83
- 4:46.54 Evanson Thea,79
- 4:50.26 Heyes Sarah,83
- 4:50.36 Cox Louise,88
- 4:50.37 Preston Julie,86
- 4:50.80 Shaw Rebecca,85
- 4:53.04 Chase Laura,87
- 4:56.95 Gretton Stephanie,83

RATING SUMMARY OF TOP PERFORMANCES

1)	986	24.53	50 free W	Sheppard Alison 72,GBR
2)	983	1:53.91	200 fly M	Hickman James 76,GBR
3)	975	2:07.59	200 back W	Price Sarah 79,GBR
4)	972	1:54.49	200 back M	Parry Stephen 77,GBR
5)	970	1:57.56	200 free W	Pickering Karen 71,GBR
6)	969	8:27.66	800 free W	Cooke Rebecca 83,GBR
7)	962	14:54.60	1500 free M	Davies David 80,GBR
8)	960	1:58.39	200 free W	Marshall Melanie 82,GBR
9)	958	1:55.57	200 back M	Tait Gregor 80,GBR
10)	956	1:00.26	100 breast M	Mew Darren 79,GBR

BUTTON BETTERS FLY RECORD

Seven Golds For Limpert

Five years after the last short course championships were held, in Halifax in February 1997, Edmonton was the site of the most recent short course nationals held November 28 to December 1, 2002. They were held early in the season. For most swimmers, it was their first major competition and as a result, performances were mixed.

It gave some youngsters a shot at the podium, like Brittany Reimer, 14, Surrey Knights, winner of the 800 free in 8:38.35 and the 1500 free in 16:28.26, and second in the 400 free. All three swims were 13-14 Age Group records that bettered 16-year-old times.

"I'm happy to get my first national titles out of the way this early in my career," Reimer said.

Veterans like Marianne Limpert were outstanding. She had five individual wins and two relay wins for a seven-gold-medal performance. Limpert, at age 30, showed few signs of wear after a decade on the national team. "It was obvious I was on," Limpert said. "I won the 50 free and the 200 IM, which are two completely different races, back-to-back. Training has gone much better this year and there's been less distraction, such as school and moving." She moved back to Montreal and coach Claude St-Jean.

Rick Say, 23, University of Calgary, swept the middle distance freestyles, winning the 200 free in 1:45.83 and the 400 free in 3:46.46. He also went after the 12-year-old 800 free record of 7:47.07, but fell off the pace around 600 metres to finish first in 7:53.71.

"I came into this meet not totally prepared and I'm just trying to get as much out of it as I possibly can. It would have been nice to begin the winter season with a record," Say explained.

The top performance was by Brian Johns, UBC Dolphins, in the 200 IM with his 1:57.72 (976 points), just off his national record. He also won the 400 IM in 4:15.29 and the 200 fly in 1:58.47.

Canadian breaststroke record holder Morgan Knabe (UCSC) was entered but was pulled out at

the last moment, and last summer's breaststroke find, Michael Brown, who is in his first year at the University of Minnesota, was absent. This allowed Chad Thomsen, 19, University of Alberta Swim Centre, to sweep the breaststrokes. He did a 28.39 in the 50, 1:01.96 in the 100, and 2:13.60 in the 200 breaststroke. "To win all three events is quite a big deal," Thomsen said. "To do it at home is even more so. The crowd support was fantastic."

Lauren van Oosten (UCSC) had a lot to be pleased with. She won the 100 breast in 1:08.81 and the 200 in her best-ever time of 2:26.21. A World Championships medal winner, van Oosten missed the Olympic and World teams in 2000-2001, but spending three months in Waterloo last summer helped. "The change of venue last summer was great," van Oosten said. "I learned a lot about myself and about training. It was a huge step and now I am having a good time swimming again."



100 fly record for Jennifer Button (ROW)

Marco Chiesa

The lone individual Canadian record was by Jennifer Button, 25, Region of Waterloo, in the 100 fly with 58.93. She also won the 200 fly in 2:09.07 and tied for first in the 50 fly with Nadine Rolland in 27.52.

Button was key to ROW's two winning medley relays: 1:53.34 in the 4x50 and 4:05.06 in the 4x100, both bettering club relay records.

"Waterloo is a small town," Button said. "To beat big clubs from Montreal, Vancouver, and Calgary was something we were shooting for the last couple of years. Our top swimmers (Jennifer Fratesi, Lisa Blackburn,



Sean Sepulis (GMAC) won 100 back

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and Laura Nicholls) were doing their best strokes and we were confident we could win."

Nicholls tied for first in the 200 free with 1:59.61, and was second in the 50 free and third in the 100 free. Fratesi won the 200 back in 2:08.45 and Lisa Blackburn, at age 31, was second in the 100 and 200 breaststrokes.

Yannick Lupien, 22, CNC Beauport, won the 50 free in 22.52 and was third in the 100 free. In the 4x100 free record attempt time trial, he led off in 48.42 for a new national record.

Comparing this meet with the one in 1997, there has been some progress, especially in the women's winning times, which were faster in all but three events. Six men's winning times in 1997 were faster than in 2002.

Final record tally: One individual, four club relay, and two national relay selection successful record attempts: the men's 4x100 free in 3:14.14 (48.42 Yannick Lupien, 48.32 Brent Hayden, 48.87 Rick Say, 48.53 Mike Mintenko), bettering the 3:14.90 from 1999, and the women's 4x100 medley in 4:02.99 (1:00.30 Jennifer Carroll, 1:08.35 Lauren van Oosten, 58.78 Jennifer Button, 55.56 Marianne Limpert), bettering the old time of 4:03.89 from 1995.

Top team was UBC Dolphins with 1343.50 points, with University of Calgary second with 1243, Montreal CAMO third with 1143, and Region of Waterloo fourth with 753 points.

CANADIAN SC CHAMPIONSHIPS

Edmonton, Nov 29-Dec 1 (25M)

MEN

50 METRES FREESTYLE

- 1) 22.53 Yannick Lupien,22,CNCB
- 2) 22.74 Brent Hayden,19,UBCD
- 3) 22.84 Craig Hutchison,27,TO
- 4) 22.98 Riley James,22,NRST
- 5) 23.06 Paul Wilkins,21,SFA
- 6) 23.07 Daniel Monid,19,UNB
- 7) 23.16 Mark Shivers,21,ROW
- 8) 23.43 Richard Hortness,17,AMAC

100 METRES FREESTYLE

- 1) 48.82 Brent Hayden,19,UBCD
- 2) 48.85 Michael Mintenko,27,UBCD
- 3) 48.90 Yannick Lupien,22,CNCB
- 4) 49.34 Rick Say,23,UCSC
- 5) 50.02 Craig Hutchison,27,TO
- 6) 50.51 Richard Hortness,17,AMAC
- 7) 50.62 Justin Tisdall,21,UBCD
- 8) 50.97 Daniel Monid,20,UNB

200 METRES FREESTYLE

- 1) 1:45.83 Rick Say,23,UCSC
- 2) 1:46.73 Brent Hayden,19,UBCD
- 3) 1:48.15 Mark Johnston,23,UBCD
- 4) 1:49.91 Justin Tisdall,21,UBCD
- 5) 1:50.18 Colin Russell,18,BTSC
- 6) 1:51.84 Brian Edey,23,UAASC
- 7) 1:52.00 Olivier Leroy,22,HAC
- 8) 1:54.43 Chad Hankewich,21,GOLD

400 METRES FREESTYLE

- 1) 3:46.46 Rick Say,23,UCSC
- 2) 3:53.36 Colin Russell,18,BTSC
- 3) 3:54.78 Richard Cormack,20,UCSC
- 4) 3:56.78 Brian Edey,23,UAASC
- 5) 3:56.99 David Creel,21,PCS
- 6) 3:58.52 Jarrod Ballam,23,UCSC
- 7) 3:59.13 Devin Phillips,17,UAASC
- 8) 4:07.90 Justin Tisdall,21,UBCD

800 METRES FREESTYLE

- 1) 7:53.71 Rick Say,23,UCSC
- 2) 8:07.20 David Creel,21,PCS
- 3) 8:07.97 Jarrod Ballam,23,UCSC
- 4) 8:14.58 Richard Cormack,20,UCSC
- 5) 8:19.45 Cameron Hyder,20,UCSC
- 6) 8:20.23 Tim Cowan,25,UCSC
- 7) 8:22.73 Michael Derban,18,UCSC
- 8) 8:23.39 Malcolm Lavoie,16,UAASC

1500 METRES FREESTYLE

- 1) 15:41.19 Richard Cormack,20,UCSC
- 2) 15:44.50 Jarrod Ballam,23,UCSC
- 3) 15:46.85 David Creel,21,PCS
- 4) 15:57.27 Tim Cowan,25,UCSC
- 5) 16:00.74 Michael Derban,18,UCSC
- 6) 16:08.06 Malcolm Lavoie,16,UAASC
- 7) 16:12.08 Don Nicholson,18,SFA
- 8) 16:16.55 Joey Kehoe,18,TO

50 METRES BACKSTROKE

- 1) 25.10 Riley James,22,NRST
- 2) 25.34 Sean Sepulis,25,GMAC
- 3) 25.62 Alexandre Pichette,25,CAMO
- 4) 25.92 Benoit Vanville-Auger,19,MEGO
- 5) 25.93 Jean-F. Langlais,23,UL
- 6) 26.12 Callum Ng,17,CASC
- 7) 26.22 Remi Lachapelle,22,CAMO
- 8) 26.72 Ryan Atkinson,17,LAC

100 METRES BACKSTROKE

- 1) 54.38 Sean Sepulis,25,GMAC
- 2) 54.77 Riley James,22,NRST
- 3) 55.43 Benoit Vanville-Auger,19,MEGO
- 4) 56.51 Stephen Preston,21,UL
- 5) 56.59 Callum Ng,17,CASC
- 6) 56.98 Remi Lachapelle,22,CAMO
- 7) 57.28 Christian Lachapelle,21,CAMO
- 8) 57.28 Christian Lachapelle,21,CAMO

200 METRES BACKSTROKE

- 1) 1:55.63 Keith Beavers,19,ROW
- 2) 2:00.54 Sean Sepulis,25,GMAC
- 3) 2:01.11 Michael Power,22,UCSC
- 4) 2:01.35 Desmond Strelzow,17,UBCD
- 5) 2:02.50 Benoit Vanville-Auger,19,MEGO
- 6) 2:02.60 Stephen Preston,21,UL

- 7) 2:04.79 Devin Phillips,17,UAASC
- 8) 2:05.53 Bryan McMillan,20,GMAC

50 METRES BREASTSTROKE

- 1) 28.39 Chad Thomsen,19,UAASC
- 2) 28.59 Trevor Brekke,25,SFA
- 3) 28.97 Nathan Parker,18,ROD
- 4) 28.99 Jason Hunter,22,SFA
- 5) 29.08 Gerard Hunter,21,UOFL
- 6) 29.11 David McKechnie,16,BTSC
- 7) 29.31 Colin Russell,18,BTSC
- 8) 29.52 Chad Thiessen,17,SPART

100 METRES BREASTSTROKE

- 1) 1:01.96 Chad Thomsen,19,UAASC
- 2) 1:02.12 Trevor Brekke,25,SFA
- 3) 1:02.22 Matthew Huang,18,UBCD
- 4) 1:02.85 Gerard Hunter,21,UOFL
- 5) 1:03.21 David McKechnie,16,BTSC
- 6) 1:03.27 Warren Barnes,17,SCAR
- 7) 1:03.50 Michel Boulianne,24,CAMO
- 8) 1:03.67 Nathan Parker,18,ROD

200 METRES BREASTSTROKE

- 1) 2:13.60 Chad Thomsen,19,UAASC
- 2) 2:14.07 Brian Johns,20,UBCD
- 3) 2:14.71 Michel Boulianne,24,CAMO
- 4) 2:15.90 Jason Hunter,22,SFA
- 5) 2:16.21 Nathan Parker,18,ROD
- 6) 2:18.36 Warren Barnes,17,SCAR
- 7) 2:19.22 Matthew Huang,18,UBCD
- 8) 2:19.28 Marco Monaco,16,OKA-TO

50 METRES BUTTERFLY

- 1) 24.00 Michael Mintenko,27,UBCD
- 2) 24.64 Thomas Kindler,22,CAMO
- 3) 24.73 Chad Hankewich,21,GOLD
- 4) 24.77 Jean-F. Langlais,23,UL
- 5) 24.84 Yannick Lupien,22,CNCB
- 6) 24.87 Sandy Henderson,23,SFA
- 7) 25.14 Mark Shivers,21,ROW
- 8) 25.29 Chris Razeau,22,MM

100 METRES BUTTERFLY

- 1) 52.85 Michael Mintenko,27,UBCD
- 2) 54.44 Josh Ballam,25,UOSA
- 3) 54.84 Jesse Jacks,20,PCS
- 4) 54.86 Jean-F. Langlais,23,UL
- 5) 54.96 Sandy Henderson,23,SFA
- 6) 55.16 Chad Hankewich,21,GOLD
- 7) 55.60 Marc-O. Lepage,20,SAMAK
- 8) 55.67 Sebastien Poulin,23,CAMO

200 METRES BUTTERFLY

- 1) 1:58.47 Brian Johns,20,UBCD
- 2) 1:59.42 Chad Murray,21,UCSC
- 3) 2:00.44 Philip Weiss,23,PCS
- 4) 2:01.08 Jesse Jacks,20,PCS
- 5) 2:02.11 Sebastien Poulin,23,CAMO
- 6) 2:02.34 Jonathan Schjott,21,UCSC
- 7) 2:02.46 Jan Pelechytik,22,ROD
- 8) 2:03.85 Klaus Hartel,23,SFA

200 METRES IND. MEDLEY

- 1) 1:57.72 Brian Johns,20,UBCD
- 2) 2:01.56 Chad Murray,21,UCSC
- 3) 2:02.53 Francois Castonguay,20,CAMO
- 4) 2:04.61 Philip Weiss,23,PCS
- 5) 2:04.68 Chad Thomsen,19,UAASC
- 6) 2:04.78 Callum Ng,17,CASC
- 7) 2:05.21 Cameron Hyder,20,UCSC
- 8) 2:05.46 Gerard Hunter,21,UOFL

400 METRES IND. MEDLEY

- 1) 4:15.29 Brian Johns,20,UBCD
- 2) 4:20.75 Chad Murray,21,UCSC
- 3) 4:23.00 Cameron Hyder,20,UCSC
- 4) 4:24.84 Francois Castonguay,20,CAMO
- 5) 4:25.54 Conrad Aach,17,ESWIM
- 6) 4:27.53 Callum Ng,17,CASC
- 7) 4:30.34 Elliot MacDonald,20,MANTA
- 8) 4:31.23 Chris Nelson,23,UAASC

4X50 M MEDLEY RELAY

- 1) 1:40.96 UBC Dolphins,UBCD
- 2) 1:41.68 Montreal Aquatique,CAMO
- 3) 1:42.26 Simon Fraser,SFA
- 4) 1:43.45 Univ.Alberta SC,UAASC
- 5) 1:43.72 Univ of Calgary SC,UCSC
- 6) 1:44.92 Montreal Aquatique B,CAMO
- 7) 1:45.76 Univ.New Brunswick,UNB

- 8) 1:45.80 Univ of Calgary SC B,UCSC

4X100 M MEDLEY RELAY

- 1) 3:39.98 UBC Dolphins,UBCD
- 2) 3:45.02 Montreal Aquatique,CAMO
- 3) 3:46.01 Univ of Calgary SC,UCSC
- 4) 3:46.87 Univ.Alberta SC,UAASC
- 5) 3:49.10 UBC Dolphins B,UBCD
- 6) 3:49.21 Montreal Aquatique B,CAMO
- 7) 3:58.76 Samak de Brossard,SAMAK

4X50 M FREE RELAY

- 1) 1:31.27 UBC Dolphins,UBCD
- 2) 1:32.01 Montreal Aquatique,CAMO
- 3) 1:32.57 Simon Fraser,SFA
- 4) 1:33.33 Univ of Calgary SC,UCSC
- 5) 1:33.36 UBC Dolphins B,UBCD
- 6) 1:34.13 Univ.Alberta SC,UAASC
- 7) 1:35.27 Montreal Aquatique B,CAMO
- 8) 1:36.17 Univ of Calgary SC B,UCSC

4X100 M FREE RELAY

- 1) 3:17.40 UBC Dolphins,UBCD
- 2) 3:23.27 Montreal Aquatique,CAMO
- 3) 3:23.34 UBC Dolphins B,UBCD
- 4) 3:26.53 Univ.Alberta SC,UAASC
- 5) 3:26.97 Simon Fraser,SFA
- 6) 3:28.61 Univ of Calgary SC B,UCSC
- 7) 3:30.65 Montreal Aquatique B,CAMO
- 8) 3:44.42 Univ of Calgary SC,UCSC

WOMEN

50 METRES FREESTYLE

- 1) 25.48 Marianne Limpert,30,CAMO
- 2) 25.60 Laura Nicholls,24,ROW
- 3) 25.94 Victoria Poon,18,CAMO
- 4) 26.18 Nadine Rolland,28,MAA
- 5) 26.29 Jennifer Fratesi,18,ROW
- 6) 26.32 Iris Elliott,20,TO
- 7) 26.32 Erin Kardash,17,MM
- 8) 26.42 Sara Alroubaie,21,MM

100 METRES FREESTYLE

- 1) 55.35 Marianne Limpert,30,CAMO
- 2) 55.90 Audrey Lacroix,19,CAMO
- 3) 55.96 Laura Nicholls,24,ROW
- 4) 56.00 Sophie Simard,24,UL
- 5) 56.58 Jennifer Parenta,17,TO
- 6) 56.87 Iris Elliott,20,TO
- 7) 56.92 Marieve De Blois,18,CAMO
- 8) 57.34 Jennifer Beckberger,16,AAC

200 METRES FREESTYLE

- 1) 1:59.61 Laura Nicholls,24,ROW
- 2) 1:59.61 Marianne Limpert,30,CAMO
- 3) 1:59.89 Sophie Simard,24,UL
- 4) 2:00.25 Jessica Deglau,22,UBCD
- 5) 2:01.92 Kelly Doody,23,UBCD
- 6) 2:01.92 Audrey Lacroix,19,CAMO
- 7) 2:01.92 Kristy Cameron,21,UCSC
- 8) 2:02.57 Elizabeth Collins,20,ROD

400 METRES FREESTYLE

- 1) 4:11.99 Sophie Simard,24,UL
- 2) 4:12.58 Brittany Reimer,14,SKSC
- 3) 4:13.10 Jessica Deglau,22,UBCD
- 4) 4:13.11 Elizabeth Warden,24,TO
- 5) 4:14.07 Shannon Hackett,16,UBCD
- 6) 4:15.90 Tanya Hunks,22,HYACK
- 7) 4:16.46 Julie Gravelle,23,TO
- 8) 4:20.12 Jennifer Button,25,ROW

800 METRES FREESTYLE

- 1) 8:38.35 Brittany Reimer,14,SKSC
- 2) 8:40.56 Taryn Lencoe,16,UBCD
- 3) 8:43.83 Tanya Hunks,22,HYACK
- 4) 8:48.31 Shannon Hackett,16,UBCD
- 5) 8:52.56 Carrie Burgoyne,21,UCSC
- 6) 8:55.34 Karley Stutzel,20,PCS
- 7) 8:55.89 Julie Gravelle,23,TO
- 8) 8:58.56 Elyse Dudar,15,MSSAC-TO

1500 METRES FREESTYLE

- 1) 16:28.26 Brittany Reimer,14,SKSC
- 2) 16:30.45 Taryn Lencoe,16,UBCD
- 3) 16:56.57 Darcy Goodridge,16,UBCD
- 4) 16:57.81 Karley Stutzel,20,PCS
- 5) 17:06.86 Danielle Bell,19,PCS
- 6) 17:10.04 Carrie Burgoyne,21,UCSC
- 7) 17:11.46 Anne Schmuck,14,PSW
- 8) 17:16.07 Amanda Bell,14,UCSC

50 METRES BACKSTROKE

- 1) 27.66 Jennifer Carroll,21,MAA
- 2) 28.77 Erin Gammel,22,UCSC
- 3) 29.04 Caitlin Meredith,18,UBCD
- 4) 29.45 Hanna Kutas,17,UAASC
- 5) 29.46 Genevieve Saumur,15,CAMO
- 6) 29.51 Marielle Menard,22,UL
- 7) 29.77 Melanie Bouchard,20,UL
- 8) 30.01 Jennifer Button,25,ROW

100 METRES BACKSTROKE

- 1) 1:00.38 Jennifer Carroll,21,MAA
- 2) 1:01.32 Caitlin Meredith,18,UBCD
- 3) 1:01.41 Erin Gammel,22,UCSC
- 4) 1:01.93 Jennifer Fratesi,18,ROW
- 5) 1:02.52 Kiera Aitken,20,BER
- 6) 1:02.85 Melanie Bouchard,20,UL
- 7) 1:03.89 Laura Nicholls,24,ROW
- 8) 1:03.99 Laina Steeple,19,PCS

200 METRES BACKSTROKE

- 1) 2:08.45 Jennifer Fratesi,18,ROW
- 2) 2:10.67 Elizabeth Warden,24,TO
- 3) 2:12.72 Caitlin Meredith,18,UBCD
- 4) 2:14.01 Melanie Bouchard,21,UL
- 5) 2:14.94 Erin Gammel,22,UCSC
- 6) 2:17.04 Deanna Stefanyshyn,18,UBCD
- 7) 2:17.63 Katherine Telfer,18,ESWIM
- 8) 2:17.69 Lynette Bayliss,17,UCSC

50 METRES BREASTSTROKE

- 1) 32.02 Marianne Limpert,30,CAMO
- 2) 32.10 Rhiannon Leier,25,MM
- 3) 32.17 Lauren van Oosten,24,UCSC
- 4) 32.34 Lisa Blackburn,31,ROW
- 5) 32.47 Renee Hober,17,ROW
- 6) 33.01 Sarah Gault,17,DDO
- 7) 33.14 Jennifer Beckberger,16,AAC
- 8) 33.30 Emma Spooner,19,UCSC

100 METRES BREASTSTROKE

- 1) 1:08.81 Lauren van Oosten,24,UCSC
- 2) 1:09.12 Lisa Blackburn,31,ROW
- 3) 1:09.72 Rhiannon Leier,25,MM
- 4) 1:10.40 Kathleen Stoodly,19,SFA
- 5) 1:10.91 Tamara Wagner,17,ROW
- 6) 1:11.16 Emma Spooner,19,UCSC
- 7) 1:11.89 Stephanie Hughes,24,UDAL
- 8) 1:11.96 Michelle Mange,15,UBCD

200 METRES BREASTSTROKE

- 1) 2:26.21 Lauren van Oosten,24,UCSC
- 2) 2:30.57 Lisa Blackburn,31,ROW
- 3) 2:30.81 Rhiannon Leier,25,MM
- 4) 2:31.01 Elizabeth Warden,24,TO
- 5) 2:31.58 Kathleen Stoodly,19,UBCD
- 6) 2:32.22 Michelle Mange,15,UBCD

4X50 M BUTTERFLY RELAY

- 1) 2:34.02 Renee Hober,17,ROW
- 2) 2:34.72 Christin Petelski,24,PCS

50 METRES BUTTERFLY

- 1) 27.52 Jennifer Button,25,ROW
- 2) 27.52 Nadine Rolland,28,MAA
- 3) 27.56 Audrey Lacroix,19,CAMO
- 4) 27.82 Kelly Doody,23,UBCD
- 5) 28.03 Jennifer Parenta,17,TO
- 6) 28.28 Karine Chevrier,25,CAMO
- 7) 28.51 Genevieve Saumur,15,CAMO
- 8) 28.82 Elizabeth Collins,20,ROD

100 METRES BUTTERFLY

- 1) 58.93 Jennifer Button,25,ROW
- 2) 59.36 Audrey Lacroix,19,CAMO
- 3) 1:00.93 Jennifer Fratesi,18,ROW
- 4) 1:01.97 Sara Alroubaie,21,MM
- 5) 1:02.73 Stephanie Hughes,24,UDAL
- 6) 1:02.83 Julia Guay-Racine,16,CAMO
- 7) 1:02.85 Jessica Deglau,22,UBCD
- 8) 1:02.96 Tiffany Vincent,17,BRANT

200 METRES BUTTERFLY

- 1) 2:09.07 Jennifer Button,25,ROW
- 2) 2:09.20 Audrey Lacroix,19,CAMO
- 3) 2:13.66 Sara Alroubaie,21,MM
- 4) 2:13.87 Jessica Deglau,22,UBCD
- 5) 2:14.91 Tanya Hunks,22,HYACK
- 6) 2:16.71 Joan Bernier,18,CNCB
- 7) 2:19.22 Melissa Hubley,21,UDAL
- 8) 2:21.11 Stephanie Hughes,24,UDAL

200 METRES IND. MEDLEY

- 1) 2:12.65 Marianne Limpert,30,CAMO
- 2) 2:14.56 Kelly Doody,23,UBCD
- 3) 2:14.88 Kristy Cameron,21,UCSC
- 4) 2:15.02 Jennifer Fratesi,18,ROW
- 5) 2:15.83 Marieve De Blois,18,CAMO
- 6) 2:17.68 Lauren van Oosten,24,UCSC
- 7) 2:19.08 Michelle Landry,17,UBCD
- 8) 2:20.76 Stephanie Hughes,24,UDAL

400 METRES IND. MEDLEY

- 1) 4:40.10 Elizabeth Warden,24,TO
- 2) 4:46.95 Carrie Burgoyne,21,UCSC
- 3) 4:47.08 Kelly Doody,23,UBCD
- 4) 4:47.15 Tanya Hunks,22,HYACK
- 5) 4:51.05 Lauren van Oosten,24,UCSC
- 6) 4:54.39 Marieve De Blois,18,CAMO
- 7) 4:54.47 Kristy Cameron,21,UCSC
- 8) 4:56.27 Melanie Bouchard,21,UL

4X50 M MEDLEY RELAY

- 1) 1:53.34 Region of Waterloo,ROW
- 2) 1:54.34 Montreal Aquatique,CAMO
- 3) 1:55.00 Univ of Calgary SC,UCSC
- 4) 1:56.19 UBC Dolphins,UBCD
- 5) 1:57.74 Montreal Aquatique B,CAMO
- 6) 1:57.75 Univ.Alberta SC,UAASC
- 7) 1:58.08 UBC Dolphins B,UBCD
- 8) 1:58.28 Manitoba Marlins,MM

4X100 M MEDLEY RELAY

- 1) 4:05.46 Region of Waterloo,ROW
- 2) 4:09.05 Montreal Aquatique,CAMO
- 3) 4:10.64 UBC Dolphins,UBCD
- 4) 4:10.77 Univ of Calgary SC,UCSC
- 5) 4:12.47 Manitoba Marlins,MM
- 6) 4:15.11 Toronto All Stars,TO
- 7) 4:15.55 Dalhousie Univ.,UDAL
- 8) 4:15.74 UBC Dolphins B,UBCD

4X50 M FREE RELAY

- 1) 1:43.68 Montreal Aquatique,CAMO
- 2) 1:44.69 Region of Waterloo,ROW
- 3) 1:45.01 UBC Dolphins,UBCD
- 4) 1:45.06 Toronto All Stars,TO
- 5) 1:45.08 UBC Dolphins B,UBCD
- 6) 1:45.67 Manitoba Marlins,MM
- 7) 1:45.98 Univ.Laval Rouge & Or,UL
- 8) 1:46.92 Univ of Calgary SC,UCSC

4X100 M FREE RELAY

- 1) 3:44.34 Montreal Aquatique,CAMO
- 2) 3:45.90 UBC Dolphins,UBCD
- 3) 3:48.11 Region of Waterloo,ROW
- 4) 3:48.68 Univ of Calgary SC,UCSC
- 5) 3:48.99 Toronto All Stars,TO
- 6) 3:5

GERMANY TOP TEAM

Klochkova and Rupprath win most prize monies

RIESA—The annual Short Course Europeans were held December 12-15 in this German city that has specialized in hosting major sporting events. After the German reunification about a decade ago, the community decided building a multi-use arena would provide activity, visitors, etc., and have hosted several world championships in other sports. The set-up for the swimming championships involved a temporary pool (the Swedish design used at the SC Worlds in 1997 and 1999) and seating for 3,500, with a total of 11,000 paying customers over the four days.



Opening ceremony in the temporary pool in multi-use complex

Marco Chiesa

The format of the competition was geared to daily live Eurosport TV coverage. The finals got underway at 3:15 pm and concluded by 5:30 or earlier. Live TV was about an hour in length and consisted of six to eight finals and a short award ceremony without flags and anthems. Since live television is so valuable and the major source of LEN's income, everything was done to make it run on time and to the second, leading to a very classy production.

For all the fine facilities, great organization, and prize money, not all European stars showed

up. The most obvious no shows were Pieter van den Hoogenband and Inge de Bruijn (NED), Franziska van Almsick (GER), Roman Sloudnov (RUS), Franck Esposito (FRA), who had just bettered the world record in the 200 fly. Therese Alshammar (SWE) was there but only swam relays. Participation by Hungary was a first, as they have shunned short course in the past.

Germany handily won the championships with 22 medals (7-7-8), more than double the totals of Italy and Sweden. Of the just over 40 LEN-affiliated countries, 24 won at least one medal.

Men's highlights

Jani Sievinen (FIN) was the men's top performer, winning the 200 IM in 1:55.47 (1004 points). He also battled Peter Mankoc (SLO) in the 100 IM, where he finished second. Mankoc's winning time was 53.05.

Thomas Rupprath (GER), with two backstroke world records from the week before, won three individual golds, in the 50 and 100 back and 100 fly, as well as a fourth gold in the fastest-ever 4x50 medley relay. His 23.66 (999 points) in the 50 back was a meet record but off his 23.23 from Dec 1 at the German SC Championships. Just five days before in Melbourne, AUS, he lowered the world record in the 100 back to 50.58. He was busy in Riesa and fighting jet-lag. His best swim was the 100 fly in 50.77 (1003 points). He ended up with two of the top three performances and 5,000 Euros in prize money.

Yuri Prilukov (RUS) had a fantastic year. He won the 200, 400, and 1500 free at the European Juniors in July, then he added the 1500 free at the Long Course

Europeans in Berlin last August. Here he finished the year with the 1500 free title in a SC European record of 14:35.06. He turned 18 last June. "I knew the European record was possible," Prilukov said. "But the real competition is in Australia. Probably not ready for that in 2003 but eventually."

David Davies (GBR) was second in the 1500 free with 14:42.51, a 15-second drop from his previous best in September. "I'm shocked," Davies said. "I never expected to win a medal at my first ever European championships. Once Prilukov got ahead it became impossible to catch him." Davies is 17 and was voted top male newcomer of the championships by the media present.

Oleg Lisogor (UKR) won the 50 breast in 26.94, and the 100 in 59.09, but was tired from the constant travel and racing. He'd been to New York and Shanghai in the weeks prior to Riesa.

Davide Rummolo (ITA) had an easy win in the 200 breast. Splitting 1:02.14, his final time was 2:07.70. He also won the long course Europeans

last summer.

Alessio Boggiatto (ITA) and Jacob Carstensen (DEN) battled in the 400 IM with Boggiatto moving into the lead in the breaststroke to finish in 4:07.44 and Carstensen second with 4:08.80. Boggiatto won the same event at the Long Course Europeans. Carstensen took up the IM recently after reaching a plateau in the 400 freestyle.



Distance winner Yuri Prilukov (RUS)

Marco Chiesa

MEDAL TOTALS

		Gold	Silver	Bronze	Total
1	GER	7	7	8	22
2	ITA	5	2	2	9
	SWE	5	2	2	9
4	UKR	4	2	3	9
5	GBR	3	4	1	8
6	HUN	3	2	3	8
7	SVK	3	0	0	3
8	FIN	2	3	1	6
9	BLR	2	2	1	5
10	AUT	1	2	0	3
11	SLO	1	1	3	5
	RUS	1	1	3	5
13	NED	1	0	2	3
14	ISL	1	0	1	2
15	CZE	0	3	0	3
16	DEN	0	2	1	3
17	FRA	0	2	0	2
18	CRO	0	1	1	2
19	SUI	0	1	0	1
20	LTU	0	0	2	2
21	ROM	0	0	1	1
	ISR	0	0	1	1
	GRE	0	0	1	1
	ESP	0	0	1	1
	Totals	39	37	38	114

Germany won the 4x50 medley relay in a world best of 1:34.72 and the Netherlands won the 4x50 free relay in 1:25.41, after trailing Italy for the first three legs. It was quite a swim for the Dutch team without Van den Hoogenband. Anchoring the Italians was breaststroker Domenico Fioravanti, whose 21.66 was faster than two swimmers from the Dutch team.

Women's highlights

Martina Moravcova (SVK) won three events and had the top swim of the meet in the 100 butterfly with a time of 56.82 (1012 points) and earned 5,000 Euros for that swim. She tied for first in the 100 free with 53.66 and won the 100 IM in 1:00.21. She scratched from the 200 free to swim a fast fly. Both events had the final on the last day.

"This is my third title here in Riesa," Moravcova said. "I wanted to be much faster, but I'm still tired from yesterday." She swam prelims in the 200 free, scratched the semis, and swam the 100 fly prelims and semis and the final of the 100 IM.

Elena Popchenko (BLR) tied for first in the 100 free in 53.66 and won the 200 free in 1:55.91 for the first women's golds for her country.

Eva Risztoz (HUN), who won four silvers at the long course Europeans, made her first short course championships a memorable one.

First up on Day One was the 200 fly, where she won easily in 2:07.19. On Day Two it was the 800 free and she won that in a European record of 8:14.72 (splitting 4:07.82 and 4:06.90), beating Flavia Rigamonti (SUI), a two-time winner of the event, in 8:16.16. On Day Three it was the 400 free against Yana Klochkova (UKR) to settle some old scores. Risztoz split 58.91, 2:00.78, and 3:02.37 to finish in 4:01.95. Klochkova split 59.03, 2:01.06, and 3:02.73 and then gave up the chase to finish in 4:04.50.

"It was important to beat Klochkova today," Risztoz said. "I could not do it last summer. I held her off at the 200 when she tried to move up."

In the 400 IM, the order at the finish was reversed as Klochkova was in the lead throughout the four strokes 1:01.27, 2:09.37, and 3:28.48 to finish in 4:29.81. Risztoz was in second throughout, finishing three body lengths back in 4:33.09.

"It was revenge for the 400 free," Klochkova said.

"I am tired," Risztoz said. "Klochkova saved



Three wins for Eva Risztoz (HUN) in first ever short course meet

Marco Chiesa

her strength on the finish of the 400 free to be ready for this."

Klochkova also won the 200 IM in a European record of 2:08.28.

Antje Buschschulte (GER) won the 50 back in 27.62 and the 100 back in 58.60 over an off-form

but clinched first for Sweden.

The meet moves to Dublin (IRL) in December 2003.

This was the sixth European SC Championships, held first in 1996, then yearly during December since 1998. During that period, 14 World, 9 World best relay, and 55 European records have been established. Prize money for records or, more recently, fast swimming based on IPS points has been an added incentive.

This year a total of 35,000 Euros was up for grabs: 16,000 for each of seven top male and female performances and the remaining 3,000 to be split between the top Newcomer (first time on podium) male and female as chosen by the hundred journalists (written and broadcast) present.

Voted best newcomers by the media present:

David Davies (GBR), silver medallist in the 1500 freestyle, and Lena Hallander (SWE), silver medallist in the 50 butterfly.

TOP EUROPEAN CHAMPIONSHIPS PERFORMERS

Men

1)	1004	1:55.47	200 IM M	Sievinen Jani 74,FIN
2)	1003	50.77	100 fly M	Rupprath Thomas 77,GER
3)	999	23.66	50 back M	Rupprath Thomas 77,GER
4)	998	53.05	100 IM M	Peter Mankoc 78,SLO
5)	996	1:56.07	200 IM M	Kerekjarto Tamas 79,HUN
	996	1:52.91	200 fly M	Parry Stephen 77,GBR
7)	994	1:56.28	200 IM M	Mankoc Peter 78,SLO
	994	14:35.06	100 free M	Prilukov Yuri 84,RUS

Women

1)	1012	56.82	100 fly W	Martina Moravcova 76,SVK
2)	1011	2:08.28	200 IM W	Klochkova Yana 82,UKR
3)	1008	4:29.81	400 IM W	Klochkova Yana 82,UKR
4)	1006	8:14.72	800 free W	Risztoz Eva 85,HUN
	1006	24.20	50 free W	Sheppard Allison 72,GBR
5)	1002	8:16.16	800 free W	Rigamonti Flavia 81,SUI
	1002	2:05.19	200 back W	Price Sara 79,GBR

Ilona Hlavackova (CZE), winner of both distances in 2000 and 2001. In the 200 back, Sarah Price (GBR) won with 2:05.19 over Buschschulte in second with 2:06.26, a German record.

Emma Igelstrom (SWE) won the 50 breast in 30.89 by 1/100th of a second over Sarah Poewe (GER). Igelstrom then scratched the 100 breast after only a seventh in the 200 breast. She had just returned from the World Cup in Melbourne where she set a European record of 2:19.85 in the 200. It was a case of too much travel and severe jet-lag.



Top women's performance for Martina Moravcova (SVK)

Marco Chiesa

2002 EUROPEAN SC CHAMPIONSHIPS

Riesa (GER) Dec 12-15 (25 M)

MEN

50 METRES FREESTYLE

1	21.55	Nystrand Stefan,81,SWE
2	21.66	Vismara Lorenzo,75,ITA
3	21.74	Gimbutis Rolandas,81,LTU
4	21.85	Kenkhuis Johan,80,NED
5	22.07	Shyrshov Vyacheslav,79,UKR
6	22.09	Sicot Julien,78,FRA
7	22.18	Volynets Oleksander,74,UKR
8	22.27	Gaspar Zsolt,77,HUN

100 METRES FREESTYLE

1	47.33	Vismara Lorenzo,75,ITA
2	48.15	Hard Jere,78,FIN
3	48.23	Kenkhuis Johan,80,NED
4	48.26	Nystrand Stefan,81,SWE
5	48.50	Pimankov Denis,75,RUS
6	48.53	Gimbutis Rolandas,81,LTU
7	48.59	Herbst Stefan,78,GER
8	49.02	Veens Mark,78,NED

200 METRES FREESTYLE

1	1:45.39	Brembilla Emiliano,78,ITA
2	1:45.45	Svoboda Kvetoslav,82,CZE
3	1:45.79	Pellicciari Matteo,79,ITA
4	1:45.83	Herbst Stefan,78,GER
5	1:45.85	Binevicius Saulius,79,LTU
6	1:45.88	Burnett Simon,82,GBR
7	1:47.45	Xylouris Nikos,82,GRE
8	1:47.91	Miloslavskis Romans,83,LAT

400 METRES FREESTYLE

1	3:40.60	Brembilla Emiliano,78,ITA
2	3:41.90	Prilukov Yuri,84,RUS
3	3:44.68	Oikonomou Athanasios,78,GRE
4	3:44.82	Svoboda Kvetoslav,82,CZE
5	3:45.88	Pellicciari Matteo,79,ITA
6	3:49.41	Fesenko Sergiy,82,UKR
7	3:50.67	Vrhoysek Martin,83,SLO
8	3:52.01	Gianniotis Spyridon,80,GRE

1500 METRES FREESTYLE

1	14:35.06	Prilukov Yuri,84,RUS
2	14:42.51	Davies David,80,GBR
3	14:51.43	Minotti Christian,80,ITA
4	14:55.06	Koptour Dmitry,78,BLR
5	14:57.54	Lurz Thomas,79,GER
6	15:00.63	Chervynskiy Igor,81,UKR
7	15:04.67	Gianniotis Spyridon,80,GRE
8	15:10.82	Zdesar Bojan,84,SLO

50 METRES BACKSTROKE

1	23.66	Rupprath Thomas,77,GER
2	24.29	Theloke Stev,78,GER
3	24.62	Grigalionis Darius,77,LTU
4	24.70	Arnason Orn,81,ISL
5	24.80	Horvath Peter,74,HUN
6	24.86	Mankoc Peter,78,SLO
7	24.88	Tamminga Baastian,81,NED
8	24.90	Zeravica Miro,72,CRO

100 METRES BACKSTROKE

1	51.51	Rupprath Thomas,77,GER
2	51.71	Theloke Stev,78,GER
3	51.91	Arnason Orn,81,ISL

4	52.73	Grigalionis Darius,77,LTU
5	53.22	Buyukuncu Derya,76,TUR
6	53.29	Alechine Evgeni,79,RUS
7	53.39	Horvath Peter,74,HUN
8	53.70	Nikolaychuk Volodymyr,75,UKR

200 METRES BACKSTROKE

1	1:54.00	Arnason Orn,81,ISL
2	1:54.11	Parry Stephen,77,GBR
3	1:54.50	Kozulij Gordan,76,CRO
4	1:55.24	Alechine Evgeni,79,RUS
5	1:55.86	Sanchez Jorge,77,ESP
6	1:56.22	Dufour Simon,79,FRA
7	1:56.23	Cseh Laszlo,85,HUN
8	1:56.94	Nikolaychuk Volodymyr,75,UKR

50 METRES BREASTSTROKE

1	26.94	Lisogor Oleg,79,UKR
2	27.15	Warnecke Mark,70,GER
3	27.36	Kruppa Jens,76,GER
4	27.40	Lutolf Remo,80,SUI
5	27.52	Tepavcevic Mladen,76,YUG
6	27.55	Pihlava Jarno,78,FIN
7	27.55	Isaksson Patrik,73,SWE
8	27.61	Duboscq Hugues,81,FRA

100 METRES BREASTSTROKE

1	59.09	Lisogor Oleg,79,UKR
2	59.18	Duboscq Hugues,81,FRA
3	59.49	Pihlava Jarno,78,FIN
4	59.72	Komornikov Dimitri,81,RUS
5	1:00.04	Podoprigora Max,78,AUT
6	1:00.37	Tepavcevic Mladen,76,YUG
7	1:00.46	Lutolf Remo,80,SUI
8	1:00.60	Cassol Davide,80,ITA

200 METRES BREASTSTROKE

1	2:07.70	Rummolo Davide,77,ITA
2	2:09.87	Podoprigora Max,78,AUT
3	2:10.62	Bodor Richard,79,HUN
4	2:10.70	Bree Andrew,81,IRL
5	2:11.19	Sveinsson Jakob,82,ISL
6	2:11.53	Kasprovicz Kamil,84,GER
7	2:12.63	van Valkengoed Thijs,83,NED
8	2:14.12	Wold Anders,81,NOR

50 METRES BUTTERFLY

1	23.47	Hard Jere,78,FIN
2	23.62	Milosevic Milos,72,CRO
3	23.75	Marchenko Igor,75,RUS
4	23.78	Tsagkarakis Apostolos,82,GRE
5	23.81	Lagoun Pavel,79,BLR
6	23.83	Serdinov Andriy,82,UKR
7	23.93	Puninski Alex,85,CRO
8	23.99	Dietrich Johannes,85,GER

100 METRES BUTTERFLY

1	50.77	Rupprath Thomas,77,GER
2	51.57	Serdinov Andriy,82,UKR
3	51.61	Marchenko Igor,75,RUS
4	51.66	Hickman James,76,GBR
5	51.97	Korolyshkin Evgeni,83,RUS
6	52.30	Lagoun Pavel,79,BLR
7	52.51	Valimaa Tero,78,FIN
8	52.58	Sylantsev Denis,76,UKR

200 METRES BUTTERFLY

1	1:52.91	Parry Stephen,77,GBR
2	1:53.02	Hickman James,76,GBR
3	1:55.49	Gherghel Ioan,78,ROM
4	1:55.62	Sylantsev Denis,76,UKR

5	1:55.65	Kerekjarto Tamas,79,HUN
6	1:57.21	Skvortsov Nikolai,84,RUS
7	1:57.46	Advena Sergiy,84,UKR
8	1:57.85	Gaspar Zsolt,77,HUN

100 METRES IND. MEDLEY

1	53.05	Mankoc Peter,78,SLO
2	53.58	Sievinen Jani,74,FIN
3	53.65	Lisogor Oleg,79,UKR
4	54.18	Kruppa Jens,76,GER
5	54.47	Andersen Jakob,77,DEN
6	55.04	Janusaitis Vytautas,81,LTU
7	55.09	Sergeev Sergiy,70,UKR
8	55.68	Tomecek Pavel,78,CZE

200 METRES IND. MEDLEY

1	1:55.47	Sievinen Jani,74,FIN
2	1:56.07	Kerekjarto Tamas,79,HUN
3	1:56.28	Mankoc Peter,78,SLO
4	1:58.00	Kruppa Jens,76,GER
5	1:58.06	Boggiatto Alessio,81,ITA
6	1:58.43	Keller Christian,72,GER
7	1:58.60	Sergeev Sergiy,70,UKR
8	2:00.05	Cac Kresimir,76,CRO

400 METRES IND. MEDLEY

1	4:07.44	Boggiatto Alessio,81,ITA
2	4:08.80	Carstensen Jacob,78,DEN
3	4:08.96	Cseh Laszlo,85,HUN
4	4:11.70	Bathazi Istvan,78,HUN
5	4:12.07	Nazarenko Dmytro,80,UKR
6	4:13.60	Halika Michael,78,ISR
7	4:14.51	Turner Adrian,76,GBR
8	4:16.13	Alexandrov Mihail,85,BUL

4X50 M MEDLEY RELAY

1	1:34.72	Germany,GER
2	1:35.69	Finland,FIN
3	1:36.46	Ukraine,UKR
4	1:37.50	Sweden,SWE

5	1:37.78	Switzerland,SUI
6	1:37.90	Russia,RUS
7	1:38.72	Portugal,POR
8	disq	Croatia,CRO

4X50 M FREE RELAY

1	1:26.41	Netherlands,NED
2	1:26.63	Italy,ITA
3	1:26.83	Ukraine,UKR
4	1:27.27	Germany,GER
5	1:27.45	Sweden,SWE
6	1:28.38	Slovenia,SLO
7	1:28.71	Finland,FIN
8	1:28.93	France,FRA

WOMEN

50 METRES FREESTYLE

1	24.20	Sheppard Alison,72,GBR
2	24.74	Herasimena Aleksandra,85,BLR
3	24.98	Kammerling Anna-Karin,80,SWE
4	25.06	Groot Chantal,82,NED
5	25.14	Brandt Dorothea,83,GER
6	25.25	Seppala Hanna-M.,84,FIN
7	25.27	Draxler Judith,70,AUT
8	25.29	Valen Suze,78,NED

100 METRES FREESTYLE

1	53.66	Popchenko Elena,79,BLR
2	53.66	Moravcova Martina,76,SVK
3	54.03	Dallmann Petra,78,GER
4	54.04	Sheppard Alison,72,GBR
5	54.19	Veldhuis Marleen,79,NED
6	54.50	Lillhage Josefine,80,SWE
7	54.65	Myskova Jana,77,CZE
8	54.76	Groot Chantal,82,NED

200 METRES FREESTYLE

1	1:55.91	Popchenko Elena,79,BLR
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Women's 800 free medallists—Flavia Rigamonti (SUI), Eva Risztov (HUN), and Hana Stockbauer (GER)

Marco Chiesa

2	1:56.26	Figues Solenne,79,FRA
3	1:56.57	Lillhage Josefine,80,SWE
4	1:57.56	Dallmann Petra,78,GER
5	1:57.84	Roca Laura,80,ESP
6	1:57.90	Ries Alessa,81,GER
7	1:57.96	Rouba Tatiana,83,ESP
8	1:58.20	Hjorth-Hansen Julie,84,DEN

400 METRES FREESTYLE

1	4:01.95	Risztoz Eva,85,HUN
2	4:04.50	Klochkova Yana,82,UKR
3	4:07.48	Stockbauer Hannah,82,GER
4	4:09.19	Oufimtseva Irina,85,RUS
5	4:09.19	Payne Keri Anne,87,GBR
6	4:09.21	Villaeica Erika,84,ESP
7	4:10.76	Sytch Regina,87,RUS
8	4:11.57	Wanberg Lotta,79,SWE

800 METRES FREESTYLE

1	8:14.72	Risztoz Eva,85,HUN
2	8:16.16	Rigamonti Flavia,81,SUI
3	8:20.92	Stockbauer Hannah,82,GER
4	8:21.76	Henke Jana,73,GER
5	8:25.87	Payne Keri Anne,87,GBR
6	8:29.51	Oufimtseva Irina,85,RUS
7	8:30.24	Villaeica Erika,84,ESP
8	8:30.62	Caballero Melissa,85,ESP

50 METRES BACKSTROKE

1	27.62	Buschschulte Antje,78,GER
2	27.75	Hlavackova Ilona,77,CZE
3	27.88	Pietsch Janine,82,GER
4	28.00	Ornstedt Louise,85,DEN
5	28.23	Manaudou Laure,86,FRA
6	28.33	Jovanovic Sanja,86,CRO
7	28.55	Amshennikova Irina,86,UKR
8	28.64	Diez Dominique,77,SUI

100 METRES BACKSTROKE

1	58.60	Buschschulte Antje,78,GER
2	59.61	Hlavackova Ilona,77,CZE
3	59.83	Price Sarah,79,GBR
4	59.92	Komarova Stanislava,86,RUS
5	59.93	Manaudou Laure,86,FRA
6	59.97	Ornstedt Louise,85,DEN
7	1:00.01	Pietsch Janine,82,GER
8	1:00.58	Amshennikova Irina,86,UKR

200 METRES BACKSTROKE

1	2:05.19	Price Sarah,79,GBR
2	2:06.26	Buschschulte Antje,78,GER
3	2:07.57	Komarova Stanislava,86,RUS
4	2:08.02	Amshennikova Irina,86,UKR
5	2:08.26	Ornstedt Louise,85,DEN
6	2:10.27	Lee Karen,82,GBR
7	2:13.69	Jovanovic Sanja,86,CRO
8	2:15.35	Erke Derya,83,TUR

50 METRES BREASTSTROKE

1	30.89	Igelstrom Emma,80,SWE
2	30.90	Poewe Sarah,83,GER
3	31.12	Schafer Janne,81,GER
4	31.45	Bogomazova Elena,82,RUS
5	31.53	Thorup Majken,79,DEN
6	31.74	Robinson Emma,78,IRL
7	31.82	Jukic Mirna,86,AUT
8	32.04	Bondarenko Sviltana,71,UKR

100 METRES BREASTSTROKE

1	1:06.67	Poewe Sarah,83,GER
2	1:07.11	Jukic Mirna,86,AUT
3	1:07.97	Kovacs Agnes,81,HUN
4	1:08.00	Bogomazova Elena,82,RUS
5	1:08.28	Baans Madelon,77,NED
6	1:08.84	Chocova Petra,86,CZE
7	1:08.93	Thorup Majken,79,DEN
8	1:09.51	Hissamutdinova Natalia,83,EST

200 METRES BREASTSTROKE

1	2:21.66	Jukic Mirna,86,AUT
2	2:21.99	Poewe Sarah,83,GER
3	2:23.51	Poleska Anne,80,GER
4	2:24.78	Bogomazova Elena,82,RUS
5	2:24.79	Kovacs Agnes,81,HUN
6	2:26.46	Remenyi Diana,86,HUN
7	2:27.02	Igelstrom Emma,80,SWE
8	2:27.29	Kornacheva Ekaterina,82,RUS

50 METRES BUTTERFLY

1	25.78	Kammerling Anna-Karin,80,SWE
2	26.74	Hallander Lena,82,SWE
3	26.87	Borochofski Vered,84,ISR
4	27.01	Groot Chantal,82,NED
5	27.13	Draxler Judith,70,AUT
6	27.18	Nadarajah Fabienne,85,AUT

7	27.37	Hofmann Nele,86,GER
8	27.57	San Juan Angela,83,ESP

100 METRES BUTTERFLY

1	56.82	Moravcova Martina,76,SVK
2	57.94	Kammerling Anna-Karin,80,SWE
3	59.09	Jacobsen Mette,73,DEN
4	59.45	Borochofski Vered,84,ISR
5	59.94	Hallander Lena,82,SWE
6	1:00.20	Segat Francesca,83,ITA
7	1:00.28	Sutiagianna Natalia,80,RUS
8	1:00.86	Mongel Aurore,82,FRA

200 METRES BUTTERFLY

1	2:07.19	Risztoz Eva,85,HUN
2	2:08.30	Jacobsen Mette,73,DEN
3	2:08.40	Vives Roser,84,ESP
4	2:08.80	Skou Sophia,73,DEN
5	2:09.37	Segat Francesca,83,ITA
6	2:09.68	Garcia Mireia,81,ESP
7	2:10.16	Zahlr Petra,81,AUT
8	2:11.77	Kubalcikova Marcela,73,CZE

100 METRES IND. MEDLEY

1	1:00.21	Moravcova Martina,76,SVK
2	1:00.99	Sheppard Alison,72,GBR
3	1:01.43	Kejzar Alenka,79,SLO
4	1:01.69	Scherba Hanna,82,BLR
5	1:02.08	Eriksson Hanna,84,SWE
6	1:02.25	Hjorth-Hansen Julie,84,DEN
7	1:02.48	Rouba Tatiana,83,ESP
8	1:03.13	Seppala Hanna-M.,84,FIN

200 METRES IND. MEDLEY

1	2:08.28	Klochkova Yana,82,UKR
2	2:09.33	Kejzar Alenka,79,SLO
3	2:10.23	Scherba Hanna,82,BLR
4	2:11.57	Hjorth-Hansen Julie,84,DEN
5	2:13.97	Rouba Tatiana,83,ESP
6	2:14.62	Carballido Paula,79,ESP
7	2:14.69	Biscia Federica,80,ITA
8	2:16.12	Borochofski Vered,84,ISR

400 METRES IND. MEDLEY

1	4:29.81	Klochkova Yana,82,UKR
2	4:33.09	Risztoz Eva,85,HUN
3	4:33.80	Kejzar Alenka,79,SLO
4	4:38.65	Biscia Federica,80,ITA



Girls from Belarus celebrating first ever relay medal Marco Chiesa

5	4:42.09	Carballido Paula,79,ESP
6	4:44.00	Remenyi Diana,86,HUN
7	4:44.98	Vives Roser,84,ESP
8	4:46.58	Jarland Elisabeth,85,NOR

7	1:54.85	France,FRA
8	1:55.08	Switzerland,SUI

4X50 M FREE RELAY

1	1:38.65	Sweden,SWE
2	1:39.03	Belarus,BLR
3	1:39.56	Germany,GER
4	1:39.64	Netherlands,NED
5	1:39.82	Czech Republic,CZE
6	1:41.08	Great Britain,GBR
7	1:42.21	Denmark,DEN
8	1:42.43	France,FRA

4X50 M MEDLEY RELAY

1	1:48.42	Sweden,SWE
2	1:49.25	Germany,GER
3	1:50.56	Netherlands,NED
4	1:51.54	Great Britain,GBR
5	1:51.72	Ukraine,UKR
6	1:52.00	Czech Republic,CZE



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CAMP AK-O-MAK

Established 1928. The world's very first competitive swimming camp for girls (ages 7-17).

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RECORD SETTERS

WORLD SHORT COURSE

	Status
<p>• Men's 400 freestyle: 3:34.58 Grant Hackett, AUS, Sydney, Jul 18, 2002 Beters old record of 3:35.01 Grant Hackett, AUS 1999</p>	FINA ratified
<p>• Men's 50 backstroke: 23.31 Matthew Welsh, AUS, Melbourne, Sep 2, 2002 23.23 Thomas Rupprath, GER, Goslar, Dec 1, 2002 beters old record of 23.42 Neil Walker, USA, 2000</p>	FINA ratified pending
<p>• Men's 100 backstroke: 50.58 Thomas Rupprath, GER, Melbourne, Dec 8, 2002 Beters old record of 50.74 Neil Walker, USA, 2000</p>	FINA ratified
<p>• Men's 200 butterfly: 1:50.73 Franck Esposito, FRA, Antibes, Dec 8, 2002 Beters old record of 1:51.21 Thomas Rupprath, GER, 2002</p>	pending
<p>• Men's 100 individual medley: 52.58 Thomas Rupprath, GER, Berlin, Jan 25, 2003 Beters old record of 52.63 Peter Mankoc, SLO, 2001</p>	FINA ratified
<p>• Men's 400 individual medley: 4:02.72 Brian Johns, CAN, Victoria, Feb 21, 2003 Beters old record of 4:04.24 Matthew Dunn, AUS, 1998</p>	pending
<p>• Men's 4x50 medley relay: 1:34.72 Germany, Riesa, Dec 12, 2002 Beters old record of 1:34.78 Germany, 2001</p>	ratified
<p>• Men's 4x100 medley relay: 3:28.12 Australia, AUS, Melbourne, Sep 4, 2002 Beters old record of 3:29.00 United States, 2002</p>	FINA ratified
<p>• Women's 400 freestyle: 3:59.53 Lindsay Benko, USA, Berlin, Jan 26, 2003 Beters old record of 4:00.03 Claudia Poll, CRC, 1997</p>	FINA ratified
<p>• Women's 100 backstroke: 56.71 Natalie Coughlin, USA, East Meadow, Nov 23, 2002 Beters old record of 57.08 Natalie Coughlin, USA, 2001</p>	FINA ratified
<p>• Women's 200 breaststroke: 2:18.86 Hui Qi, CHN, Shanghai, Dec 2, 2003 Beters old record of 2:19.25 Hui Qi, CHN, 2001</p>	pending
<p>• Women's 100 butterfly: 56.34 Natalie Coughlin, USA, East Meadow, Nov 22, 2002 Beters old record of 56.55 Martina Moravcova, SVK, 2002</p>	FINA ratified
<p>• Women's 100 individual medley: 58.80 Natalie Coughlin, USA, East Meadow, Nov 23, 2002 Beters old record of 59.30 Jenny Thompson, USA, 1999</p>	FINA ratified

COMMONWEALTH SHORT COURSE

<p>• Men's 400 freestyle: 3:34.58 Grant Hackett, AUS, Sydney, Jul 18, 2002 Beters old record of 3:35.01 Grant Hackett, AUS 1999</p>
<p>• Men's 50 backstroke: 23.31 Matthew Welsh, AUS, Melbourne, Sep 2, 2002 Beters old record of 23.66 Matthew Welsh, AUS, 2002</p>
<p>• Men's 100 backstroke: 50.95 Matthew Welsh, AUS, Melbourne, Sep 4, 2002 Beters old record of 51.18 Matthew Welsh, AUS, 2002</p>
<p>• Men's 100 breaststroke: 58.91 Chris Cook, ENG, Stockholm, Jan 23, 2003 Beters old record of 59.02 James Gibson, ENG, 2001</p>

<p>• Men's 400 individual medley: 4:02.72 Brian Johns, CAN, Victoria, Feb 21, 2003 Beters old record of 4:04.24 Matthew Dunn, AUS, 1998</p>
<p>• Men's 4x100 medley relay: 3:28.12 Australia, Melbourne, Sep 4, 2002 Beters old record of 3:29.88 Australia, 1999</p>

<p>• Women's 50 freestyle: 24.23 Alison Sheppard, SCO, Paris, Jan 17, 2003 24.06 Alison Sheppard, SCO, Berlin, Jan 25, 2003 Beters old record of 23.24 Alison Sheppard, SCO, 2000</p>
<p>• Women's 200 freestyle: 1:55.12 Elka Graham, AUS, Melbourne, Dec 8, 2002 Beters old record of 1:55.66 Susan O'Neill, AUS, 2000</p>
<p>• Women's 400 freestyle: 4:01.17 Elka Graham, AUS, Melbourne, Dec 7, 2002 Beters old record of 4:03.42 Elka Graham, AUS, 2001</p>

CANADIAN SHORT COURSE

<p>• Men's 100 freestyle: 48.42 Yannick Lupien, CNCB, Edmonton, Dec 1, 2002 Beters old record of 48.79 Michael Mintenko, UBCD, 2002</p>
<p>• Men's 50 butterfly: 23.57 Michael Mintenko, UBCD, Stockholm, Jan 21, 2003 Beters old record of 23.71 Garret Pulle, AAC, 1998</p>
<p>• Men's 200 individual medley: 1:57.21 Brian Johns, UBCD, Berlin, Jan 26, 2003 1:56.23 Brian Johns, UBC, Victoria, Feb 23, 2003 Better old record of 1:57.53 Brian Johns, 2002</p>
<p>• Men's 400 individual medley: 4:02.72 Brian Johns, UBC, Victoria, Feb 21, 2003 Beters old record of 4:06.85 Brian Johns, UBCD, Moscow, Apr 4, 2002</p>
<p>• Men's 4x100 free relay: 3:14.14 National Selection, Edmonton, Dec 1, 2002 Beters old record of 3:14.90 World Championships Team, 1999</p>
<p>• Women's 100 breaststroke: 1:07.30 Rhiannon Leier, MM, Berlin, Jan 25, 2003 Beters old record of 1:07.74 Rhiannon Leier, MANTA, 2001</p>
<p>• Women's 100 butterfly: 58.93 Jennifer Button, ROW, Edmonton, Dec 1, 2002 Beters old record 59.10 Marylyn Chiang, ESWM, 2000</p>
<p>• Women's 4x50 medley relay: 1:53.34 Region of Waterloo SC, Edmonton, Dec 1, 2002 Beters old record of 1:54.20 Montreal CAMO, 2000</p>
<p>• Women's 4x100 medley relay: 4:02.99 National Selection, Edmonton, Dec 1, 2002 Beters old record of 4:03.89 World Championship Team, 1995</p>

CANADIAN LONG COURSE

<p>• Men's 100 butterfly: 52.44 Michael Mintenko, UBCD, Minneapolis, Dec 6, 2002 Beters old record of 52.58 Michael Mintenko, PDSA, 2000</p>
<p>• Women's 1500 freestyle: 16:37.54 Brittany Reimer, SKSC, Sydney, Jan 9, 2003 Beters old record of 16:40.60 Elissa Purvis, CDSC, 1986</p>
<p>• Women's 50 breaststroke: 31.73 Rhiannon Leier, MM, Calgary, Mar 7, 2003 Beters old record of 32.02 Rhiannon Leier, MANTA, 2000</p>

TINY OLYMPIC PROSPECTS

TOP

CLUB NAME	Code	Prov	Boys	Girls	Total
Canadian Dolphins SC	CDSC	BC	23	13	36
Chena Swim Club	CHENA	BC	8	21	29
Delta Sumpul SC	DELTA	BC	3	8	11
Edmonton Keyano SC	EKSC	AB	14	27	41
Guelph Martin AC	GMAC	ON	7	10	17
Langley Olympians	LOSC	BC	31	37	68
Liquid Lighting SC	LL	BC	6	7	13
London Aquatic Club	LAC	ON	10	14	24
North York AC	NYAC	ON	6	9	15
Olympian Swim Club	OSC	AB	7	10	17
Pacific Coast Swimming	PCS	BC	9	8	17
Pointe Claire Swim Club	PCSC	QC	37	71	108
Pacific Sea Wolves	PSW	BC	23	36	59
Richmond Rapids	RAPID	BC	5	12	17
Red Deer Catalina SC	RDSC	AB	3	16	19
Region of Waterloo	ROW	ON	5	6	11
Swanhill Sharks	SHSC	AB	0	2	2
University of Calgary SC	UCSC	AB	30	40	70
Uxbridge Swim Club	USC	ON	4	14	18
Winskilil Dolphin SC	WOSC	BC	13	9	22
West Vancouver Otters SC	WVOSC	BC	3	7	10
Total			247	377	624

BOYS

BOYS 7&U - 200 FREESTYLE
Rec: 2:55.04 Donna Wu, AQUA, 85

- 3:57.30 MacLeod Katelyn, OSC
- 4:04.46 STARMAN Sabra, EKSC
- 4:11.49 MacLEOD Nikki, UCSC
- 4:16.10 TATIGIAN Liane, PCSC
- 4:16.31 VANDT Fanfreda, CDSC
- 4:18.27 SCHMIDT Stefanie, PCSC
- 4:23.00 von NOORDEEN Maria, LOSC
- 4:34.21 COLLINGS Ella, USOC
- 4:38.87 DRESSEL Emily, UCSC
- 4:44.36 GRASSO Bianca, PCSC
- 4:50.63 SANTOS Chelsea, DELTA
- 4:52.30 McCULLOUGH Megan, PCSC
- 4:54.90 CHRISTOPHERSON Chyenne, PSW
- 4:57.69 DWYER Marie, EKSC
- 5:05.00 BURTON Haylie, GMAC
- 5:07.00 CHOW Olivia, PSW
- 5:26.65 QUIMET Ariana, Eve, PCSC
- 5:28.30 CROMWELL Mickeylag, GMAC
- 5:28.69 MARTINEAU Katherine, PCSC
- 5:38.38 TRINH AN, UCSC
- 5:38.78 MARTONE Kinico, PCSC
- 5:40.25 GIBSON Kinley, EKSC
- 5:46.09 CASSAROTTO Alexandra, PCSC
- 5:50.00 EDWARDS Emma, GMAC
- 5:56.78 LEBLANC Melanie, PCSC
- 5:55.30 LITTLE Dallas, RDSC
- 5:57.94 SURA Kyllie, PCSC
- 5:58.00 GROENEWEGEN Sara, PSW
- 6:02.09 WILLIAMS Danny, PCSC
- 6:06.95 PEAKE Sydney, WDCSC
- 6:08.20 SPARSHU Gabrielle, EKSC
- 6:08.24 NOVACK Vanessa, PCSC
- 6:10.20 BELZEROWSKI Tara, RDSC
- 6:12.01 TETTAMANTI Marissa, CDSC
- 6:13.90 JOTHANON Jennie, PSW
- 6:29.21 DUSZYNSKA Agneska, CHENA
- 6:33.81 CUMMINGS Rachael, USOC
- 6:38.00 METCALFE Martha, LOSC
- 6:42.12 ENSING Kate, CHENA
- 6:46.00 WORTHINGTON Romina, LOSC
- 7:09.25 WENASAS Torea, USOC
- 7:32.00 RIDDLER Eve, LOSC
- 7:34.77 NYKIFORUK Alexandra, EKSC
- 7:35.54 RUSH Taylor, UCSC
- 7:47.00 STURGEON Micheaene, LOSC
- 7:47.70 SAURETTE Alexandra, EKSC
- 7:58.00 MONROE Abbey, LOSC
- 8:13.98 BALTZER Nicole, WDCSC
- 9:50.00 GILMORE Hayden, LOSC
- 9:51.90 METCALFE Hillary, LOSC
- 10:05.04 HASSAN Zaymah, UCSC
- 11:31.50 GILMORE Hayley, LOSC
- 11:52.43 HANCOCK Jessica, WDCSC
- 12:36.00 van WYAN Fran, LOSC

BOYS 8 - 400 FREESTYLE

Rec: 5:49.44 Sandy Sabo, DDD, 83

- 6:29.90 QUON Caitlin, RAPID
- 6:39.79 GRAVES Megan, SHSC
- 6:55.89 CLOUTIER Isabelle, PCSC
- 7:11.68 McKILLOP Corey, GMAC
- 7:12.50 ASSI Sarah, PCSC

GIRLS

- 7:17.32 BRUIN Morgann, RDSC
- 7:18.80 WU Yi Han, RAPID
- 7:20.35 JOHNSTON Shannon, SHSC
- 7:22.91 ZEVNIK Alexia, PCSC
- 7:24.94 CUNNINGHAM Margot, ROW
- 7:24.97 GAGNE Amanda, PCSC
- 7:35.00 CALDWELL Katie, PSW
- 7:48.90 LAMONTAGNE Taylor, PSW
- 7:52.31 BEETIJAN Venus, PCSC
- 7:59.49 CAMERON Ashley, PCSC
- 8:09.88 BRAYNE Jillian, PCSC
- 8:20.06 CASSAROTTO Stephanie, PCSC
- 8:21.26 ROY Caroline, PCSC
- 8:21.45 JUNG Melissa, CHENA
- 8:25.15 FAIRLE Paige, PCSC
- 8:31.27 BADGER Allison, UCSC
- 8:39.75 BLAUGRAVE Cassandra, PCSC
- 8:46.18 NORMAN Courtney, PCSC
- 8:52.05 McDONALD Marina, PCSC
- 8:53.61 ROY Lauren, PCSC
- 8:55.48 DIFRUSCIA Rebecca, PCSC
- 8:59.24 BUTTERS Meagan, PCSC
- 9:07.50 KRAFT Amara, UCSC
- 9:08.50 MULLIGAN Mariah, PSW
- 9:10.30 BELEC Anne-Marie, PCSC
- 9:11.08 TWAREK Grace, OSC
- 9:13.94 SIARKOWSKI Lauren, UCSC
- 9:14.00 CARICH Rachel, PSW
- 9:17.75 SIMONSON Kristi, LL
- 9:18.77 WILCOCK Elizabeth, WVOSC
- 9:21.46 DONALDSON Ashley, WVOSC
- 9:24.59 NOVACK Arielle, PCSC
- 9:25.43 HEEPS Michelle, CHENA
- 9:40.80 OUELLETTE Alex, PSW
- 9:44.04 KEMER Amara, UCSC
- 9:48.08 PARKER Lauren, RDSC
- 9:52.26 RIZKALLA Jessica, OSC
- 9:58.41 FLEMMING Sara, OSC
- 10:08.00 BIRDSALL Allison, PSW
- 10:18.00 TADROS Katrina, LOSC
- 10:27.50 LEE Sandra, PSW
- 10:29.92 HEFFERING Abbie, UCSC
- 10:32.00 REBERGHE Natalie, LOSC
- 10:32.13 FERRARO Anika, UCSC
- 10:37.04 DONALDSON Adrea, WVOSC
- 11:14.20 KOPATCH Rachel, PSW
- 11:17.70 SHIPPT Kayley, PSW
- 11:21.34 XIE Cherry, CHENA
- 11:21.91 CWINYAR Laurene, USC
- 11:25.00 DAISLEY Christina, LOSC
- 11:42.53 ROSTDIE Sara, CHENA
- 11:48.61 D'ASSUMPcao Robyn, RDSC
- 12:14.54 HO Katerin, CHENA
- 12:23.00 MOLSBERY Ariane, PSW
- 12:33.00 PRANGE Emma, PSW
- 12:55.23 ENSING Alexandra, CHENA
- 13:01.24 MROZ Ella, USC
- 13:13.20 ALI Amira, CDSC
- 14:20.38 MARCHUK Lyndi, RDSC
- 14:32.20 McIVER Kara, LOSC

GIRLS 9 - 800 FREESTYLE

Rec: 10:45.42 Julie Bodenbender, AQUA, 88

- 12:12.91 McGREGOR Ashley, PCSC
- 12:28.73 MISEURELLI Jennifer, UCSC
- 12:50.41 KREMER Lori, OSC

- 13:06.95 CENTOMO Kyia, PCSC
- 13:08.85 McMULLEN Olivia, PCSC
- 13:20.04 GAGNER Maria, PCSC
- 13:40.25 SMITH Grace, WVOSC
- 13:32.31 CANTY-CURRIE Roxan, PCSC
- 13:32.68 WEI Quennie, UCSC
- 13:33.35 VRIONIS Valerie, PCSC
- 13:40.30 DA SILVA Martina, CDSC
- 13:50.10 ALLARDYCE Jamie-Lee, PCSC
- 13:53.35 BEVERIDGE Allison, UCSC
- 14:04.62 RUEL Marie-Anne, PCSC
- 14:40.89 BAKKEN Alyssa, PCSC
- 14:41.35 PARSONS Caroline, PCSC
- 14:41.44 ALCORN Catherine, RDSC
- 14:42.60 DAY Anne, RAPID
- 14:44.16 SZE Laura, CDSC
- 14:51.30 LAW Krista, RAPID
- 14:51.61 MacLEOD Kari, UCSC
- 14:52.81 HILLDEBRAND Alyssa, UCSC
- 15:08.28 HART-DOWHN Breanne, OSC
- 15:10.10 PRITCHARD Mara, LAC
- 15:13.00 ROSATO Laura, LAC
- 15:19.60 CREPNJAK Catherine, PSW
- 15:20.40 McANERIN Madison, PSW
- 15:23.00 GOLDWIRE Jassiel, LOSC
- 15:26.24 DELIU Lisa, UCSC
- 15:36.99 PHILLIPS Kristin, OSC
- 15:38.60 LEITCH Andrea, RAPID
- 15:40.49 MILLS Madisson, UCSC
- 15:41.59 SALVATORI Vanessa, CDSC
- 15:52.80 LITTLE Kaitlyn, RDSC
- 15:55.90 RUDKO Lessia, PCSC
- 16:05.36 READ Laura, PCSC
- 16:10.30 LOUGHEED Lauren, PSW
- 16:31.51 LEACH Sadie, UCSC
- 16:32.00 HARTLEY Jessica, LAC
- 16:34.00 McCORD Madison, RAPID
- 16:45.07 KRYSHCHUK Michelle, UCSC
- 16:51.10 AU-YEUNG Christine, RAPID
- 16:59.00 TADROS Stephanie, LOSC
- 17:02.90 GALLAGHER Brooke, UCSC
- 17:04.25 MUTTUCCOMORE Lauren, CHENA
- 17:10.98 KEEPING Katie, USC
- 17:11.00 GIBSON-PROLOP Lindsay, EKSC
- 17:35.32 BELZEROSKI Kayla, RDSC
- 17:38.84 GABRIEL Sandra, PCSC
- 17:38.77 KENNEDY Ashley, PCSC
- 17:43.33 FUNG Natasha, OSC
- 17:43.76 JOHNSON Ashley, WDCSC
- 17:56.30 POLAK Martha, PCSC
- 18:04.00 McCANN Josie, LAC
- 18:13.84 DAVIES Stefanie, UCSC
- 18:17.21 CLELLAND Carley, UCSC
- 18:21.73 JACOBS Megan, USC
- 18:25.54 TONI Lindsay, CHENA
- 18:29.00 GREEN Tessa, EKSC
- 18:57.50 FINAN Catherine, LAC
- 18:59.24 GOMEZ Alexandra, CHENA
- 19:10.30 JUERT Christina, PSW
- 19:12.09 BUCKINGHAM Jesslyn, USC
- 19:19.74 CHAN Jessica, CDSC
- 19:29.09 KNAPP Katelin, DELTA
- 19:33.55 NANN Abby, CDSC
- 19:34.45 SH-WILLIAMS Aurlie, CHENA
- 20:02.40 BOORMAN Michelle, LL
- 20:22.15 AXWIK Monika, LL
- 20:48.22 SCOTT Erin, UCSC
- 20:49.33 JASSAL Melissa, DELTA
- 21:19.30 KARHOFER Elizabeth, PSW
- 21:27.31 MOGGERMAN Chya, CDSC
- 21:30.00 DAMETTO Jenna, USC
- 21:42.59 ARMSTRONG Faith, EKSC
- 21:57.19 HALL Julie, DELTA
- 22:09.00 MILLER Saily, LOSC
- 22:15.16 McLEAN Katie, UCSC
- 22:16.90 HUGHES Erin, WVOSC
- 22:20.70 BOLEN Brianna, LOSC
- 23:44.07 KUPPE Meghan, UCSC
- 24:26.15 NITZ Sarah, LL
- 28:00.50 LABOTS, Juliana, EKSC
- 29:21.05 HUMAYUN Sanaa, UCSC
- 39:33.00 FALLU Isabelle, EKSC

GIRLS 10 - 1500 FREESTYLE

Rec: 19:12.09 Melanie Coppel, AQUA, 86

- 23:13.89 McCULLOUGH Molly, PCSC
- 23:54.10 MATTHEWS Deanna, EKSC
- 23:58.07 McCALLUM Natalie, UCSC
- 23:59.70 QUON Meghan, RAPID
- 24:09.38 McCORD Kate, UCSC
- 24:14.35 DEVRIES Lauren, WDCSC
- 24:15.50 AIDIN Sydney, LAC
- 24:16.01 BOSSE Christina, PCSC
- 24:34.50 ZAROFF Marie, RAPID
- 24:48.00 HOOPER Allison, PCS
- 24:57.30 WALKER Alyson, LAC
- 24:59.20 D'ARLANO Victoria, LAC
- 25:01.10 BECK Kindsy, LAC
- 25:14.37 ASSI Sadye, PCSC
- 25:17.21 PIPHER Hayley, LL
- 25:24.35 McLEAN Brenna, WVOSC
- 25:46.04 ALLAN Amy, PCSC
- 26:37.51 DESILET Irene, CDSC
- 26:42.58 TSANG Vivian, CDSC
- 26:44.58 BAKKEN Alyssa, PCSC
- 26:48.20 ROSATO Sarah, LAC
- 26:51.05 NOVACK Sabrina, PCSC
- 26:57.96 KIRKPATRICK Katie, CDSC
- 27:16.42 WOODHALL Dana, ROW
- 27:18.15 DOLLINGER Jordie, PCSC
- 27:33.00 DONAHUE Morgan, LOSC
- 27:35.58 STEFOPOULOS Katie, UCSC
- 27:49.40 MULLIGAN Lynnnea, PSW
- 28:03.10 WOOD Olivia, ROW
- 28:16.16 KERR Anne, PCSC
- 28:17.62 SPROULE Emma, UCSC
- 28:29.30 LAU Sara, RAPID
- 28:41.36 SANTA MARIA Alexandra, PCSC
- 28:44.53 SCHMIDT Julie, PCS
- 29:05.54 RAWN Vicki, ROW
- 29:12.10 NELL Shannon, LAC
- 29:14.63 JAMIESON Katei, ROW

- 29:14.92 GARNER Maggie, CDSC
- 29:26.61 KALBARCYK Victoria, PCSC
- 29:35.99 BROTFOTINOS Eleri, PCSC
- 29:40.40 TADROS Sophia, LOSC
- 29:48.10 GOSEL Kim, RAPID
- 29:50.89 BACHEWICH Andrea, EKSC
- 29:51.01 VIZSOLYI Andrea, PCS
- 30:08.18 O'DONNELL Tara, PCSC
- 30:10.42 DUBOIS Laurence, PCSC
- 30:18.70 BAYLISS Chantel, UCSC
- 30:46.10 SARGENT Anna, PSW
- 30:48.17 HOSSARI Laura, PCSC
- 30:49.00 SUR Janya, LOSC
- 31:08.83 FARKAS Kristina, CHENA
- 31:11.37 SCHADE Patsy, CHENA
- 31:20.12 McMULLIN Marissa, OSC
- 31:25.70 VJH Victoria, PCSC
- 31:29.64 DAVIS Sabrina, UCSC
- 31:35.33 LEACH Naomi, UCSC
- 31:43.29 SALAMI Enida, UCSC
- 31:54.34 MARTIN Kelsey, PCSC
- 32:09.00 SMITH Shannon, LOSC
- 32:20.00 POTTER Erin, PSW
- 32:37.41 BARRETTO Claire, WDCSC
- 32:45.00 KNIGHT JILL, LAC
- 32:54.84 JOOSTEN Victoria, USC
- 33:54.36 GOSSMAN Nicole, CHENA
- 34:02.05 WONG Christine, UCSC
- 34:09.67 BORGFORJ Jennifer, USC
- 34:15.25 TOD-TIMS Bryn, WVOSC
- 34:28.60 MORRIS Caron, PSW
- 34:29.90 CASCHERA Clara, LAC
- 35:12.08 MALLOY Ellen, LL
- 35:36.05 KONDRAK Victoria, PCS
- 36:03.00 TATE Johanna, LOSC
- 36:06.90 TIERNEY Haley, PCSC
- 36:13.18 WALKER Allison, LL
- 36:14.22 FORST Beani, CHENA
- 36:20.00 DIONNE Gabrielle, LOSC
- 36:22.45 IKEZAWA Eri, CHENA
- 36:28.68 LAFLEUR Tiffany, PCSC
- 36:36.35 WYERS Andrea, USC
- 36:44.15 LINDSAY Alexandra, DELTA
- 36:51.00 FRIESE Nisha, LOSC
- 37:05.22 BIORNSON Erin, CHENA
- 37:07.45 MITHA Tazmin, CHENA
- 37:28.27 MOSKALEVA Vasiliina, CHENA
- 37:41.09 PRITCHARD Caitlin, WDCSC
- 37:55.10 JOHNSTON Tessa, PSW
- 39:00.26 LI Fiona, DELTA
- 39:33.90 FITZPATRICK Shelby, DELTA
- 39:50.51 EHSAM Anna, CHENA
- 40:01.17 FRICK Jennifer, EKSC
- 41:01.15 BALLANTYNE Findley, UCSC
- 41:06.51 BUFFAN Charlene, UCSC
- 41:16.99 CARRIERE Alisha, DELTA
- 43:30.00 CRUZ Alyssa, LOSC
- 45:00.31 COLLINGS Eva, UCSC
- 48:13.83 MENCHENTON Michelle, UCSC
- 49:56.70 COX Kristy, PSW
- 49:30.10 DIMICHELE Amian, PSW
- 51:06.00 BLACKALL Alanna, LOSC
- 50:52.51 CHEN Elizabeth, UCSC

GIRLS 7&U - 100 IND. MEDLEY

Rec: 1:28.46 Donna Wu, AQUA, 85

- 2:01.79 MacLEOD Katelyn, OSC
- 2:04.42 STARMAN Sabra, EKSC
- 2:08.62 TATIGIAN Liane, PCSC
- 2:09.39 SCHMIDT Stefanie, PCS
- 2:14.96 MacLEOD Nikki, UCSC
- 2:18.03 SANTOS Chelsea, DELTA
- 2:21.38 GIBSON Kinley, EKSC
- 2:22.52 GRASSO Bianca, PCSC
- 2:24.63 VANDT Fanfreda, CDSC
- 2:28.14 BELZEROWSKI Tara, RDSC
- 2:28.40 von NOORDEEN Maria, LOSC
- 2:28.78 McCULLOUGH Megan, PCSC
- 2:29.73 SURA Kyllie, PCSC
- 2:30.89 DWYER Marie, EKSC
- 2:33.50 CHRISTOPHERSON Chyenne, PSW
- 2:34.00 BURTON Haylie, GMAC
- 2:35.15 COLLINGS Ella, UCSC
- 2:35.29 LITTLE Dallas, RDSC
- 2:38.20 CROMWELL Mickeylag, GMAC
- 2:39.50 CHOW Olivia, PSW
- 2:40.35 QUIMET Ariana, Eve, PCSC
- 2:43.14 MARTONE Kinico, PCSC
- 2:43.39 PEAKE Sydney, WDCSC
- 2:48.07 DUSZYNSKA Agneska, CHENA
- 2:49.36 CASSAROTTO Alexandra, PCSC
- 2:50.57 HUANG Joly, CDSC
- 2:53.50 GROENEWEGEN Sara, PSW
- 2:56.16 MARTINEAU Katherine, PCSC
- 2:56.50 ENSING Kate, CHENA
- 2:57.31 GABRIEL Lena, PCSC
- 2:58.45 LEBLANC Melanie, PCSC
- 2:58.50 EDWARDS Emma, GMAC
- 2:59.10 METCALFE Martha, LOSC
- 3:01.23 DRESSEL Emily, UCSC
- 3:04.07 TRINH AN, UCSC
- 3:04.50 RIDDLER Eve, LOSC
- 3:08.86 STINIS Chloe, PCSC
- 3:11.51 WILLIAMS Sandra, PCSC
- 3:14.70 STURGEON Micheaene, LOSC
- 3:17.08 NOVACK Vanessa, PCSC
- 3:20.69 PARSONS Samantha, PCSC
- 3:22.80 SPARSHU Gabrielle, EKSC
- 3:25.88 TETTAMANTI Marissa, CDSC
- 3:28.00 ELIDORIS Jade, LOSC
- 3:40.60 GILMORE Hayden, LOSC
- 3:40.86 WENASAS Torea, UCSC
- 3:56.85 RUSH Taylor, UCSC
- 4:03.98 GREHAN Claire, EKSC
- 4:04.42 NYKIFORUK Alexandra, EKSC
- 4:04.60 ELIDORIS Jade, LOSC
- 4:25.20 SAURETTE Alexandra, EKSC
- 4:33.87 VON ENDE Cara, WDCSC
- 4:34.02 BALTZER Nicole, WDCSC
- 4:37.00 MONROE Abbey, LOSC
- 4:44.55 GILMORE Hayley, LOSC
- 4:45.43 BROWN Danna, LOSC

- 5:00.10 METCALFE Hillary, LOSC
- 5:14.00 WORTHINGTON Romina, LOSC
- 5:21.50 HOLLOWAY Kaitlin, LOSC
- 5:48.20 van WYAN Fran, LOSC
- 6:54.56 HASSAN Zaymah, UCSC

GIRLS 8 - 100 IND. MEDLEY

Rec: 1:27.52 Donna Wu, AQUA, 85

- 1:37.90 QUON Caitlin, RAPID
- 1:41.09 ASSI Sarah, PCSC
- 1:42.15 ZEVNIK Alexia, PCSC
- 1:43.41 GRAVES Megan, SHSC
- 1:44.55 CUNNINGHAM Margot, ROW
- 1:45.30 WU Yi Han, RAPID
- 1:46.04 CLOUTIER Isabelle, PCSC
- 1:46.90 McKILLOP Corey, GMAC
- 1:48.00 CALDWELL Katie, PSW
- 1:48.81 GAGNE Amanda, PCSC
- 1:54.11 MORGAN Jennifer, EKSC
- 1:54.20 MOY Nathalin, NYAC
- 1:54.33 HOEKSTRA Mackenzie, EKSC
- 1:55.45 BEETIJAN Venus, PCSC
- 1:55.40 D'ARLANO Laura, LAC
- 1:55.51 JOHNSTON Shannon, SHSC
- 1:56.66 MATTHEWS Katie, EKSC
- 1:56.78 PARKER Lauren, RDSC
- 1:56.78 CASSAROTTO Stephanie, PCSC
- 1:56.80 WILCOCK Elizabeth, WVOSC
- 1:56.83 CAMERON Ashley, PCSC
- 1:58.62 PIERSE Patricia, EKSC
- 1:59.50 LAMONTAGNE Taylor, PSW
- 2:01.01 ROY Caroline, PCSC
- 2:01.21 HEEPS Michelle, CHENA
- 2:01.72 BLAUGRAVE Cassandra, PCSC
- 2:02.17 DIFRUSCIA Rebecca, PCSC
- 2:02.86 ROY Lauren, PCSC
- 2:05.12 BELEC Anne-Marie, PCSC
- 2:05.68 BRUIN Morgann, RDSC
- 2:06.00 CARICH Rachel, PSW
- 2:06.66 DONALDSON Adrea, WVOSC
- 2:08.26 BADGER Allison, UCSC
- 2:08.40 STAMP Erin, GMAC
- 2:08.78 HEFFERING Abbie, USC
- 2:09.48 McDONALD Marina, PCSC
- 2:11.83 MacLEOD Sarah, PCSC
- 2:12.50 BROWN Jennifer, NYAC
- 2:12.81 TWAREK Grace, OSC
- 2:12.84 NORMAN Courtney, PCSC
- 2:12.81 DONALDSON Ashley, WVOSC
- 2:15.07 FERRARO Anika, USC
- 2:15.35 JUNG Melissa, CHENA
- 2:15.95 SIARKOWSKI Lauren, UCSC
- 2:16.44 FLEMMING Sara, OSC
- 2:16.49 D'ASSUMPcao Robyn, RDSC
- 2:16.82 LIVINGSTON Vassidy, USC
- 2:17.67 NOVACK Arielle, PCSC
- 2:19.26 BUTTERS Meagan, PCSC
- 2:20.00 REBERGHE Natalie, LOSC
- 2:22.30 WEIR Maggie, GMAC
- 2:23.00 MATHIAS Jenna, LOSC
- 2:23.54 SIMONSON Kristi, LL
- 2:24.80 PAPAEDDES Stephanie, GMAC
- 2:24.96 CUGY Erin, PCSC
- 2:26.10 OUELLETTE Alex, PSW
- 2:26.80 BIRDSALL Allison, PSW
- 2:27.70 MULLIGAN Mariah, PSW
- 2:30.50 KEMER Amara, UCSC
- 2:32.84 MARCHUK Lyndi, RDSC
- 2:34.11 ENSING Alexandra, CHENA
- 2:34.20 LEE Sandra, PSW
- 2:34.23 HO Katerin, CHENA
- 2:38.85 RIZKALLA Jessica, UCSC
- 2:40.00 DAISLEY Christina, LOSC
- 2:43.00 KOPATCH Rachel, PSW
- 2:45.80 SHIPPT Kayley, PSW
- 2:49.80 CROSS KIRS Charlotte, GMAC
- 2:52.87 MROZ Ella, USC
- 2:53.90 PRANGE Emma, PSW
- 2:55.80 TADROS Katrina, LOSC
- 2:56.26 CWINYAR Laurene, USC
- 3:02.02 CUMMINGS Rachael, USOC
- 3:16.50 CANDRAY Ashley, EKSC
- 3:19.75 XIE Cherry, CHENA
- 3:28.86 ALI Amira, CDSC
- 3:55.65 REBEL Carmen, EKSC
- 4:30.00 McIVER Kara, LOSC
- 4:43.90 SCHOWALTER Glenna, EKSC

GIRLS 9 - 200 IND. MEDLEY

Rec: 2:50.84 Leslie Dowson, WISC, 88

- 3:12.32 MISEURELLI Jennifer, UCSC
- 3:13.22 McGREGOR Ashley, PCSC
- 3:16.57 KREMER Lori, OSC
- 3:21.95 VRIONIS Valerie, PCSC
- 3:22.45 CENTOMO Kyia, PCSC
- 3:24.79 DA SILVA Martina, CDSC
- 3:40.23 DRESSEL Emily, UCSC
- 3:25.95 WEI Quennie, UCSC
- 3:26.00 ALLARDYCE Jamie-Lee, PCSC
- 3:28.25 BEVERIDGE Allison, UCSC
- 3:28.42 SMID Grace, WVOSC
- 3:28.46 McMULLEN Olivia, PCSC
- 3:29.42 GAGNER Maria, PCSC
- 3:36.95 MacLEOD Kari, UCSC
- 3:37.19 CANTY-CURRIE Roxan, PCSC
- 3:41.50 LAW Krista, RAPID
- 3:47.50 DAY Anne, RAPID
- 3:48.98 BAKKEN Alyssa, PCSC
- 3:42.94 SZE Laura, CDSC
- 3:44.00 RUEL Marie-Anne, PCSC
- 3:46.40 PRITCHARD Mara, LAC
- 3:46.47 MAKI Sabrina, RDSC
- 3:46.95 PARSONS Caroline, PCSC
- 3:47.30 BEETIJAN Jennifer, PCSC
- 3:47.30 ROSATO Laura, LAC
- 3:50.20 McCLEOD Katie, PCSC
- 3:52.89 HILLDEBRAND Alyssa, UCSC
- 3:54.70 CHOW Olivia, WDCSC
- 3:55.25 KRYSCHUK Michelle, UCSC

30) 3:57.90	GREPNJAK Catherine,PSW	50) 8:26.57	ODONNELL Tara,PCSC	25) 12:46.30	DONALDSON Ian,WDCS	45) 32:58.40	WHITE Reid,ECSC	22) 3:47.88	ROY Cameron,PCSC
31) 3:58.23	PHILLIPS Kristin,OSC	51) 8:26.73	MARTIN Marissa,RDCSC	26) 13:02.00	MacPHAIL Brian,LOSC	46) 33:07.85	HUYNH Ivan,CDSC	23) 3:48.60	SPRINGER Craig,LAC
32) 3:58.90	LEITCH Andrea,RAPID	52) 8:30.19	JOHNSON Chloe,RDCSC	27) 13:15.42	PHILLIPS Ryan,UCSC	47) 33:26.86	KUMEN Avi,PCSC	24) 3:48.76	KULAKOWSKI Patrick,PCSC
33) 3:59.80	McCORD Madison, RAPID	53) 8:32.80	MOLINE Brynley,RDCSC	28) 13:27.59	GLEASON Timothy,RDCSC	48) 33:36.81	LEE Hany,PCSC	25) 3:49.20	SMITH Martin,NYAC
34) 4:00.00	MUTTUCCORRELE Lauren,CHENA	54) 8:34.25	BARRETTO Claire,WDCS	29) 13:45.09	WITKOWICZ Michael,UCSC	49) 33:45.66	WOODS Brandon,CHENA	26) 3:56.67	WILEY Evan,PCSC
35) 4:00.30	McCANN Jessie, LAC	55) 8:35.88	BAYLISS Chantel,UCSC	30) 14:03.00	JO Kevin,LOSC	50) 33:41.15	WILLIAMS Nicholas, WVOSC	27) 3:57.00	LEE Charles,LOSC
36) 4:02.23	DELIU Lisa,UCSC	56) 8:43.12	FORST Beani,CHENA	31) 14:44.70	ANTONIO Ehan,ECSC	51) 34:22.02	CHUA Joshua,UCSC	28) 4:02.00	WARD Andrew,PCSC
37) 4:02.60	AU-YEUNG Christine,RAPID	57) 8:44.23	GOSSMAN Nicole,CHENA	32) 15:26.00	ORFANIDES George,LAC	52) 34:26.30	ROTH Aiden,PCSC	29) 4:08.00	BLACKMORE Ryan,OSC
38) 4:03.59	D'AGUANNO Kathleen,PCSC	58) 8:48.50	HOSSARI Laura,PCSC	33) 16:29.10	WASHTOCK Spencer,PSW	53) 35:08.92	PETTICOVIL Alosa,CHENA	30) 4:03.36	JAMISON Colin,PCSC
39) 4:05.06	RUDKO Leszia,PCSC	59) 8:49.68	VUH Victoria,PCSC			54) 36:46.00	REHBERGE Steven,LOSC	31) 4:04.09	FERGUSON Duncan,CDSC
40) 4:05.70	FINAN Catherine,LAC	60) 8:50.55	TOD-TIMS Bryn,WVOSC			55) 37:07.07	DRAYCOTT Hayden,UCSC	32) 4:07.01	ZANATA Keegan,PCSC
41) 4:06.54	READ Laura,CDSC	61) 8:52.87	GARNER Maggie,CDSC			56) 37:15.60	WAGNER Dylan,WDCS	33) 4:09.18	CORBETT Dylan,UCSC
42) 4:06.97	WILTSHIRE Miriam,ECSC	62) 8:55.20	JOOSTEN Victoria,UCSC			57) 38:06.00	JOHNSON Curtis,LOSC	34) 4:10.44	LACHANCE James,PCSC
43) 4:07.40	McANERIN Madison,PSW	63) 8:56.00	SMITH Shannon,UCSC			58) 42:20.13	MALESEVIC Vokislav,CDSC	35) 4:11.32	MENDOCA Justin,PCSC
44) 4:08.67	GREEN Tessa,ECSC	64) 8:56.00	TADROS Sophie,LOSC			59) 42:26.81	OLUIC Ivan,CDSC	36) 4:17.30	HO Jason,NYAC
45) 4:08.68	SALVATROI Vanessa,PCSC	65) 8:57.15	PILEGGI Amy,PCSC			60) 44:00.39	HILL Takumi,DELTA	37) 4:18.70	DICECCO Andrew,LAC
46) 4:10.65	MILLS Madison,OSC	66) 9:00.91	IKEZAWA Eri,CHENA			61) 45:09.60	BAUMEISTER Blake,PSW	38) 4:20.01	SPUR Bill,LOSC
47) 4:10.69	VAN DONGEN Briana,ROW	67) 9:06.09	KONDRAK Victoria,PCS			62) 45:35.40	KLASSEN Spencer,PSW	39) 4:23.00	PEDDIE Luke,OSC
48) 4:10.96	SEXTON Michelle,PCSC	68) 9:09.62	FARKAS Kristina,CHENA			63) 46:20.20	FREEMAN Kevin,PSW	40) 4:26.83	GILMARTIN Eric,PCSC
49) 4:13.07	BELZEREKI Kayla,RDCSC	69) 9:12.87	SCHADE Patsy,CHENA			64) 48:45.10	WOOD Enzo,PSW	41) 4:29.63	GODLEY Darren,OSC
50) 4:17.30	JACOBS Megan,UCSC	70) 9:12.91	BARDWELL Dylan,RDCSC			65) 49:02.61	FORGHANI Arya,PCS	42) 4:31.21	ROTH Aiden,PCSC
51) 4:18.70	LEACH Sade,UCSC	71) 9:15.88	LINDSAY Alexandra,DELTA			66) 49:45.22	DJERIC Rastko,CDSC	43) 4:36.96	LUI David,CDSC
52) 4:18.80	LOUGHEED Lauren,PSW	72) 9:17.50	MORRIS Caron,PSW			67) 49:58.77	BARRATT Cole,PCS	44) 4:42.67	YOUNG Ben,PCSC
53) 4:19.30	GOLDFEED Jassett,LOSC	73) 9:27.55	BORGFORO Jennifer,UCSC			68) 60:00.12	FORD Tony,PSW	45) 4:42.75	KRATZMANN Matthew,ECSC
54) 4:19.65	CLELAND Lauren,UCSC	74) 9:30.00	KRAGT Michelle,LOSC					46) 4:43.98	GRANGER Kevin,CHENA
55) 4:19.95	WILLSON Tessa,ECSC	75) 9:32.17	WONG Christine,UCSC					47) 4:45.20	RUTLEDGE Ryan,UCSC
56) 4:22.90	LITTLE Kaitlyn,RDCSC	76) 9:33.80	WYERS Andrea,UCSC					48) 4:46.50	TETAMANTI Ben,CDSC
57) 4:26.53	JOHNSON Ashley,WDCS	77) 9:36.50	SARGENT Anna,PSW					49) 4:51.22	HAMILTON Brandon,CHENA
58) 4:28.52	GOMEZ Alexandra,CHENA	78) 9:49.00	POTTER Erin,PSW					50) 4:57.05	CHEN Austin,CDSC
59) 4:29.10	JAILLET Natacha,NYAC	79) 9:49.84	TERNEY Haley,PCSC					51) 4:58.18	PURCHASE Sam,WVOSC
60) 4:30.20	GIBSON-PROLOP Lindsay,EKSC	80) 9:54.10	FRIESEN Aisha,LOSC					52) 5:00.47	WILLIAMS Brendon,UCSC
61) 4:31.01	KEEPING Katie,UCSC	81) 9:55.93	CARRIERE Alexa,DELTA					53) 5:01.34	STEFOPULOS Michael,UCSC
62) 4:36.64	FUNG Natasha,OSC	82) 9:56.43	PRITCHARD Caitlin,WDCS					54) 5:05.00	McLEAN Ryan,CDSC
63) 4:36.99	JASSAL Melissa,DELTA	83) 9:57.13	BIORNSON Erin,CHENA					55) 5:11.52	SALEHNIA Amir,WVOSC
64) 4:38.90	HYATT Abby,NYAC	84) 10:01.98	SALAMI Enida,UCSC					56) 5:12.54	JOHNSON Cody,WDCS
65) 4:39.40	GALLAGHER Brooke,PSW	85) 10:02.95	FITZPATRICK Shelby,DELTA					57) 5:14.13	MITHA Imran,CHENA
66) 4:39.97	POLAK Martha,PCSC	86) 10:07.41	COLLINGS Eva,UCSC					58) 5:20.10	MONK Braeden,LOSC
67) 4:40.63	ZONGOZDRA Tatiana,PCSC	87) 10:07.56	BUFFAN Charlene,UCSC					59) 5:33.42	ASMIH Michael,UCSC
68) 4:41.10	BUCKINGHAM Jesslyn,UCSC	88) 10:20.00	TATE Johanna,LOSC					60) 5:40.50	SMITHAKIS Vasili,LOSC
69) 4:44.20	HUGHES Erin,WVOSC	89) 10:23.40	LAFLURE Tiffany,PCSC					61) 5:51.27	BENNETT Stanley,UCSC
70) 4:47.58	HALL Julie,DELTA	90) 10:25.60	DIONNE Gabrielle,LOSC					62) 6:01.52	DONALDSON Ian,WDCS
71) 4:49.12	TONI Lindsay,CHENA	91) 10:27.88	EHSAM Anna,CHENA					63) 6:05.30	BUTTERWORTH Surya,UCSC
72) 4:49.55	OLMER Karlee,PCS	92) 10:42.56	LI Fiona,DELTA					64) 6:35.30	WOOD Mario,PSW
73) 4:50.20	ELIAS Evelyn,NYAC	93) 10:54.51	BALLANTYNE Findley,UCSC					65) 6:49.93	BAYLISS Ricky,UCSC
74) 4:50.47	KENNEDY Ashley,PCSC	94) 10:57.00	CRUZ Alyssa,LOSC					66) 6:57.60	BAILEY Ryan,PSW
75) 4:54.31	KNAPP Kaitlin,DELTA	95) 10:58.24	MOSKALEVA Vasiliina,CHENA					67) 7:15.52	SONTAG Jonathan,WDCS
76) 4:57.21	DAVIES Stefanie,UCSC	96) 11:11.17	YANG Jialin,UCSC					68) 7:21.10	KEHRESZTES Cameron,PSW
77) 4:58.50	BARTOSZEWICZ Agatha,GMAC	97) 12:02.33	MITHA Tazmin,CHENA					69) 7:53.09	KAART Ian,WDCS
78) 5:02.10	NANN Abby,CDSC	98) 12:02.79	CHEN Elizabeth,UCSC					70) 7:55.81	CHEHROUDI Ali,CDSC
79) 5:02.40	JERT Christina,PCSC	99) 12:07.29	FRICK Jennifer,EKSC					71) 8:21.43	OPPAL Perry,WDCS
80) 5:04.40	WRIGHT Stephanie,GMAC	100) 12:53.08	MENCHENTON Michelle,UCSC						
81) 5:10.93	GABRIEL Sandra,PCSC								
82) 5:17.44	CHAN Jessica,CDSC								
83) 5:26.20	KIM Jenny,PSW								
84) 5:26.86	MOGERMAN Chya,CDSC								
85) 5:27.00	DAMETTO Jenna,LOSC								
86) 5:46.10	ARMSTRONG Faith,EKSC								
87) 5:50.60	KARHOFFER Elizabeth,PSW								
88) 5:53.58	SCOTT Erin,UCSC								
89) 5:57.23	HANDEDEK Erin,EKSC								
90) 5:58.92	KUPPE Meghan,UCSC								
91) 6:16.46	McLEAN Katie,UCSC								
92) 6:30.30	McKENNA Angela,RDCSC								
93) 6:38.92	SH-WILLIAMS Auriel,CHENA								
94) 6:42.00	BOLEN Brianna,LOSC								
95) 6:54.34	THRASHER Melissa,WDCS								
96) 7:06.70	MILLER Sally,LOSC								
97) 7:34.99	HUMAYUN Sanaa,UCSC								
98) 7:58.42	LABOTS Julianna,EKSC								
99) 12:07.80	FALLU Isabelle,EKSC								

World Long Course Records

MEN'S EVENTS

50 free	21.64	Alexander Popov,RUS	Moscow,Jun 16,2000
100 free	47.84	Pieter van den Hoogenband,NED	Sydney,Sep 19,2000
		0:23.16	
200 free	1:44.06	Ian Thorpe,AUS	Fukuoka,Jul 25,2001
		0:24.81 0:51.45 1:18.26 1:44.06	
400 free	3:40.08	Ian Thorpe,AUS	Manchester,Jul 30,2002
800 free	7:39.16	Ian Thorpe,AUS	Fukuoka,Jul 24,2001
		0:55.02 1:52.93 2:51.65 3:50.54	
		4:49.43 5:48.66 6:45.93 7:39.16	
1500 free	14:34.56	Grant Hackett,AUS	Fukuoka,Jul 29,2001
		0:54.19 1:52.45 2:51.29 3:50.18	
		4:48.82 5:47.45 6:45.96 7:44.47	
		8:43.05 9:41.78 10:40.56 11:39.51	
		12:38.51 13:37.89 14:34.56	
50 back	24.99	Lenny Krayzelburg,USA	Sydney,Aug 28,1999
100 back	53.60	Lenny Krayzelburg,USA	Sydney,Aug 24,1999
		0:25.97	
200 back	1:55.15	Aaron Peirsol,USA	Minneapolis,Mar 20,2002
		0:27.75 0:56.60 1:25.70 1:55.15	
50 breast	27.18	Oleg Lisogor,UKR	Berlin,Aug 2,2002
100 breast	59.94	Roman Sloudnov,RUS	Fukuoka,Jul 23,2001
		28.49	
200 breast	2:09.97	Kosuke Kitajima,JPN	Busan,Oct 2,2002
		0:29.72 1:02.61 1:36.05 2:09.97	
50 fly	23.44	Geoff Huegill,AUS	Fukuoka,Jul 27,2001
100 fly	51.81	Michael Klim,AUS	Canberra,Dec 12,1999
		0:24.49	
200 fly	1:54.58	Michael Phelps,USA	Fukuoka,Jul 24,2001
		0:25.64 0:54.81 1:24.71 1:54.58	
200 IM	1:58.16	Jani Sievinen,FIN	Rome,Sep.11,1994
		0:26.17 0:56.61 1:30.03 1:58.16	
400 IM	4:11.09	Michael Phelps,USA	Ft.Lauderdale,Aug 15,2002
		0:55.97 1:59.38 3:13.14 4:11.09	
4x100 MR	3:33.48	United States,USA	Yokohama,Aug 29,2002
		Aaron Peirsol, Brendan Hansen, Michael Phelps, Jason Lezak	
		0:54.17 1:54.31 2:45.44 3:33.48	
		1:00.14 0:51.13 0:48.04	
4x100 FR	3:13.67	Australia,AUS	Sydney,Sep 16,2000
		Michael Klim, Chris Fydler, Ashley Callus, Ian Thorpe	
		0:48.18 1:36.66 2:25.37 3:13.67	
		0:48.48 0:48.71 0:48.30	
4x200 FR	7:04.66	Australia,AUS	Fukuoka,Jul 27,2001
		Grant Hackett, Michael Klim, William Kirby, Ian Thorpe	
		1:46.11 3:32.60 5:20.52 7:04.66	
		1:46.49 1:47.92 1:44.14	

WOMEN'S EVENTS

50 free	24.13	Inge de Bruijn,NED	Sydney,Sep 22,2000
100 free	53.77	Inge de Bruijn,NED	Sydney,Sep 20,2000
		0:25.81	
200 free	1:56.64	Franziska van Almsick,GER	Berlin,Aug 3,2002
		0:27.14 0:56.27 1:26.33 1:56.64	
400 free	4:03.85	Janet Evans,USA	Seoul,Sep.22,1988
		0:59.99 2:02.14 3:03.40 4:03.85	
800 free	8:16.22	Janet Evans,USA	Tokyo,Aug.20,1989
		1:00.20 2:02.53 3:05.12 4:07.92	
		5:10.27 6:12.82 7:15.44 8:16.22	
1500 free	15:52.10	Janet Evans,USA	Orlando,Mar.26,1988
		1:01.17 2:04.46 3:08.04 4:11.70	
		5:15.37 6:19.09 7:22.72 8:26.52	
		9:30.26 10:34.25 11:38.09 12:42.00	
		13:45.95 14:49.76 15:52.10	
50 back	28.25	Sandra Volker, GER	Berlin, Jun 17, 2000
100 back	59.58	Natalie Coughlin,USA	Ft.Lauderdale,Aug 13,2002
		0:28.86	
200 back	2:06.62	Krisztina Egerszegi, HUN	Athens, Aug.25,1991
		0:30.55 1:02.34 1:34.79 2:06.62	
50 breast	30.57	Zoe Baker,GBR	Manchester,Jul 30,2002
100 breast	1:06.52	Penelope Heyns, RSA	Sydney,Aug 23,1999
		0:31.16	
200 breast	2:22.99	Hui Qi,CHN	Hangzhou,Apr 13,2001
		0:33.37 1:10.00 1:46.64 2:22.99	
50 fly	25.57	Anna-Karin Kammerling,SWE	Berlin,Jul 30,2002
100 fly	56.61	Inge de Bruijn,NED	Sydney,Sep 17,2000
		0:26.67	
200 fly	2:05.78	Otylia Jedrzejczak,POL	Berlin,Aug 4,2002
		0:28.79 1:00.79 1:33.14 2:05.78	
200 IM	2:09.72	Yanyan Wu,CHN	Shanghai,Oct.17,1997
		0:28.81 1:01.91 1:39.44 2:09.72	
400 IM	4:33.59	Yana Klochkova,UKR	Sydney,Sep 16, 2000
		1:01.62 2:11.30 3:30.63 4:33.59	
4x100 MR	3:58.30	United States, USA	Sydney,Sep 23,2000
		Barbara Bedford, Megan Quann, Jenny Thomson, Dara Torres	
		1:01.39 2:07.68 3:04.93 3:58.30	
		0:57.25 0:53.37	
4x100 FR	3:36.00	Germany,GER	Berlin,Jul 26,2002
		Katrin Meissner, Petra Dalmmann, Sandra Volker, Franziska van Almsick	
		0:54.82 1:48.77 2:42.36 3:36.00	
		0:53.95 0:53.59 0:53.64	
4x200 FR	7:55.47	German Dem.Republic,GDR	Strasbourg,Aug.18,1987
		Manuela Stellmach, Astrid Strauss, Anke Mohring, Heike Friedrich	
		2:00.23 3:59.13 5:57.86 7:55.47	
		1:58.90 1:58.73 1:57.61	

Canadian Long Course Records

MEN'S EVENTS

50 free	22.81	Mark Andrews, UNATT	Indianapolis, Apr. 10, 1988
	e22.81	Yannick Lupien, CNCB	Yokohama, Aug 26, 2002
100 free	49.53	Brent Hayden, UBCD	Yokohama, Aug 28, 2002
	0:24.03		
200 free	1:48.26	Rick Say, UCSA	Yokohama, Aug 26, 2002
	0:25.26	0:52.84	1:20.79 1:48.26
400 free	3:49.99	Rick Say, IS	Montreal, May 28, 2000
	0:54.81	1:53.56	2:52.46 3:49.99
800 free	8:00.22	Chris Bowie, EKSC	Etobicoke, Aug. 2, 1990
	0:58.75	1:59.19	2:59.73 3:59.67
	4:59.59	5:59.89	7:00.75 8:00.22
1500 free	15:12.63	Harry Taylor, EKSC	Auckland, Jan. 30, 1990
	0:59.51	2:00.55	3:01.53 4:02.93
	5:04.34	6:05.97	7:07.42 8:08.41
	9:09.35	10:10.53	11:11.50 12:12.54
	13:13.88	14:14.67	15:12.63
50 back	25.73	Riley Janes, ESWIM	Victoria, Aug 10, 2002
100 back	53.98	Mark Tewksbury, UCSC	Barcelona, Jul. 30, 1992
	0:26.39		
200 back	1:59.35	Keith Beavers, ROW	Yokohama, Aug 28, 2002
	0:28.92	0:59.12	1:29.81 1:59.35
50 breast	28.33	Morgan Knabe, UCSA	Fukuoka, Jul 28, 2001
100 breast	1:00.95	Morgan Knabe, UCSA	Winnipeg, Mar 21, 2002
	0:28.71		
200 breast	2:12.87	Michael Brown, PERTH	Yokohama, Aug 27, 2002
	0:30.98	1:05.06	1:38.43 2:12.87
50 fly	24.15	Michael Mintenko, UBCD	Manchester, Aug 1, 2002
100 fly	52.44	Michael Mintenko, UBCD	Minneapolis, Dec 6, 2002
	0:24.56		
200 fly	1:58.08	Shamek Pietucha, UCSC	Montreal, May 30, 2000
	0:26.77	0:56.90	1:27.13 1:58.08
200 IM	2:00.38	Curtis Myden, UCSC	New York, July 31, 1998
	0:26.37	0:57.58	1:31.32 2:00.38
400 IM	4:15.33	Curtis Myden, CAN	Sydney, Sep 17, 2000
	0:58.01	2:04.92	3:16.53 4:15.33

Relay records

4x100 MR	3:38.17	Pan Pacific Team	Yokohama, Aug 29, 2002
		Riley Janes, Michael Brown, Michael Mintenko, Brent Hayden	
	0:56.07	1:57.68	2:49.59 3:38.17
		1:01.61	0:51.91 0:48.58
4x100 FR	3:17.69	Pan Pacific Team	Yokohama, Aug 24, 2002
		Yannick Lupien, Michael Mintenko, Rick Say, Brent Hayden	
	0:49.90	1:39.56	2:29.29 3:17.69
		0:49.76	0:49.73 0:48.40
4x200 FR	7:17.17	Commonwealth Team	Manchester, Aug 1, 2002
		Rick Say, Brian Johns, Mark Johnston, Michael Mintenko	

Club relay records

4x50 MR	1:41.03	Calgary Swimming	Etobicoke, Aug. 6, 1998
4x100 MR	3:42.44	University of Calgary SC	Etobicoke, Aug. 4, 1990
4x50 FR	1:32.61	Pacific Dolphins	Victoria, Mar. 17, 1999
4x100 FR	3:23.82	North York Aquatic Club	Calgary, Jul. 24, 1987
4x200 FR	7:29.61	University of Calgary SC	Etobicoke, Aug. 18, 1988

WOMEN'S EVENTS

50 free	25.78	Laura Nicholls, ROW	Yokohama, Aug 27, 2002
100 free	55.69	Laura Nicholls, ROW	Montreal, Jun 30, 2001
	0:27.00		
200 free	1:59.85	Marianne Limpert, PDSA	Sydney, Sep 20, 2000
	0:27.88	0:58.07	1:28.56 1:59.85
400 free	4:12.64	Joanne Malar, UCSC	Winnipeg, Aug 4, 1999
	1:00.49	2:04.37	3:08.82 4:12.64
800 free	8:36.24	Debbie Wurzbarger, LAC	Seoul, Sep. 23, 1988
	1:03.35	2:08.02	3:12.61 4:17.70
	5:22.69	6:27.67	7:32.33
1500 free	16:37.54	Brittany Reimer, SKSC	Sidney, Jan 9, 2003
	1:04.04	2:10.69	3:17.38 4:24.24
	5:31.12	6:37.75	7:44.46 8:51.39
	9:58.10	11:04.98	12:12.04 13:19.10
	14:26.06	15:33.01	16:37.54
50 back	28.94	Jennifer Carroll, MAA	Winnipeg, Mar 20, 2002
100 back	1:02.14	Kelly Stefanyshyn, PDSA	Winnipeg, Aug. 4, 1999
	0:30.88		
200 back	2:11.16	Jennifer Fratesi, ROW	Fukuoka, Jul 26, 2001
	0:31.66	1:05.17	1:38.58 2:11.16
50 breast	31.73	Rhiannon Leier, MM	Calgary, Mar 7, 2003
100 breast	1:08.66	Lauren van Oosten, NRST	Perth, Jan. 13, 1998
	0:32.68		
200 breast	2:27.27	Allison Higson, EPS	Montreal, May 29, 1988
	0:32.77	1:09.80	1:48.04 2:27.27
50 fly	27.17	Shona Kitson, OSC	Winnipeg, 4 Aug 2000
100 fly	59.68	Jennifer Button, ROW	Yokohama, Aug 25, 2002
	0:28.23		
200 fly	2:09.64	Jessica Deglau, PDSA	Winnipeg, Aug. 7, 1999
	0:29.61	1:02.14	1:35.29 2:09.64
200 IM	2:13.44	Marianne Limpert, PDSA	Sydney, Sep 19, 2000
	0:28.89	1:02.80	1:41.87 2:13.44
400 IM	4:38.46	Joanne Malar, UCSC	Winnipeg, Aug. 2, 1999
	1:03.47	2:14.75	3:33.38 4:38.46

Relay records

4x100 MR	4:05.69	Pan Pacific Team	Yokohama, Aug 29, 2002
		Erin Gammel, Rhiannon Leier, Jennifer Button, Laura Nicholls	
	1:02.32	2:11.54	3:10.70 4:05.69
		1:09.22	0:59.16 0:54.99
4x100 FR	3:42.92	Olympic Team	Sydney, Sep 16, 2000
		Marianne Limpert, Shanon Shakespeare, Laura Nicholls, Jessica Deglau	
	0:56.32	1:51.42	2:46.72 3:42.92
		0:55.10	0:55.30 0:56.20
4x200 FR	8:02.65	Olympic Team	Sydney, Sep 20, 2000
		Marianne Limpert, Shannon Shakespeare, Joanne Malar, Jessica Deglau	
	1:59.85	4:01.63	6:02.13 8:02.65
		2:01.78	2:00.50 2:00.52

Club relay records

4x50 MR	1:56.44	University of Calgary SC	Edmonton, July 28, 1993
4x100 MR	4:12.93	Canadian Kodiak SC	Etobicoke, Aug. 9, 1998
4x50 FR	1:45.09	Etobicoke Pepsi	Calgary, Aug. 2, 1989
4x100 FR	3:46.84	Region of Waterloo	Etobicoke, Mar 10, 2000
4x200 FR	8:12.36	Pacific Dolphin SA	Victoria, Mar 19, 1999

World Short Course Records

MEN'S EVENTS

50 free	21.13	Mark Foster,GBR	Paris,Jan 28,2001
100 free	46.74	Alexander Popov, RUS	Gelsenkirchen,Mar.19,1994
		0:22.70	
200 free	1:41.10	Ian Thorpe, AUS	Berlin, Feb 6,2000
		0:24.04 0:49.73 1:15.43 1:41.10	
400 free	3:34.58	Grant Hackett,AUS	Sydney,Jul 18,2002
		0:51.35 1:45.40 2:40.25 3:34.58	
800 free	7:25.28	Grant Hackett, AUS	Perth,Aug 3,2001
		0:52.68 1:48.78 2:45.19 3:41.84	
		4:38.33 5:35.01 6:30.91 7:25.28	
1500 free	14:10.10	Grant Hackett, AUS	Perth, Aug 8,2001
		0:53.60 1:49.96 2:46.46 3:43.19	
		4:40.13 5:37.00 6:34.11 7:31.36	
		8:28.45 9:25.73 10:22.90 11:20.05	
		12:17.11 13:14.02 14:10.10	
50 back	*23.23	Thomas Rupprath,GER	Goslar,Dec 1,2002
100 back	50.58	Thomas Rupprath,GER	Melbourne,Dec 8,2002
		0:24.31	
200 back	1:51.17	Aaron Piersol,USA	Moscow,Apr 2002
		0:26.46 0:54.48 1:22.64 1:51.17	
50 breast	26.20	Oleg Lisogor,UKR	Berlin,Jan 26,2002
100 breast	57.47	Ed Moses,USA	Stockholm,Jan 23,2002
		0:27.05	
200 breast	2:03.17	Ed Moses,USA	Berlin,Jan 26,2002
		0:27.92 0:58.77 1:30.73 2:03.17	
50 fly	22.74	Geoff Huegill,AUS	Berlin,Jan 26,2002
100 fly	50.10	Thomas Rupprath,GER	Berlin,Jan 27,2002
		0:23.33	
200 fly	*1:50.73	Franck Esposito,FRA	Antibes,Dec 8,2002
		0:24.73 0:52.79 1:21.35 1:50.73	
100 IM	52.58	Thomas Rupprath,GER	Berlin,Jan 25,2003
200 IM	1:54.65	Jani Sievinen, FIN	Kuopio, Jan.21,1994
		0:25.92 0:55.08 1:27.88 1:54.65	
		e1:54.65 Attila Czene,HUN	Minneapolis,Mar 23,2000
		0:25.34 0:53.84 1:26.93 1:54.65	
400 IM	*4:02.72	Brian Johns,CAN	Victoria,Feb 21,2003
		0:55.88 1:57.78 3:06.55 4:02.72	
4x50 MR	1:34.72	Germany,GER	Riesa,Dec 12,2002
		Stev Theloke, Jens Kruppa, Thomas Rupprath, Carsten Dehmlow	
4x100 MR	3:28.12	Australia,AUS	Melbourne,Sep 4,2002
		Matt Welsh, Jim Piper, Geoff Huegill, Ashley Callus	
		0:50.95 1:50.39 2:41.00 3:28.12	
		0:59.44 0:50.61 0:47.12	
4x50 FR*	1:25.87	United States	East Meadow,Oct 20,2001
		Aaron Ciarla, Nate Dusing, Neil Walker, Jason Lezak	
4x100 FR	3:09.57	Sweden,SWE	Athens,Mar 16,2000
		Johan Nystrom, Lars Frolander, Mattias Ohlin, Stefan Nystrand	
		0:49.04 1:34.73 2:22.60 3:09.57	
		0:45.69 0:47.87 0:46.97	
4x200 FR	6:56.41	Australia,AUS	Perth,Aug 7,2001
		William Kirby, Ian Thorpe, Michael Klim, Grant Hackett	
		1:44.97 1:42.63 1:45.55 1:43.26	

WOMEN'S EVENTS

50 free	23.59	Therese Alshammar,SWE	Athens,Mar 18,2000
100 free	52.17	Therese Alshammar,SWE	Athens,Mar 17,2000
		0:24.81	
200 free	1:54.04	Lindsay Benko,USA	Moscow,Apr 7,2002
		0:27.26 0:56.14 1:25.25 1:54.04	
400 free	3:59.53	Lindsay Benko,USA	Berlin,Jan 26,2003
		0:58.48 1:59.16 2:59.91 3:59.53	
800 free	8:14.35	Sachiko Yamada,JPN	Tokyo,Apr 2,2002
1500 free	15:43.31	Petra Schneider, GDR	Gainesville,Jan.10,1982
		1:00.63 2:04.60 3:07.66 4:10.93	
		5:14.04 6:17.05 7:19.98 8:22.92	
		9:25.98 10:28.76 11:31.61 12:34.44	
		13:37.69 14:40.98 14:43.31	
50 back	26.83	Hui Li,CHN	Shanghai,Dec 2,2001
100 back	56.71	Natalie Coughlin,USA	East Meadow,Nov 23,2002
		0:27.50	
200 back	2:03.62	Natalie Coughlin,USA	East Meadow,Nov 27,2001
		0:29.49 1:00.96 1:32.70 2:03.62	
50 breast	29.96	Emma Igelstrom,SWE	Moscow,Apr 4,2002
100 breast	1:05.38	Emma Igelstrom,SWE	Moscow,Apr 6,2002
		0:30.83	
200 breast*	2:18.86	Hui Qi,CHN	Shanghai,Dec 2,2002
		0:31.82 1:06.84 1:42.79 2:18.86	
50 fly	25.36	Anna K. Kammerling,SWE	Stockholm,Jan 25,2001
100 fly	56.34	Natalie Coughlin,USA	East Meadow,Nov 22,2002
		0:27.00	
200 fly	2:04.16	Susan O'Neill, AUS	Sydney,Jan 18,2000
		0:28.63 1:00.18 1:32.01	
100 IM	58.80	Natalie Coughlin,USA	East Meadow,Nov 23,2002
200 IM	2:07.79	Allison Wagner, USA	Palma,Dec.5,1993
		0:28.40 1:01.65 1:37.68 2:07.79	
400 IM	4:27.83	Yana Klochkova,UKR	Paris,Jan 19,2002
		1:01.71 2:09.20 3:26.97 4:27.83	
4X50 MR	1:48.31	Sweden,SWE	Valencia,Dec 16,2000
		Therese Alshammar, Emma Igelstrom, Anna K. Kammerling, Johanna Sjoberg	
4x100 MR	3:55.78	Sweden,SWE	Moscow,Apr 5,2002
		Therese Alshammar, Emma Igelstrom, Anna K. Kammerling, Johanna Sjoberg	
		1:00.74 2:05.64 3:02.76 3:55.78	
		1:00.74 1:04.90 0:57.12 0:53.12	
4X50 FR	1:38.21	Sweden,SWE	Valencia,Dec 15,2000
		Annica Lofstedt, Therese Alshammar, Johanna Sjoberg, Anna K. Kammerling	
4x100 FR	3:34.55	China,CHN	Goteborg, Apr 19,1997
		Jingyi Le, Na Chao, Ying Shan, Yin Nian	
		0:53.32 1:48.05 2:41.60 3:34.55	
		0:53.32 0:54.73 0:53.55 0:52.95	
4x200 FR	7:46.30	China,CHN	Moscow,Apr 4,2002
		Yanwei Xu, Yingwen Zhu, Jingzhi Tang, Yu Yang	
		1:55.73 3:52.77 5:51.14 7:46.30	
		1:55.73 1:57.04 1:58.37 1:55.16	

* = pending FINA ratification

Canadian Short Course Records

MEN'S EVENTS

50 free	22.15	Ryan Laurin, WVOSC	Edmonton, Nov. 28, 1998
100 free	48.42	Yannick Lupien, CNCB	Edmonton, Dec 1, 2002
200 free	1:44.40	Rick Say, UCOSA	Stockholm, Jan 23, 2002
	0:25.25	0:51.59	1:18.18 1:44.40
400 free	3:41.99	Rick Say, UCOSA	Stockholm, Jan 22, 2002
	0:54.03	1:49.69	2:46.28 3:41.99
800 free	7:47.07	Gary VanderMeulen, UCSC	Bonn, Feb. 9, 1990
	0:56.18	1:54.90	2:52.63 3:51.70
	4:50.54	5:49.69	6:49.27 7:47.07
1500 free	14:52.32	Turlough O'Hare, UBC	Montreal, March 9, 1992
	1:56.56	3:56.09	5:56.09 7:56.21
	9:56.01	11:56.12	13:56.15 14:52.32

50 back	23.90	Riley Janes, ESWIM	Minneapolis, Mar 23, 2000
100 back	52.18	Riley Janes, ESWIM	Minneapolis, Mar 24, 2000
	0:24.77		
200 back	1:54.01	Chris Renaud, UCSC	Halifax, Feb. 22, 1997
	0:26.82	0:55.71	1:24.79 1:54.01
50 breast	27.57	Morgan Knabe, UCSC	Hong Kong, Apr 1, 1999
100 breast	59.34	Morgan Knabe, UCOSA	Paris, Jan 19, 2002
	0:28.15		
200 breast	2:07.15	Morgan Knabe, UCOSA	Stockholm, Jan 22, 2002
	0:29.09	1:01.07	1:33.91 2:07.15
50 fly	23.57	Michael Mintenko, UBCD	Stockholm, Jan 21, 2003
100 fly	51.45	Michael Mintenko, UBCD	Moscow, Apr 4, 2002
	0:23.93		
200 fly	1:54.27	Shamek Pietucha, UCSC	Athens, Mar 18, 2000
	0:25.76	0:54.57	1:24.17 1:54.27
100 IM	54.80	Darren Ward, UCSC	Bonn, Mar 16, 1991
200 IM	1:56.23	Brian Johns, UBC	Victoria, Feb 23, 2002
	0:25.76	0:55.18	1:28.98 1:56.23
400 IM	4:02.72	Brian Johns, UBC	Victoria, Feb 21, 2003
	0:55.88	1:57.78	3:06.55 4:02.72

Relay records

4x50 MR	1:39.20	National Team	Bonn, Feb. 14, 1988
		Tewksbury, Davis, Ponting Gery	
4x100 MR	3:33.97	World Championship Team	Hong Kong, Apr 4, 1999
		Versfeld, Knabe, Pietucha, Lupien	
4x50 FR	1:30.19	University of Calgary SC	Calgary, Feb. 20, 1991
		Li, Ward, VanderMeulen, Tewksbury	
4x100 FR	3:14.14	National Selection	Edmonton, Dec 1, 2002
		Lupien, Hayden, Say, Mintenko	
4x200 FR	7:08.02	World Championship Team	Hong Kong, Apr 2, 1999
		Johnston, Johns, Say, Lupien	

Club relay records

4x50 MR	1:39.36	University of Calgary SC	Halifax, Feb. 20, 1997
4x100 MR	3:34.86	University of Calgary	Winnipeg, Feb. 22, 1992
4x50 FR	1:30.19	University of Calgary SC	Calgary, Feb. 20, 1991
4x100 FR	3:17.40	UBC Dolphins, UBCD	Edmonton, Nov 29, 2002
4x200 FR	7:13.16	University of British Columbia	Vancouver, Feb 23, 2002

WOMEN'S EVENTS

50 free	25.14	Nadine Rolland, CAMO	College Park, Nov 15, 2000
100 free	54.75	Shannon Shakespeare, MM	Buffalo, Dec. 3, 1994
	0:26.61		
200 free	1:56.53	Sophie Simard, UL	Sainte-Foy, Jan 27, 2002
	0:27.53	0:57.12	1:26.47 1:56.53
400 free	4:06.48	Sophie Simard, UL	Sainte-Foy, Jan 26, 2002
	0:59.29	2:02.38	3:05.23 4:06.48
800 free	8:30.86	Lindsay Beavers, STARS	Nepean, Feb 19, 2000
	1:01.15	2:05.20	3:09.18 4:13.69
	5:18.24	6:23.14	7:28.23
1500 free	16:09.32	Debbie Wurzburger, EKSC	Montreal, Jan. 28, 1989
	1:03.91	2:09.82	3:15.53 4:20.97
	5:26.10	6:31.19	7:36.12 8:40.92
	9:45.37	10:49.86	11:54.13 12:58.54
	14:02.76	15:06.55	
50 back	27.26	Jennifer Carroll, CAMO	Berlin, Jan 26, 2002
100 back	59.33	Marylyn Chiang, ESWIM	Athens, Mar 17, 2000
	0:29.05		
200 back	2:07.73	Jennifer Fratesi, ROW	Edmonton, Nov 23, 2001
	0:30.95	1:03.29	1:35.46 2:07.73
50 breast	31.50	Keltie Duggan, EKSC	Saskatoon, Mar 2, 1990
100 breast	1:07.30	Rhiannon Leier, MM	Berlin, Jan 25, 2003
	0:31.99		
200 breast	2:25.69	Nancy Sweetnam, LU	Toronto, Mar. 6, 1993
	0:34.40	1:12.15	1:48.62 2:25.69
50 fly	27.00	Nadine Rolland, CAMO	Paris, Jan 28, 2001
100 fly	58.93	Jennifer Button, ROW	Edmonton, Dec 1, 2002
200 fly	2:07.76	Jennifer Button, ROW	Imperia, Feb 10, 2000
100 IM	1:00.93	Marianne Limpert, PDSA	Edmonton, Nov 19, 2000
200 IM	2:10.90	Nancy Sweetnam, LU	Toronto, Mar. 7, 1993
	0:29.84	1:02.69	1:39.54 2:10.90
400 IM	4:34.90	Joanne Malar, HWAC	Hong Kong, Apr 1, 1999
	1:03.08	2:13.44	3:31.74 4:34.90

Relay records

4x50 MR	1:53.34	Region of Waterloo, ROW	Edmonton, Dec 1, 2002
		Fratesi, Blackburn, Button, Nicholls	
4x100 MR	4:02.99	National Selection	Edmonton, Dec 1, 2002
		Carroll, van Oosten, Button, Limpert	
4x50 FR	1:43.14	University of Calgary Swim Club	Calgary, Feb. 20, 1991
		Higson, Kuntz, Melien, Nugent	
4x100 FR	3:40.06	World Championship Team	Rio, Dec. 2, 1995
		Limpert, Shakespeare, Amey, Malar	
4x200 FR	7:56.21	World Championship Team	Hong Kong, Apr 1, 1999
		Deglau, Nicholls, Brambley, Malar	

Club relay records

4x50 MR	1:53.34	Region of Waterloo, ROW	Edmonton, Dec 1, 2002
4x100 MR	4:05.06	Region of Waterloo, ROW	Edmonton, Nov 30, 2002
4x50 FR	1:43.14	University of Calgary Swim Club	Calgary, Feb. 20, 1991
4x100 FR	3:44.01	University of British Columbia	Victoria, Feb 21, 2003
4x200 FR	8:01.16	University of British Columbia	Vancouver, Feb 23, 2002

Commonwealth Records

LONG COURSE

MEN'S EVENTS

50 free	22.04	Roland Schoeman,RSA	Minneapolis,Aug 10,1999
100 free	48.18	Michael Klim,AUS	Sydney,Sep 16,2000
200 free	1:44.06	Ian Thorpe,AUS	Fukuoka,Jul 25,2001
400 free	3:40.08	Ian Thorpe,AUS	Manchester,Jul 30,2002
800 free	7:39.16	Ian Thorpe,AUS	Fukuoka,Jul 24,2001
1500 free	14:34.56	Grant Hackett,AUS	Fukuoka,Jul 29,2001
50 back	25.49	Matt Welsh,AUS	Fukuoka,Jul 25,2001
100 back	53.98	Mark Tewksbury,CAN	Barcelona,Jul 30,1992
200 back	1:57.59	Matthew Welsh,AUS	Sydney,Sep 21,2000
50 breast	27.51	James Gibson,ENG	Manchester,Apr 13,2002
100 breast	1:00.69	James Gibson,GBR	Manchester,Apr 12,2002
200 breast	2:10.88	Jim Piper,AUS	Brisbane,Mar 23,2002
50 fly	23.44	Geoff Huegill,AUS	Fukuoka,Jul 27,2001
100 fly	51.81	Michael Klim,AUS	Canberra,Dec 12,99
200 fly	1:56.17	Justin Norris,AUS	Sydney,Sep 19,2000
200 IM	2:00.26	Matthew Dunn,AUS	Kuala Lumpur,Sep 17,1998
400 IM	4:15.33	Curtis Myden,CAN	Sydney,Sep 17,2000
4x100 MR	3:34.84	Australia,AUS	Yokohama,Aug 29,2002
4x100 FR	3:13.67	Australia,AUS	Sydney,Sep 16,2000
4x200 FR	7:04.66	Australia,AUS	Fukuoka,Jul 27,2001

WOMEN'S EVENTS

50 free	24.68	Alison Sheppard,SCO	Manchester,Aug 2,2002
100 free	54.44	Jodie Henry,AUS	Yokohama,Aug 29,2002
200 free	1:57.47	Susan O'Neill,AUS	Sydney, May 15, 2000
400 free	4:06.28	Tracey Wickham,AUS	Berlin, Aug 24, 1978
800 free	8:22.93	Julie McDonald,AUS	Seoul, Sep 24, 1988
1500 free	16:04.84	Hayley Lewis,AUS	Kobe, Aug 12, 1993
50 back	28.68	Dyana Calub,AUS	Hobart,Mar 27,2001
100 back	1:01.06	Sarah Price,ENG	Manchester,Aug 1,2002
200 back	2:10.20	Nicole Stevenson,AUS	Barcelona, Jul 31, 1993
50 breast	30.57	Zoe Baker,ENG	Manchester,Jul 30,2002
100 breast	1:06.52	Penelope Heyns,RSA	Sydney,Aug 23,1999
200 breast	2:23.64	Penelope Heyns,RSA	Sydney,Aug 27,1999
50 fly	26.66	Petria Thomas,AUS	Manchester,Jul 31,2002
100 fly	58.05	Petria Thomas,AUS	Sydney, May 13, 2000
200 fly	2:05.81	Susan O'Neill,AUS	Sydney,May 17,2000
200 IM	2:13.44	Marianne Limpert,CAN	Sydney,Sep 19,2000
400 IM	4:38.46	Joanne Malar,CAN	Winnipeg,Aug.2,99
4x100 MR	4:00.50	Australia,AUS	Yokohama,Aug 29,2002
4x100 FR	3:39.78	Australia,AUS	Yokohama,Aug 24,2002
4x200 FR	7:58.52	Australia,AUS	Sydney, Sep 20,2000

SHORT COURSE

MEN'S EVENTS

50 free	21.13	Mark Foster,ENG	Paris,Jan 28,2001
100 free	46.99	Ashley Callus,AUS	Moscow,Apr 7,2002
200 free	1:41.10	Ian Thorpe,AUS	Berlin,Feb 6,2000
400 free	3:34.58	Grant Hackett,AUS	Sydney,Jul 18,2002
800 free	7:25.28	Grant Hackett,AUS	Perth,Aug 3,2001
1500 free	14:10.10	Grant Hackett,AUS	Perth,Aug 7,2001
50 back	23.31	Matthew Welsh,AUS	Melbourne,Sep 2,2002
100 back	50.95	Matthew Welsh,AUS	Melbourne,Sep 4,2002
200 back	1:51.62	Matthew Welsh,AUS	Melbourne, Oct 13,2000
50 breast	26.85	Darren Mew,ENG	Antwerp,Dec 15,2001
100 breast	58.91	Chris Cook,ENG	Stockholm,Jan 23,2003
200 breast	2:06.61	Jim Piper,AUS	Stockholm,Jan 22,2002
50 fly	22.74	Geoff Huegill,AUS	Berlin,Jan 26,2002
100 fly	50.71	Geoff Huegill,AUS	Melbourne,Dec 9,2001
200 fly	1:51.76	James Hickman,GBR	Paris,Mar 28,1998
100 IM	54.32	Robert Van der Zant,AUS	Hobart,Jan 20,2001
200 IM	1:55.80	James Hickman,ENG	Paris,Mar.27,1998
400 IM	4:02.72	Brian Johns,CAN	Victoria,Feb 21,2003
4x100 MR	3:28.12	Australia,AUS	Melbourne,Sep 4,2002
4x100 FR	3:11.21	Australia,AUS	Hong Kong,Apr 1,1999
4x200 FR	6:56.41	Australia,AUS	Perth,Aug 7,2001

WOMEN'S EVENTS

50 free	24.06	Alison Sheppard,SCO	Berlin,Jan 25,2003
100 free	53.26	Sue Rolph,ENG	Lisbon,Dec 10,1999
200 free	1:55.12	Elka Graham,AUS	Melbourne,Dec 8,2002
400 free	4:01.17	Elka Graham,AUS	Melbourne,Dec 7,2002
800 free	8:17.64	Amanda Pascoe,AUS	Berlin,Jan 26,2002
1500 free	15:52.97	Rebecca Cooke,ENG	Perth,Aug 7,2001
50 back	27.26	Jennifer Carroll,CAN	Berlin,Jan 26,2002
100 back	58.77	Sarah Price,ENG	Antwerp,Dec 13,2001
200 back	2:04.44	Sarah Price,ENG	Perth,Aug 6,2001
50 breast	30.31	Zoe Baker,ENG	Berlin,Jan 27,2002
100 breast	1:05.40	Penelope Heyns,RSA	Durban,Sep 26,1999
200 breast	2:20.85	Samantha Riley,AUS	Rio,Dec 1,1995
50 fly	26.36	Petria Thomas,AUS	Moscow,Apr 5,2002
100 fly	56.93	Petria Thomas,AUS	Melbourne,Sep 5,2002
200 fly	2:04.16	Susan O'Neill,AUS	Sydney,Jan 18,2000
100 IM	1:00.88	Alison Sheppard,SCO	Moscow,Apr 5,2002
200 IM	2:10.40	Lori Munz,AUS	Sydney,Jan 17,2000
400 IM	4:34.90	Joanne Malar,CAN	Hong Kong,Apr 1,1999
4x100 MR	3:57.70	Australia,AUS	Moscow,Apr 5,2002
4x100 FR	3:35.97	Australia,AUS	Moscow,Apr 6,2002
4x200 FR	7:47.14	England,ENG	Norwich,Aug 10,2001

RUPPRATH AND SHEPPARD WIN WORLD CUP

Seven world and 16 World Cup records in 11 events were the final result of the 2002-2003 FINA World Cup.

Thomas Rupprath (GER) was the top male performer. He competed in only three of the seven competitions, one on each of the required continents, and bettered two world and four World Cup records, earning top prize money of \$66,500. He won eight individual events in backstroke, butterfly, and individual medley. One world record was established in the prelims in Melbourne, then in a stunning upset, Rupprath lost the final to Matt Welsh (AUS). Because the record swim was in the prelims, it did not count in the top performance prize. His 100 back in Berlin of 50.76 (1016 points) was the overall top performance.

Men					
1)	1016	50.76	100 back M	Rupprath Thomas,GER	Berlin
2)	1011	57.97	100 breast M	Sloudnov Roman,RUS	Stockholm
3)	1002	1:43.16	200 free M	vdHoogenband Pieter,NED	Paris

Alison Sheppard (GBR) had the top women's performance in the 50 freestyle. She competed in five competitions, winning four. She also picked up prize money in the 100 freestyle, 50 breaststroke, and 100 individual medley. Her final total was \$ 58,000, by far her biggest payday ever.

Women					
1)	1014	24.06	50 free W	Alison Sheppard,GBR	Berlin
2)	1013	2:19.85	200 breast W	Igelstrom Emma,SWE	Melbourne
3)	1011	25.42	50 fly W	Kammerling Anna-K,SWE	Stockholm

The greatest single performance was by Natalie Coughlin (USA) at World Cup 2 in East Meadow, Long Island, NY. There she won five individual events and bettered three world records—100 back, 100 fly, and 100 IM. Her best-rated swim was in the 100 fly in 56.34 (1040 points), a virtuoso performance for the ages. She only competed in that one competition. In any case, she is not able to accept prize money while a NCAA student at California (Berkeley).

Pieter van den Hoogenband (NED) won seven events (50, 100, 200, and 400 free) in the five competitions in which he took part, but battled unsuccessfully first Grant Hackett (AUS) 1:42.48 in the 200 free in Melbourne to 1:43.18, and then Ian Thorpe (AUS) in Paris 1:41.86 and Berlin 1:41.69. He did better a European record in Berlin in second with 1:42.45.

After reducing the current World Cup to seven competitions from the previous year (Canada and Italy dropping out), plans for next season include an expansion to five continents, starting with three in November in Korea, Australia, and South Africa. Three meets in January in Europe, and three more in the Americas. Prize money will increase to US\$1,000,000 from just under \$700,000 this year.



Alison Sheppard (GBR) won top prize winning four 50 freestyles, improving with every win

Marco Chiesa



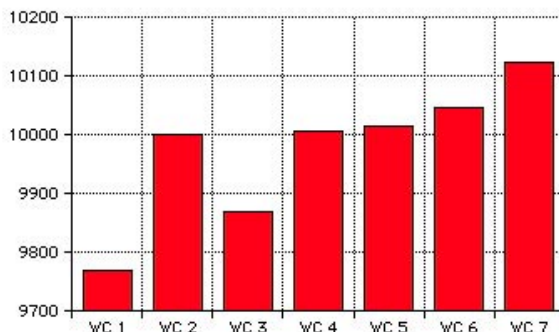
Thomas Rupprath (GER) won nine events, set three world records, and won the top prize

Marco Chiesa

Men's Prize Winners	1st	2nd	3rd	Record bonus	FINA Prize	Total
Rupprath Thomas,GER	8000	500		8000	50000	66,500
Sloudnov Roman,RUS	3000	2000	250		30000	35,250
VdHoogenband Pieter,NED	7000	2500			20000	29,500
Lisogor Oleg,UKR	12000		500			12,500
Hickman James,GBR	9000	3000	250			12,250
Foster Mark,GBR	6000	1500				7,500
Marchenko Igor,RUS	3000	2000	500			5,500
Meolans Jose M.,ARG	4000	1000	500			5,500
Coman Dragos,ROM	3000	2000				5,000
Lezak Jason,USA	4000	500				4,500
Thorpe Ian,AUS	4000					4,000

Women's Prize Winners	1st	2nd	3rd	Record bonus	FINA Prize	Total
Sheppard Alison,GBR	5000	2500	500		50000	58,000
Igelstrom Emma,SWE	8000				30000	38,000
Benko Lindsay,USA	3000	2000	500	4000	20000	29,500
Coughlin Natalie,USA *	5000			12000		17,000
Klochkova Yana,UKR	11000	500	250			11,750
Moravcova Martina,SVK	8000	500	750			9,250
Alshammar Therese,SWE	5000	2000	500			7,500
Rose Gabriel,USA	2000	3500	1250			6,750
Komisarz Rachel,USA	2000	2500	1500			6,000
Qi Hui,CHN	2000			4000		6,000
Price Sarah,GBR	6000					6,000

* NCAA rules don't allow prize money



Graph shows total points for top 10 performances at each of the seven World Cups and illustrates how each stage got faster.

2003 FINA WORLD CUP MEN'S MEDAL WINNERS

50 METRES FREESTYLE

Rio	21.53 Jose M. Meolans,ARG	21.88 Fernando Scherer,BRA	21.95 Ryk Neethling,RSA
East Meadow	21.66 Jason Lezak,USA	21.70 Jose M. Meolans,ARG	21.82 Bartosz Kizierowski,POL
Shanghai	21.40 Jason Lezak,USA	22.03 Jose M. Meolans,ARG	22.16 Nicholas Dos Santos,BRA
Melbourne	21.72 Pieter vdHoogenband,NED	21.75 Mark Foster,GBR	21.92 Aaron Ciarla,USA
Paris	21.47 Mark Foster,GBR	21.62 Jason Lezak,USA	21.85 Julien Sicot,FRA
Stockholm	21.39 Mark Foster,GBR	21.64 Roland Schoeman,RSA	21.81 Bartosz Kizierowski,POL
Berlin	21.28 Mark Foster,GBR	21.42 Roland Schoeman,RSA	21.82 Jose M. Meolans,ARG

100 METRES FREESTYLE

Rio	47.84 Jose M. Meolans,ARG	48.03 Pieter vdHoogenband,NED	48.27 Ryk Neethling,RSA
East Meadow	47.32 Jason Lezak,USA	47.55 Ryk Neethling,RSA	48.37 Bartosz Kizierowski,POL
Shanghai	48.37 Jose M. Meolans,ARG	48.72 Stefan Herbst,GER	48.79 Denis Pimankov,RUS
Melbourne	47.20 Pieter vdHoogenband,NED	48.45 Denis Pimankov,RUS	48.56 Gustavo Borges,BRA
Paris	47.41 Pieter vdHoogenband,NED	47.48 Jason Lezak,USA	47.65 Jose M. Meolans,ARG
Stockholm	47.41 Jason Lezak,USA	47.86 Salim Iles,ALG	47.91 Roland Schoeman,RSA
Berlin	47.32 Jose M. Meolans,ARG	47.37 Pieter vdHoogenband,NED	47.55 Salim Iles,ALG

200 METRES FREESTYLE

Rio	1:44.70 Pieter vdHoogenband,NED	1:46.09 Rodrigo Castro,BRA	1:47.71 Gustavo Borges,BRA
East Meadow	1:43.54 Pieter vdHoogenband,NED	1:44.95 Kvetoslav Svoboda,CZE	1:46.47 Michael Phelps,USA
Shanghai	1:45.61 Kvetoslav Svoboda,CZE	1:45.72 Stefan Herbst,GER	1:48.76 Denis Pimankov,RUS
Melbourne	1:42.48 Grant Hackett,AUS	1:43.18 Pieter vdHoogenband,NED	1:45.77 Stephen Penfold,AUS
Paris	1:41.86 Ian Thorpe,AUS	1:43.16 Pieter vdHoogenband,NED	1:44.96 Kvetoslav Svoboda,CZE
Stockholm	1:46.56 Brian Johns,CAN	1:46.63 Dragos Coman,ROM	1:46.69 Brent Hayden,CAN/Joshua Krogh,AUS
Berlin	1:41.69 Ian Thorpe,AUS	1:42.45 Pieter vdHoogenband,NED	1:44.91 Kvetoslav Svoboda,CZE

400 METRES FREESTYLE

Rio	3:43.75 Pieter vdHoogenband,NED	3:49.10 Stefan Herbst,GER	3:49.54 Rodrigo Castro,BRA
East Meadow	3:43.44 Pieter vdHoogenband,NED	3:44.44 Kvetoslav Svoboda,CZE	3:46.62 Josh Davis,USA
Shanghai	3:46.22 Kvetoslav Svoboda,CZE	3:48.85 Peng Wu,CHN	3:50.02 Zhixiang Ji,CHN
Melbourne	3:36.17 Grant Hackett,AUS	3:41.64 Chad Carvin,USA	3:46.29 Craig Stevens,AUS
Paris	3:43.73 Dragos Coman,ROM	3:44.17 Kvetoslav Svoboda,CZE	3:47.72 Nicolas Rostaucher,FRA
Stockholm	3:34.63 Ian Thorpe,AUS	3:43.54 Dragos Coman,ROM	3:47.94 Valerio Cleri,ITA/Sylvain Cros,FRA
Berlin	3:41.87 Yuri Prilukov,RUS	3:42.55 Dragos Coman,ROM	3:45.47 Sergiy Fesenko,UKR

1500 METRES FREESTYLE

Rio	15:13.50 Bruno Bonfim,BRA	15:18.71 Troyden Prinsloo,RSA	15:23.70 Armando Negreiros,BRA
East Meadow	14:50.00 Graeme Smith,GBR	15:49.35 Cheng Yu,CHN	16:49.14 Adolfo Rivadeneira,ECO
Shanghai	15:00.24 Lin Zhang,CHN	15:09.81 Zhixiang Ji,CHN	15:18.08 Ling Zhu,CHN
Melbourne	14:47.49 Stephen Penfold,AUS	15:00.24 Massi Rosolino,ITA	15:01.89 Craig Stevens,AUS
Paris	15:00.46 Dragos Coman,ROM	15:08.31 Georgios Diamantidis,GRE	15:10.15 Nicolas Rostaucher,FRA
Stockholm	14:53.98 Dragos Coman,ROM	15:09.61 Sylvain Cros,FRA	15:18.88 Valerio Cleri,ITA
Berlin	14:38.72 Yuri Prilukov,RUS	14:46.94 Dragos Coman,ROM	14:56.50 Thomas Lurz,GER

50 METRES BACKSTROKE

Rio	24.91 Toni Helbig,GER	25.03 Alexandre Massura,BRA	25.05 Rodrigo Ferreira,BRA
East Meadow	24.30 Neil Walker,USA	25.10 Ashley Anderson,84,AUS	25.12 Michael Gilliam,USA
Shanghai	24.38 Kunpeng Ouyang,CHN	24.84 Alexandre Massura,BRA	24.97 Liam Tancock,GBR
Melbourne	23.49 Thomas Rupprath,GER	23.78 Matt Welsh,AUS	24.76 Toni Helbig,GER
Paris	24.37 Michael Gilliam,USA	24.43 Kunpeng Ouyang,CHN	24.60 Atsushi Nishikori,JPN
Stockholm	24.37 Toni Helbig,GER	24.44 Michael Gilliam,USA	24.63 Atsushi Nishikori,JPN
Berlin	23.53 Thomas Rupprath,GER	24.20 Toni Helbig,GER	24.49 Michael Gilliam,USA

100 METRES BACKSTROKE

Rio	53.96 Steffen Driesen,GER	54.13 Toni Helbig,GER	54.22 Alexandre Massura,BRA
East Meadow	52.79 Neil Walker,USA	53.76 Michael Gilliam,USA	54.06 Robert Kroll,GER
Shanghai	52.16 Kunpeng Ouyang,CHN	53.81 Steffen Driesen,GER	53.84 Alexandre Massura,BRA
Melbourne	51.56 Matt Welsh,AUS	51.87 Thomas Rupprath,GER	52.81 Toni Helbig,GER
Paris	51.93 Kunpeng Ouyang,CHN	52.93 Atsushi Nishikori,JPN	53.18 Michael Gilliam,USA
Stockholm	52.97 Evgeni Alechine,RUS	53.06 Atsushi Nishikori,JPN	53.13 Toni Helbig,GER
Berlin	50.76 Thomas Rupprath,GER	52.20 Lenny Krayzelburg,USA	52.35 Darius Grigalionis,LTU

200 METRES BACKSTROKE

Rio	1:56.52 Rogerio Romero,BRA	1:57.59 Klaas Zwering,NED	1:58.13 Andrew Burns,AUS
East Meadow	1:54.30 Michael Phelps,USA	1:56.32 Simon Dufour,FRA	1:56.66 Andrew Burns,AUS
Shanghai	1:56.22 Stephen Parry,GBR	1:57.72 Robert Kroll,GER	1:57.83 Tao Zhao,CHN
Melbourne	1:54.31 Stephen Parry,GBR	1:54.52 Klaas Zwering,NED	1:56.10 Ethan Rolf,AUS
Paris	1:54.96 Klaas Zwering,NED	1:55.37 Gordan Kozulj,CRO	1:55.80 Kunpeng Ouyang,CHN
Stockholm	1:53.60 Evgeni Alechine,RUS	1:55.26 Razvan Florea,ROM	1:55.62 Simon Dufour,FRA
Berlin	1:52.80 Evgeni Alechine,RUS	1:54.05 Lenny Krayzelburg,USA	1:54.57 Klaas Zwering,NED

50 METRES BREASTSTROKE

Rio	27.72 Eduardo Fischer,BRA	27.89 Hugues Duboscq,FRA	27.99 Brenton Rickard,AUS
East Meadow	27.19 Oleg Lisogor,UKR	27.87 Christoph Stewart,RSA	27.92 Roman Sloudnov,RUS
Shanghai	27.39 Oleg Lisogor,UKR	27.74 Haibou Wang,CHN	28.23 Dong Wu,CHN
Melbourne	27.48 Roman Sloudnov,RUS	27.67 Brett Petersen,RSA	27.71 David Denniston,USA
Paris	26.52 Oleg Lisogor,UKR	27.13 Alessandro Terrin,ITA	27.56 Kosuke Kitajima,JPN
Stockholm	26.68 Oleg Lisogor,UKR	26.91 Roman Sloudnov,RUS	27.55 James Gibson,GBR
Berlin	26.59 Oleg Lisogor,UKR	26.96 Roman Sloudnov,RUS	27.17 James Gibson,GBR

100 METRES BREASTSTROKE

Rio	1:00.28 Hugues Duboscq,FRA	1:00.65 Eduardo Fischer,BRA	1:00.91 Martin Gustavsson,WE
East Meadow	59.30 Oleg Lisogor,UKR	59.83 David Denniston,USA	1:00.94 Brenton Rickard,AUS
Shanghai	59.75 Oleg Lisogor,UKR	1:00.52 David Denniston,USA	1:01.44 Dong Wu,CHN
Melbourne	59.20 David Denniston,USA	59.45 Roman Sloudnov,RUS	1:00.65 Brenton Rickard,AUS



Pieter van den Hoogenband (NED)
third prize and seven wins

Paris	58.57 Oleg Lisogor,UKR
Stockholm	57.97 Roman Sloudnov,RUS
Berlin	57.96 Roman Sloudnov,RUS

200 METRES BREASTSTROKE

Rio	2:10.41 Hugues Duboscq,FRA
East Meadow	2:11.84 David Denniston,USA
Shanghai	2:11.59 Max Podoprigora,AUT
Melbourne	2:07.53 David Denniston,USA
Paris	2:07.48 Kosuke Kitajima,JPN
Stockholm	2:07.46 Max Podoprigora,AUT
Berlin	2:06.32 Kosuke Kitajima,JPN

50 METRES BUTTERFLY

Rio	23.85 Fernando Scherer,BRA
East Meadow	23.38 Thomas Rupprath,GER
Shanghai	23.93 Raphael De Thuin,BRA
Melbourne	23.21 Thomas Rupprath,GER
Paris	23.52 Mark Foster,GBR
Stockholm	23.14 Mark Foster,GBR
Berlin	23.09 Mark Foster,GBR

100 METRES BUTTERFLY

Rio	52.57 Hao Jin,CHN
East Meadow	51.17 Thomas Rupprath,GER
Shanghai	52.20 James Hickman,GBR
Melbourne	50.82 Thomas Rupprath,GER
Paris	51.56 Igor Marchenko,RUS
Stockholm	51.17 Igor Marchenko,RUS
Berlin	51.38 Igor Marchenko,RUS

200 METRES BUTTERFLY

Rio	1:56.65 Peng Wu,CHN
East Meadow	1:53.18 James Hickman,GBR
Shanghai	1:53.72 James Hickman,GBR
Melbourne	1:53.71 Stephen Parry,GBR
Paris	1:53.03 James Hickman,GBR
Stockholm	1:53.66 James Hickman,GBR
Berlin	1:53.33 James Hickman,GBR

100 METRES IND. MEDLEY

Rio	55.56 Bartosz Kizierowski,POL	55.88 Stefan Herbst,GER	56.02 Scott Tucker,USA
East Meadow	54.68 Oleg Lisogor,UKR	54.99 Michael Phelps,USA	55.59 Bartosz Kizierowski,POL
Shanghai	54.74 Oleg Lisogor,UKR	54.86 Kunpeng Ouyang,CHN	55.81 Hao Jin,CHN
Melbourne	55.45 Robert Van Der Zant,AUS	56.02 Joshua Taylor,AUS	56.21 Massi Rosolino,ITA
Paris	53.68 Oleg Lisogor,UKR	54.85 Bartosz Kizierowski,POL	55.28 Antoine Galavine,FRA
Stockholm	53.45 Oleg Lisogor,UKR	54.21 Kosuke Kitajima,JPN	55.11 Brian Johns,CAN
Berlin	52.58 Thomas Rupprath,GER	54.44 Christian Galenda,ITA	54.59 Jens Kruppa,GER

200 METRES IND. MEDLEY

Rio	1:57.52 Tamas Kerekjarto,HUN	1:59.61 Caio Moretzohn,BRA	1:59.95 Theo Verster,RSA
East Meadow	1:57.12 Michael Phelps,USA	1:57.17 James Hickman,GBR	1:57.36 Tamas Kerekjarto,HUN
Shanghai	1:58.89 James Hickman,GBR	2:01.16 Peng Wu,CHN	2:01.67 Ziqiang Li,CHN
Melbourne	1:56.41 Thomas Rupprath,GER	2:00.31 Massi Rosolino,ITA	2:01.15 Adam Lucas,AUS
Paris	1:57.32 James Hickman,GBR	1:57.34 Dean Kent,NZL	1:59.40 Jiro Miki,JPN
Stockholm	1:56.00 Ian Thorpe,AUS	1:57.64 James Hickman,GBR	1:58.08 Dean Kent,NZL
Berlin	1:56.73 James Hickman,GBR	1:56.89 Dean Kent,NZL	1:57.21 Brian Johns,CAN

400 METRES IND. MEDLEY

Rio	4:12.72 Peng Wu,CHN	4:15.32 Tamas Kerekjarto,HUN	4:16.81 Adam Lucas,AUS
East Meadow	4:10.03 Tamas Kerekjarto,HUN	4:16.88 Tom Wilkens,USA	4:17.92 Adam Lucas,AUS
Shanghai	4:13.26 Ziqiang Li,CHN	4:14.01 Batiste Levallant,FRA	4:14.54 Huazhang Zheng,CHN
Melbourne	4:12.53 Batiste Levallant,FRA	4:15.74 Mitchell Bacon,AUS	4:17.03 Adam Lucas,AUS
Paris	4:11.14 Dean Kent,NZL	4:11.29 Jiro Miki,JPN	4:14.67 Batiste Levallant,FRA
Stockholm	4:09.00 Dean Kent,NZL	4:09.21 Brian Johns,CAN	4:16.22 Cezar Badita,ROM
Berlin	4:06.66 Dean Kent,NZL	4:08.36 Brian Johns,CAN	4:16.91 Cezar Badita,ROM



Second prize for Roman Sloudnov (RUS)

58.76 Kosuke Kitajima,JPN	59.73 James Gibson,UKR
58.64 Kosuke Kitajima,JPN	58.64 Oleg Lisogor,UKR
58.56 Kosuke Kitajima,JPN	58.64 Oleg Lisogor,UKR

200 METRES BREASTSTROKE

Rio	2:10.52 Brenton Rickard,AUS	2:12.07 Marcelo Tomazini,BRA
East Meadow	2:11.84 David Denniston,USA	2:12.94 Max Podoprigora,AUT
Shanghai	2:12.88 David Denniston,USA	2:13.13 Tao Zhao,CHN
Melbourne	2:08.21 Jim Piper,AUS	2:11.86 Roman Sloudnov,RUS
Paris	2:07.97 Max Podoprigora,AUT	2:10.94 Ian Edmond,GBR
Stockholm	2:08.01 Jim Piper,AUS	2:09.87 Jarmo Pihlava,FIN
Berlin	2:06.95 Max Podoprigora,AUT	2:08.12 Jim Piper,AUS

50 METRES BUTTERFLY

Rio	23.96 Pieter vdHoogenband,NED	24.03 Raphael De Thuin,BRA
East Meadow	23.72 Mark Foster,GBR	23.86 Benjamin Michaelson,USA
Shanghai	23.97 Igor Marchenko,RUS	24.01 James Hickman,GBR
Melbourne	23.65 Mark Foster,GBR	23.78 Adam Pine,AUS
Paris	23.62 Mark Foster,GBR	23.71 Joris Keizer,NED
Stockholm	23.23 Roland Schoeman,RSA	23.54 Igor Marchenko,RUS
Berlin	23.20 Roland Schoeman,RSA	23.67 Michael Mintenko,CAN

100 METRES BUTTERFLY

Rio	52.64 Igor Marchenko,RUS	52.99 Joris Keizer,NED
East Meadow	51.27 James Hickman,GBR	52.24 Igor Marchenko,RUS
Shanghai	52.46 Igor Marchenko,RUS	53.15 Kaijo Almeida,BRA
Melbourne	51.27 Thomas Rupprath,GER	51.77 Adam Pine,AUS
Paris	51.85 James Hickman,GBR	52.03 Joris Keizer,NED
Stockholm	51.86 James Hickman,GBR	52.15 Michael Mintenko,CAN
Berlin	51.71 James Hickman,GBR	52.07 Pavel Lagoun,BLR

200 METRES BUTTERFLY

Rio	1:57.00 Tamas Kerekjarto,HUN	1:57.20 Kaijo de Almeida,BRA
East Meadow	1:53.47 Thomas Rupprath,GER	1:54.18 Michael Phelps,USA
Shanghai	1:54.26 Stephen Parry,GBR	1:57.10 Denis Sylyantsev,UKR
Melbourne	1:56.57 Shane Norris,AUS	1:57.57 Shane Fielding,AUS
Paris	1:54.80 Tom Malchow,USA	1:57.60 Helge Meeuw,GER
Stockholm	1:54.22 Tom Malchow,USA	1:55.87 Joshua Krogh,AUS
Berlin	1:54.61 Tom Malchow,USA	1:56.36 Joshua Krogh,AUS

100 METRES IND. MEDLEY

Rio	55.88 Stefan Herbst,GER	56.02 Scott Tucker,USA
East Meadow	54.68 Oleg Lisogor,UKR	55.59 Bartosz Kizierowski,POL
Shanghai	54.74 Oleg Lisogor,UKR	55.81 Hao Jin,CHN
Melbourne	55.45 Robert Van Der Zant,AUS	56.02 Joshua Taylor,AUS
Paris	53.68 Oleg Lisogor,UKR	54.85 Bartosz Kizierowski,POL
Stockholm	53.45 Oleg Lisogor,UKR	54.21 Kosuke Kitajima,JPN
Berlin	52.58 Thomas Rupprath,GER	54.44 Christian Galenda,ITA

200 METRES IND. MEDLEY

Rio	1:57.52 Tamas Kerekjarto,HUN	1:59.61 Caio Moretzohn,BRA
East Meadow	1:57.12 Michael Phelps,USA	1:57.17 James Hickman,GBR
Shanghai	1:58.89 James Hickman,GBR	2:01.16 Peng Wu,CHN
Melbourne	1:56.41 Thomas Rupprath,GER	2:00.31 Massi Rosolino,ITA
Paris	1:57.32 James Hickman,GBR	1:57.34 Dean Kent,NZL
Stockholm	1:56.00 Ian Thorpe,AUS	1:57.64 James Hickman,GBR
Berlin	1:56.73 James Hickman,GBR	1:56.89 Dean Kent,NZL

400 METRES IND. MEDLEY

Rio	4:15.32 Tamas Kerekjarto,HUN	4:16.81 Adam Lucas,AUS
East Meadow	4:10.03 Tamas Kerekjarto,HUN	4:17.92 Adam Lucas,AUS
Shanghai	4:13.26 Ziqiang Li,CHN	4:14.01 Batiste Levallant,FRA
Melbourne	4:12.53 Batiste Levallant,FRA	4:15.74 Mitchell Bacon,AUS
Paris	4:11.14 Dean Kent,NZL	4:11.29 Jiro Miki,JPN
Stockholm	4:09.00 Dean Kent,NZL	4:09.21 Brian Johns,CAN
Berlin	4:06.66 Dean Kent,NZL	4:08.36 Brian Johns,CAN

2003 FINA WORLD CUP WOMEN'S MEDAL WINNERS

50 METRES FREESTYLE

Rio	25.51 Chantal Groot, NED	25.58 Flavia Delaroli, BRA	25.82 Renata Burgos, BRA
East Meadow	24.49 Alison Sheppard, GBR	24.52 Jenny Thompson, USA	24.82 Therese Alshammer, SWE
Shanghai	24.44 Alison Sheppard, GBR	25.01 Yanwei Xu, CHN	25.06 Anna-Karin Kammerling, SWE
Melbourne	24.58 Therese Alshammer, SWE	25.10 Lisbeth Lenton, AUS / 25.10 Michelle Engelsman, AUS	24.72 Flavia Delaroli, BRA
Paris	24.23 Alison Sheppard, GBR	24.41 Therese Alshammer, SWE	24.80 Aleksandra Herasimenia, BLR
Stockholm	24.37 Therese Alshammer, GBR	24.43 Alison Sheppard, GBR	24.50 Aleksandra Herasimenia, BLR
Berlin	24.06 Alison Sheppard, GBR	24.49 Therese Alshammer, SWE	

100 METRES FREESTYLE

Rio	55.37 Chantal Groot, NED	55.40 Gabrielle Rose, USA	56.27 Renata Burgos, BRA
East Meadow	53.59 Jenny Thompson, USA	54.35 Alison Sheppard, GBR	54.41 Courtney Shealy, USA
Shanghai	54.07 Alison Sheppard, GBR	54.21 Martina Moravcova, SVK	54.73 Courtney Shealy, USA
Melbourne	54.42 Elka Graham, AUS	54.57 Lisbeth Lenton, AUS	54.68 Lindsay Benko, USA
Paris	53.99 Elena Popchenko, BLR	54.43 Yanwei Xu, CHN	54.45 Martina Moravcova, SVK
Stockholm	54.00 Therese Alshammer, SWE	54.13 Alison Sheppard, GBR	54.21 Josefina Lillhage, SWE
Berlin	53.94 Aleksandra Herasimenia, BLR	54.14 Petra Dallmann, GER	54.22 Melanie Marshall, GBR

200 METRES FREESTYLE

Rio	1:59.05 Jiaying Pang, CHN	1:59.32 Rachel Komisarz, USA	1:59.55 Gabrielle Rose, USA
East Meadow	1:57.11 Martina Moravcova, SVK	1:57.19 Lindsay Benko, USA	1:57.52 Josefina Lillhage, SWE
Shanghai	1:58.07 Yu Yang, CHN	1:58.33 Yingwen Zhu, CHN	1:58.64 Jiaying Pang, CHN
Melbourne	1:55.12 Elka Graham, AUS	1:56.58 Kristen Thomson, AUS	1:56.98 Lindsay Benko, USA
Paris	1:55.94 Yingwen Xu, CHN	1:56.33 Elena Popchenko, BLR	1:57.12 Solenne Figue, FRA
Stockholm	1:56.18 Josefina Lillhage, SWE	1:56.27 Lindsay Benko, USA	1:57.50 Camelia Potec, ROM
Berlin	1:54.90 Yu Yang, CHN	1:55.87 Lindsay Benko, USA	1:56.43 Melanie Marshall, GBR

400 METRES FREESTYLE

Rio	4:07.66 Rachel Komisarz, USA	4:08.65 Hua Chen, CHN	4:10.53 Yana Klochkova, UKR
East Meadow	4:06.83 Lindsay Benko, USA	4:10.43 Rachel Komisarz, USA	4:12.06 Jiaying Pang, CHN
Shanghai	4:06.19 Yu Yang, CHN	4:07.05 Yana Klochkova, UKR	4:07.26 Jing Yang, CHN
Melbourne	4:01.17 Elka Graham, AUS	4:02.98 Lindsay Benko, USA	4:06.32 Rachel Komisarz, USA
Paris	4:06.87 Camelia Potec, ROM	4:07.83 Joanne Jackson, GBR	4:08.99 Laure Manaudou, FRA
Stockholm	4:03.13 Lindsay Benko, USA	4:07.49 Camelia Potec, ROM	4:08.61 Jingzhi Tang, CHN
Berlin	3:59.53 Lindsay Benko, USA	4:04.90 Hannah Stockbauer, GER	4:05.84 Erika Villaecia, ESP

800 METRES FREESTYLE

Rio	8:33.73 Yana Klochkova, UKR	8:36.38 Hua Chen, CHN	8:38.12 Rachel Komisarz, USA
East Meadow	8:17.28 Flavia Rigamonti, SUI	8:30.45 Hua Chen, CHN	8:33.53 Rachel Komisarz, USA
Shanghai	8:32.93 Keri Anne Payne, GBR	8:37.41 Jing Yang, CHN	8:48.49 Whitney Smith, USA
Melbourne	8:23.58 Keri Anne Payne, GBR	8:25.23 Rachel Komisarz, USA	8:33.14 Belinda Wilson, AUS
Paris	8:29.78 Chantal Strasser, SUI	8:32.47 Laura Blomme, FRA	8:33.54 Laure Manaudou, FRA
Stockholm	8:29.02 Jingzhi Tang, CHN	8:29.39 Jing Zheng, CHN	8:31.19 Chantal Strasser, SUI
Berlin	8:19.18 Hannah Stockbauer, GER	8:22.65 Erika Villaecia, ESP	8:27.20 Melissa Caballero, ESP

50 METRES BACKSTROKE

Rio	27.21 Haley Cope, USA	28.36 Charlene Wittstock, RSA	28.49 Nina Zhivanevskaya, ESP
East Meadow	27.08 Natalie Coughlin, USA	27.38 Haley Cope, USA	28.31 Nina Zhivanevskaya, ESP
Shanghai	28.01 Hui Li, CHN	28.17 Nina Zhivanevskaya, ESP	28.23 Tianyi Zhang, CHN
Melbourne	28.04 Giaan Rooney, AUS	28.19 Tianyi Zhang, CHN	28.27 Dyana Calub, AUS
Paris	27.89 Iliana Hlavackova, CZE	27.91 Iliana Hlavackova, CZE	27.92 Mai Nakamura, JPN
Stockholm	27.76 Mai Nakamura, JPN	27.90 Louise Ornstedt, DEN	28.00 Noriko Inada, JPN
Berlin	27.45 Mai Nakamura, JPN	28.02 Sandra Volker, GER	28.08 Noriko Inada, JPN

100 METRES BACKSTROKE

Rio	59.93 Haley Cope, USA	1:00.67 Charlene Wittstock, RSA	1:00.74 Nina Zhivanevskaya, ESP
East Meadow	56.71 Natalie Coughlin, USA	1:00.05 Haley Cope, USA	1:00.21 Nina Zhivanevskaya, ESP
Shanghai	1:00.19 Shuai Zhang, CHN	1:00.64 Courtney Shealy, USA	1:00.75 Nina Zhivanevskaya, ESP
Melbourne	1:00.32 Charlene Wittstock, RSA	1:00.37 Giaan Rooney, AUS	1:00.38 Courtney Shealy, USA
Paris	59.39 Sarah Price, GBR	59.41 Noriko Inada, JPN	59.54 Louise Ornstedt, DEN
Stockholm	59.02 Sarah Price, GBR	59.62 Noriko Inada, JPN	59.76 Louise Ornstedt, DEN
Berlin	59.08 Sarah Price, GBR	59.37 Noriko Inada, JPN	59.41 Mai Nakamura, JPN

200 METRES BACKSTROKE

Rio	2:08.98 Charlene Wittstock, RSA	2:09.64 Pamela Hanson, USA	2:11.23 Yana Klochkova, UKR
East Meadow	2:05.76 Natalie Coughlin, USA	2:09.73 Pamela Hanson, USA	2:12.47 Cathleen Rund, GER
Shanghai	2:08.46 Shong Zhang, CHN	2:08.69 Yu Yang, CHN	2:09.13 Stephanie Proud, GBR
Melbourne	2:08.00 Stephanie Proud, GBR	2:09.14 Charlene Wittstock, RSA	2:09.59 Kelly Tucker, AUS
Paris	2:05.32 Sarah Price, GBR	2:08.19 Stephanie Proud, GBR	2:08.39 Aya Terakawa, JPN
Stockholm	2:04.67 Sarah Price, GBR	2:07.23 Aya Terakawa, JPN	2:07.60 Pamela Hanson, USA
Berlin	2:04.50 Sarah Price, GBR	2:07.37 Louise Ornstedt, DEN	2:07.39 Noriko Inada, JPN

50 METRES BREASTSTROKE

Rio	31.24 Brooke Hanson, US	31.41 Amanda Beard, USA	31.97 Ashley Roby, USA
East Meadow	30.70 Emma Igelstrom, SWE	30.92 Zoe Baker, GBR	30.99 Masami Tanaka, JPN
Shanghai	31.03 Xuejuan Luo, CHN	31.26 Wei Li, CHN	31.50 Duenyi Pang, CHN
Melbourne	30.58 Emma Igelstrom, SWE	30.68 Zoe Baker, GBR	31.01 Brooke Hanson, AUS
Paris	30.66 Zoe Baker, GBR	31.42 Alison Sheppard, GBR	32.02 Mirna Jukic, AUT
Stockholm	30.51 Emma Igelstrom, SWE	30.75 Zoe Baker, GBR	31.46 Gabrielle Rose, USA
Berlin	30.73 Zoe Baker, GBR	31.45 Gabrielle Rose, USA	31.55 Janne Schafer, GER

100 METRES BREASTSTROKE

Rio	1:07.10 Amanda Beard, USA	1:07.73 Brooke Hanson, AUS	1:09.12 Staciana Slits, USA
East Meadow	1:06.00 Emma Igelstrom, SWE	1:07.04 Masami Tanaka, JPN	1:07.06 Amanda Beard, USA
Shanghai	1:06.14 Hui Qi, CHN	1:06.81 Xuejuan Luo, CHN	1:08.02 Mirna Jukic, AUT
Melbourne	1:05.55 Emma Igelstrom, SWE	1:05.91 Leisel Jones, AUS	1:07.03 Brooke Hanson, AUS

Paris	1:07.05 Mirna Jukic, AUT	1:08.46 Anne S. Le Paranthoen, FRA	1:08.77 Zoe Baker, GBR
Stockholm	1:06.20 Emma Igelstrom, SWE	1:07.03 Tarnee White, AUS	1:07.80 Rhiannon Leier, CAN
Berlin	1:06.69 Mirna Jukic, AUT	1:07.30 Rhiannon Leier, CAN	1:07.32 Tarnee White, AUS

200 METRES BREASTSTROKE

Rio	2:23.16 Amanda Beard, USA	2:24.22 Mirna Jukic, AUT	2:27.25 Ashley Roby, USA
East Meadow	2:21.42 Amanda Beard, USA	2:22.09 Masami Tanaka, JPN	2:23.50 Anne Poleska, GER
Shanghai	2:18.86 Hui Qi, CHN	2:23.64 Mirna Jukic, AUT	2:24.49 Xuejuan Luo, CHN
Melbourne	2:19.85 Emma Igelstrom, SWE	2:20.89 Leisel Jones, AUS	2:25.19 Brooke Hanson, AUS
Paris	2:21.58 Mirna Jukic, AUT	2:28.97 Salma Zeinhor, EGY	2:29.51 Lisa Schoellhammer, GER
Stockholm	2:23.91 Emma Igelstrom, SWE	2:27.63 Rhiannon Leier, CAN	2:28.66 Sara Larsson, SWE
Berlin	2:20.28 Mirna Jukic, AUT	2:26.08 Rhiannon Leier, CAN	2:26.55 Natalia Hissamutdinova, EST

50 METRES BUTTERFLY

Rio	26.92 Yafei Zhou, CHN	26.95 Haley Cope, USA	27.00 Rachel Komisarz, USA
East Meadow	25.74 Anna-Karin Kammerling, SWE	25.84 Jenny Thompson, USA	27.05 Therese Alshammer, SWE
Shanghai	26.07 Anna-Karin Kammerling, SWE	26.84 Yafei Zhou, CHN	26.85 Martina Moravcova, SVK
Melbourne	26.38 Therese Alshammer, SWE	26.83 Rachel Komisarz, USA	26.89 Hinkielien Schreuder, NED
Paris	26.12 Therese Alshammer, SWE	26.91 Diane Bui Duyet, FRA	26.94 Martina Moravcova, SVK
Stockholm	25.42 Anna-Karin Kammerling, SWE	25.82 Therese Alshammer, SWE	26.63 Aleksandra Herasimenia, BLR
Berlin	25.51 Anna-Karin Kammerling, SWE	26.22 Therese Alshammer, SWE	26.68 Aleksandra Herasimenia, BLR

100 METRES BUTTERFLY

Rio	59.55 Yafei Zhou, CHN	59.60 Amanda Loots, RSA	1:00.16 Rachel Komisarz, USA
East Meadow	56.34 Natalie Coughlin, USA	57.20 Jenny Thompson, USA	58.26 Anna-Karin Kammerling, SWE
Shanghai	57.39 Martina Moravcova, SVK	58.25 Yanwei Xu, CHN	58.93 Qing Zhao, CHN
Melbourne	58.67 Rachel Komisarz, USA	59.43 Felicity Galvez, AUS	59.48 Jessica Skipper, AUS
Paris	57.37 Martina Moravcova, SVK	58.70 Yanwei Xu, CHN	59.41 Yurie Yano, JPN
Stockholm	57.04 Martina Moravcova, SVK	59.10 Lena Hallander, SWE	59.12 Felicity Galvez, AUS
Berlin	57.32 Martina Moravcova, SVK	58.12 Annika Mehlhorn, GER	59.14 Yurie Yano, JPN

200 METRES BUTTERFLY

Rio	2:09.04 Yana Klochkova, UKR	2:09.38 Amanda Loots, RSA	2:11.11 Rachel Komisarz, USA
East Meadow	2:09.70 Georgina Lee, GBR	2:11.36 Rachel Komisarz, USA	2:12.90 Yafei Zhou, CHN
Shanghai	2:08.35 Yu Yang, CHN	2:10.17 Jie Li, CHN	2:10.92 Rachel Komisarz, USA
Melbourne	2:08.62 Felicity Galvez, AUS	2:09.16 Felicity Galvez, AUS	2:09.98 Lara Davenport, AUS
Paris	2:07.30 Yanwei Xu, CHN	2:07.81 Yurie Yano, JPN	2:08.06 Francesca Segat, ITA
Stockholm	2:06.85 Yu Yang, CHN	2:08.00 Yurie Yano, JPN	2:08.09 Felicity Galvez, AUS
Berlin	2:04.90 Yu Yang, CHN	2:05.98 Annika Mehlhorn, GER	2:07.34 Felicity Galvez, AUS

100 METRES IND. MEDLEY

Rio	1:01.24 Gabrielle Rose, USA	1:01.88 Amanda Beard, USA	1:02.53 Brooke Hanson, AUS
East Meadow	58.80 Natalie Coughlin, USA	1:00.87 Gabrielle Rose, USA	1:01.30 Alison Sheppard, GBR
Shanghai	1:01.37 Alison Sheppard, GBR	1:01.37 Martina Moravcova, SVK	1:02.01 Yana Klochkova, UKR
Melbourne	1:01.85 Brooke Hanson, AUS	1:02.69 Tianyi Zhang, CHN	1:02.76 Hinkielien Schreuder, NED
Paris	1:00.81 Martina Moravcova, SVK	1:01.00 Gabrielle Rose, USA	1:01.17 Alison Sheppard, GBR
Stockholm	1:00.55 Martina Moravcova, SVK	1:00.58 Gabrielle Rose, USA	1:01.84 Hanna Eriksson, SWE
Berlin	1:00.66 Gabrielle Rose, USA	1:01.30 Annika Mehlhorn, GER	1:01.57 Martina Moravcova, SVK

200 METRES IND. MEDLEY

Rio	2:11.23 Yana Klochkova, UKR	2:12.44 Amanda Beard, USA	2:13.63 Gabrielle Rose, USA
East Meadow	2:10.83 Alenka Kejzar, SLO	2:11.38 Gabrielle Rose, USA	2:13.41 Amanda Beard, USA
Shanghai	2:08.77 Hui Qi, CHN	2:09.85 Tianyi Zhang, CHN	2:10.91 Yana Klochkova, UKR
Melbourne	2:10.78 Tianyi Zhang, CHN	2:13.56 Brooke Hanson, AUS	2:13.83 Jessica Abbott, AUS
Paris	2:08.79 Yana Klochkova, UKR	2:10.64 Hanna Scherba, BLR	2:12.73 Gabrielle Rose, USA
Stockholm	2:09.11 Yana Klochkova, UKR	2:10.40 Gabrielle Rose, USA	2:10.44 Julie Hjorth-Hansen, DEN
Berlin	2:08.44 Yana Klochkova, UKR	2:11.30 Gabrielle Rose, USA	2:11.37 Elizabeth Warden, CAN

400 METRES IND. MEDLEY

Rio	4:36.94 Yana Klochkova, UKR	4:38.49 Georgina Bardach, ARG	4:42.27 Joanna Maranhao, BRA
East Meadow	4:37.18 Alenka Kejzar, SLO	4:44.17 Andrea Cassidy, USA	4:49.31 Sara Nordenstam, SWE
Shanghai	4:33.91 Yana Klochkova, UKR	4:37.22 Tianyi Zhang, CHN	4:41.31 Qing Yang, CHN
Melbourne	4:35.69 Tianyi Zhang, CHN	4:36.37 Jennifer Reilly, AUS	4:42.36 Jessica Abbott, AUS
Paris	4:32.42 Yana Klochkova, UKR	4:37.72 Maiko Fujino, JPN	4:38.40 Helen Norfolk, NZL
Stockholm	4:36.33 Yana Klochkova, UKR	4:38.69 Elizabeth Warden, CAN	4:39.05 Helen Norfolk, NZL
Berlin	4:34.80 Yana Klochkova, UKR	4:35.85 Maiko Fujino, JPN	4:37.23 Elizabeth Warden, CAN



Three world records for Natalie Coughlin (USA) at World Cup 2



Third place prize for Lindsay Benko (USA) first to better four minutes in 400 free

SCOTTISH SWIMMER ALISON SHEPPARD THE 100% PROFESSIONAL ATHLETE

Nikki Dryden

Over 30 years ago, Howard Firby said that the Canadian model of coaching was that of a hothouse gardener. He described a gardener who must feed and nurture each flower individually and with great care in order for it to bloom. And in the past, that model of one dedicated coach working individually with one dedicated swimmer was the key to our success. Although they swam two decades ago, Alex Baumann and Victor Davis are our most acclaimed examples, but there is finally a new team that has started to blossom and prove Firby's theory once again.

While this old-school model seems rare amidst all the training centres where swimmers must fight like weeds for sunlight and water, a new garden has sprung on Vancouver Island near Lake Cowichan. It is there that former Canadian National team swimmer Gary VanderMeulen and Scotland's greatest swimming export, Alison Sheppard, have made their home and training base. As husband and wife, coach and swimmer, they have a unique relationship and perhaps one that couldn't work for anyone else, anywhere else. But for Gary and Alison, the seeds of hard work have taken root.

Last summer, Alison finished off the year ranked number one in the world long course in the 50 freestyle, and this year she won over US \$57,000 on the World Cup circuit by racing to the highest point swim on the tour. Both those accomplishments capped off continually improving seasons; every race she did this year on the circuit got faster until she finished with a swim that earned her 1014 points.

Gary has been coaching Alison one-on-one since

January 1998, and it was in September of that year that Alison had her breakthrough swim with a silver medal in the 50 free at the Commonwealth Games. She had been ranked number nine in the Commonwealth that year and the silver was a big improvement for her. Since then the pair has continued to make Alison's individual plan each year, adapting it only slightly, tweaking it only when necessary. "I think that is one of the reasons why Alison has consistently improved," says Gary. "We do the same sets each year, and have the same weekly and daily routine."

That routine starts at the pool every morning at 5 a.m. in a 25-metre, six-lane community pool. Three days a week after swimming, Alison does a dryland circuit for an hour and twice a week she does medicine balls and Pilates. She also does weights four times a week on any night of her choosing depending on how she is feeling. Most importantly, she sticks to that routine every day. "Originally we swam every morning because of pool space, because we had more room in the mornings," says Gary. "Now we do it because we prefer it. It is good for everyone because it creates routines. It eliminates the chance to stay up too late and it encourages the same sleep patterns."

Alison is a full-time professional athlete who eats, lives, and breathes the sport of swimming. She is extremely focused, an attribute readily apparent to anyone who watches her on the pool deck or tries to stop her for an interview. That kind of intensity and strictness may scare some athletes, but Gary thinks that is only true if you look at it on the surface. "Alison tracks all her best workout times and sets and so we are always able to see how she is improving. Sometimes that is incremental,

sometimes it's slower, and sometimes it's a lot faster. But by keeping her routine and sets the same instead of changing them, we can see the progression." Gary believes that is especially helpful for an older athlete. "Many senior athletes get a feeling for a workout based



Number one in the world

on one bad rep or one good one. But sometimes if you were to examine the average of a set you would see how good or bad the workout really was. That



Faster off the blocks with every swim

Marco Chiesa

QUICK FACTS: SHEPPARD, Alison, GBR

BIRTHDATE, PLACE	5 NOV 1972, Glasgow
HEIGHT	175 cm
WEIGHT	138 lb
HOME	Duncan, BC
REPRESENTS	Stingrays
COACH	Gary VanderMeulen
• 2002 Commonwealths	1st 50 free 24.76, 6th 100 free 56.05
• 2001 Worlds	4th 50 free 25.00
• 2000 Olympics	7th 50 free 25.45, 5th 4x100 free
• 1999 Europeans	3rd 50 free 25.33, 3rd 4x100 free
• 1998 Commonwealths	2nd 50 free 25.92, 7th 100 free 56.81
• 1996 Olympics	9th 4x100 free
• 1994 Commonwealths	7th 50 free 26.69, 12th 100 free 58.61
• 1993 Europeans	21st 50 free 26.90
• 1992 Olympics	27th 50 free 26.90, 31st 100 free 58.83
• 1990 Commonwealths	10th 50 free 27.01, 15th 100 free 59.29
• 1988 Olympics	25th 50 free 27.14
• 2002 SC Europeans	1st 50 free 24.20, 4th 100 free 54.04, 2nd 100 IM 1:00.99
• 2002 SC Worlds	2nd 50 free 24.28, 6th 100 free 53.91
• 2000 SC Europeans	2nd 50 free 24.48
• 2000 SC Worlds	3rd 50 free 24.80
• 1999 SC Europeans	5th 50 free 25.00
• 1999 SC Worlds	3rd 50 free 24.97

way, that general feeling a swimmer gets is not based on emotion but on reality, and when you are training really hard it's difficult not to be emotional when that is all you are doing."

Assuming Alison qualifies for Athens in 2004, she will be competing in her fifth Olympic Games, but for ten years, from 1988 to 1998, she remained at the same level. Now, each year since then she has gotten stronger and fitter. "Alison loves training on her own. She likes to do things her way, and if that means taking a long time to get in the water for warm up then that's fine with me." That sense of independence goes for Gary's entire team. "Just like Alison, all my kids put their

workouts and times in their log books and they know what they need to do on a particular set to be better than the last time. They have to be active participants and push themselves."

While Alison trains separately from the team, she has set the standard very high for the rest of Gary's swimmers. "She shows them what a routine looks like. Alison is 100% consistent in her routine. I don't think



Holds 100 IM Commonwealth record Marco Chiesa

there has ever been a workout where she hasn't had her equipment or when she has forgotten her water bottle or her snack for after practice." Gary says his swimmers do respect and admire her, but he's not often sure if they really understand how good she is. "To many of the younger swimmers, she's just a good swimmer on the team, a really good swimmer." He jokes, however, that if this were a hockey team, the kids would certainly know if someone like Wayne Gretzky was training with them. "But that is just the nature of swimming," he laughs.

As for Gary, he doesn't worry any more about his place in the coaching world. While Gary is Canadian and coaches in Canada, he

gets no recognition from his peers for his successful coaching of a world-ranked swimmer because Alison is not Canadian too. Gary's presence on the British Olympic Team in Sydney was also controversial, but the British coaching fraternity has been more accepting of his feats, and Gary received an award for coaching excellence last year from British Swimming.

More importantly, Gary has always just wanted to

be in a situation where he can do what he wants; and being away from the big city jungles, he can do just that. He fondly remembers his days swimming at the Calgary Centre when it first began in the late 1980s and was at its peak, but it is not the type of situation he or Alison would thrive in today. "It really was a complete team back then and we were more unique than we realized. Teams are trying to replicate that success but it's not that easy to put together. People try to copy other programs but because they are not using their intuition, it just doesn't work."

Gary is of the philosophy that coaching is both an art and a science, and that you have to find both and apply it to the situation you are in to be successful. "The great Canadian coaches of the past, like George Gate and Howard Firby, found that combination of art and science, and their intuition made them successful." He feels that it is a shame that so many programs have lost that personal touch because they are just too big. "More effort really needs to be taken to ensure that these special flowers, if you will, survive. There are a lot of super talented kids in this country and it is terrible that we are losing them."

However, Gary is fully aware of how special his athlete is and is ready to give some of the coaching credit to Alison, who raced this year's circuit without her coach. "She's very comfortable coaching herself and has proved that she can swim well when I am there and when I am not. That is in part due to how our training program is set up. Of course I would like it better if I was there, as often things come up that a coach can see, but it is obvious she can swim well on her own."

And how does that coach-swimmer relationship affect their married life? "We talk about swimming all the time," Gary says laughing. "We both grew up with swimming being a big part of our life. My brother Steve and I both swam for Canada, and Alison and her sister have both represented Scotland. Her dad used to be the president of British Swimming too, so it is a part of both our families. Most of the time it's cool, and sometimes it's not. But I understand and so does she, that coaching an adult is different than coaching an adolescent, and we respect each other and that's how it works."

It surely is different, and it surely seems to be working. Howard Firby's hothouse is alive and well, this time on Vancouver Island. And if the glory of Baumann and Davis are any indication of how well this model works, we haven't seen the best of Alison Sheppard yet.

ALISON SHEPPARD'S YEARLY PROGRESSION

	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992
SHORT COURSE												
50 FREE	24.06	24.26	24.26	24.80	24.96	25.86	26.34	25.85	25.92	26.51	25.72	26.11
100 FREE	54.03	53.91	54.30	55.52	54.83	56.46	59.43	56.46	57.10	56.49	56.17	57.54
200 FREE	-	2:01.72	-	-	2:06.36	2:06.36	2:09.62	2:02.93	-	-	-	-
400 FREE	-	-	-	-	-	4:33.00	4:32.29	-	-	-	-	-
50 BACK	29.01	29.31	-	30.27	30.19	30.53	-	-	-	-	-	-
100 BACK	-	-	1:03.13	1:04.49	1:04.04	1:04.84	1:06.25	1:04.73	-	-	1:03.54	1:04.85
200 BACK	-	-	2:16.42	-	-	2:18.29	-	-	-	-	-	-
50 BREAST	31.42	32.36	-	-	-	-	33.94	-	-	-	-	-
100 BREAST	-	-	1:13.32	-	-	1:15.43	1:13.54	-	-	1:13.17	-	-
50 FLY	-	27.13	-	-	-	-	-	-	-	-	-	-
100 IM	1:00.99	1:00.88	-	1:04.96	-	1:04.51	-	-	-	-	-	1:04.87
200 IM	-	-	-	-	-	2:22.26	2:21.12	2:21.01	-	2:21.49	2:17.35	-
LONG COURSE												
50 FREE	-	24.68	25.00	25.12	25.33	25.73	26.26	26.57	26.71	26.69	26.70	26.33
100 FREE	-	55.89	55.97	55.78	56.21	56.81	57.99	57.73	-	58.44	-	57.60
200 FREE	-	-	-	-	-	-	2:07.56	-	-	-	-	-
50 BACK	-	-	30.37	-	-	-	-	-	-	-	-	-
100 BACK	-	-	-	1:04.99	1:04.95	1:05.28	1:06.72	-	-	1:05.47	-	1:06.22
200 BACK	-	-	-	-	-	-	-	-	-	-	-	2:20.40
50 BREAST	-	-	33.36	-	33.03	33.74	-	-	-	-	-	-
100 BREAST	-	-	-	-	1:16.04	-	1:15.72	-	-	-	-	-
50 FLY	-	27.30	27.05	-	28.65	-	-	-	-	-	-	-
200 IM	-	-	-	-	2:26.59	-	2:26.22	-	-	-	-	-

BREATHE BETTER—SWIM FASTER

Breath control is fundamental to efficient swimming. Like singers, swimmers need to train their breathing for effective performance.

Cecil Colwin

Controlled breathing is the main factor contributing to swimming efficiency. Breathing control involves timing the breath within the rhythm of the stroke and ventilating the lungs for the work to be done. Many talented swimmers, with the ability to become great, fall short in this department.

For instance, in freestyle swimming, mastering the fundamentals of balance, relaxation, arm-timing, streamlining, stroke length and the effective application of power depends on a swimmer's ability to prolong exhalation so that it blends smoothly into the total action.

The stroke movements used in swimming interfere greatly with ordinary respiration and swimmers overcome this tendency to inhibit breathing only by developing unusual respiratory powers. Tests made on expert swimmers as compared with average swimmers of a similar age show that top swimmers are superior in vital capacity, and both inspiratory strength and expiratory strength.

A survey of the swimming literature shows that most references to breathing refer either to head-turning mechanics or the frequency of breathing, but references to the actual act of breathing are sparse. The omission is understandable because breathing on land is automatic, and few realize that swimming performance can be improved by learning breathing techniques that delay the onset of fatigue and enable swimmers to adjust their breathing for specific paces and events.

Controlled breathing will help a swimmer to take a *deep breath quickly and easily*, and then follow with the *long outward breath* that provides enough time within each stroke cycle, or series of cycles, to keep the action long, loose and rhythmic. To reach the highest level of stroke fluency, even top swimmers need to pay attention

to breathing effortlessly.

Diaphragmatic Breathing

Back in the 1920s diaphragmatic breathing was considered an important part of the new American crawl being developed by pioneer coaches, such as Bachrach and Handley, but the idea was lost somewhere along the line. They believed that “the diaphragmatic method” of breathing ensured that the lungs were completely filled, whereas shallow intercostal breathing filled only half of each lung—so the swimmer, in effect, was only using one lung!

Much has been made of the term “diaphragmatic breathing” but the fact of the matter is that *all* breathing is diaphragmatic, particularly when we breathe deeply. The use of the term “diaphragmatic breathing” in this text is made to show the difference between shallow upper-chest (intercostal) breathing and diaphragmatic breathing, which causes a quick, deep breath followed by a long slow exhalation.

To feel the difference between shallow upper-chest breathing and diaphragmatic breathing, one has only to inhale deeply and exhale while placing one hand on the chest and the other on the abdomen and feeling the abdomen rise and fall; this is sometimes called “belly breathing.”

Diaphragmatic breathing, as used by singers or musicians playing wind instruments, is the key to advanced breathing skills. Famous singers such as Pavarotti and Placido Domingo practise breathing control. The singers' smooth performances are achieved by mastering a long, slow exhalation, and a deep but quick inward breath that is undetected. Their effortless phrasing would be impossible without a well-regulated exhalation aided by exceptional control of the diaphragm. Swimmers could take a page from their book.

Placido Domingo says: “Before you take a high note the diaphragm should not go up, but

all the way down, pushing the stomach out, and providing room for the lungs to expand and fill with air.” He likens it to squeezing a soft rubber ball with a hole in it. When squeezed the air empties out of the ball; when released, air rushes in to fill the empty space in the ball because nature abhors a vacuum.

The Role of Diaphragmatic Breathing in Breath Control

When we inhale, oxygen from the air enters the lungs from where the blood takes it to all the cells of the body. At the cellular level oxygen acts on glucose (from food) to produce energy. Water and carbon dioxide are byproducts of this process, which are returned to the lungs by the venous blood, to be exhaled. Carbon dioxide is never completely eliminated from the system, neither is all the air exhaled; some residual air always remains in the lungs.

The diaphragm is the large muscle stretching across the body at the floor of the chest under the heart and lungs. Because the lungs themselves have no muscles and are passive, they need the help of the diaphragm and intercostal muscles to function.

When at rest, the diaphragm is held up in two domes by the abdominal viscera. When the diaphragm contracts, the domes flatten out, the lungs expand downwards and the abdomen is pushed out. Lung capacity is further increased by the intercostal muscles contracting and lifting some of the ribs in an outward and upward direction. The result is that the rib cage expands and suction is created, which draws air into the lungs.

Exhalation through Nose or Mouth?

Swimmers have a choice of three different methods:

1. *Inhaling through the mouth and exhaling through the nose only.*

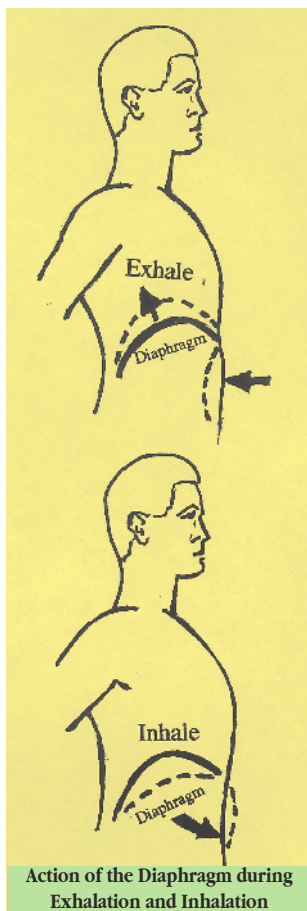
This is a good way to learn prolonged exhalation because of the smaller opening at the nostrils.

2. *Inhaling through the mouth and exhaling through nose and mouth simultaneously.*

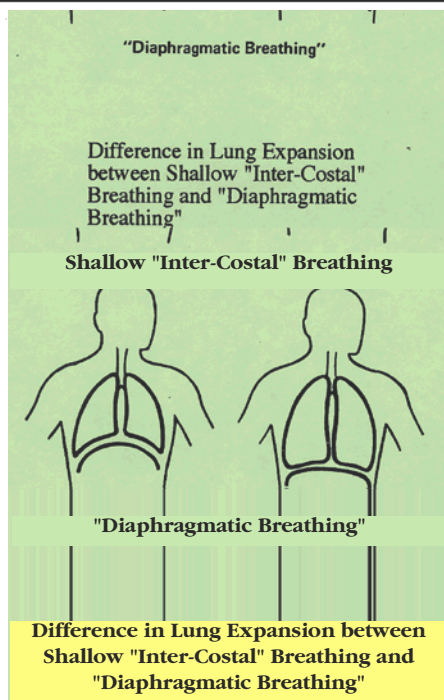
For some individual swimmers this is a good method to use when sprinting when a greater volume of air has to be exhaled.

3. *Inhaling through the mouth and exhaling through the mouth only.*

This method is recommended for beginners as it is the easiest to learn. Ask the swimmer to exhale



Action of the Diaphragm during Exhalation and Inhalation



through pursed lips. Keeping the lips pursed teaches the beginner to regulate the flow of the outward breath, and helps avoid water accidentally entering the mouth.

Don't Gasp or Blow!

The inward breath should be *an easy reflex action*; if exhalation is adequate, air will flow in on its own! The inward breath is quick, but should not be gasped in.

The outward breath follows as soon as the mouth moves under the surface. Important: never blow the air out forcefully, because doing so causes breathlessness and loss of breathing control resulting in premature fatigue.

Let the outward breath escape gradually by allowing the air to *flow* out easily until the mouth has almost returned to the surface for the next inhalation. At this point, the swimmer expels the remainder of the air with a small puff that clears the lungs for more air, and moves the water away from the front of the mouth so that air is inhaled without taking in water.

Note: Should you gulp in water, shape your tongue as if you're pronouncing the letter K; this should prevent you from gagging. Even the greatest swimmers have been known to take in water accidentally. This is a rare occurrence, but I once saw a top swimmer in an Olympic final unable to finish the race because she inhaled water.

Inward-Outward Breath Ratios

A "breath ratio" is simply the amount of time a swimmer spends exhaling compared to the amount of time spent inhaling. On land, we tend to breathe in equal timing—in and out, in and out.

But, if this equal breath ratio (1:1) is transferred to freestyle swimming, for example, the body will often ride off balance because the outward breath will be too short to permit time enough for the swimmer to complete the natural roll of the body. Neither will the swimmer be able to maintain equal stroke length on each side of the body. Furthermore, as oxygen demand increases, the swimmer will tire quickly because there has not been enough time to complete the exhalation to allow an adequate inward breath to follow. Remember the important breathing rule in swimming *the ratio of the outward breath to the inward breath should always be at least twice as long (2:1) as the inward breath.*

It is possible to consciously control the breath ratio according to the needs of the individual swimmer. With practice, it will be possible to increase the breath ratio to 3:1 and even longer. The volume and pace of the outward breath will vary according to which style is swum; for example, there will be significant differences between freestyle breathing and breathing while swimming butterfly, breaststroke or backstroke. The breath ratio may change according to the energy demands of the distance to be swum, each individual's

the first fifty metres of a 100-metres race (50 metres pool) and more regularly on the final 50 metres, such as once every four strokes or once every six strokes. Short distance swimmers need to experiment with different patterns of irregular breathing to find the individual's ideal rhythm pattern.

Underwater observation of short distance swimmers reveals a variety of breathing rhythms. A few will breathe on every stroke cycle while others may breathe less regularly. Inexperienced swimmers often fix the abdominal and back muscles when swimming the crawl stroke, thus interfering with the function of the diaphragm. On the other hand, expert swimmers, who have mastered controlled breathing and relaxation of the abdominal muscles, seldom have difficulty in breathing under the exertion of swimming at full speed.

Backstroke swimmers usually inhale through the mouth during the recovery of one arm, and exhale through the mouth during the recovery of the opposite arm. However, all swimmers, irrespective of whether or not backstroke is their main stroke, should practise doing backstroke while inhaling through the mouth during the recovery of one arm, and exhaling *through the nose* during the recovery of the other arm. This practice helps the swimmer to learn good breath control, and how to *flow* the air out when exhaling instead of blowing it out.

Butterfly swimmers start to flow air out in a slow exhalation from the moment the stroke starts. Exhalation gradually increases in intensity throughout the arm-stroke and finishes with a puff of air a moment before the mouth clears the surface. The inward breath is taken (through the mouth) in the *final* stage of the arm-push. Swimmers may breathe once to every arm cycle or once every two strokes. In breathing once to every two strokes, the breath is held throughout the first arm-cycle. Exhalation and inhalation take place during the second arm-cycle. The ideal breathing rhythm is a matter of individual preference and depends on the length of the racing distance. Swimmers need to breathe more frequently the longer the distance covered. Butterfly swimmers in the sprint and shorter events, 50 and 100, tend to breathe every second stroke, but some do breathe once to every arm cycle. Swimmers who use irregular breathing patterns risk premature fatigue by incurring too early an oxygen debt.

Breaststroke As the stroke starts, the swimmer begins to exhale through the mouth. The swimmer's head gradually lifts as the elbow-bend increases and the shoulders rise. Throughout the arm stroke the swimmer gradually increases the volume of the exhalation. As the shoulders reach their highest point,

Important breathing tips:

- **Inhalation: Should be an easy reflex action—don't gasp in air! If exhalation is adequate, air will flow in on its own!**
- **Exhalation: Always flow the air out easily. Never blow the air out forcefully, because this causes breathlessness and loss of breathing control resulting in premature fatigue. Exhalation should be at least twice as long as the inward breath.**

most comfortable stroke length and rhythm, and the frequency of breathing.

Freestyle In distances longer than the 100, most freestyle swimmers inhale on every second stroke, while others may breathe bilaterally (once every three strokes). The pattern best suited to the individual should be established in practice, as well as in competition.

Most short distance freestylers do not breathe regularly; they might breathe three or four times on

exhalation is completed with a puff that clears water away from the mouth. The swimmer inhales and the face returns to the water as the arms thrust forward to full extension.

Prolonging the Outward Breath in the Crawl Stroke

The ability to prolong the outward breath is the key to efficient swimming. By prolonging each exhalation and allowing the air to flow out easily, the swimmer *will have more time within each stroke cycle* to streamline and balance the body while maintaining stroke length and rhythm. The result will be the "ghost-like" glide, so often the hallmark of great swimmers.

Practise face-down glides with slow exhalation; push off from the wall in prone position with arms and legs extended. Allow the body to continue its glide. Concentrate on allowing air to *flow* out gently until exhalation is completed.

Now start to swim freestyle very slowly. Turn your face to the side and take a breath. As your face returns to the centre position, continue exhaling by flowing air out gently. When your outward breath is nearly finished, turn your face back to the side with mouth open, lips curled outward, and air will flow in naturally. Return your face to the centre position as you continue into the next outward breath. Keep swimming slowly and allow the air to escape by flowing it out softly and gently without stopping.

Select a distance over which you wish to practise in a non-stop swim. Swim as far as you can, concentrating on allowing the air to flow out gently in a prolonged exhalation. Ideally, if you are fit enough to do so, swim a slow 1500 in this manner. *Try to make each outward breath at least twice as long as the inward breath.* With practice, you'll be surprised and impressed at how relaxed and facile your stroke will become.

As you become more proficient, the next step should be to try timing your outward breath with each phase of your stroke. Your outward breath

should finish just as the breathing-side arm completes its stroke. The in-breath will occur as a reflex action; in fact you will not be aware of having inhaled. As you return your face to the centre position, your breathing-side arm will have recovered from the water and will be about to slide forward into the entry.

As the arm enters and slides forward, thus absorbing the body's momentum, your outward breath will have started to flow out gently and steadily. The outward breath will continue flowing non-stop throughout the ensuing stroke cycle, allowing you time to complete your body roll to the opposite side and recover and enter the arm on that side. As the entry arm is once again almost fully extended, your

face will have returned to the breathing side. Just before the mouth clears the surface, you should expel the remainder of the air with a puff that not only clears the lungs for more air, but moves the water away from the front of the mouth so that air can be inhaled without risk of inhaling water.

Effect on Relaxation and Stroke Mechanics

Once a swimmer can breathe as easily in the water as on land, it soon becomes possible to cover long distances effortlessly and at speed. This is because relaxation within the stroke is improved by the ability to inter-time and control breathing rhythm within the changing

phases of the stroke. Once this expertise has been achieved, the swimmer will be surprised to find how easy it is to swim at speed while maintaining a high level of relaxation. The aim is to develop maximum stroke application with maximum relaxation.

In freestyle, for example, combining the inward breath with the push-back of the arm on the breathing side automatically causes it to coincide with the entry slide of the opposite arm. While tension on the pectoral muscles acting between the pulling arm and the ribs tends to draw that side of the chest upward, the ensuing motion of the recovery arm helps to free and raise the ribs away from the expanding lung on the opposite side. These advantageous mechanical conditions make this a particularly appropriate time for inhalation.

It is interesting to note that Michael Phelps, butterfly world champion and record-breaker, concentrates on setting up his breathing rhythm early in a race. He says that he can only find his rhythm by breathing once to every stroke, and not once every two strokes. He adds that finding his rhythm makes him feel relaxed, and "when I feel relaxed, I know I'm going to have a fast swim."

References.

Cureton, T.K. "Respiration in Swimming and its Relationship to Speed Efficiency," *Research Quarterly*, Feb. 1930, 54-70.

The Importance of Breath Control While Swimming

Today's swimmers and coaches generally regard breathing as an automatic action not requiring attention. They believe that swimmers fall into a natural pattern if not interfered with. Attempting to teach breathing habits may seem an excellent example of over-coaching, like trying to standardize swimming strokes.

To some extent this may be true, but because swimming respiration breaks the normal rhythm of everyday breathing, swimmers can enhance their performances through analysis and special breathing exercises. Because people breathe on land without thinking about it, there's a tendency to take breathing for granted when swimming.

- **The ability to prolong the outward breath is the key to efficient swimming. By prolonging each exhalation and allowing the air to flow out easily, the swimmer will have more time within each stroke cycle to streamline and balance the body while maintaining stroke length and rhythm. The result will be the "ghost-like" glide so often exhibited by great swimmers.**

- **Mastering the subtleties of diaphragmatic breathing requires repeated practice until it becomes second-nature. The result is a relaxed swimmer able to conserve energy, even when swimming at speed.**

- **The natural reaction of the unskilled swimmer, obsessed with the need to obtain air, is to breathe in more air than is exhaled. This often causes the swimmer to "blow up." The important point in swimming is not how much air is inhaled but rather the quantity of air exhaled; the swimmer can only breathe in as much air as is exhaled.**

- **Even with experienced swimmers, the natural reaction under the stress of competition is to inhale more air than needed. The emphasis should be on complete and prolonged exhalation through the use of diaphragmatic breathing performed in time with the normal stroking action.**

FINA A AND B QUALIFYING TIME STANDARDS

Olympic Games 2004, Athens (GRE)

MEN'S STANDARDS	A - 2 Entries	B - 1 Entry	IOC Target is for 800 swimmers in total. Qualifying period will be 1 April 2003—21 July 2004. Qualifying events will be reduced compared to Sydney. Details not yet available. To be provided by FINA Office.
50 freestyle	22.51	23.64	
100 freestyle	49.66	52.14	
200 freestyle	1:49.60	1:55.08	
400 freestyle	3:52.01	4:03.61	
1500 freestyle	15:14.43	16:00.15	
100 backstroke	55.63	58.41	
200 backstroke	2:00.20	2:06.21	
100 breaststroke	1:01.92	1:05.02	
200 breaststroke	2:14.20	2:20.91	
100 butterfly	53.49	56.16	
200 butterfly	1:58.63	2:04.56	
200 ind.medley	2:02.54	2:08.67	
400 ind.medley	4:20.17	4:33.18	
4x100 medley	3:41.37		
4x100 freestyle	3:21.48		
4x200 freestyle	7:24.83		
WOMEN'S STANDARDS	A - 2 Entries	B - 1 Entry	
50 freestyle	25.64	26.92	
100 freestyle	55.58	58.36	
200 freestyle	2:00.07	2:06.07	
400 freestyle	4:11.60	4:24.18	
800 freestyle	8:36.94	9:02.79	
100 backstroke	1:02.42	1:05.54	
200 backstroke	2:13.58	2:20.26	
100 breaststroke	1:09.85	1:13.34	
200 breaststroke	2:28.21	2:35.62	
100 butterfly	59.67	1:02.65	
200 butterfly	2:11.20	2:17.76	
200 ind.medley	2:15.27	2:22.03	
400 ind.medley	4:46.42	5:00.74	
4x100 medley	4:10.05		
4x100 freestyle	3:46.69		
4x200 freestyle	8:09.59		

Canadian Short Course National Age Group Records

10 & UNDER BOYS SHORT COURSE

100 free	1:03.56	Andrew Bignall,SSMAC,1994
400 free	4:47.08	Tobias Oriwol,PCSC,1996
100 back	1:13.45	Andrew Bignall,SSMAC,1994
100 breast	1:23.43	Tobias Oriwol,PCSC,1996
100 fly	1:12.03	Kyung Soo Yoon,NYAC,2001
200 IM	2:31.79	Tobias Oriwol,PCSC,1996

11- 12 BOYS SHORT COURSE

50 free	25.28	John M.Mills,GO,1993
100 free	55.99	Brad Creelman,TOMAC,1983
200 free	2:01.59	Doug Wake,YLSC,1990
400 free	4:15.89	Chuck Sayao,TOMAC,1995
1500 free	16:58.85	Jamie White,LAC,1990
100 back	1:03.13	Jimmy Lee,WEST,2003
200 back	2:14.05	Tobias Oriwol,PCSC,1998
100 breast	1:07.51	Matthew Huang,ARBU,1997
200 breast	2:26.87	Matthew Huang,ARBU,1997
100 fly	1:02.37	Drew Chorney,TMSC,1991
	e1:02.37	Michael Calkins,IS,1991
200 fly	2:17.46	Andrew Cho,HYACK,1991
200 IM	2:17.55	Matthew Huang,ARBU,1997
400 IM	4:52.13	Keith Barrett,UCSC,1994
4x50 MR	2:05.03	Mississauga AC,1992
4x100 MR	4:38.88	Etobicoke Swimming,1996
4x50 FR	1:51.22	London AC,1988
4x100 FR	4:07.99	Cascade Swim Club,1998

13-14 BOYS SHORT COURSE

50 free	23.45	Yannick Lupien,CAGRA,1995
100 free	51.03	Yannick Lupien,CAGRA,1995
200 free	1:52.51	Yannick Lupien,CAGRA,1995
400 free	3:58.32	Jamie Stevens,MANTA,1989
1500 free	15:32.15	Alex Baumann,LUSC,1979
100 back	56.93	Garret Pulle,MAC,1993
200 back	2:00.04	Tobias Oriwol,ESWIM,2000
100 breast	1:03.27	Mike Mason,EPS,1989
200 breast	2:14.36	Matthew Huang, PDSA,1998
100 fly	56.61	Garret Pulle,MAC,1993
200 fly	2:04.83	Philip Weiss,SKSC,1994
200 IM	2:05.94	Tobias Oriwol,ESWIM,2000
400 IM	4:24.89	Tobias Oriwol,ESWIM,2000
4x50 MR	1:51.33	Markham AC,1992
4x100 MR	4:07.20	Etobicoke Swimming,1998
4x50 FR	1:38.37	Markham AC,1992
4x100 FR	3:44.45	Etobicoke Swimming,1998

15-17 BOYS SHORT COURSE

50 free	22.56	Simon MacDonald,NKB,1997
100 free	49.84	Yannick Lupien,GO,1997
200 free	1:47.83	Alex Baumann,LUSC,1981
400 free	3:47.27	Brian Johns,RAPID,2000
1500 free	15:04.14	Michael McWha,WAC,1995
100 back	54.56	Chris Renaud,UCSC,1993
200 back	1:56.75	Tobias Oriwol,ESWIM,2002
100 breast	59.93	Morgan Knabe,UCSC,1999
200 breast	2:11.22	Morgan Knabe,UCSC,1999
100 fly	53.77	Adam Sioui,TD,2000
200 fly	1:57.66	Adam Sioui,TD,1999
200 IM	1:59.35	Curtis Myden,UCSC,1991
400 IM	4:12.62	Tobias Oriwol,ESWIM,2001
4x50 MR	1:44.53	Markham AC,MAC,1994
4x100 MR	3:50.48	Nanaimo Riptide ST,NRST,1997
4x50 FR	1:34.58	Markham AC,MAC,1992
4x100 FR	3:28.30	Manta Swim Club,MANTA,1995

10 & UNDER GIRLS SHORT COURSE

100 free	1:02.65	Shauna Collins,ROD,1988
400 free	4:51.13	Shannon Hackett,PDSA,1999
100 back	1:13.00	Mallory Hoekstra,EKSC,1999
100 breast	1:22.68	Whitney Rich,ISS,1999
100 fly	1:11.26	Shauna Collins,ROD,1988
200 IM	2:35.89	Alison Dozzo,NYAC,1979

11- 12 GIRLS SHORT COURSE

50 free	26.34	Lori Melien,AAC,1985
100 free	57.36	Lori Melien,AAC,1985
200 free	2:05.41	Shauna Collins,ROD,1990
400 free	4:23.93	Stephanie Shewchuk,PCSC,1987
800 free	8:55.85	Stephanie Shewchuk,PCSC,1987
1500 free	17:34.50	Patricia Noall,BBF,1983
100 back	1:04.33	Brooke Buckland,WTSC,2002
200 back	2:19.97	Brooke Buckland,WTSC,2002
100 breast	1:10.11	Allison Higson,ESC,1985
200 breast	2:30.55	Courtenay Chuy,HYACK,1998
100 fly	1:04.82	Kaleigh McKinnon,NYAC,2003
200 fly	2:18.09	Michelle Coulombe,CNMN,1978
200 IM	2:19.25	Allison Higson,ESC,1985
400 IM	4:55.03	Allison Higson,ESC,1985
4x50 MR	2:07.70	Markham AC,1994
4x100 MR	4:40.98	Cobra Swim Club,1999
4x50 FR	1:53.45	Regina Opt.Dolphins,1990
4x100 FR	4:12.35	Regina Opt.Dolphins,1989

13-14 GIRLS SHORT COURSE

50 free	26.04	Kristin Topham,MANTA,1988
100 free	56.29	Shauna Collins,ROD,1990
200 free	2:00.88	Jane Kerr,ESC,1983
400 free	4:12.58	Brittany Reimer,SKSC,2002
800 free	8:38.35	Brittany Reimer,SKSC,2002
1500 free	16:28.26	Brittany Reimer,SKSC,2002
100 back	1:02.21	Suzanne Weckend, IS,1992
200 back	2:12.86	Kelly Stefanyshyn,MANTA,1997
100 breast	1:08.64	Allison Higson,ESC,1988
200 breast	2:26.48	Alison Higson,ESC,1988
100 fly	1:02.60	Jennifer Fratesi,SSMAC,1999
200 fly	2:13.75	Sandra Marchand,ENL,1988
200 IM	2:16.79	Allison Higson,SKSC,1987
400 IM	4:47.40	Carrie Burgoyne,MANTA,1996
4x50 MR	2:00.93	Etobicoke SC,1997
4x100 MR	4:25.74	Edmonton Keyano,1985
4x50 FR	1:48.47	Etobicoke SC,1997
4x100 FR	3:58.66	Etobicoke Swimming,1999

15-17 GIRLS SHORT COURSE

50 free	25.25	Shannon Shakespeare,MM,1993
100 free	54.75	Shannon Shakespeare,MM,1994
200 free	1:58.85	Shannon Shakespeare,MM,1994
400 free	4:07.79	Nikki Dryden,IS,1993
800 free	8:31.65	Nikki Dryden,IS,1993
1500 free	16:23.60	Cindy Bertelink,COBRA,1993
100 back	1:00.43	Kelly Stefanyshyn,PDSA,1999
200 back	2:07.73	Jennifer Fratesi,ROW,2001
100 breast	1:07.96	Tara Sloan,UCSC,1997
200 breast	2:27.08	Anne Ottenbrite,AAC,1984
100 fly	1:00.45	Kristin Topham,EPS,1991
	e1:00.45	Jennifer Fratesi,ROW,2000
200 fly	2:09.47	Jessica Deglau,PDSA,1998
200 IM	2:12.50	Nancy Sweetnam,LLSC,1991
400 IM	4:39.32	Nancy Sweetnam,LLSC,1991
4x50 MR	1:57.44	Mississauga AC,MSSAC,2001
4x100 MR	4:15.81	Etobicoke Pepsi,1991
4x50 FR	1:45.47	Toronto All Stars,2003
4x100 FR	3:48.19	Toronto All Stars,2001

Canadian Long Course National Age Group records

10 & UNDER BOYS LONG COURSE		
100 free	1:05.02	Andrew Bignall,SSMAC,1994
400 free	4:55.60	Trevor Jakisch,SJS,1978
100 back	1:14.50	Andrew Bignall,SSMAC,1994
100 breast	1:22.79	David Cheung,CREST,1992
100 fly	1:13.20	Alex Baumann,LUSC,1994
200 IM	2:35.84	Tobias Oriwol,PCSC,1996

11- 12 BOYS LONG COURSE		
50 free	26.17	John M.Mills,GO,1992
100 free	57.20	Miguel Munoz,ESC,1986
200 free	2:05.83	Chuck Sayao,TOMAC,1995
400 free	4:19.04	Chuck Sayao,TOMAC,1995
1500 free	17:05.50	Nicolas Richards,PCSC,1984
100 back	1:05.60	Tobias Oriwol,PCSC,1998
200 back	2:18.05	Tobias Oriwol,PCSC,1998
100 breast	1:12.24	David Cheung,CREST,1994
200 breast	2:36.28	Ryan Chiew,HYACK,1999
100 fly	1:03.26	Michael Caulkins,IS,1990
200 fly	2:19.88	Jonathan Cantin,PLUS,1991
200 IM	2:21.81	Brian Johns,RACER,1995
400 IM	5:03.60	Andrew Cho,HYACK,1996
4x50 MR	2:06.96	Mississauga AC,1992
4x100 MR	4:46.01	Hamilt-Wentworth AC,1991
4x50 FR	1:54.21	Hamilt-Wentworth AC,1991
4x100 FR	4:10.79	Regina Opt.Dolphins,1988

13-14 BOYS LONG COURSE		
50 free	23.97	Kurtis Miller,SCAR,2000
100 free	52.91	Yannick Lupien,CAGRA,1994
200 free	1:55.97	Brian Johns,RACER,1997
400 free	4:05.63	Jamie Stevens,MANTA,1989
1500 free	16:00.93	Alex Baumann,LUSC,1979
100 back	58.92	Tobias Oriwol,ESWIM,2000
200 back	2:05.16	Tobias Oriwol,ESWIM,2000
100 breast	1:04.53	Matthew Huang,PDSA,1999
200 breast	2:19.95	Matthew Huang,PDSA,1999
100 fly	57.45	Philip Weiss,SKSC,1994
200 fly	2:05.20	Philip Weiss,SKSC,1994
200 IM	2:09.65	Tobias Oriwol,ESWIM,2000
400 IM	4:32.29	Tobias Oriwol,ESWIM,2000
4x50 MR	1:54.59	Etobicoke Swimming,1998
4x100 MR	4:16.08	Cambridge AC,1983
4x50 FR	1:42.33	Etobicoke Swimming,1998
4x100 FR	3:46.40	Regina Opt.Dolphins,1990

15-17 BOYS LONG COURSE		
50 free	23.19	Yannick Lupien,GO,1997
100 free	51.14	Yannick Lupien,CAGRA,1996
200 free	1:50.34	Brian Johns,RAPID,2000
400 free	3:52.23	Andrew Hurd,MSSAC,2000
1500 free	15:12.70	Andrew Hurd,MSSAC,2000
100 back	56.19	Tobias Oriwol,ESWIM,2002
200 back	2:00.03	Tobias Oriwol,ESWIM,2001
100 breast	1:02.53	Morgan Knabe,UCSC,1999
200 breast	2:15.45	Morgan Knabe,UCSC,1999
100 fly	54.50	Adam Sioui,TD,1999
200 fly	2:00.78	Peter Ward,CDSC,1981
200 IM	2:02.78	Alex Baumann,LUSC,1981
400 IM	4:19.99	Chuck Sayao,MSSAC,2001
4x50 MR	1:46.72	Markham AC,MAC,1994
4x100 MR	3:56.43	Edmonton Keyano,EKSC,1997
4x50 FR	1:35.93	Markham AC,MAC,1994
4x100 FR	3:34.55	Etobicoke SC,ETOB,1987

10 & UNDER GIRLS LONG COURSE		
100 free	1:04.42	Shauna Collins,ROD,1088
400 free	4:48.72	Amanda Hansford,ROW,1996
100 back	1:15.87	Jennifer Fratesi,SSMAC,95
100 breast	1:25.18	Kelly Timmons,OSC,1997
100 fly	1:13.09	Tracy Osswald,VPSC,1975
200 IM	2:41.44	Mallory Hoekstra,EKSC,1998

11- 12 GIRLS LONG COURSE		
50 free	27.16	Shauna Collins, ROD,1990
100 free	58.04	Shauna Collins, ROD,1990
200 free	2:03.72	Shauna Collins, ROD,1990
400 free	4:28.48	Shauna Collins, ROD,1990
800 free	9:12.83	Shannon Smith, VanPks,1974
1500 free	17:31.64	Stephanie Shewchuk,PCSC,1987
100 back	1:07.31	Michelle Cruz,ACE,1993
200 back	2:24.64	Michelle Cruz,ACE,1993
100 breast	1:10.94	Allison Higson,ESC,1986
200 breast	2:34.11	Allison Higson,ESC,1986
100 fly	1:05.51	Shauna Collins, ROD,1990
200 fly	2:22.47	Michelle Coulombe,CNMMN,1977
200 IM	2:21.55	Allison Higson,ESC,1986
400 IM	5:02.71	Joanne Malar,HWAC,1988
4x50 MR	2:10.53	Regina Opt.Dolphins,1990
4x100 MR	4:48.79	Canadian Dolphin SC,1982
4x50 FR	1:55.93	Regina Opt.Dolphins,1995
4x100 FR	4:13.15	Regina Opt.Dolphins,1990

13-14 GIRLS LONG COURSE		
50 free	26.51	Lori Melien,AAC,1986
100 free	56.91	Julie Howard,BRANT,1991
200 free	2:03.35	Julie Barbeau,ELITE,1989
400 free	4:14.60	Shannon Smith,HYACK,1976
800 free	8:44.45	Michelle Sallee,CDSC,1988
1500 free	16:45.70	Shyanne Shannon,UNATT,1990
100 back	1:03.28	Nancy Garapick,HTAC,1976
200 back	2:15.60	Nancy Garapick,HTAC,1976
100 breast	1:09.84	Allison Higson,ESC,1986
200 breast	2:29.18	Courtenay Chuy,HYACK,1998
100 fly	1:02.87	Julie Howard,BRANT,1991
200 fly	2:15.76	Sandra Marchand,ENL,1988
200 IM	2:18.08	Allison Higson,ESC,1988
400 IM	4:52.35	Joanne Malar,HWAC,1990
4x50 MR	2:02.81	Etobicoke Swimming,1997
4x100 MR	4:31.93	Manta Swim Club,1996
4x50 FR	1:50.15	Etobicoke Swimming,1997
4x100 FR	4:01.89	Regina Opt Dolphins,1991

15-17 GIRLS LONG COURSE		
50 free	25.92	Laura Nicholls,ROW,1996
100 free	56.61	Shannon Shakespeare,MM,1995
200 free	2:01.08	Jane Kerr,ESC,1985
400 free	4:14.45	Donna McGinnis,ESC,1986
800 free	8:39.19	Debbie Wurzbarger,LYAC,1988
1500 free	16:37.54	Brittany Reimer,SKSC,2003
100 back	1:02.14	Kelly Stefanyszyn,PDSA,1999
200 back	2:11.16	Jennifer Fratesi,ROW,2001
100 breast	1:08.86	Allison Higson,EPS,1988
200 breast	2:27.27	Allison Higson,EPS,1988
100 fly	1:00.20	Audrey Lacroix,CAMO,2001
200 fly	2:11.29	Jessica Deglau,PDSA,1998
200 IM	2:15.61	Nancy Sweetnam,LLSC,1990
400 IM	4:47.62	Nancy Sweetnam,LLSC,1991
4x50 MR	1:59.20	Pointe Claire SC,1976
4x100 MR	4:20.91	Etobicoke SC,1983
4x50 FR	1:47.46	Etobicoke Swimming,2000
4x100 FR	3:55.04	Etobicoke SC,1983

10th FINA World Championships - Barcelona - July 2003

Swimming Order of Events

Day 1	20 July	Saturday	Day 2	21 July	Sunday	Day 3	22 July	Monday	Day 4	23 July	Tuesday
Prelims 9:00 am			Prelims 9:00 am			Prelims 9:00 am			Prelims 9:00 am		
100 fly	W		100 breast	W		50 breast	M		50 back	W	
400 free	M		200 free	M		200 free	W		100 free	M	
400 free	W		100 back	W		200 fly	M		200 fly	W	
50 fly	M		100 back	M					200 breast	M	
200 IM	W		1500 free	W					4x200 free	M	
100 breast	M										
4x100 free	W										
4x100 free	M										
Finals 18:00 pm			Finals 18:00 pm			Finals 18:00 pm			Finals 18:00 pm		
100 fly	W	semis	100 fly	W	final	50 breast	M	semis	100 free	M	semis
400 free	M	final	50 fly	M	final	1500 free	W	final	50 back	W	semis
400 free	W	final	100 breast	W	semis	200 free	M	final	50 breast	M	final
50 fly	M	semis	200 free	M	semis	100 breast	W	final	200 free	W	final
200 IM	W	semis	100 back	W	semis	100 back	M	final	200 fly	M	final
100 breast	M	semis	100 breast	M	final	200 free	W	semis	200 breast	M	semis
4x100 free	W	final	200 IM	W	final	200 fly	M	semis	200 fly	W	semis
4x100 free	M	final	100 back	M	semis	100 back	W	final	4x200 free	M	final

Olympic Games - Athens - August 2004

Swimming Order of Events

Day 1	Aug 14	Saturday	Day 2	Aug 15	Sunday	Day 3	Aug 16	Monday	Day 4	Aug 17	Tuesday
Prelims 10:00 am			Prelims 10:00 am			Prelims 10:00 am			Prelims 10:00 am		
400 IM	M		100 back	W		200 free	W		100 free	M	
100 fly	W		200 free	M		200 fly	M		200 fly	W	
400 free	M		100 breast	W		200 IM	W		200 breast	M	
400 IM	W		100 back	M					4x200 free	M	
100 breast	M		400 free	W							
4x100 free	W		4x100 free	M							
Finals 19:00 pm			Finals 19:00 pm			Finals 19:00 pm			Finals 19:00 pm		
400 IM	M	final	100 back	W	semis	200 free	W	semis	100 free	M	semis
100 fly	W	semis	200 free	M	semis	200 free	M	final	200 free	W	final
400 free	M	final	100 fly	W	final	100 back	W	final	200 fly	M	final
400 IM	W	final	100 breast	M	final	100 back	M	final	200 fly	W	semis
100 breast	M	semis	100 breast	W	semis	100 breast	W	final	200 breast	M	semis
4x100 free	W	final	100 back	M	semis	200 fly	M	semis	200 IM	W	final
			400 free	W	final	200 IM	W	semis	4x200 free	M	final
			4x100 free	M	final						

10th FINA World Championships - Barcelona - July 2003

Swimming Order of Events

Day 5 24 July Wednesday	Day 6 25 July Thursday	Day 7 26 July Friday	Day 8 27 July Saturday
Prelims 9:00 am	Prelims 9:00 am	Prelims 9:00 am	Prelims 9:00 am
100 free W	50 fly W	50 breast W	400 IM M
200 back M	100 fly M	50 back M	400 IM W
200 breast W	800 free W	50 free W	4x100 medley M
200 IM M	50 free M	1500 free M	
4x200 free W	200 back W	4x100 medley W	
800 free M			
Finals 18:00 pm	Finals 18:00 pm	Finals 18:00 pm	Finals 18:00 pm
50 back W final	800 free M final	50 fly W final	50 back M final
200 breast M final	100 free W final	50 breast W semis	50 breast W final
100 free W semis	50 free M semis	50 back M semis	1500 free M final
200 back M semis	50 fly W semis	200 back W final	50 free W final
200 fly W final	100 fly M semis	50 free M final	400 IM M final
100 free M final	200 breast W final	800 free W final	400 IM W final
200 breast W semis	200 back M final	50 free W semis	4x100 medley M final
200 IM M semis	200 back W semis	100 fly M final	
4x200 free W final	200 IM M final	4x100 medley W final	

Olympic Games - Athens - August 2004

Swimming Order of Events

Day 5 Aug 18 Wednesday	Day 6 Aug 19 Thursday	Day 7 Aug 20 Friday	Day 8 Aug 21 Saturday
Prelims 10:00 am	Prelims 10:00 am	Prelims 10:00 am	
100 free W	50 free M	50 free W	
200 back M	800 free W	1500 free M	
200 breast W	100 fly M	4x100 medley W	
200 IM M	200 back W	4x100 medley M	
4x200 free W			
Finals 19:00 pm	Finals 19:00 pm	Finals 19:00 pm	Finals 18:00 pm
200 breast M final	50 free M semis	200 back W final	50 free W final
100 free W semis	200 breast W final	100 fly M final	1500 free M final
200 back M semis	200 back M final	800 free W final	4x100 medley W final
200 fly W final	200 back W semis	50 free M final	4x100 medley M final
100 free M final	200 IM M final	50 free W semis	
200 breast W semis	100 free W final		
200 IM M semis	100 fly M semis		
4x200 free W final			

EAST-WEST CHAMPIONSHIPS

East - London, ON, West - Regina, SK
Feb 20-23 (25 m)

BOYS 16 & YOUNGER

50 METRES FREESTYLE

- 23.94 Philippe Drolet, 16, ELITE
- 24.06 Vincent Boulanger-M, 15, CSQ
- 24.45 Octavian Petre, 16, CAMO
- 24.45 Nicolas Murray, 16, UCSC
- 24.55 Wesley Newman, 16, DDO
- 24.61 Mark Kurtzer, 15, NEW
- 24.70 Jackson Wang, 15, DELTA
- 24.82 Hans Fracke, 16, USC

100 METRES FREESTYLE

- 52.24 Vincent Boulanger-M, 16, CSQ
- 52.54 Nicolas Murray, 16, UL
- 53.16 Greer Jacks, 15, PCS
- 53.38 David Provencher-F, 16, DDO
- 53.55 Wesley Newman, 16, DDO
- 53.64 Octavian Petre, 16, CAMO
- 53.66 Darren Tso, 15, LASC-RSA
- 53.71 Kyle Sorrenti, 16, BRSA

200 METRES FREESTYLE

- 1:54.25 Justin Bronson, 16, OSHAC
- 1:54.31 Greer Jacks, 15, PCS
- 1:55.10 Vincent Boulanger-M, 16, CSQ
- 1:55.61 Wesley Newman, 16, DDO
- 1:55.71 Zachary Hurd, 16, BTSC
- 1:55.75 Colin Ackroyd, 16, AAC
- 1:55.78 Pascal Wollach, 15, CASC
- 1:55.83 David Provencher-F, 16, DDO

400 METRES FREESTYLE

- 4:03.12 Mark Kurtzer, 15, NEW
- 4:04.95 Chris Bento, 15, LAC
- 4:04.96 Marco Monaco, 16, TO
- 4:05.92 Greer Jacks, 15, PCS
- 4:05.94 Ray Betuzzi, 15, UCSC
- 4:06.07 Pascal Wollach, 15, CASC
- 4:06.85 Justin Bronson, 16, OSHAC
- 4:06.88 Renaud Laliberte, 14, EXCEL

1500 METRES FREESTYLE

- 16:03.54 Pascal Wollach, 15, CASC
- 16:05.27 Ray Betuzzi, 15, UCSC
- 16:15.37 Nelson Niedzielski, 15, TO
- 16:25.59 Ryan Cochrane, 14, IS
- 16:30.66 James Monk, 16, UBDC
- 16:33.44 Gavin D'Amico, 15, EKSC
- 16:34.14 David Provencher-F, 16, DDO
- 16:35.32 Zachary Glassman, 16, DDO

50 METRES BACKSTROKE

- 27.18 Wesley Newman, 16, DDO
- 27.32 Colin Ackroyd, 16, AAC
- 27.78 Kyle Sorrenti, 16, BRSA
- 27.79 Pascal Wollach, 15, CASC
- 27.84 Eric Gendron, 16, BRSA
- 27.92 John Lapins, 15, EXST
- 28.03 Lee Grant, 15, UCSC
- 28.07 Daniel Vollmer, 16, AAC

100 METRES BACKSTROKE

- 57.49 Colin Ackroyd, 16, AAC
- 58.40 Wesley Newman, 16, DDO
- 58.92 Andrej Lenert, 16, NKB
- 59.19 Eric Gendron, 16, BRSA
- 59.30 Kyle Sorrenti, 16, BRSA
- 59.52 Alex Desilets, 15, MEGO
- 59.73 Daniel Vollmer, 16, AAC
- 59.84 Donald Ellison, 16, NEW

200 METRES BACKSTROKE

- 2:04.46 Colin Ackroyd, 16, AAC

- 2:06.30 Kyle Sorrenti, 16, BRSA
- 2:06.60 Richard Alexander, 15, IS
- 2:06.64 Scott VanDoormaal, 15, GMAC
- 2:06.64 Eric Gendron, 16, BRSA
- 2:06.71 John Lapins, 15, EXST
- 2:07.27 Wesley Newman, 16, DDO
- 2:08.01 Andrej Lenert, 16, NKB

50 METRES BREASTSTROKE

- 30.05 Raymond Chow, 16, TMSC
- 30.23 Marco Monaco, 16, TO
- 30.57 Ryan Chiew, 16, SFA
- 30.59 Mathieu Bois, 14, HIPPO
- 30.68 Bryan Mell, 15, ESWM
- 30.77 Kyle Sorrenti, 16, BRSA
- 30.89 Adam Dunn, 16, AAC
- 31.26 Matt Derochie, 16, BRSA

100 METRES BREASTSTROKE

- 1:04.83 Raymond Chow, 16, TMSC
- 1:05.80 Mathieu Bois, 14, HIPPO
- 1:06.62 Bryan Mell, 15, ESWM
- 1:06.80 Kyle Sorrenti, 16, BRSA
- 1:07.00 Ryan Chiew, 16, SFA
- 1:07.25 Kevin Harmidy, 16, PCSC
- 1:07.53 Bryn Jones, 16, NEW
- 1:07.74 Andrew Malawski, 15, ROD

200 METRES BREASTSTROKE

- 2:18.23 Marco Monaco, 16, TO
- 2:21.86 Raymond Chow, 16, TMSC
- 2:22.94 Kevin Harmidy, 16, PCSC
- 2:24.56 Bryan Mell, 15, ESWM
- 2:24.73 Michael Materski, 15, TO
- 2:25.17 Zachary Glassman, 16, DDO
- 2:25.75 Bryn Jones, 16, NEW
- 2:27.07 Sean Armstrong, 15, EKSC

50 METRES BUTTERFLY

- 25.92 Justin Bronson, 16, OSHAC
- 26.11 Philippe Drolet, 16, ELITE
- 26.33 Jeff Byrne, 15, SSMAC
- 26.40 Matt Derochie, 16, BRSA
- 26.61 David Milot, 15, PCSC
- 26.87 Simon Cournoyer, 16, ELITE
- 26.92 Alex Agostino, 16, LAVAL
- 27.02 Bryce Tung, 16, ESWM

100 METRES BUTTERFLY

- 57.22 Jeff Byrne, 15, SSMAC
- 57.23 Philippe Drolet, 16, ELITE
- 57.47 Roman Dagash, 15, CAMO
- 57.73 Justin Bronson, 16, OSHAC
- 58.13 Matt Derochie, 16, BRSA
- 58.20 Colin Ackroyd, 16, AAC
- 58.59 Nathan Ferguson, 16, EBSC
- 58.79 David Milot, 15, PCSC

200 METRES BUTTERFLY

- 2:07.04 Roman Dagash, 15, CAMO
- 2:07.19 Philippe Drolet, 16, ELITE
- 2:08.48 Zachary Hurd, 16, BTSC
- 2:10.50 James Monk, 16, UBDC
- 2:10.93 Jeff Byrne, 15, SSMAC
- 2:11.18 Bryce Tung, 16, ESWM
- 2:11.87 Steven Marcoux, 16, EXCEL
- 2:11.99 Endi Babi, 14, ESWM

200 METRES IND. MEDLEY

- 2:06.25 Marco Monaco, 16, TO
- 2:07.48 Colin Ackroyd, 16, AAC
- 2:08.58 Nicolas Murray, 16, UL
- 2:09.00 Mathieu Bois, 14, HIPPO
- 2:09.23 Kyle Sorrenti, 16, BRSA
- 2:09.76 Matt Derochie, 16, BRSA
- 2:11.26 Richard Alexander, 15, IS
- 2:12.46 Derek Richter, 16, ROD

400 METRES IND. MEDLEY

- 4:33.60 Marco Monaco, 16, TO
- 4:36.34 Kyle Sorrenti, 16, BRSA
- 4:37.80 Zachary Glassman, 16, DDO
- 4:37.95 Tristan Armstrong, 15, BRSA
- 4:37.96 Matt Derochie, 16, BRSA
- 4:39.37 Nicolas Murray, 16, UL
- 4:39.64 Chris Bento, 15, LAC
- 4:40.33 Renaud Laliberte, 14, EXCEL

GIRLS 15 & YOUNGER

50 METRES FREESTYLE

- 26.33 Julia Wilkinson, 15, SKYAC
- 26.48 Genevieve Saumur, 15, CAMO
- 26.72 Erica Beaton, 14, HYACK
- 26.79 Emily Gillespie, 15, PERTH
- 26.83 Kirsten Pomerleau, 15, UCSC
- 26.92 Allison Bennett, 15, NYAC
- 27.05 Justina Di Fazio, 15, TO
- 27.07 Catherine Lee Ha, 15, ESWM

100 METRES FREESTYLE

- 56.91 Genevieve Saumur, 15, CAMO
- 56.99 Brittany Reimer, 15, SKSC
- 57.23 Emily Gillespie, 15, PERTH
- 57.29 Kirsten Pomerleau, 15, UCSC
- 57.30 Allison Bennett, 15, NYAC
- 57.47 Julia Wilkinson, 15, SKYAC
- 57.85 Maya Beaudry, 14, UBDC
- 57.93 Julianne Toogood, 15, MM

200 METRES FREESTYLE

- 2:01.87 Brittany Reimer, 15, SKSC
- 2:03.81 Maya Beaudry, 14, UBDC
- 2:04.24 Emily Gillespie, 15, PERTH
- 2:04.45 Seanna Mitchell, 14, NKB
- 2:04.84 Genevieve Saumur, 15, CAMO
- 2:05.65 Allison Bennett, 15, NYAC
- 2:06.00 Amanda Bell, 15, UCSC
- 2:07.16 Natalie Chan, 14, UBDC

400 METRES FREESTYLE

- 4:14.12 Brittany Reimer, 15, SKSC
- 4:18.40 Amanda Bell, 15, UCSC
- 4:19.88 Maya Beaudry, 14, UBDC
- 4:20.90 Bevan Haley, 15, WTSC
- 4:24.16 Stephanie Pollard, 14, IS
- 4:24.95 Sarah Mayzes, 15, IS
- 4:25.87 Mary C. Steiner, 14, USA
- 4:28.30 Anne Schmuck, 15, PSW

800 METRES FREESTYLE

- 8:39.24 Brittany Reimer, 15, SKSC
- 8:51.04 Amanda Bell, 15, UCSC
- 8:54.61 Bevan Haley, 15, WTSC
- 9:04.29 Anne Schmuck, 15, PSW
- 9:11.20 Emiley Jellie, 15, ROW
- 9:12.11 Danielle Sanders, 13, ESWM
- 9:12.33 Laura Murray, 13, SJL

Rating Summary of Boys 16 & younger

1)	872	2:18.23	200 breast M	Marco Monaco, 16, TO
2)	856	2:07.48	200 IM M	Colin Ackroyd, 16, AAC
3)	850	16:03.54	1500 free M	Pascal Wollach, 15, CASC
4)	849	1:54.31	200 free M	Greer Jacks, 15, PCS
5)	849	1:54.25	200 free M	Justin Bronson, 16, OSHAC

Rating Summary of Girls 15 & younger

1)	936	8:39.24	800 free W	Brittany Reimer, 15, SKSC
2)	903	1:02.29	100 back W	Genevieve Saumur, 15, CAMO
3)	902	8:51.04	800 free W	Amanda Bell, 15, UCSC
4)	899	2:18.43	200 IM W	Julia Wilkinson, 15, SKYAC
5)	897	2:18.59	200 IM W	Whitney Rich, 15, LAC

- 9:13.65 Maya Beaudry, 14, UBDC

50 METRES BACKSTROKE

- 29.12 Genevieve Saumur, 15, CAMO
- 29.60 Brooke Buckland, 13, EAST
- 30.54 Kirsten Pomerleau, 15, UCSC
- 30.55 Emily Gillespie, 15, PERTH
- 30.55 Shannon McQueen, 16, NKB
- 30.61 Whitney Buczkowski, 14, BRSA
- 30.62 Landice Yestrau, 15, MM
- 30.76 Julia Wilkinson, 15, SKYAC

100 METRES BACKSTROKE

- 1:02.29 Genevieve Saumur, 15, CAMO
- 1:03.04 Brooke Buckland, 13, EAST
- 1:03.43 Landice Yestrau, 15, MM
- 1:03.63 Emily Gillespie, 15, PERTH
- 1:03.70 Kirsten Pomerleau, 15, UCSC
- 1:04.82 Whitney Buczkowski, 14, BRSA
- 1:04.88 Julia Wilkinson, 15, SKYAC
- 1:05.19 Shannon McQueen, 15, NKB
- 1:05.19 Katy Murdoch, 15, NWO

200 METRES BACKSTROKE

- 2:15.70 Brittany Reimer, 15, SKSC
- 2:16.55 Genevieve Saumur, 15, CAMO
- 2:17.82 Landice Yestrau, 15, MM
- 2:18.78 Katy Murdoch, 15, NWO
- 2:18.85 Shannon McQueen, 15, NKB
- 2:19.32 Brooke Buckland, 13, EAST
- 2:20.28 Alexa Komarnycky, 13, ESWM
- 2:21.97 Whitney Buczkowski, 14, BRSA

50 METRES BREASTSTROKE

- 33.32 Whitney Rich, 15, LAC
- 33.65 Katrina Obas, 15, NKB
- 34.05 Lynsey Pasloski, 15, WGB
- 34.07 Katerina Symes, 14, EKSC
- 34.16 Morgan Kierstead, 14, EAST
- 34.26 Elizabeth Hendrick, 15, BRSA
- 34.35 Penny Baxter, 14, NKB
- 34.41 Hanna Piersie, 14, EKSC

100 METRES BREASTSTROKE

- 1:10.85 Whitney Rich, 15, LAC
- 1:11.43 Julia Wilkinson, 15, SKYAC
- 1:12.97 Morgan Kierstead, 14, EAST
- 1:13.51 Hanna Piersie, 14, EKSC
- 1:13.51 Katrina Obas, 15, NKB
- 1:13.81 Lynsey Pasloski, 15, WGB
- 1:14.01 Nicoletta Lakatos, 15, TO
- 1:14.34 Rachel Chan, 14, TO

200 METRES BREASTSTROKE

- 2:32.19 Whitney Rich, 15, LAC
- 2:34.37 Hanna Piersie, 14, EKSC
- 2:35.16 Julia Wilkinson, 15, SKYAC
- 2:36.64 Lynsey Pasloski, 15, WGB
- 2:38.26 Katrina Obas, 15, NKB
- 2:38.29 Kathryn Sutton, 14, IS
- 2:38.70 Nicoletta Lakatos, 15, TO
- 2:38.98 Mireille Tremblay, 14, CNCB

50 METRES BUTTERFLY

- 27.94 Genevieve Saumur, 15, CAMO
- 28.67 Allison Bennett, 15, NYAC
- 28.92 Emily Gillespie, 15, PERTH

- 28.97 Stephanie Pollard, 14, IS
- 29.16 Nadia Kumentas, 15, TO
- 29.39 Katie Kotlowski, 15, LOSC
- 29.42 Jillian Tyler, 14, CASC
- 29.42 Kayla Rawlings, 15, LOSC

100 METRES BUTTERFLY

- 1:03.12 Genevieve Saumur, 15, CAMO
- 1:03.87 Kayla Rawlings, 15, LOSC
- 1:03.88 Emily Gillespie, 15, PERTH
- 1:03.92 Nadia Kumentas, 15, TO
- 1:04.16 Stephanie Pollard, 14, IS
- 1:04.23 Allison Bennett, 15, NYAC
- 1:04.58 Kimberly Kabesh, 15, STSC
- 1:04.74 Anne Marie Frechette, 15, CNB

200 METRES BUTTERFLY

- 2:19.29 Kimberly Kabesh, 15, STSC
- 2:20.04 Kaleigh McKinnon, 13, TORCH
- 2:20.05 Ashley Marion, 15, LAC
- 2:20.10 Kayla Rawlings, 15, LOSC
- 2:20.88 Tawnya Rudy, 15, SCAR
- 2:21.82 Bevan Haley, 15, WTSC
- 2:21.96 Stephanie Pollard, 14, IS
- 2:23.22 Hollis Roth, 14, PCS

200 METRES IND. MEDLEY

- 2:18.43 Julia Wilkinson, 15, SKYAC
- 2:18.59 Whitney Rich, 15, LAC
- 2:18.90 Brittany Reimer, 15, SKSC
- 2:20.03 Anne Schmuck, 15, SKSC
- 2:20.04 Stephanie Pollard, 14, IS
- 2:20.42 Emily Gillespie, 15, PERTH
- 2:21.26 Ashley Marion, 15, LAC
- 2:23.10 Seanna Mitchell, 14, NKB

400 METRES IND. MEDLEY

- 4:53.60 Brittany Reimer, 15, SKSC
- 4:57.13 Julia Wilkinson, 15, SKYAC
- 4:59.00 Stephanie Pollard, 14, IS
- 4:59.42 Anne Schmuck, 15, SKSC
- 5:00.22 Whitney Rich, 15, LAC
- 5:00.37 Mireille Tremblay, 14, CNCB
- 5:02.00 Ashley Marion, 15, LAC
- 5:05.57 Hannah Vaughan, 14, EAST

BOYS 17 & OLDER

50 METRES FREESTYLE

- 23.08 Simon MacDonald, 23, NKB
- 23.24 Brad Mori, 25, EXST
- 23.38 Kurtis Miller, 17, SCAR
- 23.38 Richard Hortness, 17, RSA
- 23.64 Mark Thauvette, 18, CAMO
- 23.69 Ben Schach, 17, NEW
- 23.70 Dominique Bourdages, 21, CAMO
- 23.74 Graeme Tozer, 17, MM

100 METRES FREESTYLE

- 50.37 Simon MacDonald, 23, NKB
- 50.65 Richard Hortness, 17, RSA
- 50.74 Graeme Tozer, 17, MM
- 50.78 Kurtis Miller, 17, SCAR
- 50.83 Craig Hutchison, 27, TO
- 51.02 Kyle Smerdon, 23, TO
- 51.32 Kevin Gillespie, 17, EXST
- 51.44 Mark Thauvette, 18, CAMO

200 METRES FREESTYLE

- 1:49.97 Keith Beavers, 20, ROW
- 1:51.87 Mark Thauvette, 18, CAMO
- 1:52.58 Richard Hortness, 17, RSA
- 1:52.89 Kevin Laflamme, 16, UL
- 1:53.44 Aaron Blair, 17, CASC
- 1:53.47 Steven Medaglia, 18, NKB
- 1:53.65 Graeme Long, 17, LAC
- 1:53.98 Graeme Tozer, 17, MM

400 METRES FREESTYLE

- 3:57.93 Jonathan Long, 17, LAC
- 3:58.50 Malcolm Lavoie, 17, OSC

- 3) 3:59.48 Mikael Benoit,18,CNNG
- 4) 4:00.06 Graeme Tozer,17,MM
- 5) 4:00.48 Steven Medaglia,18,NKB
- 6) 4:03.03 Kevin Laflamme,16,UL
- 7) 4:03.32 Devin Phillips,17,EKSC
- 8) 4:03.94 John Calnan,23,NYAC

1500 METRES FREESTYLE

- 1) 15:44.94 Jonathan Long,17,LAC
- 2) 15:55.71 Malcolm Lavoie,17,OSC
- 3) 16:02.50 Jerome Le Siege,19,LAVAL
- 4) 16:03.17 Jonathan Aubry,17,CNB
- 5) 16:08.75 Willie Derban,17,UCSC
- 6) 16:11.08 Matt Johnston,18,TO
- 7) 16:11.54 Marcin Partyka,20,PGB
- 8) 16:14.17 Joe Bajcar,17,TO

50 METRES BACKSTROKE

- 1) 25.29 Callum Ng,17,CASC
- 2) 25.86 Kurtis Miller,17,SCAR
- 3) 26.12 Benoit Banville-Auger,20,MEGO
- 4) 26.27 Remi Lachapelle,22,CAMO
- 5) 26.59 Ryan Atkinson,17,LAC
- 6) 26.73 Mark Thauvette,18,CAMO
- 7) 26.88 Marshall Bonner,18,ROC
- 8) 27.31 Jian-Lok Chang,17,EKSC

100 METRES BACKSTROKE

- 1) 55.11 Benoit Banville-Auger,20,MEGO
- 2) 55.15 Callum Ng,17,CASC
- 3) 55.67 Kurtis Miller,17,SCAR
- 4) 56.40 Ryan Atkinson,17,LAC
- 5) 56.79 Devin Phillips,17,EKSC
- 6) 57.12 Matt Hawes,16,NKB
- 7) 57.36 Remi Lachapelle,22,CAMO
- 8) 57.79 Mark Thauvette,18,CAMO

200 METRES BACKSTROKE

- 1) 1:56.90 Keith Beavers,20,ROW
- 2) 2:00.19 Benoit Banville-Auger,20,MEGO
- 3) 2:01.73 Ryan Atkinson,17,LAC
- 4) 2:02.84 Callum Ng,17,CASC
- 5) 2:03.15 Devin Phillips,17,EKSC
- 6) 2:03.60 Matt Hawes,16,NKB
- 7) 2:04.94 Milos Marjanovic,18,NYAC
- 8) 2:05.32 Erich Schmitt,17,PCS

50 METRES BREASTSTROKE

- 1) 28.85 Brad Mori,25,EXST
- 2) 29.06 David McKechnie,17,BTSC
- 3) 29.33 Simon MacDonald,23,NKB
- 4) 29.49 Warren Barnes,17,SCAR
- 5) 29.62 Chad Thiessen,17,SPART
- 6) 29.63 Chad Thomsen,20,EKSC
- 7) 29.76 Roman Margulis,18,NYAC
- 8) 29.92 Anthony Trubiano,20,DDO

100 METRES BREASTSTROKE

- 1) 1:02.67 Warren Barnes,17,SCAR
- 2) 1:03.37 David McKechnie,17,BTSC
- 3) 1:03.53 Gregg Gleason,22,BROCK
- 4) 1:03.90 Brad Mori,25,EXST
- 5) 1:03.93 Chad Thiessen,17,SPART
- 6) 1:04.04 Chad Thomsen,20,EKSC
- 7) 1:04.12 Nick Graham,21,UDAL
- 8) 1:04.63 Roman Margulis,18,NYAC

200 METRES BREASTSTROKE

- 1) 2:15.89 Gregg Gleason,22,BROCK
- 2) 2:16.32 Warren Barnes,17,SCAR
- 3) 2:17.60 Keith Beavers,20,ROW
- 4) 2:17.82 Steven Medaglia,18,NKB
- 5) 2:17.96 David McKechnie,17,BTSC
- 6) 2:20.05 Chad Thomsen,20,EKSC
- 7) 2:20.31 Chad Thiessen,17,SPART
- 8) 2:20.49 Richard Bowen,18,NKB

50 METRES BUTTERFLY

- 1) 24.89 Simon MacDonald,23,NKB
- 2) 25.27 Dominique Bourdages,21,CAMO
- 3) 25.55 Mark Shivers,22,ROW
- 4) 25.58 Marc-O. Lepage,21,SAMAK

- 5) 25.84 Richard Hortness,17,RSA
- 6) 25.88 Kurtis Miller,17,SCAR
- 7) 26.05 Graeme Tozer,17,MM
- 8) 26.33 Remi Lachapelle,22,CAMO

100 METRES BUTTERFLY

- 1) 52.73 Takashi Yamamoto,24,JPN
- 2) 54.83 Simon MacDonald,23,NKB
- 3) 56.18 Callum Ng,17,CASC
- 4) 56.40 Kurtis Miller,17,SCAR
- 5) 56.51 Marc-O. Lepage,21,SAMAK
- 6) 57.22 Thomas Senecal,18,NEW
- 7) 57.59 Abraham Alta Cesar,19,CAMO
- 8) 57.71 Richard Hortness,17,RSA

200 METRES BUTTERFLY

- 1) 1:57.27 Takashi Yamamoto,24,JPN
- 2) 2:03.80 Callum Ng,17,CASC
- 3) 2:04.40 Steven Medaglia,18,NKB
- 4) 2:04.75 Thierry Bannon,20,SAMAK
- 5) 2:04.85 Thomas Senecal,18,NEW
- 6) 2:05.57 Francois Castonguay,20,CAMO
- 7) 2:06.08 John Calnan,23,NYAC
- 8) 2:06.37 Michel Tremblay,21,CNCB

200 METRES IND. MEDLEY

- 1) 2:04.01 Steven Medaglia,18,NKB
- 2) 2:04.49 Timothy Ruse,17,PCSC
- 3) 2:04.89 Francois Castonguay,20,CAMO
- 4) 2:06.81 Maxime Samson,17,ELITE
- 5) 2:06.97 Roman Margulis,18,NYAC
- 6) 2:07.04 Conrad Aach,18,ESWIM
- 7) 2:07.08 Gregg Gleason,22,BROCK
- 8) 2:08.13 Thomas Senecal,18,NEW

400 METRES IND. MEDLEY

- 1) 4:17.95 Keith Beavers,20,ROW
- 2) 4:26.79 Timothy Ruse,17,PCSC
- 3) 4:27.70 Callum Ng,17,CASC
- 4) 4:27.97 Steven Medaglia,18,NKB
- 5) 4:28.60 Conrad Aach,18,ESWIM
- 6) 4:30.77 Graeme Tozer,17,MM
- 7) 4:31.85 Michel Tremblay,21,CNCB
- 8) 4:33.21 Malcolm Lavoie,17,OSC

4X50 M MEDLEY RELAY

- 1) 1:44.64 Edmonton Keyano
- 2) 1:44.92 Cascade Swim Club
- 3) 1:45.07 Scarborough SC
- 4) 1:45.81 Montreal Aquatique
- 5) 1:46.02 Excalibur Swim Team
- 6) 1:46.34 Etobicoke Swimming
- 7) 1:46.63 Dollard Swim Club
- 8) 1:47.24 London AC

4X100 M MEDLEY RELAY

- 1) 3:46.63 Toronto All Stars
- 2) 3:48.50 Nepean Kanata
- 3) 3:50.48 Scarborough SC
- 4) 3:52.23 Edmonton Keyano
- 5) 3:53.57 Montreal Aquatique
- 6) 3:53.68 North York AC
- 7) 3:55.77 Samak de Brossard
- 8) 3:55.89 Cascade Swim Club

4X50 M FREE RELAY

- 1) 1:34.11 Nepean Kanata

Rating Summary of Girls 16 & older

1) 967	27.81	50 back W	Jennifer Carroll,21,MEGO
2) 961	2:08.83	200 back W	Jennifer Fratesi,18,ROW
3) 937	59.84	100 fly W	Audrey Lacroix,19,CAMO
4) 934	2:00.46	200 free W	Jennifer Button,25,ROW
5) 930	2:15.63	200 IM W	Marieeve De Blois,19,CAMO

Rating Summary of Boys 17 & older

1) 948	52.73	100 fly M	Takashi Yamamoto,24,JPN
2) 941	1:56.90	200 back M	Keith Beavers,20,ROW
3) 901	25.29	50 back M	Callum Ng,17,CASC
4) 899	2:04.01	200 IM M	Steven Medaglia,18,NKB
5) 899	2:00.19	200 back M	Benoit Banville-Auger,20,MEGO

- 2) 1:34.80 Montreal Aquatique
- 3) 1:36.52 Cascade Swim Club
- 4) 1:36.66 Newmarket SC
- 5) 1:36.74 Scarborough SC
- 6) 1:36.76 Longueuil
- 7) 1:36.81 Cascade Swim Club
- 8) 1:36.99 Excalibur Swim Team

4X100 M FREE RELAY

- 1) 3:29.80 Nepean Kanata
- 2) 3:30.82 Montreal Aquatique
- 3) 3:31.61 Cascade Swim Club
- 4) 3:32.21 North York AC
- 5) 3:32.23 Newmarket SC
- 6) 3:32.53 Edmonton Keyano
- 7) 3:33.81 London AC
- 8) 3:33.82 Scarborough SC

GIRLS 16 & OLDER

50 METRES FREESTYLE

- 1) 25.92 Laura Nicholls,24,ROW
- 2) 25.94 Erin Kardash,17,MM
- 3) 26.10 Victoria Poon,18,CAMO
- 4) 26.13 Jennifer Carroll,21,MEGO
- 5) 26.17 Jennifer Beckberger,17,AAC
- 6) 26.18 Jennifer Porenta,17,TO
- 7) 26.52 Sarah Gault,17,DDO
- 8) 26.53 Audrey Lacroix,19,CAMO

100 METRES FREESTYLE

- 1) 55.91 Laura Nicholls,24,ROW
- 2) 56.04 Jennifer Porenta,17,TO
- 3) 56.18 Jennifer Beckberger,17,AAC
- 4) 56.66 Jennifer Carroll,21,MEGO
- 5) 56.85 Victoria Poon,18,CAMO
- 6) 56.87 Jennifer Button,25,ROW
- 7) 56.92 Marieeve De Blois,19,CAMO
- 8) 56.99 Jenny Lock,17,COMOX

200 METRES FREESTYLE

- 1) 2:00.46 Jennifer Button,25,ROW
- 2) 2:00.68 Audrey Lacroix,19,CAMO
- 3) 2:00.88 Jennifer Porenta,17,TO
- 4) 2:02.21 Chanelle Charron-Watson,18,UL
- 5) 2:02.87 Jenny Lock,17,COMOX
- 6) 2:03.27 Marieeve De Blois,19,CAMO
- 7) 2:03.53 Amanda Gillespie,18,NKB
- 8) 2:03.67 Tanya Hunks,22,HYACK

400 METRES FREESTYLE

- 1) 4:15.12 Chanelle Charron-Watson,18,UL
- 2) 4:18.41 Audrey Lacroix,19,CAMO
- 3) 4:18.58 Joan Bernier,18,CNCB
- 4) 4:18.87 Elyse Dudar,16,TO
- 5) 4:19.77 Tanya Hunks,22,HYACK
- 6) 4:20.03 Erin Kardash,17,MM
- 7) 4:21.25 Katherine Telfer,18,ESWIM
- 8) 4:22.54 Hayley Doody,17,UCSC

800 METRES FREESTYLE

- 1) 8:48.57 Elyse Dudar,16,TO
- 2) 8:48.61 Chanelle Charron-Watson,18,UL

- 3) 8:51.79 Darcy Goodridge,16,UBCD
- 4) 8:53.34 Joan Bernier,18,CNCB
- 5) 8:56.72 Hayley Doody,17,UCSC
- 6) 8:59.11 Alex Lachance-F,17,UL
- 7) 8:59.77 Nathalie Lacoste,17,TO
- 8) 9:03.29 Elizabeth Osterer,17,NKB

50 METRES BACKSTROKE

- 1) 27.81 Jennifer Carroll,21,MEGO
- 2) 29.62 Hanna Kubas,17,UASC
- 3) 29.93 Andrea Shoust,16,SSMAC
- 4) 30.05 Jennifer Beckberger,17,AAC
- 5) 30.07 Stephanie Fennell,18,ESWIM
- 6) 30.11 Randi Beaujeu,17,TO
- 7) 30.19 Laura Nicholls,24,ROW
- 8) 30.21 Melissa Bartlett,16,CYPS

100 METRES BACKSTROKE

- 1) 1:00.13 Jennifer Carroll,21,MEGO
- 2) 1:01.82 Jennifer Fratesi,18,ROW
- 3) 1:02.26 Hanna Kubas,17,UASC
- 4) 1:02.74 Randi Beaujeu,17,TO
- 5) 1:02.93 Erin Kardash,17,MM
- 6) 1:03.44 Amanda Gillespie,18,NKB
- 7) 1:03.47 Andrea Shoust,17,SSMAC
- 8) 1:03.62 Julia Guay-Racine,17,CAMO

200 METRES BACKSTROKE

- 1) 2:08.83 Jennifer Fratesi,18,ROW
- 2) 2:14.29 Amanda Gillespie,18,NKB
- 3) 2:15.33 Sheena Martin,17,ROW
- 4) 2:16.39 Lynette Bayliss,17,UCSC
- 5) 2:17.45 Julia Guay-Racine,17,CAMO
- 6) 2:17.46 Chanelle Charron-Watson,18,UL
- 7) 2:17.98 Ifiyenia Koskina,20,OSC
- 8) 2:18.16 Tanya Hunks,22,HYACK

50 METRES BREASTSTROKE

- 1) 32.55 Lisa Blackburn,31,ROW
- 2) 32.80 Jennifer Beckberger,17,AAC
- 3) 32.80 Sarah Gault,17,DDO
- 4) 33.44 Jacquelyn Craft,17,TRENT
- 5) 33.76 Marcy Edgecumbe,19,EKSC
- 6) 33.79 Erin Kardash,17,MM
- 7) 33.95 Mila Zvijerac,17,HYACK
- 8) 33.97 Jenny Lock,17,COMOX

100 METRES BREASTSTROKE

- 1) 1:10.77 Lisa Blackburn,31,ROW
- 2) 1:10.96 Marcy Edgecumbe,19,EKSC
- 3) 1:11.70 Renee Hober,18,ROW
- 4) 1:11.73 Jacquelyn Craft,17,TRENT
- 5) 1:11.90 Kim Labbett,16,TO
- 6) 1:12.39 Sarah Gault,17,DDO
- 7) 1:12.87 Marie-P. Ratelle,16,MEGO
- 8) 1:13.09 Elizabeth Engs,16,CAJ

200 METRES BREASTSTROKE

- 1) 2:31.11 Lisa Blackburn,31,ROW
- 2) 2:31.49 Kim Labbett,16,TO
- 3) 2:32.34 Renee Hober,18,ROW
- 4) 2:32.70 Marcy Edgecumbe,19,EKSC
- 5) 2:34.92 Marieeve De Blois,19,CAMO
- 6) 2:34.96 Genevieve Dack,17,NWO
- 7) 2:35.50 Jacquelyn Craft,17,TRENT
- 8) 2:35.66 Micheline Dufour,17,UL

50 METRES BUTTERFLY

- 1) 27.67 Jennifer Carroll,21,MEGO
- 2) 27.90 Audrey Lacroix,19,CAMO
- 3) 28.24 Valerie Tcholkayan,18,DDO
- 4) 28.33 Jennifer Porenta,17,TO
- 5) 28.39 Chrystele Roy-IEcuyer,18,CNB
- 6) 28.54 Stephanie Kuhn,17,TMSC
- 7) 28.65 Victoria Poon,18,CAMO
- 8) 28.71 Tiffany Vincent,17,BRANT

100 METRES BUTTERFLY

- 1) 59.84 Audrey Lacroix,19,CAMO

- 2) 1:00.68 Jennifer Button,25,ROW
- 3) 1:01.88 Chrystele Roy-IEcuyer,18,CNB
- 4) 1:02.39 Jennifer Carroll,21,MEGO
- 5) 1:02.60 MacKenzie Downing,15,WGB
- 6) 1:02.73 Julia Guay-Racine,17,CAMO
- 7) 1:02.92 Nancy Gajos,18,ESWIM
- 8) 1:03.37 Valerie Tcholkayan,18,DDO

200 METRES BUTTERFLY

- 1) 2:10.98 Audrey Lacroix,19,CAMO
- 2) 2:11.54 Jennifer Button,25,ROW
- 3) 2:15.97 Alex Lachance-F,17,UL
- 4) 2:16.41 Joan Bernier,18,CNCB
- 5) 2:16.66 Tanya Hunks,22,HYACK
- 6) 2:17.87 Kahla Walkinshaw,17,HAC
- 7) 2:18.45 Nancy Gajos,18,ESWIM
- 8) 2:19.36 Julia Guay-Racine,17,CAMO

200 METRES IND. MEDLEY

- 1) 2:15.35 Jennifer Fratesi,18,ROW
- 2) 2:15.63 Marieeve De Blois,19,CAMO
- 3) 2:17.54 Amanda Gillespie,18,NKB
- 4) 2:17.91 Sarah Gault,17,DDO
- 5) 2:19.65 Tanya Hunks,22,HYACK
- 6) 2:20.11 Marcy Edgecumbe,19,EKSC
- 7) 2:20.49 Julia Guay-Racine,17,CAMO
- 8) 2:20.95 Genevieve Dack,17,NWO

400 METRES IND. MEDLEY

- 1) 4:51.58 Tanya Hunks,22,HYACK
- 2) 4:54.55 Marieeve De Blois,19,CAMO
- 3) 4:54.84 Elizabeth Osterer,17,NKB
- 4) 4:55.13 Brittany Cooper,16,LAC
- 5) 4:57.53 Marcy Edgecumbe,19,EKSC
- 6) 4:59.01 Thea Norton,16,OSC
- 7) 4:59.22 Genevieve Dack,17,NWO
- 8) 5:00.89 Joan Bernier,18,CNCB

4X50 M MEDLEY RELAY

- 1) 1:56.58 Montreal Aquatique
- 2) 1:57.25 Edmonton Keyano
- 3) 1:58.35 Dollard Swim Club
- 4) 1:58.40 Toronto All Stars
- 5) 1:59.89 Nepean Kanata
- 6) 1:59.94 Etobicoke Swimming
- 7) 2:00.15 Bow River Swim Assoc
- 8) 2:00.50 Cascade Swim Club

4X100 M MEDLEY RELAY

- 1) 4:14.24 Montreal Aquatique
- 2) 4:17.27 Toronto All Stars
- 3) 4:18.62 Nepean Kanata
- 4) 4:18.72 Edmonton Keyano
- 5) 4:19.06 Dollard Swim Club
- 6) 4:19.38 Etobicoke Swimming
- 7) 4:19.99 London AC
- 8) 4:21.84 Univ.Laval Rouge & Or

4X50 M FREE RELAY

- 1) 1:44.76 Montreal Aquatique
- 2) 1:45.47 Toronto All Stars
- 3) 1:46.19 Manitoba Marlins
- 4) 1:46.68 Nepean Kanata
- 5) 1:47.95 Dollard Swim Club
- 6) 1:48.37 Edmonton Keyano
- 7) 1:48.64 Hyack Swim Club
- 8) 1:48.72 Bow River Swim Assoc

4X100 M FREE RELAY

- 1) 3:48.33 Montreal Aquatique
- 2) 3:50.58 Manitoba Marlins
- 3) 3:51.63 Toronto All Stars
- 4) 3:55.12 Nepean Kanata
- 5) 3:55.21 Univ.of Calgary SC
- 6) 3:55.95 Bow River Swim Assoc
- 7) 3:56.76 Edmonton Keyano
- 8) 3:57.25 Dollard Swim Club

CANADA CUP 1

Calgary, Mar 7-9 (50 M)

MEN

50 METRES FREESTYLE

- 22.57 Jason Lezak,27,USA
- 23.40 Scott Tucker,28,USA
- 23.60 Kicker Vencill,24,USA
- 23.87 Riley Janes,22,NRST
- 23.97 Jason Strelzow,21,UBCD
- 24.20 Delonte Stephens,23,USA
- 24.47 Trevor Neufeld,18,CASC
- 24.55 Daniel Petrus,18,UBCD

100 METRES FREESTYLE

- 50.13 Jason Lezak,27,USA
- 50.33 Scott Tucker,28,USA
- 52.00 Kyle Smerdon,23,TO
- 52.50 Jason Strelzow,21,UBCD
- 52.81 Kicker Vencill,24,USA
- 53.32 Graeme Tozer,17,MM
- 53.90 Joseph Novak,26,USA
- 53.97 Cameron Hyder,20,UCSC

200 METRES FREESTYLE

- 1:50.56 Rick Say,23,UCSC
- 1:51.82 Mark Johnston,23,UBCD
- 1:52.39 Michael Mintenko,27,UBCD
- 1:52.93 Scott Tucker,28,USA
- 1:55.35 Brian Johns,20,UBCD
- 1:55.54 Chad Hankewich,21,GOLD
- 1:56.27 Jarrod Ballem,23,UCSC
- 1:57.08 Brian Edey,23,EKSC

400 METRES FREESTYLE

- 3:56.10 Rick Say,23,UCSC
- 3:57.46 Mark Johnston,23,UBCD
- 4:04.88 Jarrod Ballem,23,UCSC
- 4:09.83 Malcolm Lavoie,17,OSC
- 4:09.99 Tim Cowan,25,UCSC
- 4:10.10 Michael Derban,18,UCSC
- 4:10.92 Devin Phillips,17,EKSC
- 4:11.86 Daniel A. Hewko,17,USA

800 METRES FREESTYLE

- 8:33.59 Jarrod Ballem,23,UCSC
- 8:39.02 Malcolm Lavoie,17,OSC
- 8:40.57 Michael Derban,18,UCSC
- 8:44.89 Pascal Wollach,15,CASC
- 8:45.21 Tim Cowan,25,UCSC
- 8:46.69 Daniel A. Hewko,16,USA
- 8:49.19 Willie Derban,17,UCSC
- 8:57.12 Ray Betuzzi,15,UCSC

50 METRES BACKSTROKE

- 25.77 Lenny Krayzelburg,27,USA
- 26.11 Albert Sung,19,USA
- 26.53 Riley Janes,22,NRST
- 27.40 Callum Ng,17,CASC
- 27.44 Ryan Atkison,17,LAC
- 28.34 Roland Bauhart,22,UBCD
- 28.55 Devin Phillips,17,EKSC
- 28.64 Andrew S Cole,18,USA

100 METRES BACKSTROKE

- 55.24 Lenny Krayzelburg,27,USA
- 57.21 Albert Sung,19,USA
- 57.63 Keith Beavers,20,ROW
- 57.81 Riley Janes,22,NRST
- 59.10 Ryan Atkison,17,LAC

- 59.96 Graham Diehl,20,UCSC
- 1:00.06 Roland Bauhart,22,UBCD
- 1:00.11 Desmond Strelzow,17,UBCD

200 METRES BACKSTROKE

- 2:01.03 Keith Beavers,20,ROW
- 2:05.50 Albert Sung,19,USA
- 2:07.60 Roland Bauhart,22,UBCD
- 2:08.30 Desmond Strelzow,17,UBCD
- 2:08.42 Ryan Atkison,17,LAC
- 2:11.64 Graham Diehl,20,UCSC
- 2:12.93 Andrew S Cole,19,USA
- 2:13.41 Aaron Blair,17,CASC

50 METRES BREASTSTROKE

- 28.90 Morgan Knabe,21,UCSA
- 29.21 Brad Mori,25,EXST
- 29.43 David Denniston,24,USA
- 29.49 Marco Gonzalez,24,MEX
- 30.11 Chad Thiessen,17,SPART
- 30.12 Matthew Huang,18,UBCD
- 31.15 Clayton Delaney,22,ROW
- 31.65 Roger Boucher,22,GOLD

100 METRES BREASTSTROKE

- 1:02.52 Morgan Knabe,21,UCSA
- 1:04.94 Gerard Hunter,21,UOFL
- 1:05.12 David Denniston,24,USA
- 1:05.15 Matthew Huang,18,UBCD
- 1:05.72 Chad Thiessen,17,SPART
- 1:05.88 Marco Gonzalez,24,MEX
- 1:06.54 Brad Mori,25,EXST
- 1:07.06 Clayton Delaney,22,ROW

200 METRES BREASTSTROKE

- 2:19.67 Morgan Knabe,21,UCSA
- 2:23.28 David Denniston,24,USA
- 2:24.02 Matthew Huang,18,UBCD
- 2:24.09 Brian Johns,20,UBCD
- 2:25.71 Clayton Delaney,22,ROW
- 2:26.05 Keith Beavers,20,ROW
- 2:28.08 Andrew Priest,24,USA
- 2:28.27 Chad Thiessen,17,SPART

50 METRES BUTTERFLY

- 24.15 Michael Mintenko,27,UBCD
- 24.76 Takashi Yamamoto,24,JPN
- 25.09 Joseph Novak,25,USA
- 25.43 Kicker Vencill,24,USA
- 25.65 Josh Ballem,25,UCSA
- 25.70 Chad Hankewich,21,GOLD
- 26.17 Delonte Stephens,23,USA
- 26.35 Jonathan Schjott,21,UCSC

100 METRES BUTTERFLY

- 53.53 Michael Mintenko,27,UBCD
- 53.73 Takashi Yamamoto,24,JPN
- 56.00 Josh Ballem,25,UCSA
- 56.54 Chad Murray,21,UCSC
- 56.66 Delonte Stephens,23,USA
- 56.93 Chad Hankewich,21,GOLD
- 57.16 Jonathan Schjott,21,UCSC
- 57.33 Jan Pelechytik,22,ROD

200 METRES BUTTERFLY

- 2:00.26 Takashi Yamamoto,24,JPN
- 2:06.13 Jonathan Schjott,21,UCSC
- 2:08.33 Jan Pelechytik,22,ROD
- 2:08.33 Tim Cowan,25,UCSC
- 2:08.43 Max Jensen,20,HYACK
- 2:11.44 Taylor Graham,18,UOFL

- 2:13.22 Josh Ballem,25,UCSA
- 2:13.94 Malcolm Lavoie,17,OSC

200 METRES IND. MEDLEY

- 2:07.33 Chad Murray,21,UCSC
- 2:08.42 Albert Sung,19,USA
- 2:12.26 Gerard Hunter,21,UOFL
- 2:12.37 Cameron Hyder,20,UCSC
- 2:12.57 Graeme Tozer,17,MM
- 2:13.49 Brent Hankewich,19,GOLD
- 2:14.45 Jarrod Ballem,23,UCSC
- 2:14.69 Michael Derban,18,UCSC

400 METRES IND. MEDLEY

- 4:40.20 Cameron Hyder,20,UCSC
- 4:44.95 Daniel A. Hewko,16,USA
- 4:46.76 Malcolm Lavoie,17,OSC
- 4:47.26 Callum Ng,17,CASC
- 4:48.16 Colin Lyon,17,EKSC
- 4:50.87 Kyle Sorrenti,16,BRSA
- 4:52.76 Kurt Neihaus,22,USA
- 4:52.83 Tristan Armstrong,15,BRSA

WOMEN

50 METRES FREESTYLE

- 26.41 Laura Nicholls,24,ROW
- 26.61 Lindsay Benko,26,USA
- 26.68 Meredith Bryarly,23,USA
- 26.75 Danielle de Alba,23,MEX
- 26.81 Caroline Clapham,21,UBCD
- 26.82 Elizabeth Meskill,24,USA
- 27.54 Anna Lydall,22,UBCD
- 27.96 Laura Grant,18,UCSC

100 METRES FREESTYLE

- 57.43 Lindsay Benko,26,USA
- 58.06 Laura Nicholls,24,ROW
- 58.15 Elizabeth Meskill,24,USA
- 58.26 Erin Kardash,17,MM
- 58.49 Laura Grant,18,UCSC
- 58.63 Alexandra Lys,18,UCSC
- 58.88 Elizabeth Collins,20,ROD
- 59.71 Meredith Bryarly,23,USA

200 METRES FREESTYLE

- 2:03.77 Jennifer Button,25,ROW
- 2:04.46 Lindsay Benko,26,USA
- 2:06.88 Taryn Lencoe,17,UBCD
- 2:06.89 Hayley Peirso,17,USA
- 2:06.91 Elizabeth Collins,20,ROD
- 2:06.93 Alexandra Lys,18,UCSC
- 2:07.28 Deanna Stefanyszyn,18,UBCD

- 2:07.31 Erin Kardash,17,MM

400 METRES FREESTYLE

- 4:18.11 Hayley Peirso,17,USA
- 4:18.98 Lindsay Benko,26,USA
- 4:20.71 Taryn Lencoe,17,UBCD
- 4:23.88 Shannon Hackett,16,UBCD
- 4:26.64 Deanna Stefanyszyn,18,UBCD
- 4:30.73 Kelly Doody,23,UBCD
- 4:31.60 Darcy Goodridge,16,UBCD
- 4:31.62 Amanda Bell,15,UCSC

800 METRES FREESTYLE

- 8:48.64 Hayley Peirso,17,USA
- 8:54.51 Taryn Lencoe,17,UBCD
- 9:08.87 Tanya Hunks,22,HYACK
- 9:10.76 Shannon Hackett,16,UBCD
- 9:17.65 Brittany Reimer,15,SKSC
- 9:19.63 Amanda Bell,15,UCSC
- 9:25.18 Gail Findlay-Shirras,19,UCSC
- 9:28.26 Stacy Cormack,16,CASC

50 METRES BACKSTROKE

- 29.73 Erin Gammel,22,UCSC
- 29.98 Diana MacManus,16,USA
- 30.80 Caitlin Meredith,19,UBCD
- 30.86 Paige Francis,24,USA
- 31.08 Hiu Wai Tsai,20,HKG
- 31.24 Jennifer Fratesi,18,ROW
- 31.24 Kelly Stefanyszyn,20,UBCD
- 32.28 Jessica Cruzat,16,USA

100 METRES BACKSTROKE

- 1:03.30 Erin Gammel,22,UCSC
- 1:03.52 Jennifer Fratesi,18,ROW
- 1:04.44 Kelly Stefanyszyn,20,UBCD
- 1:04.90 Diana MacManus,16,USA
- 1:05.20 Hiu Wai Tsai,20,HKG
- 1:05.96 Caitlin Meredith,19,UBCD
- 1:06.12 Danielle de Alba,23,MEX
- 1:07.18 Paige Francis,24,USA

200 METRES BACKSTROKE

- 2:15.61 Lindsay Benko,26,USA
- 2:15.78 Jennifer Fratesi,18,ROW
- 2:17.82 Kelly Stefanyszyn,20,UBCD
- 2:21.12 Caitlin Meredith,19,UBCD
- 2:22.18 Diana MacManus,16,USA
- 2:22.63 Deanna Stefanyszyn,18,UBCD
- 2:23.62 Lynette Bayliss,17,UCSC
- 2:23.93 Hayley Peirso,17,USA

50 METRES BREASTSTROKE

- 32.07 Rhiannon Leier,26,MM
- 33.53 Emma Spooner,20,UCSC
- 33.67 Renee Hober,18,ROW
- 34.24 Tamara Wagner,17,ROW
- 34.30 Michelle Mange,16,UBCD

- 34.65 Jenny Lock,17,COMOX
- 34.95 Marcy Edgecumbe,19,EKSC
- 35.16 Hanna Pierse,14,EKSC

100 METRES BREASTSTROKE

- 1:10.22 Rhiannon Leier,26,MM
- 1:10.49 Lauren van Oosten,24,UCSC
- 1:13.22 Lisa Blackburn,31,ROW
- 1:13.76 Emma Spooner,20,UCSC
- 1:14.37 Michelle Mange,16,UBCD
- 1:14.87 Renee Hober,18,ROW
- 1:15.25 Shannon Frey,19,BRSA
- 1:16.50 Kristy Cameron,21,UCSC

200 METRES BREASTSTROKE

- 2:30.06 Amanda Beard,21,USA
- 2:32.48 Lauren van Oosten,24,UCSC
- 2:34.15 Rhiannon Leier,26,MM
- 2:38.22 Renee Hober,18,ROW
- 2:39.78 Michelle Mange,16,UBCD
- 2:41.54 Hanna Pierse,14,EKSC
- 2:41.79 Emma Spooner,20,UCSC
- 2:43.15 Haylee Johnson,17,UBCD

50 METRES BUTTERFLY

- 27.30 Bethany Goodwin,22,USA
- 27.99 Elizabeth Meskill,24,USA
- 28.49 Jennifer Button,25,ROW
- 28.54 Meredith Bryarly,23,USA
- 28.58 Elizabeth Collins,20,ROD
- 28.78 Tara Thomas,13,USA
- 29.72 Kelly Doody,23,UBCD
- 29.72 Sara Alroubaie,21,MM

100 METRES BUTTERFLY

- 1:01.05 Bethany Goodwin,22,USA
- 1:01.29 Jennifer Button,25,ROW
- 1:03.52 Elizabeth Meskill,24,USA
- 1:03.70 Sara Alroubaie,21,MM
- 1:04.02 Elizabeth Collins,20,ROD
- 1:04.21 Kelly Doody,23,UBCD
- 1:05.23 Eliko Heimbach,16,USA
- 1:05.62 Meredith Bryarly,23,USA

200 METRES BUTTERFLY

- 2:18.96 Jennifer Button,25,ROW
- 2:19.84 Tanya Hunks,22,HYACK
- 2:22.92 Shannon Hackett,16,UBCD
- 2:24.14 Brigitta Olson,20,UCSC
- 2:24.40 Stephanie Bigelow,17,COMOX
- 2:24.57 Sara Alroubaie,21,MM
- 2:25.14 Megan Bird,17,UCSC
- 2:26.20 Bethany Goodwin,22,USA

200 METRES IND. MEDLEY

- 2:22.07 Kelly Doody,23,UBCD
- 2:23.14 Carrie Burgoyne,21,UCSC
- 2:23.92 Rhiannon Leier,26,MM
- 2:27.17 Erin Kardash,17,MM
- 2:27.50 Jenny Lock,17,COMOX
- 2:28.14 Shannon Frey,19,BRSA
- 2:28.28 Annamay Pierse,19,EKSC
- 2:28.50 Haylee Johnson,17,UBCD

400 METRES IND. MEDLEY

- 4:55.80 Hayley Peirso,17,USA
- 4:57.58 Carrie Burgoyne,21,UCSC
- 5:02.79 Tanya Hunks,22,HYACK
- 5:06.33 Kelly Doody,23,UBCD
- 5:07.22 Thea Norton,16,OSC
- 5:08.32 Anne Schmuck,15,SKSC
- 5:12.57 Nicole Mackey,18,USA
- 5:12.97 Lynette Bayliss,17,UCSC

Rating Summary of Top Canada Cup Performances

1)	969	55.24	100 back M	Lenny Krayzelburg,27,USA
2)	963	24.15	50 fly M	Michael Mintenko,27,UBCD
3)	954	22.57	50 free M	Jason Lezak,27,USA
4)	953	53.73	100 fly M	Takashi Yamamoto,24,JPN
5)	952	2:01.03	200 back M	Keith Beavers,20,ROW
6)	950	1:02.52	100 breast M	Morgan Knabe,21,UCSA
7)	944	32.07	50 breast W	Rhiannon Leier,26,MM
	944	26.11	50 back M	Albert Sung,19,USA
9)	942	50.33	100 free M	Scott Tucker,28,USA
10)	941	2:30.06	200 breast W	Amanda Beard,21,USA

TURNAROUND IN BRITAIN

Sweetenham + Atkinson + New Lottery Funds = International Success

Ben Lafferty

How did Great Britain go from winning no medals in the 2000 Olympic Games to winning seven in the 2001 World Championships? What has inspired the turnaround to the extent that the Brits gave the Aussies a run for their money at the Commonwealth Games this year? Much of the answer has to do with the arrival of Bill Sweetenham (National Performance Director) and his right-hand man John Atkinson (National Youth Coach), and the programs they have put in place. Both men were an integral part of the Australian junior development program and were largely given carte blanche to bring their expertise to bear when they arrived in Britain. Another part of the answer may be that sport in Britain is now receiving considerable amounts of money from the National Lottery. Naturally these two factors are linked; without the money, Sweetenham and Atkinson would have been severely limited in what they could do.

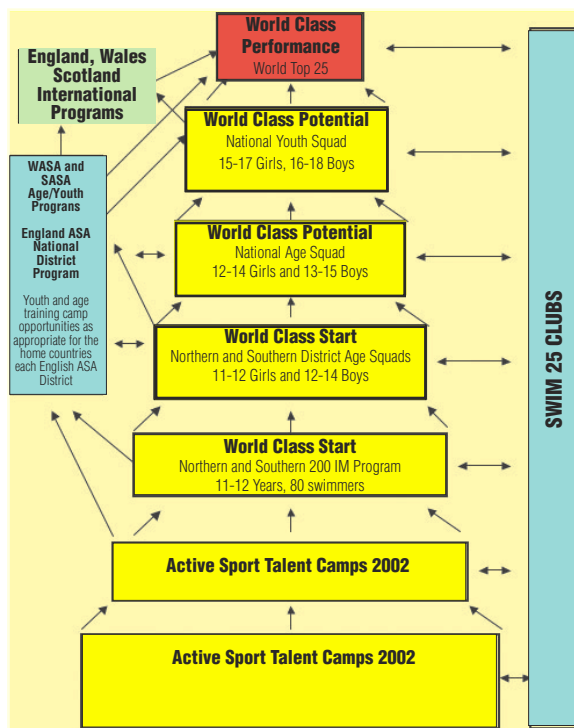
The Organization

Elite swimming in Britain is structured around the framework of the World Class Programs. These programs (World Class Performance, World Class Potential, and World Class Start) are funded by money that comes from the National Lottery. Underpinning the World Class programs is another set of programs called Active Sport. Active Sport is more about participation than performance at the elite level. Alongside all these programs is the Swim 21 initiative, which has clubs organize themselves according to strict guidelines before they can be awarded a graded status by the Amateur Swimming Association.

Swimmers who are ranked in the top 25 in the world in an Olympic event are part of the World Class Performance program. They can receive support funding and are eligible to attend specialist camps at home and abroad. World Class Potential and World Class Start are junior programs with the aim of developing Olympic and World Championship medallists in the near future. To qualify for Potential, swimmers generally have to win their events at National Age or Youth Championships. The Potential and Start programs are based around residential camps lasting between one day and one week, which bring the country's top swimmers together to make an informal national junior team.

Components of the Potential program are:

- Lifestyle and self management skills
 - Muscular – skeletal screening
 - Land work (core strength, swiss ball, medicine ball)
 - Test sets and skill / drill development in camp and in home program
 - Competition analysis, race plans, and performance modelling
 - Media training
 - Biomechanical analysis
 - Drugs in sport and testing procedures
 - Nutritional education
- Potential level swimmers can also be selected (at the performance director's discretion) for national stroke, relay, and sprint / distance camps with the senior team.



World class programmes and home nations structural flow

The Staff

Behind the two generals Sweetenham and Atkinson is a battalion of support staff. There is a team of sports scientists and a network of coaching coordinators across the country who help to run the camps and who visit clubs to advise coaches and monitor swimmers.

On the camps, a head coach takes charge of a skills coach and a team of group coaches. Group coaches are selected for camps only if they have swimmers

qualify. Every camp also has a team manager and an assistant team manager who are part of a program to develop future team staff for World Championships and Olympic Games.

The Philosophy

The Potential and Start programs aim to develop the swimmer from age group level to the point where they have the skills and resources to be able to cope at International Senior level before they gain selection to the GB Senior team. Both coaches and swimmers are working with a long-term focus and these programs are expected to come to fruition in 8 to 10 years time. The World Class programs challenge both swimmers and coaches. Swimmers are required to complete a minimum weekly volume in their home programs and can be excluded from the World Class camps if they fail to achieve it. In addition, they have to complete test sets within their home clubs on the required dates and maintain a comprehensive training log book. Coaches are challenged on the camps to plan sessions for all the stroke groups without knowing which one they will be supervising, and they are also challenged

by the National Youth Coach or Head Coach to justify the content of their session plans.

The success of the Potential and Start programs will primarily be measured by results at the annual European Junior Championships. Success at this meet is considered to be key to future success at senior international level.

The Response

Since the introduction of the World Class programs, there has been a small but significant culture change in British Swimming. Young swimmers now talk more of their weekly meterage than of their results in local competitions. There has been an erosion of the "small club" mentality that stifled young talent and chained gifted swimmers to underachieving clubs under the pretext of loyalty.

Results produced recently give cause for optimism. Kerry-Anne Payne became the world's fastest ever 14-year-old at the recent Melbourne World Cup when she won the 800 freestyle in 8:23. Another 14-year-old, Stephanie Proud, swam 2:08 for 200 backstroke at the same meet. Is it coincidence that these two talents have appeared at the same time as the programs established by Sweetenham and Atkinson? Or will we see a steady stream of future medallists appearing from the recently stagnant waters of Great Britain?

Part Two of a Two-Part Series.

The First Part was published in the July-August 2002 issue: Winning Is the Only Option

LIVING FOR SWIMMING

His swimmers call him the Energizer Bunny, because he just keeps going and going and going

Nikki Dryden

Sure Australian swimming is different, but there's something else that makes swimming on the Gold Coast unique: Miami Swimming's head coach Denis Cotterell has spent the last 20 years doing what he loves and has established a world-class swim team as a result.

On the surface it may appear that Denis and his swimmers have it easy. They live in paradise and train in a complex complete with two 50-metre pools and a dryland facility. Denis is free from many of the traditional coaching responsibilities that unfortunately pull some coaches away from their athletes. Denis cares or thinks little of money, management, recruiting, or climbing any ladder of coaching hierarchy in Australian Swimming. He also has the support of his swimmers' parents who, in a nation where swimming reigns supreme, live for this sport.

This environment leaves Denis time for what he's good at: watching every swimmer in every workout regardless of who they are. Denis knows the names of each swimmer on his 100-plus team and seems to be able to recite their best times and set splits from years past. He lives to see swimmers swim best times, work hard, and challenge themselves regardless of what level they swim at. Whether it's his World and Olympic swimming champions, the nation's top surf swimmer or triathlete, or the slowest eight-year-old in the group, Denis gets his energy from each swimmer who puts in the effort. It seems as if he feeds off them like a rock star absorbing the crowd's energy. So it's no wonder his swimmers call him the Energizer Bunny, because he just keeps going and going and going.

But to really understand Denis and his team, you have to look back at the past and his early days of coaching to understand how his team was built. Years of struggle to get where he is has created a team built on mutual respect, hard work, and discipline.

Denis is a trained physical education teacher who swam, studied karate, and played Aussie Rules football before getting hooked on surfing. But it was in teacher's college that he got his first job as a swim coach to help pay his way through school. His first head-coaching job was in the early 1970s. He coached in South Port on the northern end of the Gold Coast, where his swimmers often trained in the shark pool at Sea World. He used have to wake up an hour early



QUICK FACTS: COTTERELL, Denis

BIRTHDATE, PLACE 18 OCT 1949, Sydney, NSW
HOMETOWN Surfers Paradise, QLD
OCCUPATION Swimming Coach
CLUB Miami, QLD
ACHIEVEMENTS

- Olympic Coach 1988, 1992, 1996, 2000
- World Championships 1991, 1994, 1998, 2001
- Commonwealths 1990, 1994, 1998, 2002
- Pan Pacifics 1987, 1989, 1993, 1997, 1999, 2002

in the mornings in order to pick up his swimmers; he started at the south end of the Coast before ending in South Port, filling his car with nine swimmers en route to work out.

When he couldn't get warm water during the winter months, Denis used to have time to go surfing in Bali. He imported jewellery and clothes, and made more money doing that than his job as a swim coach. But by 1981 he got serious with his coaching. "By that point I had enough kids to swim year round," says Denis. "So we travelled everywhere, swimming in motel pools or wherever we could get warm water."

It took him 11 years before he earned a taxable income from coaching, supporting his passion with gigs as a lifeguard working from 8 am to 5 pm, then working in a nightclub from 9:30 pm to 3:30 am, sometimes only finding an hour of sleep before morning practice.

It may seem that having a new pool named in his honour to add to the original 50-metre pool in Miami is a dream come true, but it isn't all it's cracked up to be. In fact, Denis liked it better with one pool when he could see every kid in the squad at once. Now he has to run back and forth between pools, which has forced him to put more focus on his senior swimmers. "They are used to me staying out of their face, and not sweating on them," says Denis smiling. "But now I'm there for more than just the critical stuff."

Nor is he interested in money. Denis figures he's on an average wage, but this writer guesses he is earning far less than his counterparts throughout the world. "I have no concept of people getting six figures. I've been offered three or four times what I get here to coach in another country, but I'm a surfer, and I'm too happy here on the Gold Coast."

"I like coaching local kids; there's a certain pride in it. I'm not ambitious, I don't want more money, I just want people to leave me alone and let me figure out what my kids need." However, Denis is quite comfortable listening to his swimmers. "I learn from my kids so much. I respond to them. I don't need to be in control, I can terrorize them (and have in the past) but hopefully I've evolved." He admits that sometimes he can get cranky, but says that he tries to remain fair. "You can never be unfair, you must be consistent, honest, and admit your mistakes. The whole game is about honesty; you can't cheat and you can't cut corners in coaching or swimming."

Last year, Denis came down with Guillain-Barre Syndrome, an often-paralyzing disease that attacks the peripheral nervous system. When he came through the worst of it, his swimmers bought him a ring to show how much they cared about him. He put it on his wedding finger by mistake, but could not get it off. "That's okay," he said. "I'm married to you guys anyway."

On any morning at Miami there could be eight lanes filled with swimmers of varying levels—world-class triathletes and surf swimmers right alongside the likes of Grant Hackett and Giaan Rooney. And no matter who you are, how fast you are going, or what the set is, Denis never misses a time. No matter who you speak to, every swimmer who has ever swum with Denis will swear up and down he knows every one of their splits for every set they've ever done. While Denis admitted he does have a little trick for looking so good, the fact that his swimmers believe it is all that

matters. "I used to do dryland with them [before getting sick last year] and watched them struggle. I enjoyed being able to show them I've been there. It helps them appreciate that you've been through some physical thing too." Denis used to do 1000 push-ups a day as part of his karate training. He would get down beside his swimmers, doing push-ups on his knuckles on the concrete; in a day he would do 100 an hour and just keep doing it all day long.

And you can tell by the way Denis talks about his swimmers and they about him, that there is a great deal of mutual respect. "Grant [Hackett] really grew into my program. He is an honest swimmer, highly motivated, and his attitude is that he will always give it his best shot. Grant knows where the standard is. He never walked around thinking he was the best for his age. With Grant I've got to be sure I don't raise the bar too high, because whatever I plan for, I know I am going to get more with him."

And the comments go both ways. Grant is the first to say that, for all he has achieved, full credit goes to Denis. "He is a hard coach and there is no way out," says Grant. "If it's not done properly, you do it again. Denis is so enthusiastic and passionate about swimming, and he can't do enough to find enough ways for us to improve."

While Daniel Kowalski retired recently, Denis still thinks of him as a great role model for his swimmers. "Dan's another guy who doesn't think he's a superhero," says Denis. "All he is is the kid up the road who is tough as all hell; its simple, he's a basic Australian kid who wants to beat you and he doesn't back down. I can set something up, and you can be sure he's going to flog himself to achieve the objective. He won't say it's impossible, he'll always try, and he's just here to get better."

New to his program, butterflyer Scott Miller chose his new team because of Denis. "I always got along



Grant Hackett, Australia's supreme distance freestyler, unbeaten in the 1500 since age 16, has been coached by Dennis Cotterell..

"He is a hard coach and there is no way out. If it's not done properly, you do it again. Denis is so enthusiastic and passionate about swimming, and he can't do enough to find enough ways for us to improve," says Grant Hackett.

well with Denis. It is not often you find someone with more energy than you. He's also a really good motivator, and that's a real buzz. It gets you excited to swim, and being an older athlete, you need all the help you can get."

Young miler Stephen Penfold is equally as positive. "Denis is good, everything he knows, everything he's done, and all the people he's had and has, it seems as if he knows everything. He's the only coach in the world with two people under 15 minutes, and hopefully I'll be number three!"

World Champion Giaan Rooney has been swimming for six years with Denis, since age 13. "There are thousands of things going on in his mind and if you ask him a question, you get 50,000 answers. He's mellowed a lot over the years, since he was sick. But while Denis and I have disagreed, and I can get moody with him, at the end of the day, I couldn't train with anyone else. If I had a problem, I know I could talk it through with him. Denis is extremely dedicated; you could call him at 3 am if you needed to."

Denis chose to be a swim coach, and it is readily apparent to all who watch him coach that he loves the process of it. That has created an atmosphere in the water where every swimmer feels like a superstar and the superstars are humble athletes, prouder of the

work they do than the rewards.

Watching a practice at Miami gives you chills up your spine. Seeing Grant Hackett drop a 52.7 for the 30th 100 of a mixed pace set is enough to get any swim fan's blood pumping. But it is Denis Cotterell who sets the stage for such drama to unfold. Without his energy and enthusiasm for swimming and coaching, there wouldn't be that kind of swimming. And that is what makes swimming just a little bit better in a land where swimming is as good as it gets.

ON BREASTSTROKE

Victor Davis Explains the Secrets of His Technique

Victor Davis announced his retirement in early July 1989. After a decade of unparalleled triumphs, Canada's greatest breaststroker explained the secrets of his success.

Many great athletes are unable to describe exactly what they do. They perform instinctively.

Victor knew what he was doing.

To be as good as he was and to be able to tell why is an added dimension of his unique greatness.

His only coach, Cliff Barry, played a big part in his success. Victor did his early swimming in Guelph, moving to Waterloo when Barry was appointed head coach at Region of Waterloo Swim Club. Victor eventually followed him to Pointe Claire, Quebec.

Victor's description of the timing and stroke drills is particularly valuable. Knowing what you're doing at all times made the difference for him.

Victor had a great career and died tragically in November 1989 when hit by an automobile.

This article was first published in our July 1989 issue. Victor spoke with then Features Editor Patricia Young by phone.

Warm Up

I do a lot of stretching of the legs, groin, and shoulders before I even get in the water. Don't ignore this first step of your race. To get prepared for the 200, I warm up for about 1100 to 1500 metres. I do a lot of breaststroke drills, then timing drills: glide to three, glide to two, glide to one. My warm-up set is three to four 200 IMs descending.

It is a general warm up, including kicking and pulling 400 easy, 400 kick, 400 pull, 400 drill. Then the 200 IMs, and then timing and drills. This would be followed by three or four 50s descending, 75% to 90%, really working on the timing and stroke efficiency. At the same time, I would be working (from a push) on getting the speed and feel for the first and third 50s of the race. The last 50 would be from a dive. It is paced like the first 50 of a race, not all out.

I loosen down for about 200 to 300 metres, get out, stretch again, and keep warm.

I make sure my legs are completely loose, warmed up, and flexible. I like to stretch out my gluteus maximus by placing one leg on the block and the other foot behind me on the deck. This stretches the gluteus and top half of the hamstring at the same time. I do a lot of calf and forearm stretches. Your forearms need to be extremely loose. I find that it really helps out at the end of the race.

Constantly move and stretch behind the blocks, keeping your muscles warm and fired and ready to go.

Most of the pre-race stretching and moving around

is done in the ready room and until the last two minutes before you step on the blocks. The last two minutes are for mental preparation. Concentrate on how the race is going to go. I never get distracted by other people. If they want to be distracted by me, that is up to them. I concentrate on my race.

Don't think too much about it. What I mean is, don't get bogged down in details: what you are doing, where your hands are. At the same time, you have to be aware. You can over-think. You can think yourself out of a good race.

The Start

I get up on the blocks when I feel ready, at the same time not delaying the race. If I'm in a rush, I get up first. If I'm not 100% prepared and I need another three minutes, then I'll take a false start. [This would not be allowed under today's rules.] To have a great start, you need to get a lot of practice. It doesn't happen in a race if you haven't done the work in practice.

I put my hands outside my legs. Think about staying on the balls of your feet, not letting heels touch the back of the block at all when you're going down into the "take your mark stance." You are ready to spring. It is like a cobra being ready to explode at



Victor Davis winning Worlds in 1986

Marco Chiesa

any second.

If you are sitting on your heels then right away you have lost a few tenths. The transition from taking the energy from the block all the way through your body is much quicker if it doesn't have to go through

the back of your feet.

When the gun goes, the head leads, the hands follow, and the body finishes the action. I like to get out, not high, but straight from the blocks and follow a hole through the water. Get out as far as you can, pikeing or tucking, and following with your body through a little hole.

You are literally diving towards the bottom of the pool if you don't curl your back. That gives a whipping action when you hit the water. At the same time, keep your shoulders tucked up, as high as you can, into your ears. This streamlines you incredibly, especially when you're gliding underwater before your first pull.

Keep your buttocks tight, feet together, and shoulders tucked up as close to your ears as possible after the first pull. You are still creating a streamline effect.

About two inches before my head breaks the surface of the water, I like to take that first stroke and really get pumping right away, rather than waiting for my head to break the surface and then starting the rhythm. For the first pull, my head is still underwater and it is like a shotgun effect. Foom— I'm up and I'm going.

If, for the first stroke, my head was too shallow or too deep and I didn't hit my rhythm right away, it is important to take the time in the first five strokes in the race and correct it.

I make sure I don't start my pull before my legs come together. I work on snapping my feet together before my hands start pulling. That way I fall into the rhythm right away and I'm back on track. At this stage in the race everyone is moving so fast from the start that you really aren't going to lose anything.

The Race

The first 50 has got to be fast and smooth yet controlled speed. When you hit the wall at the first 50, you should feel like you haven't put out any energy whatsoever. I split it in the 30.5 area.

To make sure you get a good turn, the first thing to do is practise your turns in warm up. You have to be able to judge the wall from about three metres out. Know if you have to take a short stroke or if you are going to have to stretch out to hit the wall properly. It is important not to bunch up going into the wall because that tightens up your arms and your shoulders quite a bit.

Regardless of which hand you turn on, whether it is the right or the left, the same rules apply. I turn on my right hand. I go into the wall and I touch with both hands, but the left hand barely touches. Make sure that you drive your knees up into your chest as quickly as possible. That will get your legs off the wall faster.

A lot of people think that the turns are a resting place. Turns are a point in the race that you can get ahead of everybody else. Turns are important in terms of getting off the wall, streamlining through the water, and coming up to set your stroke with that first pull underwater.

The second 50 has got to be strong and smooth. At this point you should be holding the same comfortable

speed that you had in the first 50. I like to work into it and pick up the pace on the last 10 metres of the last 25 of that 100. The 80-metre mark is where I set the pace for the third 50.

I build my race in terms of 60-40. When I'm going into the 100 I build that third 50 to the wall. Always build your race before the turn.

The third 50 in a 200 metre breaststroke is the most crucial point in the race. It is where the strong will survive.

You shouldn't blast it coming off the wall. You can't expect to be going full tilt in five strokes. You have to build it over three to five metres. Most of the build is done in the first 25 metres.

At this point I'm doing okay. My main concern is getting out of that turn. Getting a good turn at this point will set the pace for the last 50. No matter how much you are hurting, think about getting the best turn possible and getting ahead of your competition on that turn. Coming out of the turn, concentrate on your rhythm by setting the stroke rate right away.

Hold your pace off the wall for the first 5-6-7 strokes and build to full bore by the 20-25 metre mark.

The 200 breaststroke is fatiguing. No matter how tired you are, keep finishing your stroke. Make sure you are finishing your kick before you take your pull. Keep your wits about you and never, ever, ever, look around.

By the final 25 metres, most of my fatigue is in my shins and forearms. No matter how much forearm work you do, and I do a lot of it, your forearms will always fatigue. My stroke is geared towards a lot of forearm and back of the shoulder strength, so this area gets really stressed.

The Finish

Spinning your wheels is the biggest mistake in the last 50 metres of a 200 metre breaststroke. You are trying to go fast and still keep your stroke together without failing or breaking up.

Remember to finish your kick before you take that pull. You've got to keep it long and strong. If you rush the stroke, you're in trouble. In freestyle you can flail away sometimes and get away with it, but breaststroke is the most technical stroke there is.

Flailing away and spinning your wheels will get you absolutely nowhere but last place.

For the last 25 metres, you should be concentrating on driving your legs like crazy. Make sure that you lunge and dive at that wall rather than just coasting in for the touch. The finish is as much a part of the race as the first 50 metres. You should be able to judge it and hit it properly. Don't finish with your arms bent. Stretch right out, almost laying on top of the water, as you touch the wall.

Timing

Everybody's stroke is different. It is all relative to what your timing and body structure are like. At the same time, the one basic rule that stands true for all breaststrokers is that you do have to finish your kick before you start your pull. If you are going to remember one thing, remember that.

You can't have your pull going while your legs are still apart. You have to get the full drive out of your legs before you start getting a pull out of your arms. If your arms are apart and you're driving with your legs, you are creating a negative, pushing against something that is wide rather than streamlined.

Drills

Pulling helps my forearms as much as any exercise I do. Make sure when you pull that your elbows are locked, you're getting a lot of water on the outside, you're pulling wide, and your hands are turned out at almost a 90 degree angle. That is where I get most of my forearm work. Pulling sets also strengthen your shoulders. Paddles and pull buoys work very well for that.

For one of my favourite sets I use very small flippers, called boogie flippers. They are smaller than diving flippers, are easy to move around in, and you still get something out of them. Mystroke is like a dolphin. This work is geared towards that. A lot of breaststrokers are getting that type of dolphin-wave stroke now.

Accentuate your lower back and buttock movements by really breaking the surface of the water with your buttocks, stretching as far as possible with your arms and catching a lot of water. I use flippers, pulling with just paddles and tubing on the land.

I train mostly individual medley, but a third of my training is in breaststroke. It increases when we go into a taper period.

I was good in butterfly and IM, but I found that breast was the hardest stroke to train, not only because you are going slower than everybody, but it seems to be the most fatiguing. It takes so much strength out of you. It was always pushing water, you were never really flowing through the water.

My suggestion is to keep a cool head and keep it all relative. If you race breaststroke you've got to train breaststroke. At the same time, I think it is the coach's responsibility to put the breaststrokers together in one lane and put a lane rope on. It is probably the most frustrating thing in the world for a breaststroker to swim into butterfly and freestyle waves when you are fatigued. It is not a lot of fun.

Work on your stroke constantly. When you get into the race, the last thing you want to worry about is if your stroke is there.

You have to know your stroke. My coach, Cliff Barry, has really taught me to understand what I'm doing. He teaches you to think for yourself. There are too many robots out there.

Breaststrokers should know where they are at all times: where their feet are, where their hands are, and where their body is in relation to the surface of the water. If you've got a deep start, know that you have a deep start. If you have a shallow start, know that you have a shallow start. Compensate and make the necessary adjustments for these differences.

The most important thing before going into a race is to know that you have done the training and that you have trained breaststroke. Keeping your stroke together is the secret of breaststroke. As soon as you start to rush your stroke, you are in trouble.

CAREER STATS

INTERNATIONAL RESULTS

Year	Placing	Time	Competition
100 Breaststroke			
1982	2nd	1:02.82	Worlds
	3rd	1:03.18	Commonwealths
1984	2nd	1:01.99	Olympics
1986	1st	1:03.01	Commonwealths
	1st	1:02.71	Worlds
1987	1st	1:02.85	Pan Pacifics
1988	4th	1:02.38	Olympics
200 Breaststroke			
1982	1st	2:14.77	Worlds
	1st	2:16.25	Commonwealths
1984	1st	2:13.34	Olympics
1986	2nd	2:16.70	Commonwealths
	2nd	2:14.93	Worlds
1987	3rd	2:18.27	Pan Pacifics
4x100 Medley Relay (Victor's splits)			
1982	4th	1:02.83	Worlds
1984	2nd	1:02.33	Olympics
1986	1st	1:02.44	Commonwealths
	4th	1:02.13	Worlds
1987	2nd	1:02.44	Pan Pacifics
1988	2nd	1:00.90	Olympics

CANADIAN CHAMPIONSHIPS

Year	Course	Placing	Time	Competition
100 Breaststroke				
1981	scm	1st	1:02.34	Winter Natls
1981	lcm	1st	1:04.41	Summer Natls
1982	scm	1st	1:01.58	Winter Natls
1982	lcm	1st	1:03.45	World Trials
1982	lcm	1st	1:05.01	Summer Natls
1983	scm	1st	1:02.11	Winter Natls
1984	scm	1st	1:00.61	Winter Natls
1984	lcm	1st	1:02.87	Olympic Trials
1985	scm	1st	1:02.25	Winter Natls
1985	lcm	1st	1:03.99	Summer Natls
1986	lcm	1st	1:02.57	Winter Natls
1987	lcm	1st	1:02.97	Winter Natls
1987	lcm	1st	1:02.44	Summer Natls
1988	lcm	1st	1:02.87	Winter Natls
1988	lcm	1st	1:02.57	Olympic Trials
1988	lcm	1st	1:03.10	Summer Natls
1989	scm	1st	1:00.73	Winter Natls
200 Breaststroke				
1981	scm	1st	2:14.34	Winter Natls
1981	lcm	1st	2:20.05	Summer Natls
1982	scm	1st	2:18.28	Winter Natls
1982	lcm	1st	2:16.47	World Trials
1982	lcm	1st	2:21.87	Summer Natls
1983	scm	1st	2:12.04	Winter Natls
1984	scm	1st	2:09.81	Winter Natls
1984	lcm	1st	2:14.58	Olympic Trials
1985	scm	1st	2:14.52	Winter Natls
1985	lcm	1st	2:18.25	Summer Natls
1986	lcm	1st	2:15.29	Winter Natls
1987	lcm	1st	2:17.02	Winter Natls
1987	lcm	1st	2:15.87	Summer Natls
1988	lcm	1st	2:18.65	Winter Natls
1988	lcm	3rd	2:16.21	Olympic Trials
200 Butterfly				
1981	scm	3rd	2:01.46	Winter Natls
1982	scm	1st	1:59.28	Winter Natls
1982	lcm	3rd	2:03.67	World Trials
1982	lcm	2nd	2:03.33	Summer Natls
1983	scm	1st	1:58.49	Winter Natls
200 Individual Medley				
1982	scm	1st	2:02.22	Winter Natls
1982	lcm	1st	2:06.72	World Trials
1982	lcm	3rd	2:08.54	Summer Natls
1983	scm	2nd	2:02.95	Winter Natls
1987	lcm	3rd	2:06.23	Winter Natls
400 Individual Medley				
1982	scm	1st	4:19.16	Winter Natls
1982	lcm	2nd	4:27.70	World Trials
1983	scm	3rd	4:22.24	Winter Natls

PHYSIOLOGY

Heart Rate, Lactates, and All the Stuff For the Practising Coach

Wayne Goldsmith

Coaches are always looking for an edge—a new idea or innovative technique that might provide their athletes with a performance advantage.

Sports scientists are in the same game. They search for evidence to support ideas that may lead to breakthroughs in sports training techniques and competition performances.

Sports science is not a magic trick or shortcut or easy way to the top. The methods and techniques of sports science are tools, and like the tools of any trade, their effectiveness lies in the skills of the user.

The challenge is to provide the coaches and athletes with what they need—an edge—without giving them too much information or the wrong type of information and pushing them over it!

Tricks of the Trade—Physiology and Coaching

The basic tricks of the trade for physiology are the H.E.L.P.P. techniques:

- Heart Rate
- Energy Systems – Training Zones
- Lactate
- Power Output
- Perceived Exertion

These basic techniques are used to help the coach determine the key aspect of training, which is *exercise intensity*, or how hard the athlete is working.

While the *volume* of training is an important issue, it is intensity of training that is the key determinant of how the athlete responds and adapts to the training program.

Intensity of training is *the* key aspect of exercise physiology. Training adaptations, fatigue, recovery, and other issues are all directly affected by training intensity. Successful coaches must have a thorough understanding of training intensity: how to manipulate to achieve performance goals and, very importantly, how to measure it.

To illustrate this, consider an athlete running 30 km in training in a given week. The volume of training is 30 km and there are some physiological adaptations that will occur because of that volume. However, the key to the physiological adaptations is the intensity of training done.

For example, the athlete could:

Jog slowly for 5 km for 6 days and enjoy 1 day off.

Jog slowly for 10 km on 3 days and enjoy 4 days off.

Complete 3 x 10 km time trials all at or near maximum speed.

Complete a 20-km run on one day, then 5 x 2 km time trials at or near maximum speed over the next 6 days.

There are countless combinations of training activities that could be completed as part of the 30 km training volume. However it is the changes and variations in the intensity of training that will determine if coach and athlete achieve their program outcomes.

Primary and Secondary Measures—An important Concept

It is important to distinguish between primary and secondary measures. A primary measure is the more constant or controllable of the measures. For example, consider a runner training over a 400-m track. The primary measurements here are time and distance since they can be accurately and reliably measured.

The secondary measure in this situation might be heart rate, since it cannot be measured with the same accuracy as time and distance (especially if it is being measured manually) and it is subject to many other internal and external factors.

The coach generally wants to know how hard the athlete is working at a specific speed over a specific distance. With speed and distance known, then secondary variables, such as heart rate and lactate, can play an important role in providing feedback on the fitness level and progress of the athlete.

Heart Rate

Once the panacea of sports physiology, heart rate as the primary determinant of exercise intensity is increasingly coming under attack. The reason stems from heart rate being a very volatile indicator of what is happening to the body. For example, heart rate is affected by caffeine, alcohol, fatigue, hydration, nervous system arousal, mental stimulation, and many other factors. Since it is so volatile and subject to so many factors and daily fluctuations, basing training loads exclusively on heart rate is not logical.

However, heart rate is a valuable tool when used in combination with other measures of exercise intensity. For example, in sports like swimming, running, and rowing, coaches use speed or time or power output as the primary measure and heart rate as a secondary measure. The reason is that speed and time can be standardised and measured accurately—heart rate cannot.

A coach would want to know what is the athlete's heart rate at a set speed or at a specific time to provide valuable information on the progress of physiological adaptations that are being targeted by the training program.

However, no one wins gold medals for having the best heart rate: it is one tool, not the “magic pill.”

Recent research suggests that heart rates taken manually, particularly at intensity levels above 130 beats per minute, are very inaccurate, and heart rate should not be the exclusive determinant of higher-in-intensity exercise.

Energy Systems / Training Zones

Energy systems or training zones are one of the most confusing areas of exercise physiology, primarily because the sports scientists themselves cannot agree on the number or nature of training zones that can be recognised and utilised in training for sport.

Some sports scientists recommend three to four aerobic training zones alone and up to nine different training zones in total!

It is impractical and unrealistic to expect that a coach—especially a coach working with team sports in a field situation—can identify, at most, any more than three or four training zones.

For practical purposes, the most readily identifiable and useable zones are:

- Recovery level, relaxed, comfortable
- Low intensity, easy aerobic
- High intensity, sustained pace work—what some might call threshold training
 - Specific pace work at the speed of the targeted competition (with race-specific dynamics)
 - Speed development work (neuromuscular training).

While it is possible to identify other zones in a laboratory setting, with an individual athlete, for all practical purposes, these four training zones will cover the vast majority of training needs for the majority of sports.

Lactate

Lactate is one indicator of how hard the body is working in terms of the relative contribution of the aerobic and anaerobic systems. In general terms, the greater the athlete uses his anaerobic system to produce the power and energy to perform an activity, the higher the level of lactate will be.

Lactate is produced in working muscles during hard work and high-intensity efforts. The lactate then “leaks” out of the muscle into the blood, where it can be collected by a simple blood sampling technique, usually from the ear lobe or finger.

The challenge with lactate as a measure of exercise intensity is that it too is subject to variables such as nutrition, recovery level, and fatigue. It is relatively expensive to use and for coaches working with teams of athletes with limited support or assistance, is highly impractical.

Power Output

Power output can be measured successfully in sports like cycling and rowing where elaborate measuring devices can be placed around the sports equipment to provide information about the athlete’s ability to deliver power in a range of circumstances. This provides useful information about technical efficiency (power output during specific movements), fitness level (change in power output with fatigue), strength levels (peak power output), and many other performance factors.

Expensive and often difficult to use, power output measurement equipment is generally not a practical method of measuring exercise intensity for most coaches working in the field, on the road, or out on the water.

Perceived Exertion

The concept of perceived exertion relies on the subjective judgement and “feel” of the athlete to provide feedback on the intensity level of the training activity.

For example, an athlete may be asked to perform a training activity at a specific intensity level. The coach may choose to prescribe the intensity level, not in terms of objective measurements like speed or time, but in terms of how the athlete “feels” these things.

While there are documented scales of intensity, many coaches and athletes formulate simple scales that are practical and meaningful to them. A 1 to 5 scale is popular and, when used in combination with other measurements, can give a relatively accurate understanding of the athlete’s intensity level.

Intensity Level	Feels Like	Equates to
1	Very relaxed	Recovery
2	Easy	Easy Aerobic
3	Tough	Threshold
4	Very Hard— uncomfortable	Race Pace
5	Fast but not hard	Speed / Neural

The downside to using perceived exertion levels is that each athlete’s subjectivity about how things “feel” applies to that individual only. A 4 for one athlete may feel like a 2 for another athlete. Also, the feel and rating of an activity may change from day to day as the athlete’s level of fatigue, motivation, attitude, and recovery status change.

So what is the best way for a coach to determine the intensity level of training activities?

Recent research (see references) has suggested that heart rate taken by manual palpation is so inaccurate that alternate methods should be sought. Lactate—even with the introduction of hand-held portable analysers over recent years—is expensive and generally impractical for the majority of coaches. Both heart rate and lactate are subject to a wide range of influences and variables that question the validity of using them in many field situations.

In the end, the coach must determine the most appropriate way of monitoring training intensity in their athletes. As athletes become more experienced and get older, it is important that the coach take time to demonstrate and teach athletes to self manage and self monitor so that they themselves can determine accurate training loads.

A summary of the research suggests that the best way may be a combination of two or more of the above physiological measurement techniques.

Practical Example

Coach and athlete meet at the training venue.

The coach has determined that the training activity should be completed at a moderate pace.

The instruction from coach to athlete may go something like this:

“I would like you to run 3 km around 12 minute pace. It should feel about 6 out of 10 pace. Just steady running. Moderate effort.”

In this instruction, the coach has given the athlete the same information three ways and has clearly indicated the intensity of the workout. The athlete, educated and trained to understand accurate pacing and the concept of perceived exertion, performs the training activity to the demands of the coach.

On the completion of the 3-km run, the coach takes the athlete’s heart rate to determine how hard the athlete is working at the prescribed training pace.

The coach and athlete then exchange “feel” and “feedback.”

Coach: “It looked good. It looked comfortable. How did it feel?”

Athlete: “It felt easy. About 6 out of 10. What was my time?”

Coach: “The time was 11:57. Nice pacing.”

Athlete: “What about heart rate?”

Coach: “Pretty comfortable—about 140.”

Through the interaction of coach and athlete and the combination of “feel” and feedback, the training session can be finetuned to achieve the program goals.

In most cases, simplicity is the key. An educated athlete with a strong feel for pace and an understanding of how her body works, training together with an intelligent coach who has an understanding of and empathy for his athlete and an understanding of the principles of sports science, can achieve anything.

Whilst sports physiology can provide coaches and athletes with technology and tools to measure a wide range of responses and adaptations, often it comes down to what is practical, simple, immediate, and affordable.

Just as no sensible investor put all her eggs in one basket, no coach or athlete should place all his faith in one particular physiological measure or technique.

It is with a combination of the art of coaching and the feel for the athlete, together with the science of sport through the appropriate use of heart rate and other measurement techniques, that the most effective training methodologies lie.

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UBC EXTENDS RULE

World Record for Johns in the 400 IM



World record for Brian Johns (UBC)

Marco Chiesa

Brian Johns (UBC) was the star at the Annual Canadian Interuniversity Sports (CIS) championships held in Victoria, BC, Jan 21-23 (25 m).

Johns bettered the world record in the 400 individual medley with his 4:02.72, bettering a five-year-old previous record of 4:04.24 by Matthew Dunn (AUS) from 1998. It was a four-second improvement over his previous best.

Johns (UBC) added Canadian and CIS records in the 200 individual medley with 1:56.23, bettering his month-old record of 1:57.21.

Johns had an outstanding championships with one world (400 IM), two Canadian, and three CIS individual records, as well three more in a UBC sweep of all the men's relays. His wins in the 200 back, 200 fly, 200 and 400 IMs, and the relays gave him seven golds. His lead-off leg in the 4x200 free of 1:45.31 was

the second-fastest all-time Canadian performance.

"I'm absolutely ecstatic with my performances," Johns said. "I've never swam so fast in my life. It puts me on the right step towards the World Championships this summer and the Olympics next year."

"Brian can be amongst the best in the world," added Tom Johnson, UBC head coach. "He still has some work to do. Short course is always a stepping stone to long course. But the improvement he's shown in the last year is very encouraging."

Johns was the male swimmer of the meet.

UBC won its fourth consecutive men's team title and its fifth all-time with golds in 12 out of the 19 men's events. Its other big winner was Mark Johnston, sweeping the 200, 400, and 1500 freestyles.

CIS records were bettered in four individual and all three relays in the 19 events on the men's program.

In a closer battle, UBC edged out Calgary 666.5 to 616.5 in the women's team race. UBC now has 11 women's team championships since 1978 and 9 during the past 10 years.

UBC had 19 (3-8-8) medals to Calgary's 14 (6-5-3), but the top individual women's performer was Elizabeth Warden (UofT).

Warden, in her final (fifth) year of eligibility, won the 200 and 400 IM (2:11.99 and 4:38.21), and the 200 backstroke (2:09.14), and added a second in the 200 breaststroke. She set a CIS record in the 400 IM. She has a career total of 10 individual golds.

"This was my last CIS championships," Warden said. "I'm glad to end it with some good swims. I felt I had a shot at the 200 IM national record but the 200 backstroke earlier took too much out of me."

Carla Geurts (UNB), the oldest winner at 31, won the 400 and 800 freestyles, the longer one in a CIS record of 8:30.39. She also won the 50 free and added a second in the 200 free. Geurts was a two-time Olympian for the Netherlands.

Four individual (one was a tie) and two relay CIS records were bettered in the 19 events for women.

UBC coach Tom Johnson was named the CIS swim coach of the year, while Matthew Huang (UBC) and Caitlin Meredith (UBC) were named the CIS rookies of the year.

MEN'S SCM 400 INDIVIDUAL MEDLEY RECORD SPLIT CHRONOLOGY

Record holder	Butterfly	Backstroke	Breaststroke	Freestyle
Baumann (1987) ●●	58.46	2:00.75 (1:02.29)	3:12.81 (1:12.06)	4:09.64 (56.83)
Myden (1995) ●	57.59	2:01.82 (1:04.23)	3:12.53 (1:10.71)	4:09.39 (56.86)
Myden (1998) ●	56.79	2:00.50 (1:03.71)	3:10.47 (1:09.97)	4:08.50 (58.03)
Sievinen (1992) ●●	58.49	2:01.04 (1:02.55)	3:11.38 (1:10.34)	4:07.10 (55.73)
Sievinen (1996) ●●	57.91	2:00.57 (1:02.66)	3:10.51 (1:09.94)	4:06.03 (55.52)
Wouda (1997) ●●	57.04	1:58.70 (1:01.66)	3:08.00 (1:09.30)	4:05.41 (57.41)
Dunn (1998) ●●	57.01	2:00.53 (1:03.52)	3:08.68 (1:08.15)	4:04.24 (55.56)
Johns (2002) ●	57.06	1:59.00 (1:01.94)	3:09.55 (1:10.55)	4:06.85 (57.30)
Johns (2003) ●●	55.88	1:57.78 (1:01.90)	3:06.55 (1:08.77)	4:02.72 (56.17)

●● = World ● = Canadian record

New regulations during the 1990s that have considerably affected short course swimming

- no hand touch at backstroke turn
- underwater kick to 15 metres after start and turns (60 metres out of a 100 may be kicking underwater) applies to backstroke and butterfly
- turning onto stomach to execute turn



Liz Warden (UofT) won three events to bring career total to 10

Marco Chiesa

2003 CIS CHAMPIONSHIPS

Victoria, BC, Feb 21-23 (25 M)

MEN

50 METRES FREESTYLE

- 1) 22.58 Brent Hayden,19,UBC
- 2) 22.87 Daniel Monid,20,UNB
- 3) 22.98 Ryan Tomicic,22,UMCG
- 4) 22.99 Justin Tisdall,21,UBC
- 5) 23.04 Jason Strelzow,21,UBC
- 6) 23.24 Alexandre Pichette,26,UMCG
- 7) 23.30 Gerard Hunter,21,UOFL
- 8) 23.46 Matt Wood,22,UWO

100 METRES FREESTYLE

- 1) 49.18 Brent Hayden,19,UBC
- 2) 49.88 Mark Johnston,23,UBC
- 3) 50.15 Chad Hankewich,21,UREG
- 4) 50.24 Justin Tisdall,21,UBC
- 5) 50.53 Jason Strelzow,21,UBC
- 6) 50.53 Jean-F. Langlais,23,ULAV
- 7) 50.55 Alexandre Pichette,26,UMCG
- 8) 50.73 Daniel Monid,20,UNB

200 METRES FREESTYLE

- 1) 1:46.16 Mark Johnston,23,UBC
- 2) 1:47.32 Brent Hayden,19,UBC
- 3) 1:47.94 Chad Hankewich,21,UREG
- 4) 1:50.20 Cameron Hyder,20,UOFC
- 5) 1:50.22 Michael Power,22,UOFC
- 6) 1:50.56 Peter Szafarski,21,UOFT
- 7) 1:51.98 Jarrod Ballem,23,UOFC
- 8) 1:52.50 Justin Tisdall,21,UBC

400 METRES FREESTYLE

- 1) 3:44.99 Mark Johnston,23,UBC
- 2) 3:54.88 David Creel,22,UVIC
- 3) 3:54.95 Jarrod Ballem,23,UOFC
- 4) 3:58.94 David Ling,23,UOFT
- 5) 3:59.85 Nicolas Guillotte,19,UDEM
- 6) 4:00.87 Serge Loiselle,21,U
- 7) 4:03.06 Elliot MacDonald,20,UMAN
- 8) 4:03.11 Michael Derban,18,UOFC

1500 METRES FREESTYLE

- 1) 15:15.84 Mark Johnston,23,UBC
- 2) 15:33.85 Jesse Jacks,20,UVIC
- 3) 15:36.59 Jarrod Ballem,23,UOFC
- 4) 15:42.26 David Creel,22,UVIC
- 5) 15:45.46 David Ling,23,UOFT
- 6) 15:50.85 Darryl Rudolf,18,UBC
- 7) 15:53.79 Michael Derban,18,UOFC
- 8) 16:01.13 Alex Hayes,22,UOTT

50 METRES BACKSTROKE

- 1) 25.41 Alexandre Pichette,26,UMCG
- 2) 25.57 Jean-F. Langlais,23,ULAV
- 3) 25.78 Stephen Preston,21,ULAV
- 4) 26.23 Doug McCarthy,21,UMCG
- 5) 26.34 Jan Pelechtyk,22,UREG
- 6) 26.42 Maciek Zielnik,18,UALB
- 7) 26.56 Roland Bauhart,22,UBC
- 8) 26.97 Scott Briggs,20,UOFT

100 METRES BACKSTROKE

- 1) 54.67 Alexandre Pichette,26,UMCG
- 2) 54.91 Stephen Preston,21,ULAV
- 3) 56.07 Roland Bauhart,22,UBC
- 4) 56.36 Michael Power,22,UOFC
- 5) 56.53 Bryan McMillan,20,UOFG
- 6) 57.23 Doug McCarthy,21,UMCG
- 7) 57.34 Louis-D. Bonneau,22,UOTT
- 8) 57.77 Graham Diehl,20,UOFC

200 METRES BACKSTROKE

- 1) 1:56.89 Brian Johns,20,UBC
- 2) 1:58.71 Stephen Preston,21,ULAV
- 3) 1:59.48 Roland Bauhart,22,UBC
- 4) 2:00.69 Michael Power,22,UOFC
- 5) 2:03.33 Matthew Terauds,19,UDAL
- 6) 2:04.29 Jonathan Schjott,21,UOFC
- 7) 2:04.76 Graham Diehl,20,UOFC
- 8) 2:04.97 Bryan McMillan,20,UOFG

50 METRES BREASTSTROKE

- 1) 28.68 Michel Boulianne,24,UDEM
- 2) 28.77 Matthew Mains,21,UWAT

- 3) 28.92 Matthew Huang,18,UBC
- 4) 28.98 Gerard Hunter,21,UOFL
- 5) 29.03 Chris Stewart,25,UDAL
- 6) 29.22 Matt Wood,22,UWO
- 7) 29.33 Nathan Parker,18,UREG
- 8) 29.71 Patrick Russell,19,UMCM

100 METRES BREASTSTROKE

- 1) 1:01.52 Matthew Mains,21,UWAT
- 2) 1:01.98 Gerard Hunter,21,UOFL
- 3) 1:02.12 Matthew Huang,18,UBC
- 4) 1:02.40 Michel Boulianne,24,UDEM
- 5) 1:02.53 Chris Stewart,25,UDAL
- 6) 1:03.03 Nathan Parker,18,UREG
- 7) 1:03.14 Aaron Lee,23,UNB
- 8) 1:04.02 Clayton Delaney,21,WLU

200 METRES BREASTSTROKE

- 1) 2:12.28 Matthew Mains,21,UWAT
- 2) 2:13.06 Michel Boulianne,24,UDEM
- 3) 2:13.38 Matthew Huang,18,UBC
- 4) 2:15.69 Nathan Parker,18,UREG
- 5) 2:17.70 Clayton Delaney,21,WLU
- 6) 2:18.14 Aaron Lee,23,UNB
- 7) 2:19.54 Alex Boulanger,20,UMCG
- 8) 2:19.83 David Allard,23,UMCG

50 METRES BUTTERFLY

- 1) 24.35 Chad Hankewich,21,UREG
- 2) 24.78 Jean-F. Langlais,23,ULAV
- 3) 24.91 Ian MacLeod,19,UOFT
- 4) 25.05 Gerard Hunter,21,UOFL
- 5) 25.14 Jesse Jacks,20,UVIC
- 6) 25.26 Chris Razeau,22,UMAN
- 7) 25.49 Alex Babaris,21,TU
- 8) 25.60 Philip Weiss,23,UVIC

100 METRES BUTTERFLY

- 1) 53.60 Chad Murray,21,UOFC
- 2) 54.45 Jean-F. Langlais,23,ULAV
- 3) 54.54 Jesse Jacks,20,UVIC
- 4) 54.58 Chad Hankewich,21,UREG
- 5) 54.78 Philip Weiss,23,UVIC
- 6) 55.09 Darryl Rudolf,18,UBC
- 7) 55.26 Jonathan Schjott,21,UOFC
- 8) 55.92 Chris Razeau,22,UMAN

200 METRES BUTTERFLY

- 1) 1:54.76 Brian Johns,20,UBC
- 2) 1:58.80 Jesse Jacks,20,UVIC
- 3) 1:58.83 Chad Murray,21,UOFC
- 4) 2:01.24 Jonathan Schjott,21,UOFC
- 5) 2:01.71 Ian MacLeod,19,UOFT
- 6) 2:01.98 Sebastien Poulin,23,CAMO
- 7) 2:02.34 Philip Weiss,23,UVIC
- 8) 2:05.72 Taylor Graham,18,UOFL

200 METRES IND. MEDLEY

- 1) 1:56.23 Brian Johns,20,UBC
- 2) 2:02.17 Chad Murray,21,UOFC
- 3) 2:03.53 Philip Weiss,23,UVIC
- 4) 2:04.31 Cameron Hyder,20,UOFC
- 5) 2:05.47 Matthew Mains,21,UWAT
- 6) 2:06.54 Taylor Graham,18,UOFL
- 7) 2:06.90 Sylvain Lemieux,22,UMCG
- 8) 2:08.60 David Allard,23,UMCG

400 METRES IND. MEDLEY

- 1) 4:02.72 Brian Johns,20,UBC
- 2) 4:22.72 Cameron Hyder,20,UOFC
- 3) 4:26.19 Roland Bauhart,22,UBC
- 4) 4:27.54 David Creel,22,UVIC
- 5) 4:28.86 Elliot MacDonald,20,UMAN
- 6) 4:30.77 Jonathan Bird,20,UOFC
- 7) 4:32.03 Andrew Sweet,21,UALB
- 8) 4:34.62 Jarrod Ballem,23,UOFC

4X100 M MEDLEY RELAY

- 1) 3:39.03 Univ.British Columbia
- 2) 3:45.58 Univ.Laval
- 3) 3:45.74 Univ.Montreal
- 4) 3:46.08 Dalhousie Univ.
- 5) 3:46.93 McGill Univ.
- 6) 3:47.07 Univ.Calgary
- 7) 3:47.97 Univ.Regina
- 8) 3:49.92 Univ.Alberta

4X100 M FREE RELAY

- 1) 3:17.53 Univ.British Columbia
- 2) 3:24.08 McGill Univ.
- 3) 3:24.66 Dalhousie Univ.
- 4) 3:24.69 Univ.Calgary
- 5) 3:26.26 Univ.Montreal
- 6) 3:27.43 Univ.Toronto
- 7) 3:28.48 Western Ontario
- 8) 3:28.60 McMaster Univ.

4X200 M FREE RELAY

- 1) 7:10.95 Univ.British Columbia
- 2) 7:24.38 Univ.Calgary
- 3) 7:35.66 McGill Univ.
- 4) 7:35.77 Univ.Montreal
- 5) 7:36.62 Dalhousie Univ.
- 6) 7:38.00 Univ.Alberta
- 7) 7:38.11 Univ.Victoria
- 8) 7:41.01 Univ.Toronto

TEAM SCORES

- 1) 618.5 Univ.British Columbia
- 2) 428.0 Univ.Calgary
- 3) 312.0 McGill University
- 4) 222.0 Univ.Victoria
- 5) 216.0 Univ.Montreal
- 6) 204.0 Univ.Toronto
- 7) 193.0 Univ.Regina
- 8) 179.5 Dalhousie Univ.
- 9) 166.5 Univ.Laval
- 10) 141.5 Univ.Alberta

WOMEN

50 METRES FREESTYLE

- 1) 26.04 Carla Geurts,31,UNB
- 2) 26.17 Anna Lydall,22,UBC
- 3) 26.28 Caroline Clapham,21,UBC
- 4) 26.34 Erin Gammel,22,UOFC
- 5) 26.35 Laura Grant,18,UOFC
- 6) 26.73 Genevieve Gregoire,21,UMCG
- 7) 26.77 Alexandra Lys,18,UOFC
- 8) 26.88 Marielle Menard,22,ULAV

100 METRES FREESTYLE

- 1) 56.43 Sophie Simard,24,ULAV
- 2) 56.61 Elizabeth Collins,20,UBC
- 3) 56.61 Alexandra Lys,18,UOFC
- 4) 56.68 Jessica Deglau,22,UBC
- 5) 57.03 Laura Grant,18,UOFC
- 6) 57.05 Anna Lydall,22,UBC
- 7) 57.41 Gail Whittaker,23,UDAL
- 8) 58.06 Sienna Quirk,20,UNB

200 METRES FREESTYLE

- 1) 1:58.25 Sophie Simard,24,ULAV
- 2) 1:58.60 Carla Geurts,31,UNB
- 3) 1:59.68 Elizabeth Collins,20,UBC
- 4) 2:00.85 Jessica Deglau,22,UBC
- 5) 2:00.87 Alexandra Lys,18,UOFC
- 6) 2:02.00 Deanna Stefanyshyn,18,UBC
- 7) 2:02.07 Sienna Quirk,20,UNB
- 8) 2:03.10 Karley Stutzel,20,UVIC

400 METRES FREESTYLE

- 1) 4:07.94 Carla Geurts,31,UNB
- 2) 4:10.41 Sophie Simard,24,ULAV
- 3) 4:13.01 Julie Gravelle,23,UOFT
- 4) 4:15.97 Deanna Stefanyshyn,18,UBC
- 5) 4:16.63 Carrie Burgoyne,21,UOFC

RATING SUMMARY OF TOP CIS PERFORMANCES

- | | | | |
|---------|---------|--------------|---------------------------|
| 1) 1019 | 4:02.72 | 400 IM M | Brian Johns,20,UBC |
| 2) 970 | 2:11.99 | 200 IM W | Elizabeth Warden,25,UOFT |
| 3) 969 | 7:10.95 | 4x200 free M | Univ.British Columbia,UBC |
| 4) 963 | 4:07.94 | 400 free W | Carla Geurts,31,UNB |
| 5) 962 | 1:58.25 | 200 free W | Sophie Simard,24,ULAV |
| 6) 961 | 1:46.16 | 200 free M | Mark Johnston,23,UBC |
| 7) 945 | 1:47.32 | 200 free M | Brent Hayden,19,UBC |
| 8) 945 | 2:10.23 | 200 back W | Kelly Stefanyshyn,20,UBC |
| 9) 945 | 1:00.60 | 100 back W | Erin Gammel,22,UOFC |
| 10) 944 | 1:59.68 | 200 free W | Elizabeth Collins,20,UBC |

- 6) 4:17.01 Sienna Quirk,20,UNB
- 7) 4:18.13 Jessica Deglau,22,UBC
- 8) 4:19.13 Alexandra Lys,18,UOFC

800 METRES FREESTYLE

- 1) 8:30.39 Carla Geurts,31,UNB
- 2) 8:37.71 Sophie Simard,24,ULAV
- 3) 8:39.11 Julie Gravelle,23,UOFT
- 4) 8:44.06 Danielle Bell,19,UVIC
- 5) 8:46.33 Carrie Burgoyne,21,UOFC
- 6) 8:52.42 Deanna Stefanyshyn,18,UBC
- 7) 8:53.80 Karley Stutzel,20,UVIC
- 8) 9:00.01 Sienna Quirk,20,UNB

50 METRES BACKSTROKE

- 1) 28.44 Erin Gammel,22,UOFC
- 2) 29.13 Kelly Stefanyshyn,20,UBC
- 3) 29.35 Caitlin Meredith,19,UBC
- 4) 29.38 Kiera Aitken,21,UDAL
- 5) 29.56 Caroline Clapham,21,UBC
- 6) 29.84 Marielle Menard,22,ULAV
- 7) 30.27 Genevieve Gregoire,21,UMCG
- 8) 30.41 Marla Breitkreutz,18,UALB

100 METRES BACKSTROKE

- 1) 1:00.60 Erin Gammel,22,UOFC
- 2) 1:01.29 Kelly Stefanyshyn,20,UBC
- 3) 1:02.59 Caitlin Meredith,19,UBC
- 4) 1:03.30 Melanie Bouchard,21,ULAV
- 5) 1:03.65 Kiera Aitken,21,UDAL
- 6) 1:04.20 Caroline Clapham,21,UBC
- 7) 1:04.90 Marla Breitkreutz,18,UALB
- 8) 1:05.28 Genevieve Gregoire,21,UMCG

200 METRES BACKSTROKE

- 1) 2:09.14 Elizabeth Warden,25,UOFT
- 2) 2:10.23 Kelly Stefanyshyn,20,UBC
- 3) 2:12.32 Caitlin Meredith,19,UBC
- 4) 2:12.51 Melanie Bouchard,21,ULAV
- 5) 2:12.60 Erin Gammel,22,UOFC
- 6) 2:16.43 Deanna Stefanyshyn,18,UBC
- 7) 2:19.59 Sara Alroubaie,21,UMAN
- 8) 2:19.78 Danielle Bell,19,UVIC

50 METRES BREASTSTROKE

- 1) 32.51 Michelle Laprade,21,UMCG
- 2) 32.93 Emma Spooner,19,UOFC
- 3) 33.76 Serena McGibbon,21,UBC
- 4) 33.78 Marie-E. Beauvive,22,ULAV
- 5) 33.85 Jennifer Bochen,21,UMAN
- 6) 34.01 Christie Smith,21,U
- 7) 34.01 Sandra McLean,24,UDAL
- 8) 34.13 Heather Bell,19,UMCG

100 METRES BREASTSTROKE

- 1) 1:10.35 Emma Spooner,19,UOFC
- 2) 1:11.19 Kristy Cameron,21,UOFC
- 3) 1:11.29 Shannon Frey,18,UALB
- 4) 1:11.42 Michelle Laprade,21,UMCG
- 5) 1:13.09 Heather Bell,19,UMCG
- 6) 1:13.12 Francine Ling,19,UBC
- 7) 1:13.17 Sandra McLean,24,UDAL
- 8) 1:13.55 Julie Lafontaine,23,UDEM

200 METRES BREASTSTROKE

- 1) 2:29.11 Kristy Cameron,21,UOFC
- 2) 2:29.18 Elizabeth Warden,25,UOFT
- 3) 2:32.07 Emma Spooner,19,UOFC
- 4) 2:35.25 Dena Durand,22,UOFC
- 5) 2:35.47 Kristen Lis,19,UOFC
- 6) 2:35.69 Shannon Frey,18,UALB
- 7) 2:36.89 Sandra McLean,24,UDAL
- 8) 2:40.56 Heather Bell,19,UMCG

50 METRES BUTTERFLY

- 1) 27.93 Elizabeth Collins,20,UBC
- 2) 28.26 Sara Alroubaie,21,UMAN

- 3) 28.52 Laura Grant,18,UOFC
- 4) 28.55 Diana Bennett,21,UDAL
- 5) 28.56 Carolyn McCabe,21,UMCG
- 6) 28.66 Lori Borgal,21,UDAL
- 7) 28.76 Marielle Menard,22,ULAV
- 8) 29.30 Jennifer Manley,22,UWO

100 METRES BUTTERFLY

- 1) 1:01.01 Kelly Stefanyshyn,20,UBC
- 2) 1:01.15 Sara Alroubaie,21,UMAN
- 3) 1:01.21 Elizabeth Collins,20,UBC
- 4) 1:01.94 Julie Gravelle,23,UOFT
- 5) 1:02.28 Melissa Hublely,21,UDAL
- 6) 1:02.59 Laura Grant,18,UOFC
- 7) 1:03.29 Melissa Laflamme,20,ULAV
- 8) 1:04.13 Carolyn McCabe,21,UMCG

200 METRES BUTTERFLY

- 1) 2:12.27 Julie Gravelle,23,UOFT
- 2) 2:13.06 Melissa Hublely,21,UDAL
- 3) 2:13.32 Sara Alroubaie,21,UMAN
- 4) 2:15.95 Michelle Landry,18,UBC
- 5) 2:18.64 Michelle Landry,18,UBC
- 6) 2:20.15 Kellie Rolston,22,UVIC
- 7) 2:21.52 Carolyn McNeill,18,UBC
- 8) 2:21.71 Dena Durand,22,UOFC

200 METRES IND. MEDLEY

- 1) 2:11.99 Elizabeth Warden,25,UOFT
- 2) 2:16.33 Kristy Cameron,21,UOFC
- 3) 2:17.91 Michelle Landry,18,UBC
- 4) 2:18.07 Carrie Burgoyne,21,UOFC
- 5) 2:18.80 Francine Ling,19,UBC
- 6) 2:19.35 Caitlin Meredith,19,UBC
- 7) 2:19.36 Melissa Laflamme,20,ULAV
- 8) 2:20.00 Dena Durand,22,UOFC

400 METRES IND. MEDLEY

- 1) 4:38.21 Elizabeth Warden,25,UOFT
- 2) 4:43.91 Carrie Burgoyne,21,UOFC
- 3) 4:50.15 Melanie Bouchard,21,ULAV
- 4) 4:50.18 Dena Durand,22,UOFC
- 5) 4:50.92 Michelle Landry,18,UBC
- 6) 4:58.38 Melissa Laflamme,20,ULAV
- 7) 4:59.83 Marcia Bryon,19,UOFT
- 8) 5:20.31 Kristy Cameron,21,UOFC

4X100 M MEDLEY RELAY

- 1) 4:08.66 Univ.Calgary
- 2) 4:10.47 Univ.British Columbia
- 3) 4:12.19 Dalhousie Univ.
- 4) 4:17.67 Univ.Laval
- 5) 4:18.56 Univ.Toronto
- 6) 4:20.15 McGill Univ.
- 7) 4:22.27 Univ.Alberta
- 8) 4:27.32 Univ.Manitoba

4X100 M FREE RELAY

- 1) 3:44.01 Univ.British Columbia
- 2) 3:49.76 Univ.Calgary
- 3) 3:50.75 Univ.Laval
- 4) 3:52.89 Dalhousie Univ.
- 5) 3:53.19 Univ.New Brunswick
- 6) 3:54.82 Univ.Toronto
- 7) 3:55.46 McGill Univ.
- 8) 3:56.84 Univ.Victoria

4X200 M FREE RELAY

- 1) 8:04.71 Univ.British Columbia
- 2) 8:13.62 Univ.Calgary
- 3) 8:14.51 Univ.Toronto
- 4) 8:21.99 Univ.Laval
- 5) 8:24.88 Univ.Victoria
- 6) 8:28.01 Dalhousie Univ.
- 7) 8:29.93 Univ.New Brunswick
- 8) 8:33.88 Univ.Alberta

TEAM SCORES

- 1) 666.5 Univ.British Columbia
- 2) 616.5 Univ.Calgary
- 3) 327.0 Univ.Laval
- 4) 305.0 Dalhousie Univ.
- 5) 266.0 Univ.Toronto
- 6) 233.0 McGill Univ.
- 7) 202.0 Univ.Victoria
- 8) 191.0 Univ.New Brunswick
- 9) 155.0 Univ.Al

RECORD FOR MINTENKO IN THE 100 BUTTERFLY

If you make the meet long course when most of North America is training and racing short course (yards or metres) and schedule it at the height of the US College season when hundreds of men's and women's teams are busy racing each other, the US Open is bound to have mixed results.

Not a single winning time would have won the US Summer Nationals, but don't blame those that showed up. Many are up-and-coming youngsters like Karalynn Joyce (born 1986), winner of the women's 50 free in a meet record of 25.20. She set a national high school record in the 50 yards freestyle of 22.04 a few weeks before. And three 16-year-old women swept the top three spots in the 100 free. An even younger Jenny Forster, 14, won the women's 200 IM in 2:17.52.

Injured stars made tentative returns, including Olympic champions Brooke Bennett, Lenny Krayzelburg, and Misty Hyman. All have undergone recent surgery and are on the long, slow, comeback trail. Even 32-year-old Hall-of-Fame backstroker Jeff

Rouse (1996 Olympic double gold medallist) is back after a six-year retirement and took a first step with a modest fifth in the 200 back.

Krayzelburg won the 100 backstroke in 55.09, surging ahead of Neil Walker (55.25) in the final strokes.

Misty Hyman, the 2000 Olympic 200 fly winner, finished third in the 100 fly with 1:01.79 and eighth in the 200 fly.

Brooke Bennett was modest with her sixth in the 400 free and fifth in the 800 free. The 1996 and 2000 Olympic 800 free champion was only aiming to get her national qualifying times.

Josh Davis, a three-time Olympic relay gold medallist, made up for a disappointing summer season with a win in the 200 free in 1:48.38, the third-fastest American in 2002. "I spent my whole fall shooting for this night," Davis said. "This was a big swim for me. It's been a year and a half since I've gone this fast and it's nice to know I still got it."

Top performance was by Tom Malchow, winning the 200 butterfly in 1:55.66 (996 points) and giving him the Performance of the Meet honours for his effort. He was swimming in front of his hometown fans. "Anytime I have a chance to race the 200 fly, I like to go after it," Malchow said. "I'm excited about this time for this early in the season."

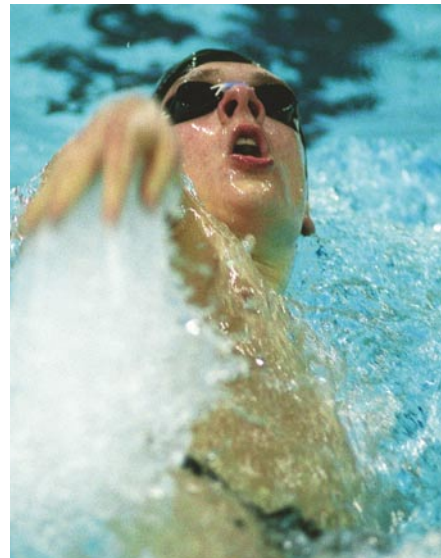
Malchow has 21 sub-1:56 performances in the past four years.

Kyle Bubolcz, in fifth place, bettered the US Age 15-16 50 free record with his 23.15.

The only non American or Canadian winner was Masami Tanaka (JPN) in the 100 and 200 breaststrokes with 1:08.89 and 2:26.52. She is training with Curl-Burke in Washington, DC.

Canadian highlights:

Canadians, just three days after the conclusion of the short course nationals in Edmonton, travelled in large numbers to Minneapolis.



Keith Beavers, ROW

Marco Chiesa

They had a very strong showing, with eight firsts including a sweep of the top three spots in the men's 200 breaststroke.

Chad Thompsen and Michael Brown went 1-2 in the men's 100 breaststroke in 1:03.59 and 1:03.92. In the 200 sweep, it was John Stambhuis in first in 2:18.12, Brown second in 2:18.78, and Thompsen third in 2:21.29. All were faster last summer.

Michael Brown from Perth, ON, is attending the University of Minnesota, which was hosting the US Open.

Michael Mintenko bettered his own national record in the 100 butterfly with 52.44, bettering his previous record of 52.58 from the 2000 Olympic final in Sydney. He also finished in second in the 100 freestyle in 50.41.

"It was unexpected," Mintenko said. "I took 17 strokes on the second 50 instead of my usual 18. It's early in the season and we haven't done all the work to be in top form. I had a great finish. It was the first time my second 50 was under 28 seconds. It's a great start to the season." Mintenko's winning time was a meet record, bettering the old one of 52.90 held by no less than Michael Klim (AUS).

Keith Beavers (ROW) won the 200 backstroke in 1:59.75, with Lenny Krayzelburg (USA) in second in 2:00.47. He also won the 400 IM in 4:24.39, adding a sixth in the 200 IM in 2:05.23.

"I felt I had an opportunity to beat him," Beavers said. "I don't have the strength to go out with these guys at the start so I usually save my speed for the end. The key here was to stay relaxed and swim my own race." His splits were 24.56 and 27.88 for each 50.

Audrey Lacroix (CAMO) won the 100 and 200 fly in 1:01.19 and 2:12.81. She was pleased with the 200: "I had a much better race as I went out slower than usual and was able to finish very strong in the final 50." Her best time is 2:11.36 from 2001.



Michael Mintenko, UBCC

Marco Chiesa

2002 US OPEN

Minneapolis, Dec 5-7 (50 M)

MEN

50 METRES FREESTYLE

- 22.59 Walker Neil, 76, USA
- 22.73 Busquets Ricardo, 75, PUR
- 22.97 Gallagher Dan, 79, USA
- 23.15 Bubolcz Kyle, 86, USA
- 23.56 Ong Allen, 79, MAS
- 23.56 Dusing Nate, 78, USA
- 23.61 Jayme Carlos A., 80, BRA
- 23.65 Vonschoff Scott, 78, USA

100 METRES FREESTYLE

- 49.40 Walker Neil, 76, USA
- 50.41 Mintenko Michael, 75, CAN
- 50.55 Busquets Ricardo, 75, PUR
- 51.13 Bubolcz Kyle, 86, USA
- 51.14 Vonschoff Scott, 78, USA
- 51.33 Jayme Carlos A., 80, BRA
- 51.35 Weber-Gale Garret, 85, USA
- 52.12 Silkaitis Terry, 83, USA

200 METRES FREESTYLE

- 1:48.38 Davis Josh, 72, USA
- 1:49.96 Keller Kleite, 82, USA
- 1:50.76 Say Rick, 79, CAN
- 1:52.53 Vonschoff Scott, 78, USA
- 1:52.67 Dusing Nate, 78, USA
- 1:53.24 Mull Cameron, 76, USA
- 1:53.34 Taylor Matt, 81, USA
- 1:53.61 Preston Adam, 84, USA

400 METRES FREESTYLE

- 3:53.40 Say Rick, 79, CAN
- 3:53.57 Mortimer Justin, 82, USA
- 3:57.00 Thompson Chris, 78, USA
- 3:57.30 Preston Adam, 84, USA
- 3:58.79 Jensen Larsen, 85, USA
- 3:59.44 Lochte Ryan, 84, USA
- 4:01.10 Taylor Matt, 81, USA
- 4:02.47 Jaben Max, 86, USA

1500 METRES FREESTYLE

- 15:22.76 Thompson Chris, 78, USA
- 15:41.03 Say Rick, 79, CAN
- 15:46.10 Mortimer Justin, 82, USA
- 15:50.17 Lochte Ryan, 84, USA
- 15:51.95 Jensen Larsen, 85, USA
- 15:52.41 Keller Kleite, 82, USA
- 15:58.08 Beckerle Travis, 84, USA
- 15:58.90 Biel Matt, 87, USA

100 METRES BACKSTROKE

- 55.09 Krayzelburg Lenny, 75, USA
- 55.25 Walker Neil, 76, USA
- 56.16 Hussein Ahmed, 82, EGY
- 56.30 Hannan Tommy, 80, USA
- 57.03 Smolinski Todd, 80, USA
- 57.18 Rouse Jeff, 70, USA
- 57.58 Beavers Keith, 83, CAN
- 58.15 Ally Bradley, 87, USA

200 METRES BACKSTROKE

- 1:59.75 Beavers Keith, 83, CAN
- 2:00.47 Krayzelburg Lenny, 75, USA

- 2:04.74 Urreta Diego, 81, MEX
- 2:05.74 Rouse Jeff, 70, USA
- 2:05.82 Smolinski Todd, 80, USA
- 2:07.89 Plank Greg, 78, USA
- 2:08.02 Schirk Patrick, 87, USA
- 2:08.28 Hartley Brian, 83, USA

100 METRES BREASTSTROKE

- 1:03.59 Thomsen Chad, 83, CAN
- 1:03.92 Brown Michael, 84, CAN
- 1:04.76 Hackler Jeff, 81, USA
- 1:05.54 Lowe Matthew, 85, USA
- 1:05.85 Charlton Cameron, 81, CAN
- 1:06.56 Beckwith Harvey, 78, USA
- 1:06.66 Chadsey Ian, 79, USA
- 1:07.28 Hurley Ryan, 86, USA

200 METRES BREASTSTROKE

- 2:18.12 Stamhuis John, 79, CAN
- 2:18.78 Brown Michael, 84, CAN
- 2:21.29 Thomsen Chad, 83, CAN
- 2:22.15 Hackler Jeff, 81, USA
- 2:22.43 Hurley Ryan, 86, USA
- 2:22.48 Charlton Cameron, 81, CAN
- 2:24.26 Norris Philip, 80, USA

100 METRES BUTTERFLY

- 52.44 Mintenko Michael, 75, CAN
- 53.29 Hannan Tommy, 80, USA
- 54.17 Cooper Todd, 83, GBR
- 54.31 Bubolcz Kyle, 86, USA
- 54.33 Malchow Tom, 76, USA
- 55.02 Abal Pablo, 77, ARG
- 55.52 Jacks Jesse, 82, CAN
- 56.02 Ballem Josh, 77, CAN

200 METRES BUTTERFLY

- 1:55.66 Malchow Tom, 76, USA
- 2:03.34 Taylor Matt, 81, USA
- 2:03.52 Cooper Todd, 83, GBR
- 2:04.26 Jacks Jesse, 82, CAN
- 2:07.47 Eaddy Jason, 75, USA
- 2:07.78 Pedersen Anders Bo, 81, DEN
- 2:09.34 Natali Michael, 85, USA

200 METRES IND. MEDLEY

- 2:02.66 Kerekjarto Tamas, 79, HUN
- 2:04.18 Montague Joey, 78, USA
- 2:04.18 Urreta Diego, 81, MEX
- 2:04.63 Lochte Ryan, 84, USA
- 2:05.05 Ally Bradley, 87, USA
- 2:05.23 Beavers Keith, 83, CAN
- 2:05.64 Karnaugh Ron, 66, USA
- 2:09.17 Plummer Ryan, 81, USA

400 METRES IND. MEDLEY

- 4:24.39 Beavers Keith, 83, CAN
- 4:25.60 Kerekjarto Tamas, 79, HUN
- 4:29.37 Lochte Ryan, 84, USA
- 4:29.97 Urreta Diego, 81, MEX
- 4:30.69 Donnelly Eric, 80, USA
- 4:31.26 Ally Bradley, 87, USA
- 4:34.23 Plummer Ryan, 81, USA
- 4:34.64 Barber Justin, 85, USA

4X100 MEDLEY RELAY

- 3:46.64 Univ. of Minnesota, USA
- 3:50.76 Univ. of Minnesota B, USA
- 3:51.92 Univ. of Florida, USA

4X100 FREE RELAY

- 3:23.77 Circle C Swim, USA
- 3:27.55 Univ. of Minnesota, USA
- 3:30.38 Univ. of Minnesota B, USA

4X200 FREE RELAY

- 7:33.91 Univ. of Minnesota, USA
- 7:37.75 Circle C Swim, USA
- 7:48.73 Univ. of Florida B, USA

WOMEN

50 METRES FREESTYLE

- 25.20 Joyce Karalynn, 86, USA
- 25.43 Stone Tammie, 76, USA
- 25.52 Weir Amanda, 86, USA
- 25.65 Swindle Christina, 84, USA
- 25.76 Lanne Colleen, 79, USA
- 25.98 Jeffrey Rhiannon, 86, USA
- 26.29 Nymeyer Lacey, 86, USA
- 26.80 Kelly Lindsey, 87, USA

100 METRES FREESTYLE

- 55.60 Weir Amanda, 86, USA
- 55.84 Jeffrey Rhiannon, 86, USA
- 55.86 Joyce Karalynn, 86, USA
- 55.91 Lanne Colleen, 79, USA
- 56.12 Swindle Christina, 84, USA
- 56.78 Williams Stefanie, 79, USA
- 57.07 van Rooijen Manon, 82, NED
- 57.19 Stone Tammie, 76, USA

200 METRES FREESTYLE

- 2:02.19 Lanne Colleen, 79, USA
- 2:02.53 Weir Amanda, 86, USA
- 2:03.05 van Rooijen Manon, 82, NED
- 2:03.40 Deglau Jessica, 80, CAN
- 2:03.52 Jeffrey Rhiannon, 86, USA
- 2:04.36 Nisbet Karen, 81, GBR
- 2:04.51 Joyce Karalynn, 86, USA
- 2:05.66 Koronowicz Kierstin, 86, USA

400 METRES FREESTYLE

- 4:15.64 McLarty Sara, 83, USA
- 4:15.90 Deglau Jessica, 80, CAN
- 4:15.99 Kiel Alyssa, 87, USA
- 4:16.76 Lencoe Taryn, 86, CAN
- 4:19.36 Munz Diana, 82, USA
- 4:19.68 Bennett Brooke, 80, USA
- 4:20.59 Kelly Kimberly, 86, USA
- 4:21.65 Costella Lauren, 85, USA

800 METRES FREESTYLE

- 8:39.71 Munz Diana, 82, USA
- 8:40.28 Kiel Alyssa, 87, USA
- 8:44.28 McLarty Sara, 83, USA
- 8:48.25 Lencoe Taryn, 86, CAN
- 8:49.30 Bennett Brooke, 80, USA
- 8:51.18 Reimer Brittany, 88, CAN
- 8:53.01 Kelly Kimberly, 86, USA
- 8:54.63 Ziegler Kate, 88, USA

100 METRES BACKSTROKE

- 1:02.47 Gregory Hayley, 86, USA
- 1:03.49 Rogers Lauren, 87, USA
- 1:04.02 Gammel Erin, 80, CAN
- 1:04.31 Woessner Susan, 80, USA
- 1:04.35 Reid Jamie, 83, USA
- 1:04.60 Forster Erin, 85, USA
- 1:04.88 Farrell Maureen, 83, USA
- 1:05.75 Akradi Roxane, 86, USA

200 METRES BACKSTROKE

- 2:15.75 McGregory Hayley, 86, USA
- 2:16.72 Reid Jamie, 83, USA
- 2:17.47 Chura Haley, 85, USA
- 2:17.71 Rogers Lauren, 87, USA
- 2:18.36 Forster Erin, 85, USA
- 2:18.88 Beller Yeng, 88, USA
- 2:21.06 McLane Julianne, 87, USA
- 2:21.95 Stinnett Lauren, 80, USA

100 METRES BREASTSTROKE

- 1:08.89 Tanaka Masami, 79, JPN



Audrey Lacroix, CAMO

Marco Chiesa

- 1:10.14 Kowal Kristy, 78, USA
- 1:11.19 Bernhardt Vipa, 82, GER
- 1:11.29 Hehn Keri, 81, USA
- 1:11.40 Spann Alexandra, 86, USA
- 1:12.28 Petelski Christin, 77, CAN
- 1:12.37 Leier Rhiannon, 76, CAN
- 1:12.47 Hall Whitney, 88, USA

200 METRES BREASTSTROKE

- 2:26.52 Tanaka Masami, 79, JPN
- 2:29.80 Kowal Kristy, 78, USA
- 2:31.89 Bernhardt Vipa, 82, GER
- 2:32.47 Hehn Keri, 81, USA
- 2:33.35 Spann Alexandra, 86, USA
- 2:34.75 Petelski Christin, 77, CAN
- 2:36.18 Sakamoto Hiroka, 81, JPN
- 2:37.45 Stein Kellie, 82, USA

100 METRES BUTTERFLY

- 1:01.19 Lacroix Audrey, 83, CAN
- 1:01.68 Azevedo Laura, 82, BRA
- 1:01.79 Hyman Misty, 79, USA
- 1:02.44 Conneally Caitlin, 85, USA
- 1:03.16 Rodakowski Juleen, 83, USA
- 1:03.58 Beller Yeng, 88, USA
- 1:04.09 Stinnett Lauren, 80, USA
- 1:04.18 Weilbacher Anne, 81, USA

200 METRES BUTTERFLY

- 2:12.81 Lacroix Audrey, 83, CAN
- 2:14.25 Stinnett Lauren, 80, USA
- 2:15.31 Deglau Jessica, 80, CAN
- 2:16.88 McLarty Sara, 83, USA
- 2:17.17 Bechem Jennifer, 81, USA
- 2:17.44 Harper Rebecca, 83, USA

- 2:17.93 Stojanovska Vesna, 85, MKD
- 2:20.48 Hyman Misty, 79, USA

200 METRES IND. MEDLEY

- 2:17.52 Forster Jennifer, 88, USA
- 2:18.62 Kowal Kristy, 78, USA
- 2:19.00 McLarty Sara, 83, USA
- 2:19.76 Mattsson Ida, 85, SWE
- 2:20.61 Tafflinger Brooke, 81, USA
- 2:20.69 Braun Katherine, 85, USA
- 2:22.47 Reid Jamie, 83, USA
- 2:25.07 van Rooijen Manon, 82, NED

400 METRES IND. MEDLEY

- 4:49.87 Forster Jennifer, 88, USA
- 4:51.63 McLarty Sara, 83, USA
- 4:53.71 Tafflinger Brooke, 81, USA
- 4:55.70 Dwelley Kate, 89, USA
- 4:58.07 Costella Lauren, 85, USA
- 4:59.35 Johnson Brittany, 85, USA
- 5:02.49 Woodruff Kelly, 85, USA
- 5:03.81 Kiel Alyssa, 87, USA

4X100 MEDLEY RELAY

- 4:17.60 Circle C Swim, USA
- 4:17.88 Univ. of Minnesota, USA
- 4:18.47 Univ. of Florida, USA

4X100 FREE RELAY

- 3:51.98 Pine Crest SC, USA
- 3:52.59 Circle C Swim, USA
- 3:53.92 Dallas Mustangs A, USA

4X200 FREE RELAY

- 8:24.67 Sun Devils, USA
- 8:27.86 Indiana Univ., USA
- 8:27.94 Circle C Swim, USA

RATING SUMMARY OF TOP PERFORMANCES

1)	996	1:55.66	200 fly M	Malchow Tom 76, USA
2)	994	52.44	100 fly M	Mintenko Michael 75, CAN
3)	977	55.09	100 back M	Krayzelburg Lenny 75, USA
	977	2:26.52	200 breast W	Tanaka Masami 79, JPN
5)	973	55.25	100 back M	Walker Neil 76, USA
6)	971	53.29	100 fly M	Hannan Tommy 80, USA
7)	970	1:48.38	200 free M	Davis Josh 72, USA
8)	969	1:59.75	200 back M	Beavers Keith 83, CAN
9)	965	25.20	50 free W	Joyce Karalynn 86, USA
10)	964	2:02.66	200 IM M	Kerekjarto Tamas 79, HUN

AUSTRALIA DOMINANT

Nederpelt Wins Seven Golds, Reimer Top

The four-day Australian Youth Olympic Festival swimming events ended on January 12 with a clear victory for the host nation with 34 (19-8-7) medals. Aussie Travis Nederpelt won six individual events and a seventh gold as a member of the 4x200 free relay.

Nederpelt, from Western Australia, won a gold in every one of the events he contested: the 400, 800, and 1500 free, 200 fly, and 200 and 400 IM. He won the 1500 freestyle on the last day in 15:23.94 by a 10-metre margin over second place. In the 200 IM, it was a come-from-behind swim as he was in fifth place at the 100 and third after the breaststroke leg. He moved into the lead on the freestyle leg to touch in 2:04.73.

Australian Youth head coach Leigh Nugent was proud of his entire Australian team's performance at the Youth Olympics, and described the racing and results of Travis Nederpelt as some of the best he has witnessed.

Canadian Youth Team

Selected off Summer Nationals, Victoria, Aug 6-10

Girls

Jen Porenta, 17, Halton Hills AC
 Erin Kardash, 16, Manitoba Marlins
 Brittany Reimer, 15, Surrey Knights
 Bevan Haley, 15, Wolfville Tritons
 Hanna Kubas, 16, Edmonton Keyano SC
 Jessie Bradshaw, 18, Univ. Calgary SC
 Joanie Bernier, 18, CNC Beauport
 Michelle Landry, 17, UBC Dolphins

Boys

Colin Russell, 18, Barrie Trojans
 Graham Tozer, 17, Manitoba Marlins
 Matthew Hawes, 16, Nepean Kanata
 Scott Dickens, 18, Brantford AC
 Matthew Huang, 18, UBC Dolphins
 Darryl Rudolf, 18, UBC Dolphins
 Steve Medaglia, 17, Nepean Kanata
 Callum Ng, 18, Cascade SC

National Senior Coach Dave Johnson
 National Junior Coach Deryk Snelling
 Team Manger Ken Radford
 Assistant Coach Cory Beatt
 Assistant Coach Heather MacFarlane
 Personal Coach Nicholas Perron

MEDAL TOTALS

Medals	Gold	Silver	Bronze	Total
AUS	19	8	7	34
USA	6	9	15	30
JPN	5	5	2	12
CAN	4	10	7	21
NZL	1	1	3	5
	35	33	34	102

"It was a great performance by all members of the Australian team but especially Travis, who has shown an incredible amount of success and diversity at this meet and should be a name to look out for in the very near future," Nugent said.

This is the second Youth Festival in Sydney and it is a multi-sport competition among Pacific Rim countries. This year, 1400 athletes from 15 countries in 14 sports took part.

In swimming, only two from each country advance to the final but any number may be entered in the prelims. Some events had B finals if there were more than 30 entries. One event was a direct final as there were only seven entries (women's 200 fly). It was a four-day competition in the Olympic pool in Sydney.

Canada had 16 swimmers (8 girls and 8 boys), 5 coaches, and a team manager. In 2001, Canada sent 10 and 10 for a total of 20 swimmers.

In 2001, Canada won 22 medals (7-10-5), finishing second behind Australia with 37 (15-12-10).

The big Canadian story was Brittany Reimer. The 15-year-old won the 200 freestyle in 2:02.84, added seconds in the 400, 800, and 1500 free, and was part of the winning girls 4x200 free relay. The relay win was a great team effort against Australia. The Canadians were behind after the first three swimmers, but Reimer, swimming anchor, did a 2:01.78 to Australia's Belinda Wilson's 2:03.46. Canada's time was 8:16.59 and Australia's 8:17.32.

Reimer had a great competition. Her 1500 free time of 16:37.54, second behind winner Yumi Kida (JPN) in 16:33.24, bettered a 16-year-old Canadian Senior record of 16:40.60 by Elissa Purvis, CDSC.

"I was a bit surprised to win the 200 freestyle," Reimer said. "But after qualifying first, I felt I was a contender for the gold."

"My training times showed I could get the record,"

Reimer said after the 1500 free.

The boys' team also had its share of wins as Matthew Huang won the 100 breaststroke in 1:03.71 with Scott Dickens second in 1:03.93.

"I needed this type of performance to re-ignite my career," Huang said. "It hasn't gone as well as I'd like since I was a relay alternate on the 2000 Olympic team, mainly because of school commitments. I had a great battle with Scott Dickens here."

Huang was second in the 100 breaststroke at the 2000 Canadian Olympic Trials in 1:03.23 and fourth in the 200 breaststroke in 2:17.88.

In the 200 breaststroke, Scott Dickens tied for first in 2:18.42 with Rory Comerford (AUS), with Huang missing a medal in fourth.

Colin Russell was second in the 100 free in 51.43 and also in the 200 free in 1:52.12, adding a third in the 400 free with 3:58.90.

Darryl Rudolf was second in the 200 fly in 2:03.83. All three boys' relays medalled with silvers in the 4x100 medley and 4x100 free, and bronze in the 4x200 free.

Of the 34 events, 21 winning times were faster in 2001 including all the relays.

EUROPE vs PANPAC YOUTH COMPARISON

Event	YOUTH 2001	EU JRS 2002	YOUTH 2003
BOYS			
50 free	23.38	22.74	23.30
100 free	51.12	50.47	51.22
200 free	1:51.85	1:50.26	1:51.85
400 free	3:54.11	3:53.59	3:55.61
1500 free	15:24.72	15:14.85	15:23.94
100 back	56.90	56.09	56.41
200 back	2:00.03	2:02.81	2:03.81
100 breast	1:03.93	1:03.25	1:03.71
200 breast	2:18.12	2:17.08	2:18.42
100 fly	54.57	53.76	53.85
200 fly	1:58.38	1:59.25	2:01.76
200 IM	2:04.04	2:03.65	2:04.73
400 IM	4:19.99	4:19.81	4:21.34
4x100 MR	3:46.27	3:44.99	3:46.92
4x100 FR	3:24.54	3:24.12	3:24.86
4x200 FR	7:30.49	7:28.12	7:31.72
GIRLS			
50 free	26.39	25.76	26.24
100 free	57.25	56.73	57.07
200 free	2:01.07	2:02.40	2:02.84
400 free	4:16.18	4:15.43	4:14.18
800 free	8:43.64	8:43.64	8:40.32
100 back	1:02.89	1:01.88	1:03.53
200 back	2:12.42	2:11.56	2:15.85
100 breast	1:10.75	1:09.91	1:10.89
200 breast	2:28.35	2:26.42	2:32.78
100 fly	1:01.16	1:02.19	59.95
200 fly	2:13.35	2:13.45	2:11.98
200 IM	2:18.24	2:16.35	2:18.00
400 IM	4:48.36	4:46.20	4:51.21
4x100 MR	4:13.07	4:12.41	4:16.20
4x100 FR	3:49.03	3:48.96	3:49.34
4x200 FR	8:16.55	8:14.59	8:16.59

AUSTRALIAN YOUTH OLYMPIC FESTIVAL

Sydney, Jan 9-12 (50 M)

BOYS

50 METRES FREESTYLE

- 1 23.30 Bubolcz Kyle,86,USA
- 2 23.51 Grevers Matthew,85,USA
- 3 23.57 Herring Mark,85,NZL
- 4 23.58 Sullivan Eamon,85,AUS
- 5 23.80 Tozer Graeme,85,CAN
- 6 23.91 Sharp Robert,84,AUS
- 7 24.09 Swanepoel Corney,86,NZL
- 8 24.36 Yamamoto Hiroaki,84,JPN

100 METRES FREESTYLE

- 1 51.22 Grevers Matthew,85,USA
- 2 51.43 Russell Colin,84,CAN
- 3 51.51 Bubolcz Kyle,85,NZL
- 4 51.66 Herring Mark,85,NZL
- 5 52.49 McIntosh Braydon,84,AUS
- 6 52.54 McDonald Cameron,84,AUS
- 7 52.56 Tozer Graeme,85,CAN
- 8 52.76 Yamamoto Hiroaki,84,JPN

200 METRES FREESTYLE

- 1 1:51.85 Sharp Robert,84,AUS
- 2 1:52.12 Russell Colin,84,CAN
- 3 1:52.50 Sakamoto Noa,85,USA
- 4 1:52.62 McGinnis Matt,86,USA
- 5 1:53.67 Thompson Andrew,86,AUS
- 6 1:54.26 Yamamoto Hiroaki,84,JPN
- 7 1:55.01 Dickens Scott,84,CAN
- 8 1:57.57 Pickersgill-B Ben,84,NZL

400 METRES FREESTYLE

- 1 3:55.61 Nederpelt Travis,85,AUS
- 2 3:56.81 Sakamoto Noa,85,USA
- 3 3:58.90 Russell Colin,84,CAN
- 4 3:59.87 Miyajima Takehiro,86,JPN
- 5 3:59.89 Semmens Ashley,84,AUS
- 6 4:02.81 Haszard Arjun,85,NZL
- 7 4:03.05 Cuttino Judson,85,USA
- 8 4:08.94 Gardner Shaun,85,NZL

800 METRES FREESTYLE

- 1 8:04.11 Nederpelt Travis,85,AUS
- 2 8:12.26 Miyajima Takehiro,86,JPN
- 3 8:15.01 Semmens Ashley,84,AUS
- 4 8:16.48 Cuttino Judson,85,USA
- 5 8:18.29 Hewko Daniel A.,86,USA
- 6 8:20.56 Glucina Matthew,85,AUS
- 7 8:26.96 Haszard Arjun,85,NZL
- 8 8:29.82 Gardner Shaun,85,NZL

1500 METRES FREESTYLE

- 1 15:23.94 Nederpelt Travis,85,AUS
- 2 15:37.48 Miyajima Takehiro,86,JPN
- 3 15:40.71 Glucina Matthew,85,AUS
- 4 15:47.83 Cuttino Judson,85,USA
- 5 15:50.86 Sakamoto Noa,85,USA
- 6 15:56.86 Hewko Daniel A.,86,USA
- 7 16:02.51 Semmens Ashley,84,AUS
- 8 16:07.68 Nead Kevin,86,USA

100 METRES BACKSTROKE

- 1 56.41 Grevers Matthew,85,USA
- 2 57.92 Brodie Leith,86,AUS
- 3 58.06 Sun Hong Zhe,85,USA
- 4 58.30 Koga Junya,84,JPN
- 5 58.38 Uchida Shouhei,84,JPN
- 6 58.65 Hawes Matt,86,CAN
- 7 59.12 Williams Lewis,85,NZL
- 8 59.87 Braddock Damian,86,NZL

200 METRES BACKSTROKE

- 1 2:03.74 Clark Ian,85,USA
- 2 2:03.91 McGinnis Matt,86,USA
- 3 2:05.26 Hawes Matt,86,CAN
- 4 2:06.18 Uchida Shouhei,84,JPN
- 5 2:06.18 Matsui Kasaku,84,JPN
- 6 2:08.45 Braddock Damian,86,NZL
- 7 2:09.98 Ng Callum,85,CAN
- 8 2:12.35 Kirby Chris,86,USA

100 METRES BREASTSTROKE

- 1 1:03.71 Huang Matthew,84,CAN
- 2 1:03.93 Dickens Scott,84,CAN
- 3 1:04.28 Newman Keenan,85,USA
- 4 1:04.92 Comerford Rory,85,AUS
- 5 1:05.15 Kibbe James,84,USA
- 6 1:05.67 Brodie Sam,84,AUS
- 7 1:06.05 Snyders Glenn,85,AUS

8 1:07.19 Anderson Nick,85,NZL

200 METRES BREASTSTROKE

- 1 2:18.42 Comerford Rory,85,AUS
- 2 2:18.42 Dickens Scott,84,CAN
- 3 2:18.97 Kibbe James,84,USA
- 4 2:19.64 Huang Matthew,84,CAN
- 5 2:21.67 Hurley Ryan,86,USA
- 6 2:22.14 Snyders Glenn,85,AUS
- 7 2:26.48 Otsuka Kazuki,85,JPN
- 8 2:26.61 Brodie Sam,84,AUS

100 METRES BUTTERFLY

- 1 53.85 Swanepoel Corney,86,NZL
- 2 54.44 Bubolcz Kyle,86,USA
- 3 55.62 Sharp Robert,84,AUS
- 4 55.65 Takamoto Syouta,84,JPN
- 5 55.69 Walkotten Nicholas,86,USA
- 6 55.93 Rudolf Darryl,84,CAN
- 7 56.13 Fujii Shunsuke,87,JPN
- 8 56.53 Lee Henry,85,AUS

200 METRES BUTTERFLY

- 1 2:01.76 Nederpelt Travis,85,AUS
- 2 2:03.83 Rudolf Darryl,84,CAN
- 3 2:03.86 Ng Callum,85,CAN
- 4 2:04.64 Kaneda Kazuyo,85,JPN
- 5 2:04.95 Lee Henry,85,AUS
- 6 2:05.35 Walkotten Nicholas,86,USA
- 7 2:05.94 Fujii Shunsuke,87,JPN
- 8 2:07.85 Johnson Mark,84,USA

400 METRES IND. MEDLEY

- 1 2:04.73 Nederpelt Travis,85,AUS
- 2 2:05.58 Brodie Leith,86,AUS
- 3 2:05.72 Clark Ian,85,USA
- 4 2:07.01 Mellors Patrick,85,USA
- 5 2:07.55 Ng Callum,85,CAN
- 6 2:08.57 Medaglia Steven,84,CAN
- 7 2:12.24 Hotchin Chris,85,NZL
- 8 2:12.64 Jack Michael,85,NZL

400 METRES IND. MEDLEY

- 1 4:21.34 Nederpelt Travis,85,AUS
- 2 4:27.03 Newman Keenan,85,USA
- 3 4:28.47 Mellors Patrick,85,USA
- 4 4:31.86 Ng Callum,85,CAN
- 5 4:35.01 Medaglia Steven,84,CAN
- 6 4:40.10 Braddock Damian,86,NZL
- 7 4:42.98 Iwata Kosuke,86,JPN
- 8 4:46.02 Bestler Adam,86,AUS

4X100 METRES RELAY

- 1 3:46.92 United States,USA
- 57.19 Grevers Matt
- 1:04.15 Newman Keenan
- 54.36 Bubolcz Kyle
- 51.22 Flatt Wesley
- 2 3:49.50 Canada,CAN
- 58.81 Hawes Matt
- 1:03.96 Huang Matthew
- 55.41 Rudolf Darryl
- 51.32 Russell Colin
- 3 3:50.87 Australia,AUS
- 58.70 Brodie Leith
- 1:04.45 Comerford Rory
- 56.04 Sharp Robert
- 51.68 McIntosh Braydon

4X100 METRES RELAY

- 4 3:51.94 New Zealand,NZL
- 5 3:58.13 Japan,JPN
- 3:51.81 United States B,USA
- 3:56.28 Australia B,AUS
- 3:57.03 Japan B,JPN

4X100 FREE RELAY

- 1 3:24.86 United States,USA
- 51.10 Grevers Matt
- 52.20 McGinnis Matt
- 51.22 Flatt Wesley
- 50.34 Bubolcz Kyle
- 2 3:27.38 Canada,CAN
- 51.79 Russell Colin
- 51.51 Tozer Graeme
- 52.15 Dickens Scott
- 51.93 Rudolf Darryl
- 3 3:31.14 New Zealand,NZL
- 52.10 Pickersgill-Brown Ben
- 52.38 McMillan Andrew
- 54.06 Hotchin Chris
- 52.60 Herring Mark

4X100 FREE RELAY

- 4 3:38.32 Japan,JPN
- 4 3:24.86 United States,USA
- 51.10 Grevers Matt
- 52.20 McGinnis Matt
- 51.22 Flatt Wesley
- 50.34 Bubolcz Kyle
- 5 3:27.38 Canada,CAN
- 51.79 Russell Colin
- 51.51 Tozer Graeme
- 52.15 Dickens Scott
- 51.93 Rudolf Darryl
- 3 3:31.14 New Zealand,NZL
- 52.10 Pickersgill-Brown Ben
- 52.38 McMillan Andrew
- 54.06 Hotchin Chris
- 52.60 Herring Mark

3:30.22 Australia B,AUS

3:30.78 United States B,USA

3:30.24 Japan B,JPN

discq Australia A,AUS

4X200 FREE RELAY

- 1 7:31.72 Australia,AUS
- 1:52.56 Thompson Andrew
- 1:53.20 Sharp Robert
- 1:53.25 Semmens Ashley
- 1:52.71 Nederpelt Travis
- 2 7:33.56 United States,USA
- 1:53.26 Sakamoto Noa
- 1:52.65 McGinnis Matt
- 1:55.51 Mellors Patrick
- 1:52.14 Flatt Wesley
- 3 7:39.27 Canada,CAN
- 1:53.03 Russell Colin
- 1:54.70 Rudolf Darryl
- 1:54.43 Tozer Graeme
- 1:57.11 Dickens Scott

4 7:45.76 New Zealand,NZL

5 7:50.33 Japan,JPN

7:43.50 United States B,USA

7:43.76 Australia B,AUS

8:03.75 Japan B,JPN

8:03.75 Japan B,JPN

GIRLS

50 METRES FREESTYLE

- 1 26.24 Guehrer Marieke,85,AUS
- 2 26.26 Mitchell Melissa,87,USA
- 3 26.71 Porenta Jennifer,85,CAN
- 4 26.73 Kardash Erin,85,CAN
- 5 26.79 Kugler Kassandra,87,USA
- 6 26.87 Nakamura Nozomi,89,JPN
- 7 26.91 Hansen Codie,86,USA
- 8 27.19 Toomey Julia,86,NZL

100 METRES FREESTYLE

- 1 57.07 Guehrer Marieke,85,AUS
- 2 57.16 Mitchell Melissa,87,USA
- 3 57.19 Kardash Erin,85,CAN
- 4 57.48 Porenta Jennifer,85,CAN
- 5 57.50 Kugler Kassandra,87,USA
- 6 58.63 Tanaka Hiro,88,JPN
- 7 59.03 Reynolds Caitlin,88,USA
- 8 59.30 Nakamura Nozomi,89,JPN

200 METRES FREESTYLE

- 1 2:02.84 Reimer Brittany,88,CAN
- 2 2:03.02 Mitchell Melissa,87,USA
- 3 2:04.02 Kugler Kassandra,87,USA
- 4 2:04.05 Kardash Erin,85,CAN
- 5 2:04.17 Kida Yumi,85,JPN
- 6 2:04.45 Lehner Andrea,89,USA
- 7 2:04.54 Walker Meagan,84,AUS
- 8 2:04.70 Linton Rebecca,85,NZL

400 METRES FREESTYLE

- 1 4:14.18 Wilson Belinda,84,AUS
- 2 4:15.61 Reimer Brittany,88,CAN
- 3 4:18.17 Hentzen Whitney,86,USA
- 4 4:18.49 Kida Yumi,85,JPN
- 5 4:20.43 Linton Rebecca,85,NZL
- 6 4:21.60 Swinley Leslie,88,USA
- 7 4:22.99 Mitchell Melissa,87,USA

400 METRES FREESTYLE

- 1 4:25.85 Yoshimura Shiho,87,JPN
- 8 4:25.85 Yoshimura Shiho,87,JPN

800 METRES FREESTYLE

- 1 8:40.32 Wilson Belinda,84,AUS
- 2 8:41.03 Reimer Brittany,88,CAN
- 3 8:45.43 Hentzen Whitney,86,USA
- 4 8:48.63 Kelly Kimberly,86,USA
- 5 8:48.65 Kida Yumi,85,JPN
- 6 8:52.80 Swinley Leslie,88,USA
- 7 8:54.45 Linton Rebecca,85,NZL
- 8 8:56.15 Gorman Melissa,85,AUS

1500 METRES FREESTYLE

- 1 16:33.24 Kida Yumi,85,JPN
- 2 16:37.54 Reimer Brittany,88,CAN
- 3 16:41.44 Wilson Belinda,84,AUS
- 4 16:49.35 Kelly Kimberly,86,USA
- 5 16:52.65 Swinley Leslie,88,USA
- 6 16:57.25 Gorman Melissa,85,AUS
- 7 16:57.69 Hentzen Whitney,86,USA
- 8 17:03.24 Iwai Kanae,85,JPN

100 METRES BACKSTROKE

- 1 1:03.53 Tanaka Hiro,88,JPN
- 2 1:03.80 Rogers Lauren,87,USA
- 3 1:04.13 Ingram Melissa,85,NZL
- 4 1:04.37 Seah Nicole,86,AUS
- 5 1:04.56 Kubas Hanna,85,CAN
- 6 1:05.04 Houlton Molly,88,USA
- 7 1:05.32 Zimmer Tayliah,85,AUS
- 8 1:05.80 Bradshaw Jessie,84,CAN

200 METRES BACKSTROKE

- 1 2:15.85 Tanaka Hiro,88,JPN
- 2 2:15.85 Ingram Melissa,85,NZL
- 3 2:16.42 Houlton Molly,88,USA
- 4 2:18.55 Leane Karina,85,AUS
- 5 2:19.00 Newcombe Kelly,85,NZL
- 6 2:19.49 Rogers Lauren,87,USA
- 7 2:21.40 Kubas Hanna,85,CAN
- 8 2:22.92 Seah Nicole,86,AUS

100 METRES BREASTSTROKE

- 1 1:10.89 Nakamura Sayaka,87,JPN
- 2 1:11.19 Taneda Megumi,86,JPN
- 3 1:13.03 Collins Lauren,86,USA
- 4 1:13.72 Kilkuts Courtney,88,USA
- 5 1:14.78 De Golia Hailey,86,USA
- 6 1:15.29 Swanson Lara,87,USA
- 7 1:16.51 Loughton Stephanie,87,NZL
- discq Tamura Nanaka,87,JPN

200 METRES BREASTSTROKE

- 1 2:32.78 Tamura Nanaka,87,JPN
- 2 2:34.78 Taneda Megumi,86,JPN
- 3 2:36.76 De Golia Hailey,86,USA
- 4 2:37.32 Swanson Lara,87,USA
- 5 2:39.22 Kilkuts Courtney,88,USA
- 6 2:43.65 Carroll Lara,86,AUS
- 7 2:44.93 Loughton Stephanie,87,NZL
- 8 2:50.52 Dunlop-Barrett Ayla,87,NZL

100 METRES BUTTERFLY

- 1 59.95 Schipper Jessica,87,USA
- 2 1:00.09 Breden Elaine,89,USA
- 3 1:02.30 Watanabe Kozue,86,JPN
- 4 1:02.75 Crossingham Charnelle,84,AUS
- 5 1:02.80 McCawley Margo,86,USA
- 6 1:03.10 Okumura Ayaka,86,JPN
- 7 1:03.88 Bernier Joan,84,CAN
- 8 1:04.54 Porenta Jennifer,85,CAN

200 METRES BUTTERFLY

- 1 2:11.98 Schipper Jessica,87,USA
- 2 2:14.64 Crossingham Charnelle,84,AUS

3 2:14.73 Breden Elaine,89,USA

4 2:16.42 Bernier Joan,84,CAN

5 2:17.07 Watanabe Kozue,86,JPN

6 2:19.93 Landry Michelle,85,CAN

7 2:20.08 Beller Yeng,88,USA

200 METRES IND. MEDLEY

- 1 2:18.00 Carroll Lara,86,AUS
- 2 2:19.59 Crossingham Charnelle,84,AUS
- 3 2:19.67 Landry Michelle,85,CAN
- 4 2:20.41 Inoue Megumi,86,JPN
- 5 2:21.81 Houlton Molly,88,USA
- 6 2:22.01 Lehner Andrea,89,USA
- 7 2:24.81 Thompson Carissa,85,NZL
- 8 2:26.73 Dunlop-Barrett Ayla,87,NZL

400 METRES IND. MEDLEY

- 1 4:51.21 Crossingham Charnelle,84,AUS
- 2 4:51.38 Kida Yumi,85,JPN
- 3 4:53.62 Carroll Lara,86,AUS
- 4 4:53.66 Inoue Megumi,86,JPN
- 5 4:53.86 Breden Elaine,89,USA
- 6 4:55.86 Houlton Molly,88,USA
- 7 4:57.41 Reimer Brittany,88,CAN
- 8 4:59.53 Landry Michelle,85,CAN

4X100 METRES RELAY

- 1 4:16.20 Australia,AUS
- 1:04.57 Seah Nicole
- 1:13.12 Collins Lauren
- 1:00.75 Schipper Jessicah
- 5:17.76 Guehrer Marieke
- 2 4:17.82 United States,USA
- 1:04.34 Rogers Lauren
- 1:14.68 Kilkuts Courtney
- 1:00.72 Breden Elaine
- 58.08 Kugler Kassandra

3 4:19.88 Japan,JPN

- 1:06.90 Inoue Megumi
- 1:12.02 Taneda Megumi
- 1:01.61 Watanabe Kozue
- 59.35 Kida Yumi
- 4 4:21.38 Canada,CAN
- 5 4:27.43 New Zealand,NZL
- 4:16.53 Japan B,JPN
- 4:22.41 Australia B,AUS
- 4:24.23 United States B,USA

4X100 FREE RELAY

- 1 3:49.34 Australia,AUS
- 58.03 Guehrer Marieke
- 57.14 Walker Meagan
- 57.57 Schipper Jessicah
- 56.60 Mitchell Melissa
- 2 3:49.39 Canada,CAN
- 57.36 Erin Kardash
- 57.03 Porenta Jennifer
- 57.13 Landry Michelle
- 56.89 Reimer Brittany

3 3:51.77 United States,USA

- 57.85 Kugler Kassandra
- 57.97 Lehner Andrea
- 58.27 Hansen Codie
- 57.68 Reynolds Caitlin
- 4 3:54.79 New Zealand,NZL
- 5 3:59.94 Japan,JPN
- 3:57.33 United States B,USA
- 3:59.75 Australia B,AUS
- 4:00.37 Japan B,JPN

4X200 FREE RELAY

- 1 8:16.59 Canada,CAN
- 2:05.91 Kardash Erin
- 2:04.45 Porenta Jennifer
- 1:04.45 Landry Michelle
- 2:01.78 Reimer Brittany
- 2 8:17.32 Australia,AUS
- 2:05.26 Walker Meagan
- 2:04.67 Mitchell Melissa
- 2:03.93 Schipper Jessicah
- 2:03.46 Wilson Belinda
- 3 8:26.40 United States,USA
- 2:05.97 Lehner Andrea
- 2:08.24 Kugler Kassandra
- 2:07.10 Swinley Leslie
- 2:05.09 Reynolds Caitlin

4 8:29.20 New Zealand,NZL

5 8:32.24 Japan,JPN

8:29.21 Australia B,AUS

8:29.86 United States B,USA

8:44.62 Japan B,JPN

Australian Youth Olympic Festival Top Performances

1)	951	16:33.24	1500 free W	Kida Yumi 85,JPN
	951	4:14.18	400 free W	Wilson Belinda 84,AUS
3)	950	8:04.11	800 free M	Nederpelt Travis 85,AUS
	950	53.85	100 fly M	Swanepoel Corney 86,NZL
5)	944	16:37.54	1500 free W	Reimer Brittany 88,CAN
6)	943	8:16.59	4x200 free W	Canada,CAN
7)	942	59.95	100 fly W	Schipper Jessica 87,AUS
8)	940	8:17.32	4x200 free W	Australia,AUS
9)	938	56.41	100 back M	Grevers Matthew 85,USA
	938	1:00.09	100 fly W	Breden Elaine 89,USA
11)	934	54.44	100 fly M	Bubolcz Kyle 86,USA

THE CONTINUING CRISIS

During December, the so-called Flag Flap broke, making front-page news across Canada. Jennifer Carroll held a Quebec flag when receiving her silver medal for the 50 backstroke at the Commonwealth Games. She received a letter from Head Coach Dave Johnson recommending a six-month suspension for this and other related incidents.

An independent review panel investigated the events and made some recommendations. What follows is a small portion of the 13-page document.

The Independent Review Panel

Hilary A. Findlay

Associate Professor, Department of Sport Management
Brock University and Director, Centre for Sport and Law
Yann Bernard

Secrétaire général, Commission scolaire de Laval
Alex Gardiner

Head Coach, Athletics Canada

Judy McCrae

Athletic Director, University of Waterloo

Observations

Commonwealth selection criteria were confusing and very complicated. Certain criteria were intentionally vague so as to provide discretion to the Head Coach to reflect his view of the best team and ensure medal hopefuls not meeting other criteria could be included on the team. The inclusion of Ms Carroll (winner of 50 back) and an injured Curtis Myden were selected on this basis. This meant criteria was open to interpretation.

The problems had an even earlier origin in the coach selection process for the 2000 Sydney Olympics. The selection of a female coach was conducted outside the normal channels for Olympic team coach selection. The process was perceived to be arbitrary on the part of Mr. Johnson. This coach selection matter eventually went to a protracted and highly adversarial appeal. A number of those interviewed described that this had a lasting and detrimental impact on the team's performance at the Olympic Games, and continues to reverberate even today.

The Commonwealth swim team was split into two groups, who prepared for and arrived at Manchester separately. This approach of dividing the team and singling out the higher performers for additional training opportunities was new to SNC. Some feel such an approach is now necessary (that is, focusing on a smaller and more elite "A" team), while others

identified some inherent problems including a feeling among the "B" team members of being "second class."

The tension surrounding the team during the entire Games was palpable. It was reportedly felt by all the swim team members (coaches, staff and athletes—Marianne Limpert stated that "it was the most uncomfortable competition I had ever attended in 13 years of being on the national team"). The tension was also noted by CWG staff, SNC staff and other Canadian teams participating at the Games. In summary, this was a demoralized, frustrated and angry team.

The team saw Ms Carroll and Ms Rolland's behaviour as disruptive, contrary to team unity and selfish, and many were frustrated that they seemed able to engage in these behaviours with impunity. Athletes and coaches expressed frustration that Mr. Johnson as Head Coach and the person in charge, did not do enough to control the situation and did not take steps to sanction their behaviour, when clearly Mr. Johnson has a reputation as a disciplinarian and an authoritarian.

Performances in Manchester were nowhere what was expected, creating *enormous* pressure to perform; a top swimmer and medal hopeful injured his back on the pool floor; a relay team was stripped of its medal due to lack of competition in the event. (This is incorrect; medals for top three awarded only when a minimum of five teams take part. The women's 4x200 free had four entries. The same happened in 1994 in Victoria.)

There was a subsequent move by a group of coaches to circulate a petition calling for the removal of Mr. Johnson as Head Coach; there were ongoing conflicts between swim team sponsor logos and CWG sponsor logos; and several other swimmers engaged in misconduct that resulted in disciplinary action, including one incident that involved police.

Recommendations

SNC should have recognized the potential for a divided and fractured team, . . . In failing to act SNC assumed a strategy of "avoidance." SNC has been operating in close to "crisis mode" for several years.

Mr. Johnson must understand that while this style of management may have served him in the past, it is no longer effective or appropriate. In Manchester, it failed him. As the situation escalated, no one

was willing or able to take on a leadership role to manage, or assist in the management of, the conflict. The Canadian Sport System is stretched to the extreme. There is a tendency often out of necessity, for people to take on tasks outside their mandate. There needs to be a very clear delineation between the business of the corporation, which is led by the CEO, and the technical business of swimming, which is led by the Head Coach. Both, of course, must be held accountable for their performances but now unimpeded by other responsibilities.

Part of the present culture of the organization appears to include a willingness to alter or ignore the rules when it is expedient, or when a certain outcome is desired and SNC can get there by a shorter or surer route; this has contributed to the erosion of trust and it also provides an open avenue for aggrieved individuals wanting to challenge a decision where they feel that they have been dealt with unfairly or arbitrarily.

A climate of mistrust characterizes a number of relationships within SNC. The lack of communication and transparency in decision making breeds mistrust.

SNC should use objective selection criteria and should institute a completely transparent and public selection process.

Swimming/Natation Canada response

1. SNC fully accepts the recommendations made by the Independent Review Panel. We are pleased to note that SNC has implemented the vast majority of these recommendations following a thorough review of all its policies and protocols over the past nine months.

2. SNC took every effort to communicate the true facts in this case to the swimming community, to the media, to our government representatives and to the public. We would like to reiterate our sincere apology for any offence that may have been caused in our remarks or actions in dealing with this issue.

3. SNC has full confidence in the leadership of its National Coach, Dave Johnson. We respect Mr. Johnson's international experience in high performance swimming. His expertise is essential in our preparation for the World Championships in Barcelona this summer and for the Olympic Games in Athens, in 2004.

4. Our principal focus is on safeguarding the performances of our swimmers and coaches in the field. We will continue to do so by building upon the core values of SNC: professional excellence, accountability, responsibility, respect, integrity, growth and learning, open communication and selflessness.

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