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ORIENTEERING CANADA

The Official Newsletter of the Canadian Orienteering Federation

355 River Road,
Vanier, Ont.

VOL. 8 NO. 2 1980

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Orienteering Canada is published in Ottawa with the assistance if the National Sport and Recreation Administration Centre.

Circulation: 2 000

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NEWS FROM 
THE PROVINCES

Several provincial orienteering magazines have been coming my way lately. They are generally very good, informative journals. I shall use these pages to transmit some of the news contained in recent issues.

The spring issue of Orienteering Ontario reports that great progress is being made establishing new clubs in virgin orienteering territories. The Thunder Bay '0' Club held a Ski-0 Meet in March and a clinic and Summer Games selection races in May. There is also an editorial wish to hold the Canadian or Ontario Championships some day in Thunder Bay. Another active new club is Belle River, near Windsor.

Also, relatively young clubs like Laurentian Voyageurs (Sudbury) and Forest City (London) will be hosting two-day meets this year.

Ontario has also named its top orienteers in some 22 categories. Top lady was Marg Ellis of Guelph and top man was Ron Lowry of Hamilton.

Speaking of Lowry, four of the articles in the Ontario magazine were from his pen. He is not only a prodigious trainer but a writer of some volume as well!

***

Orienteer Alberta is proclaimed as the "official rag of the Alberta Orienteering Association." Published monthly, it contains news, results and general interest articles.

The most recent issue contains a complete report of the new COF Officials' Certification Program.

The A.O.A. has plans to establish an orienteering library. Besides keeping and lending written materials on orienteering, the library will keep a master file of A.O.A. events. The file would contain copies of courses, descriptions of control points, planning information, etc. This, to me, seems to be a good idea as course setters would not have to rely on memory to avoid problem controls and courses too similar to ones set in the past.

An anonymous donor has presented the A.O.A. with a prize to be known as the "Calgary Cup". The cup (or cups) will go to the top male and female Alberta orienteers over the space of a year. Bruce Jeffries and Raelene Robertson were
proclaimed the 1979 winners.

***

Due West is the British Columbia newsletter.

In February, the O.A.B.C. faithful (or fanatical) held what is reported to have been a very positive planning session. Priorities and goals for orienteering were set with Mapping and increased Memberships being the two highest priorities. In the middle of the lower priorities is the Canadian Championships in 1981 which B.C. is hosting. (?) Two articles on mapping by Afan Jones also highlight Due West's spring issue. In one he deals with photogrammetric base maps, how they are produced and how they make field work easier. In the second, he reports on the status of Lower Mainland areas suitable for orienteering. The report is not optimistic.

***

Aiming East comes from Nova Scotia. The April issue reports that Don Longard has been hired as the Development Coordinator for O.A.N.S. He is a graduate of Dalhousie University and the British Mountaineering Centre at Plas y Brenin. (Check your copies of By Map and Compass for a map of Plas y Brenin).

Aiming East, like many of our 'O' magazines freely reprints from other sources. Recently included is one from a 1974 issue of Orienteering Canada on misplaced controls. The article by Colin Kirk referred to a meet I put on in Ottawa. The reprint must have jinxed me as for the first time since 1974, I made the same mistake in placing a control for our Interclub Meet!

One of the original articles in Aiming East is about one person's "Initiation" into orienteering. I have reprinted it elsewhere so as to give it a wider enjoyment.

***

The Orienteering New Brunswick Newsletter reported that Andy Martin was nominated by Orienteering for an Executive Award sponsored by Moosehead Breweries.

O.N.B. is already planning to host the 1984 Canadian Championships.

Ted de St. Croix was in New Brunswick for mapping - he worked in three areas. He also left Sheila Andrew with a recipe for something called "Ted's Bread." Sheila published this in the O.N.B. newsletter and we shall do the same in this magazine.

***
Nouvelles - News is the bilingual newsletter of Orienteering Quebec. Recent issues have contained mostly Meet and Clinic announcements.

Bernard Douville du Club Azimut a donné un stage d'initiateur en course d'Orientation. Le stage a été d'une durée de cinq jours - deux fins-de-semaines consécutives et puis les candidats doivent participer à une course organisée par la fédération provinciale ou un de ses clubs.

Aussi la F.Q.C.O. (Orienteering Quebec) a introduit un nouveau cotisation d'un jour. Si quelqu'un qui n'a pas un cotisation de membre anuel il peut compétitionner à un niveau élève de course (orange, vert, rouge, bleu) en payant le cotisation d'un jour-junior $2, senior $3.

NEW EDITOR WANTED

This is my fourth year as editor of Orienteering Canada. I am willing to have it be my last.

In its eight year history there have been three editors of Orienteering Canada - Juri Peepre, Bob Kaill and myself. Each of us, I feel, has added to the growth of the magazine. But if it is going to continue to grow we must put Orienteering Canada in new hands-in the hands of one with more literary flair.

In practical terms, the editor is responsible for collecting appropriate articles for publication, writing them where necessary. He also handles the layout and paste-up of articles. Titles are currently done by the graphics department of the National Sport and Recreation Centre. The editor should keep in touch with the COF committee chairman and the Executive Director to keep abreast of what each is doing.

If anyone is interested in editing Orienteering Canada, get in touch with me or with Colin Kirk in the National Office to discuss it.

Appointment of a new editor will be done by the COF Board of Directors immediately after the Annual General Meeting in November.
1. Planning Meeting: The Planning Committee met in Toronto on June 1, to discuss the various committee projects for 1981 and prioritize budget items for the 1980 Annual Meeting. In attendance were: Pat de St. Croix (Chairperson), Marg James (COF Pres.), Anne Anthony (Education), Juri Peepre (Technical), Jack Forsyth (Promotion), Bruce Brenot (Competition), Mike Day (Finance), Colin Kirk (Executive Director).

The Level I Coaching Certification Program came in for a lot of discussion and this project is considered one of our most important tasks. It is essential that we get this program implemented as soon as possible.

The Committee discussed the restructuring of some of the present committees:

A. A new committee - the Development Committee to replace the present Promotion Committee. The Promotion Committee has a very limited area of operation with very few of their projects receiving government support. A Development Committee has a much broader scope and can include projects such as Leadership clinics (e.g. the Guelph Leadership Clinic in 1974 or the Blue Lake clinics in Alberta organized in 1979 and 1980). Special map projects to develop new areas or assist existing associations could also be included under Development.

B. The Education Committee will concentrate their direction and projects in the areas of Educational Institutions (i.e. Universities, schools, colleges, etc.)

C. A new Coaching Committee as a sub-committee of the Competition Committee will be formed with the responsibility of developing our Coaching Certification Program.

The suggested committee re-structuring more reflects our current needs and more clearly defines the mandates of the committees.

The Planning Committee also unanimously endorsed C.O.F. bidding to host the 1985 W.O.C.

2. Canadian Orienteers Competing in Europe: This summer is a busy one for C.O.F. members competing in various large European events. A Canadian team consisting of:
Ted de St. Croix, Ron Lowry, Kevin Jones, Frank Farfan, Denise Demonte, Susan Budge-Ontario; Megan Piercy, Sharon Dean, Mark Adams, Quebec; and Sheila Smith and Dave Wheeler-Nova Scotia plus National Coach, Ken Sidney, will compete in several events in Switzerland, Austria, Germany and Czechoslovakia. Two Ottawa juniors, Chris Robert and Mike Day are travelling with the group as unofficial members.

In addition to this National Team there are: Marg and Brian Ellis, previously of Guelph and now living for one year in Germany, who will compete in the Swiss 5-Day event. Pat and Dick de St. Croix who are taking in the Swiss 5-Day and Austrian Alpencup. Scott and Raelene Robertson plus 2 other Alberta members are covering most major events in Switzerland, Austria, and the Swedish O'Ringen.

3. **International Orienteering Congress in West Germany—July 7-13:**

C.O.F. President, Marg James, Gordon Hunter and Colin Kirk will represent C.O.F. at the 1980 IOF Congress in Malente, West Germany. The important item of business will be the decision on whether Canada or Australia is awarded the 1985 World Championships. Several articles outlining the merits of both countries have been published in 'O' magazines around the world. By the time you receive this issue of Orienteering Canada the decision will have been made.

Helene Huculak, of Silva Ltd., will also be attending the Congress as a member of the IOF A.P.K. Committee (Education and Promotion).

4. **Good News—New Executive Director in Nova Scotia:** As of April 1, there has been a new Executive Director, Don Longard, working for O.A.N.S. Don replaces Bob Kaill who resigned as of March 31. Congratulations and good luck to Don.

5. **Bad News:** We have just been advised that the British Columbia Government did not provide funds for an Executive Director for the current year. Consequently, O.A.B.C. no longer have the services of the hard-working Bruce Rennie. This is an unfortunate happening as O.A.B.C. were getting several new projects underway.

6. **Ex-World Champion, Guest Instructor at Advanced Officials' Clinic:**

One of the all time great orienteers, Stig Berge, of Norway will be the guest instructor at the Advanced Officials' Clinic to be held at Arundel August 6-11. Stig and his great friend and rival, Age Hadler, provided Norway with a 1-2 punch that no other country has ever matched in World Competition. In the late 60's and early 70's, Stig and Age were the undisputed kings of orienteering. Between them they won three of the four World Championships in 1966-68—
7. Stig was World Champion in 1970 and finished 2nd behind his team mate Radler in 1972.

It has been said that Stig Berge is "the best ever all-round orienteer" in that he could run in any country and in any type of terrain and still be a winner whereas other top level competitors perform better in specific terrain types. In particular, Stig was almost unbeatable in the Mountain Marathons after winning by huge margins. Stig is a member of the IOF Technical Committee and will instruct Course Setting and Controlling at Arundel. Accompanying Stig will be his wife, Katarina, who has competed for Norway in the World O. Championships and has also represented Norway at both World and Olympic Games as a Cross Country skier.

8. Bulletin on 1980 Canadian O. Championships: C.O.F. secretary, Lee Leger, will compete in the 1980 C.O.C., this guarantees that this year's event will be a memorable one.

NEW BOOK AVAILABLE

The author of the popular Modern Orienteering Training, Wilf Holloway has just published a new book, World Class Orienteering. The book is a follow-on to Modern Orienteering Training with emphasis being placed on training for improvement, race strategy, and top level competitive techniques.

Several chapters of the book have been written by top competitors from various countries. E.g. Dieter Wolf of Switzerland, Carol McNeill of Great Britain, Peter Gagarin of the United States and Ted de St. Croix have combined to write a chapter, "New World Problems". In the Foreward of the book, Britain's perennial champion, Geoff Peck writes, "Whereas Modern Orienteering Training lays the ground rules, World Class Orienteering shows how the game can be played—and won!"

This book is now available from the C.O.F. office at the cost of $13.00 plus .50c postage.
The organizing of the C.O.C. on August 16-17 is well underway. The maps have been printed and provisional courses set and delivered to controller, Mike Day in early June. The Montreal O. Club are now getting down to the final preparations for the event; Start and Finish areas, refreshments, a social and all the other things which will make this a memorable championship.

Support from local landowners has been tremendous. One even offered the use of an old barn for the storage of equipment. There are few fields in the area and so Start and Finish and parking will be in some large sandpits. All the facilities are close together, the longest walk is just a kilometre to the second day Start but it passes through the Finish area. There is little shade around the Finish and you would be advised to bring a screen to avoid frying on the sand.

Accommodation

The Old Stone House campground is almost within running distance of the Start but for those who prefer more sophisticated camping, there is a Quebec provincial park at Carrillon, about 15 kilometres away. Unfortunately, no advance reservations can be made but the park does have full facilities. Telephone number is 514-562-6669.

Pre-Meet Information

Entries received before August 1st will be acknowledged by post. There will be an information booth at Lachute Regional High School on Friday 15th of August where you can collect registration envelopes (the swimming pool in the school complex will also be available to orienteers).

Terrain

The competition area for the 1980 C.O.C. will offer both physical and technical challenges to all orienteers. The land is typical of southern Quebec forest, bush mixed with coniferous and deciduous woodland which is now reaching maturity after immediate post war felling. Although visibility is generally poor, the ground underfoot is good and will give you safe but slow running.

There is no major height change over the map, but the many small hills and knolls will test
navigation skills; one characteristic feature in the area is a smooth rocky knoll which forms a small (5m) clearing in the woods.

There are few paths or roads on the map but a number of old logging trails exist and each will provide a few hundred metres of easier running. The most significant feature is the several large marshes; their boundaries are well defined and they will make useful handrails between controls. Unlike last year in Newfoundland, they will not make for easier running but they may be crossed - very slowly!

Courses

Eight courses have been set for each day with four levels of difficulty. First year novice, second and third year capability, intermediate and advanced. Winning times are anticipated around the current C.O.F. standards. Full details are shown below with the number of controls in brackets.

Bill Cowley

<table>
<thead>
<tr>
<th>CLASSES</th>
<th>DAY 1</th>
<th>DAY 2</th>
<th>RECOMMENDED WINNING TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. H21A</td>
<td>9.1 km (15)</td>
<td>9.6 km (17)</td>
<td>90</td>
</tr>
<tr>
<td>2. H35 D21A</td>
<td>6.5 km (11)</td>
<td>6.5 km (10)</td>
<td>60</td>
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<tr>
<td><strong>Intermediate</strong></td>
<td></td>
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</tr>
<tr>
<td>3. H19-20 H21B</td>
<td>8.3 km (12)</td>
<td>8.2 km (16)</td>
<td>75</td>
</tr>
<tr>
<td>4. H43A H17-18A</td>
<td>5.8 km (11)</td>
<td>6.1 km (10)</td>
<td>60</td>
</tr>
<tr>
<td>D19-20A H21-43 Open</td>
<td></td>
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</tr>
<tr>
<td>5. D35A D17-18A D21 Open</td>
<td>4.8 km (9)</td>
<td>5.8 km (10)</td>
<td>50</td>
</tr>
<tr>
<td><strong>2nd and 3rd Year Level</strong></td>
<td></td>
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</tr>
<tr>
<td>H15-16A D15-16A</td>
<td>3.9 km (8)</td>
<td>4.7 km (9)</td>
<td>45</td>
</tr>
<tr>
<td>D43A H50A H17-50-</td>
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<tr>
<td>Open D17-43 Open</td>
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<tr>
<td>H13-14A D13-14A</td>
<td>3.0 km (8)</td>
<td>2.9 km (9)</td>
<td>40</td>
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<tr>
<td>D50A H56A H15- Open D15-Open</td>
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<tr>
<td><strong>1st Year Novice</strong></td>
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<tr>
<td>H12A D12a H Open D Open</td>
<td>2.2 km (7)</td>
<td>2.6 km (8)</td>
<td>25</td>
</tr>
</tbody>
</table>
TWO ORANGE COURSES?

As all Canadian orienteers know, it has long been our practice to group competitive classes on courses varying in both length and difficulty.

The courses are named by colour. The shorter ones being light colours (white, yellow, etc.), the longer ones darker, (red, blue). This grouping has lead to beginners, youngsters and 'old timers' competing on the same course even though their level of experience may differ greatly. For example, the Orange course now holds the Boys and Girls 15-16 year olds, Ladies 43+, Men 50+ and Open classes where, typically, the orienteer may have had 4-5 races for experience.

The course setter faces problems as he/she tries to fashion a route that will be mentally challenging but physically not too tough for the veterans while at the same time being mentally easy and physically long enough for the younger competitors.

At their June 'A' Meet, Gillian and Leigh Bailey of Toronto O.C. tried to solve the problem by setting two Orange Courses. The 'Old' Orange Course was shorter with less trail running and with more difficult control locations (see map).

Says Gillian, herself a D35 competitor, "Leigh and I have felt for some time that the present system of progression only works for those on the way up. Each colour has a longer course and more difficult navigation which is fine for those new to orienteering. However, we oldies while needing shorter courses are not yet senile and our navigation abilities are still pretty sharp, so we do not want 'orange' or 'yellow' type control locations."

This is not the first time the idea of 'breaking down' the courses has been tried but it is worth noting as there has been some discussion at the level of the C.O.F. Technical Committee to do away with colour coded courses.

Orienteering Canada would appreciate receiving comments and suggestions from our readers concerning our present course alignment and possible suggestions for improvement.
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TRIMTEX
WHERE WILL THEY RUN?

CompassSport looks at the rival bids to host WM85

Waves of excitement which have been sweeping through Australian and Canadian orienteering circles since 1978 will reach their climax in the second week of July when the decision is finally made as to which of these two countries will be invited to host the 1985 World Orienteering Championships (WM85).

POPULAR UPSURGE

Both countries have been intensively canvassing the International Orienteering Federation delegates who will vote at the 9th I.O.F. Congress at Malente, West Germany from July 7th-12th. Hosting the World Championships can bring a country's orienteering community immense benefits not only in terms of prestige but also, perhaps more importantly in terms of publicity which can increase many times public awareness of the sport. Witness the huge upsurge of interest and participation in Denmark after 1974 and in Britain after 1976 following the staging by those countries of WM. With WM likely to be back in Europe at least twice more following 1985, it seems that the disappointed candidate may have to wait until 1991 or beyond before being able to make a second bid. Thus is the importance emphasised of winning the right to put on WM85 and thus the intensive canvassing.

Both Australia and Canada stand considerable larger than Europe but orienteering started later — in both countries in the late '60s — and there are fewer orienteers than in Britain. This means that there are in the term 'under-developed' areas in each country as regards orienteering. Obviously a World Championship could only take place in those parts of the country where the necessary technical expertise and experience and the necessary manpower are available — in other words the Toronto-Ottawa-Montreal area of South-Eastern Ontario and Western Quebec in Canada and the South-Eastern corner (Victoria, A.C.T., and New South Wales) in Australia.

MAPPING

Mapping standards are very high in both countries with extensive use of photogrammetric base maps often prepared by the major Scandinavian mapping services. In Australia it seems that most of the field work is done as in Britain by voluntary part-time mappers but in Canada they seem lucky enough to have sufficient finance to allow top orienteers such as Ted de St.Croix and Ron Lowry to spend considerable parts of the summer mapping. An arrangement like this benefits both orienteering and the map-maker's competitive techniques as any of the many British juniors who annually head north to Norway will vouch.

I.O.F. mapping seminars have been held in both countries. In Australia last year led by Robin Harvey: and in Canada in 1978 with Fleming Norberg of Denmark and Oyvind Bratlien of Norway. In each case this has meant a considerable fillip to mapping expertise.

LUSH AND DENSE

With its fine detail Canadian terrain has been likened to Scandinavian but the forests are much larger and much denser. Wooded marshes are often too thick to run through but the open marshes which are flooded early in the season have cleared up to become easily negotiable by the autumn. There are only a limited number of paths, roads and fences and with the forest floor covered in a plethora of small plants, bushes and young trees, visibility is often restricted. This, the Canadians say, places emphasis on strong, rough running abilities in natural terrain and on good map reading and route selection.

The forests are a mixture of deciduous and coniferous. The deciduous forests are mainly of hardwood maples while balsam, pine and cedar comprise the coniferous forests. Although there are many boulders and rock formations in the terrain, the actual under-foot running ground is not usually stony and is quite good for running. The late summer months see the foliage turn to brilliant reds, oranges and yellows and the ground covered in leaves, twigs and berry bushes. The visibility and runnability is at best in late summer and autumn.

ERODES HANDRAILS

Australian terrain features are usually the result of erosion by water over many millions of years. This has produced rounded hills and mountains with strongly developed gully systems and prominent intervening spurs. These gulles and spurs form linear features which have similar counterparts on many central European orienteer maps and can be used as handrails by orienteers. The most common underlying rock is either of sedimentary origin or granite. These erode differently resulting in distinctively different terrains.

Extensive forests also cover the stabilized sandhills of the semi-desert areas and the floodplains of the rivers of the Murray basin. All these terrain types are as yet relatively un-developed for orienteering.

Old gold workings occur widely and in these areas there are often major changes to the original terrain. Workings have been abandoned for the last century and forest now covers the mines, shallow pits and opencut workings, which now provide orienteers with a very intricate terrain.

The dominant tree in Australian forests is the eucalypt. These are broad-leaved evergreens typically with a single trunk and a spreading crown. In mature forests there is usually good visibility between the trees and the deep shade of northern Hemisphere forests is rare, as leaves in the...
canopy hang vertically allowing sunlight through.

The nature of the undergrowth in the forest depends on rainfall, soil and aspect. In the wetter forests dense areas of shrubs, ferns and windfall timber may be met. However in drier ones this gives way to low shrubs, tussock grass or even a complete absence of undergrowth altogether. It is not uncommon for several undergrowth types to exist on the same map and where they effect runnability they are mapped using the three shades of green. Large areas are planted with exotic trees, usually Pinus radiata, and these plantations are also used for orienteering.

EXTRA CREEPY-CRAWLIES

Those who venture into the forests in Canada and Australia also have to face the usual creepy-crawlies and perhaps some extra. Ted de St. Croix writing in "World Class Orienteering" says that in Canada, each month brings its own variety of determined flies whilst in Australia the 1978 5-day programme carried an exhaustive article on what to do in the event of snake bites!

Travel costs for a time looked like being a significant issue in deciding the location of WM 85 with the Canadians emphasising the low cost of trans-Atlantic fares but the Australians have subsequently secured a sponsorship agreement with SAS and Thai Airlines which they claim will mitigate travelling expenses even for the financially hard-pressed (currency-wise) East European countries. Thus this is no longer likely to be a vital factor.

INTERNATIONAL COMPETITION

More likely to be considered are the track records of the two countries with regard to the staging of major events. Here Canada were first in the field with a 5-day competition in 1976 that attracted over 700 Swedish participants. A 6-day competition followed in 1978. Australia's first big effort was a 5-day competition in January 1978 which similarly attracted major overseas attendance. Recently the Pacific Orienteering Carnival with seven days of competition took place. Both countries have endeavoured to secure visits from top names and perhaps Australia has had the biggest coup to date by persuading Egil Johansen to go down-under.

If you fancy checking either country out, competitions in the next few months include the Canadian Orienteering Festival from August 10th-17th (see separate box) and the Australian International 6-Day Galoppen from January 4th-9th 1981 (details were given in CompassSport No. 2).

One thing is sure, orienteering is a friendly sport and whichever contender is awarded WM85, there will be bitter disappointment but no hard feelings. It seems a great shame that both countries can't be successful in their bids.

— CompassSport Extends thanks to both the Canadiana and the Australian Orienteering Federations for sending material to enable this article to be written.
DEITER WOLF
- SCIENTIFIC ORIENTEEER

Dieter Wolf runs for OLV Ostschweiz and lives just outside Zurich where he works as a P.E. teacher in a high school. He has been orienteering since 1965 and can produce quite a list of both national and international successes. Already in 1968 he was a WM participant (as a reserve) and this energetic Swiss had his best result in WM72 with a silver in the Relay and 6th place in the Individual. Other successes include 3 national championships, winner of the Swiss 5-Day in 1975, winner of the Midnight Sun Galopper in 1977 and many Swiss championships. He is also a fellow with a travel bug and has competed in 13 countries - so he should have some basis on which to discuss orienteering.

We took our chance of a short chat with Dieter Wolf and first of all, asked him to describe his own form of training.

"I run more slowly than most continental orienteers with the greatest emphasis on safety/accuracy. Enroute I always read the map on the run and also plan the next legs. In this way I don't have any delays at the controls themselves. With regard to results, I'm generally best in difficult orienteering terrain with thick vegetation."

Dieter Wolf is systematic in training, competition and map study.

"I use at least one hour to analyse every single run in the season. This is a quantitative analysis where, amongst other things, I note down technical data, kilometer time, climbing, percentage after winner's time, number of controls with and without error. I analyse my mistakes and place the result list along with any newspaper cuttings with the map. In this way I can see throughout the season how I develop in technique and I am in a better position to set up training to correct repeated mistakes. I also keep a card index of all my training maps."

In December 1978 he ran his 543rd orienteering race and every single one has been evaluated in the same precise manner. Dieter mentioned casually that back home in Zurich he has a collection of over 2,500 orienteering maps from 20 different countries.
Planning

Q. Do you put just as much emphasis on physical training?

A. Each autumn I sit down and do some rough planning for the coming season's training. Then I set one main goal - in 1978 it was the World Championships in Kongsberg in mid-September - and the events in which I will participate in order to be best prepared. I make a rough division of the season into several phases, each of which has a separate function.

In the spring a building-up phase, in the summer an international phase, and in the autumn a peak phase during the championships.

For the most part I carry out training at a steady pace of about 12 hours a week in the winter. During a year I run about 5,000 km. The amount of training each week varies according to my work schedule, travelling and other factors. In contrast to others, I can do training as part of my work at school - it's not everyone that gets paid for slogging round the track. This is probably the reason why I come out best in difficult hilly terrain.

from NOF Posten 1979
ORIENTEERING

(The Following article first appeared in the Quebec Orienteering Association's newsletter in 1973. It concerns an event in 1970. Apparently, the author continued in orienteering and managed to progress to the Blue Course. ... Ed.)

It was a hot humid sort of day, and although the sun was shining, it was the type of day in which you could expect thunderstorms. It was to be a day of decision making for me. Not just the route choice type of decision that every orienteer is forced with when he competes but, for me, it was going to be the day I decided whether this sport of orienteering was worth taking up on a regular basis, or whether I should go back to the less exerting pastime of gardening, and being an armchair spectator of baseball and football.

It was my third lifetime outing, although it was my first visit to the Gatineau Hills, and the magnificent scenery put me in a good frame of mind as I followed the markers towards the parking area. It was to be graduation day as well. My first two outings had been in the White course, but today I considered myself fit enough to graduate to the Yellow course.

It's a funny thing how fit one feels just before starting a race, and how quickly that feeling disappears shortly after leaving those master maps. Today was no exception, and by the time I had wasted ten minutes running up and down a hill, looking for the first control point, I realised I had made my first wrong decision. I should have stuck to the white course! However, I was committed now and there was nothing for it but to press on.

I found the second and third controls relatively easily, and although I had become heartened each time I sighted those red and white flags, I had become very disheartened by another completely unrelated fact. I was being bitten! Not just by one mosquito, but by thousands. In fact it seemed to me that every mosquito in the Gatineau Hills had decided that I was a prime target, not just for a light snack, but for a full blown six-course meal starting with "eyelid a la princesse" as an hors d'oeuvre and ending with "ankle flambe" for dessert. It was at this point that I knew I had made my second wrong decision. I should have brought some insect repellent. "But surely", I said to
myself, "Insect repellent wouldn't discourage half of those voracious devils that were after my blood!"

The points against this sport were adding up in my mental arithmetic decision making process. But then came the sounds of relief-thunder in the distance, and between controls three and four a bit of a breeze sprung up and the mosquitoes did not seem quite so bad.

In choosing my route between control points four and five I decided, many hours later, that my mental processes had definitely been impaired by the mosquitoes, heat and the humidity. Instead of following the path which took one almost directly to the knoll, I decided to cut across straight to it, through the thick undergrowth, across a shaded area in the map, which I subsequently discovered to be a marsh - mosquito infected, of course - over a stream and due north to the knoll. Looking back on it, I can only assume fate had decided to delay me on this leg so that the events which were to follow could unfold in their proper sequence. In any event, I became hopelessly lost trying to go around the marsh, and finally arrived at control point five, three quarters of an hour later, feeling rather sorry for myself and almost ready to give up.

One thing was certain, the points against the sport were now far outstripping the few that I had chalked up for it.

But by this time the distant thunder was very much closer, the slight breeze had become a force 4 wind and it had started to rain. This had the miraculous effect of sending the mosquitoes back to where they had come from and also made me feel altogether much better. So I decided to press on, and that was the first right decision I had made all day.

By the time I had made my way to control point six, the storm had really arrived in earnest. The thunder and lightning were at intervals of every 30 seconds or so, and the rain was coming down in torrents. Small gullies which a few minutes before had been as dry as a bone were now wildly rushing rivers.

Between control point six and seven it seemed to me another storm had arrived in the scene to challenge the first one. A clap of thunder to the south east would immediately be followed by a louder clap of thunder to the north west, and when I heard a sizzling, hissing sound as lightning struck a tree not 100 yards from where I stood, I knew I was slap in the middle between the two battling giants.
Now I am the sort of person who has always enjoyed thunderstorms and this one gave me renewed vigour to finish the course. I might get beaten by mosquitoes, but no damn thunderstorm was going to beat me! But I had forgotten the soft spot I have in my heart for members of the opposite sex.

You may well ask what on earth that had to do with it. Well, it happened as I was crossing a small bridge on my way to control point eight. Between claps of thunder, I heard a rather plaintive cry behind me, and turning, perceived a somewhat bedraggled girl running toward me. My first impression changed rapidly, because as she came closer, I could see the rain had soaked the clothes she was wearing and they were clinging to a supple, very well proportioned body of a young lady who could not have been a day older than nineteen. I figured she was going to stop and ask me where we were because she was lost. But she did not stop, she just kept on running and threw herself round my neck and clung to me as tightly as she could, and I could feel that her young body was shaking with fright.

You know I may not be very good at orienteering, and I may not be a very active individual compared to some people. But I do have the normal quota of hormones allotted to the full blooded male of our species, and the events which had just taken place so suddenly certainly started to arouse those hormones to activity from a situation of relative calm. After all, I had been concentrating on matters far removed from that of the opposite sex for well over two hours.

The situation I now found myself in was the classic one that a bachelor's dreams are made of. Only I wasn't a bachelor! Nonetheless, my romantic instincts prevailed and my "strong arm of man the protector" went around the lady in an attempt to calm her down. She had almost reached the point where she could talk coherently when another bolt of lightning struck close by at which she held me even tighter. Believe me, this was one thunderstorm I was enjoying more than any other.

After awhile she grew calm enough to tell me she was afraid of thunderstorms, which was fairly obvious, and she had been lying face down in the grass ever since it has started. All thought of finishing the course had now disappeared from my mind, and I at once became the expert orienteer and mapped our way back to the finishing point.

We walked back most of the way on a path. I with my protective arm around her, and she, shaking and
and drawing closer everytime there was a renewed clap of thunder. We did pass a woodman's hut on the way, and the thought did occur that we should seek shelter there but my better judgement told me that that was not the right thing to do.

All the books you read nowadays would have developed this story so that I, the respectable married man, would have a passion-ate affair with the young attractive girl. But what you read in books rarely happens in real life and when we got back, she went her way and I went my way. I thought I might get a bit of a write-up for having rescued a damsel in distress in the next newsletter, but all I got was a big DNF against my name.

What sort of decision did I finally make on orienteering? Well, next time you are at a meet on one of those hot, humid sort of days, you will see me I'm the fellow with one eye cocked towards the horizon looking for signs of a thunderstorm.

ANONYMOUS
(my wife wouldn't understand).

---

1980 New England Championships

When: October 4-5

Where: Upton State Forest, by the junction of I-90 and I-495
30 miles west of Boston.

Map: 1:15,000, 5 meter, 5 color, made in 1980 by Bob Lux from a Scandinavian base map.

Information and Entry Forms:

Linda Taylor
737 Main St.
Acton, MA 01720

Entry forms will also be in Orienteering USA.
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Ted's Bread

(From Orienteering New Brunswick)

It is not true that Ted de St. Croix, Canadian Men's Champion ranked sixth in the world, eats only bees knees and walrus bristles, whatever the last issue of the Canadian Orienteering magazine may have claimed. He actually lives on bananas, peanut butter, yogurt, granola and brown bread. Sugar, salt and white flour are strictly taboo.

The brown bread Ted makes himself is something special, so, in the interests of raising New Brunswick orienteering standards, we pass on the recipe.

Ted's Bread

2 tbsp. active dry yeast
1 tbsp. sea salt (for those of us who can't do without it.)
1/4 cup vegetable oil
1/4 cup honey
2 1/2 cups hot water
1 cup skim milk powder
2 cups whole wheat powder
3 large eggs
6 - 7 more cups whole wheat flour.

Mixing:

Into a large mixing bowl measure 2 tbsp. of yeast, 1 tbsp. of salt, 1/4 cup of oil and 1/4 cup of honey. Add 2 1/2 cups hot water and stir. Mix in 1 cup instant skim milk powder. Add 2 cups of whole wheat flour and stir till smooth. Mix in 3 large eggs at room temperature. Add the next 5 cups of flour 2 cups at a time, making sure it is all wetted before going on to the next 2 cups. Pump another cup of flour onto the board and scrape the batter over it. Knead in, adding small amounts of flour as required until the dough stops sticking. Knead for another 10-15 minutes. First rise - oil the bowl with a few drops and turn the dough in it till oiled all over, cover with a clean cloth and leave in a warm place to rise for about 1 1/4 hours. Test by pushing a finger in about 1" and if the hole does not fill up, it has risen enough. Divide into three parts and place in three greased loaf tins 8 1/2" X 4 1/2" X 2 1/2". Cover and leave to rise for 1/2 hour or more. Bake at 350° for about 40 minutes. The loaves are done when a clean knife comes out with no dough sticking to it. Put it in from the bottom and the loaf isn't spoiled.
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Each year our provincial association holds an annual general meeting, at which the year's activities are reviewed, a new board of directors, elected, and new measures are discussed. This year, as is often the case, our annual general meeting did not have the turnout expected, especially in view of the important developments taking place in the Ontario Association this year.

Orienteering Ontario presented to the membership, via Clark Hill and Sandy Kenyon, a comprehensive document entitled "Thinking Ahead." This official plan is, in the words of the founders, "...an attempt to stand back from the issue to issue routine of the Board and lay out objectively the purposes of Orienteering Ontario. It also tries...to set forth how Orienteering Ontario should go about achieving those purposes."

A method by which the general membership can contribute or make suggestions has been devised and hopefully, before the year is out, the official plan, now just a working document, will be approved by the board and put to good use. Needless to say, many people familiar with the many frustrations and contradictions of managing an association are very excited by this development. Sandy and Clark certainly deserve accolades for their great effort in developing this document. Keith Hansen too, as his foresight got the ball rolling.

It is standard practise for the various standing committees to present concise reports on their activities over the past year.

The Coaching Committee had a very active and successful year. Ron Lowry (Chairperson), Glen Davis and Denise Demonte did a fine job of providing the impetus for a variety of programs. These included a Junior Training Camp, a spring Training Day and a weekend Development Clinic near Windsor. Thunder Bay, another of our orienteering hinterlands, has received the same type of clinic recently. Continued efforts of this sort will certainly stand Orienteering Ontario in good stead.

The Mapping Committee of Leigh (Chairperson) and Gillian Bailey, Margaret and Brian Ellis, Ted de St. Croix and Mark Smith also was responsible for an active year. Our summer Mapping Program, the
C.O.F. mapping grant, and some supplementary funds all combined to allow work on various stages of many maps needed for various championships and our increased meet activities.

In addition, the Ontario Summer Games map was prepared for use in our first involvement with this annual sports extravaganza for young people. The committee has also been tackling map ownership questions arising with O.O.A. assistance produced maps.

The Publicity Committee of Andy Lamm (Chairperson), Helen Huculak and Clark Hill made several contributions to our successful year. Clark Hill put together an extremely effective sound/slide show promoting the sport of orienteering. This has been put to good use in the various clinics and other promotional activities. One of these was the annual Sportsman's Show, a gala affair held at the Canadian National Exhibition, where thousands of people can be exposed to our sport.

The 'Pub People' also brought to fruition a Special Achievement Awards Program wherein orienteers are provided with rewards, in the form of an attractive bronze, silver, or gold pin, for becoming involved in various aspects of our game.

Among other important business at the meeting, "Top Ontario" orienteers were identified and provided with awards. Winners of this season-long competition are chosen after totaling their respective scores in certain specified meets throughout the year.

Henry Lam, our executive director, summarized much of the association's development in his report. After ironing out a few kinks in our new membership structure, we have shown excellent improvement. At the time of the meeting, membership registration was up about 25% over that time last year. Other possible indications of growth are found in the starting of eleven new clubs in Ontario this year in spite of the collapse of two former ones. We have also broken into two new areas with the formation of the Belle River (Southwest Ontario) and Thunder Bay (Northwest) clubs.

Our competition schedule also shows steady growth this year, thanks, in part to the inclusion of orienteering in the Summer Games. There are thirty scheduled days of meets so far, thirteen of these being of higher quality 'A' standard.

In short, the orienteering scene in Ontario appears to be slowly breaking out of the downspin of recent years. Hopefully, the trend will continue. With the contribution of hard-working committees and
individuals and the generous support of the various levels of government, the C.O.F. and other organizations, the future does have a definite glow of brightness about it.

The new Board of Directors:

Keith French (President)
Al McFarlane (Treasurer)
Vera Malaczyj (Secretary)
Jim Waddington
Wendy Edge
Mark Smith

will be working as hard as possible to ensure that this glow will thrive and, indeed, flourish. We will let you know the results at our next annual general meeting. In the meantime, let us all continue working effectively for the betterment of Canadian orienteers.

Mark Smith

BIG U.S. MEETS THIS FALL

American orienteers will be hosting at least three Championships this fall.

On October 4 and 5 the New England Open Orienteering Championships will be held near Upton, Mass. 1979 U.S. team member Linda Taylor is the Meet Director and Bob Lux the course setter.

The meet will be on a new map from Swedish and Norwegian base maps field checked by Bob Lux.

Information and entry forms from:
Linda Taylor
737 Main St.
Acton, MA 01720

On October 18th and 19th, the U.S. Championships will be held near St. Louis, Missouri.

Information and entry forms from:
Al Smith
74 Decorah Dr.
Creve Coeur, MO 63141

Then on November 1st and 2nd, the 5th Biennial North American Championships will be put on in the Cleveland, Ohio area by the N.E. Ohio Orienteering Club. More details will come in the next issue of our magazine in September.

Contact: Dave Kreider, 1136 Magnolia, Cleveland, OH 44106.
A RESEARCH REPORT ON
SCHOOL ORIENTEERING

by Dr. Gilles Quennville

In a research conducted by the writer of this article, some findings might be interesting for teachers working in school orienteering.

The research conducted in Bloomington, Indiana in the spring 1979 was carried on using 10 and 11 year old children who were involved in a science curriculum at the time of the study. Using volunteers, 11 instructors were trained to teach the children. Using tests to measure running ability and map reading skills, comparisons were made with school skills, teaching methods and performance on circuit and score orienteering. The children were first tested on the various components, after which they were instructed map reading skills with either the direct or the conventional methods. The direct method involves the running of circuit courses. After six periods of 40 minutes of instruction, the children were tested again and computations were made for measuring improvement.

Results and Recommendations

The results of the study were as follows and led to the following conclusions and recommendations:

1. The children used in the study were normally distributed on their running ability, their knowledge of map reading skills and their school skills. Also, the children were within the United States national norms for their running ability and for their school skills. Therefore, the children were considered as average in cognitive and motor ability as measured in the present research.

2. After testing, the direct method and conventional method appeared equally effective for teaching map reading skills. However, it was noted that the children who were instructed with the direct method had difficulty at the start while the children instructed with the conventional method had success from the beginning. On the other hand, the children who were instructed with the conventional method were very anxious to run circuit towards the latter part of the course. Consequently, it is recommended that the teacher use the conventional (part) method at the start to teach a few basic skills such as map orientation, map holding, thumbmap reading, control recognition and control card marking. After...
these skills are introduced, it seems appropriate to use the direct method (whole or gestalt) to continue instruction and occasionally use the conventional method again as new skills are introduced. Finally, it should be noted that at least three instructors are needed when using the direct method.

3. With only six periods of 40 minutes each, it was found that the children succeeded in completing a circuit course on their own and acquired significant gains in map reading skills. Therefore, it is recommended that courses be implemented even if only a few periods are available since improvement of significance can be expected.

4. A short score orienteering test of nine minutes proved to be a valid and reliable instrument for measuring map reading skills in school orienteering. It is therefore recommended to use score orienteering for evaluation purposes.

5. A significant relationship was found between the map reading skills of the children and their mathematics ability. It is therefore recommended that the mathematics curriculum be enriched with orienteering activities.

6. The results indicated that being good in school skills was not a prerequisite for being a good school orienteer. Nevertheless, since both orienteering and school skills require qualities of vision, perception, memory, and symbolic representation, it can be hoped that some transfer from orienteering to school skills could be of interest in improving these qualities.

7. It was also found that the best orienteers were those who could integrate running and orienteering skills in one optimal performance. Consequently, it is recommended that not only the teaching of map reading skills and running be conducted but that time be spent in integrating both components. The use of the direct method seems appropriate for this purpose. Also, it should be noted that courses must present a challenge for both mind and body in order to achieve this purpose.

Finally, research such as the present study should be pursued in order to examine compass skills and orienteering techniques. Also, research on the workings of vision, memory, symbolic representation is recommended.*

* A more detailed and technical paper is available on request at the following address:

Dr. Gilles Quenneville
F.E.P.S.
University of Sherbrooke
Sherbrooke, Que. J1K 2R1
HEAT EXHAUSTION AND ORIENTEERING

Heat exhaustion is important to the Orienteer in two ways:

a) The ability to recognise the symptoms.

b) The awareness of conditions which predispose to heat exhaustion and necessary avoidance precautions.

Even under the best working conditions only 20% - 25% of total energy output of the human body takes the form of mechanical energy that can be transferred to the environment as work. The rest produces heat. At an oxygen uptake of say 4 litres/minute, corresponding to about 20 kcal./minute, 15 - 16 kcal/minute of heat is produced. As the specific heat of the human body is about 0.8 kcal/kg, it follows that a man weighing 75 kg. would increase his body temperature by 0.8°C every 5 minutes if heat were not dissipated.

During the first 30-60 minutes of exercise not all extra heat is given off, as a certain amount is stored in the body and the temperature consequently rises. Thereafter the elevated body temperature is maintained within narrow limits in normal circumstances.

In heavy work at normal conditions, most of the heat is given off by the evaporation of sweat. A minor part is played by radiation and convection.

Heat exhaustion develops when the body mechanisms for the dissipation of heat are no longer able to keep the body temperature within the narrow limits. When the body temperature reaches in the vicinity of greater than 40°C (normal-approx. 37°C) physiological control is lost and body temperature may continue to rise—hyperpyrexia, as this is known, constitutes a dangerous threat to life.

The aware Orienteer should be able to recognise symptoms and stop prior to this threat. The symptoms of heat exhaustion are:

- a sudden feeling of weakness
- muscular cramps
- headaches
- dizziness
- an uncharacteristic loss of coordination.

In the event of these developing, the Orienteer should stop, cool the body by whatever means available, preferably by water immersion, make up water and electrolyte losses.
But let us review the methods of prevention. The various factors which determine an individual's ability to cope with personal body heat during muscular activity are:

1. the amount of muscular activity.
2. environmental temperature and humidity.
3. physical properties of the individual.
4. clothing.

I Duration and severity of muscular activity play an important role in the development of heat stress states. The metabolic heat production in the resting state is 1.0 kcal./minute (size dependent). The maximal values during severe exercise go as high as 20 kcal/minute, though this cannot be sustained for long periods and one hour of heavy exertion produces about 600 kcal./hour.

Thermal balance depends on the following equation:

\[ M - E = (R + C) = DS = 0 \]

- \( M \) = metabolic heat production.
- \( E \) = evaporative heat loss.
- \( R + C \) = loss or gain by radiation and convection.
- \( DS \) = change in the stored body heat.

The values for \( E \), \( R \) and \( C \) are determined by the factors 2, 3, 4.

II Climatic factors play an important role in the ability of the body to dissipate heat. A greater external temperature lessens the differential between skin and environment and thus the loss by radiation and convection. (In extreme heat the body can actually gain by these processes). The radiant heat derives from the sun and the surrounding surfaces and ground.

Relative humidity plays a large role in the evaporative process of cooling. When high, the body's sweat cannot be readily evaporated.

Air movement is another variable to consider. Intolerable conditions whilst in still air are often made comfortable if a breeze is blowing. This facilitates the loss by convection. Warm air is then replaced by cooler air to increase body losses.

III Individual tolerances vary. Body size and shape play a part in the rate of heat exchange. The loss by convection and by evaporation is greater, the larger the surface area of the skin or, in the case of radiant heat exchanges, of the radiating surface. A linear build, i.e. relatively tall per unit of weight, serves a useful purpose in the exchange.

Acclimatisation is the key to individual differences (nature aside). The ability to sweat
increases with repeated exposures to high temperature. An acclimatised person secretes sweat with a lower concentration of salt and thereby is able to conserve sodium to an extent. Loss of acclimatisation occurs within 2-3 weeks.

Fluid balance is of importance. It is essential that the degree of hydration is high prior to competing. If fluid is taken prior to competing the blood viscosity is relatively lower (thin) and this helps positively towards perspiration as a means of heat loss. In the presence of any condition that predisposes to decreased circulating volume (diarrhoea, vomiting) then the risk of heat exhaustion rises.

This brings us to sounding a note of warning about competing in events when one has some concurrent illness. Some medications interfere with sweat production, thus making one more prone to heat stress: atropine and its derivatives, which may be used to treat a gastrointestinal disorder or thorazine which is used to treat patients with nervous disorders. Both these groups of drugs impair the function of sweat glands.

Also a person who starts an event with a mild fever has a smaller margin of safe temperature rise than a person who is afebrile.

IV Clothing may interfere with the evaporation of sweat, may act as an insulator thus interfering with radiant and convective heat losses and by these means increase body heat stores.

The Orienteer is in the position where he must balance the need for protection against lacerations and abrasions from the vegetation and rocks, with the need in hot conditions to be clothed to allow maximum heat loss.

In given conditions, the amount of sweat required for heat balance is least when the sweat evaporates directly from the skin. However, since the Orienteer requires his limbs to be covered, then he or she should aim to have loose, floppy, porous clothing. Then the clothing allows air movement close to the skin and pumps the warm, moist air away from the skin. Such clothing will also protect you from extremely hot, dry winds.

Open weave materials are preferable to close weaves as they allow better skin ventilation.

So the wise Orienteer obeys the following rules:

1. Recognise climatic conditions that cause heat stress.

2. In high risk conditions, limits heat exposure—starts as early as
possible; plots a course that limits exposure to radiant heat and allows some resting of the cooling system.

3. Wears suitable clothing.

4. Ensures adequate hydration prior to the event. This means taking a reasonable quantity of fluid (preferably a glucose-electrolyte solution) before competing (this goes against the grain of some runners).

5. When despite these precautions, recognises symptoms of heat exhaustion, STOPS or invites tragedy.

Organisers of Orienteering events must also take responsibility for recognising high risk climatic conditions and consider limiting starting times so that no one starts in the middle of the day when temperatures are highest. In very bad conditions they should even consider cancelling events. They should also be prepared to warn novices of the dangers of heat stress and possibly encourage them to compete on shorter courses if they have not done any previous training. They should be advised to pace themselves, starting slowly and increasing pace gradually.

REFERENCES:
Passmore and Robson—A Companion to Medical Studies Vols I and III.

Cochrane and Pyke—Physical Performances in Hot Conditions (article)


Reprinted from the 'Victorian' ORIENTEEER, January 1978

Dr. Eric Isaachsen

Dr. Louise Farrell

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## National Office

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PACE SCALES FOR ORIENTEERING

An easy way to measure distance when you are walking in the forest is to count the number of double steps (paces) required to cover 100 metres in average terrain. For tougher (slower) or easier (faster) going, you adjust your pace count based upon previous experience.

Willy's pace scale system lets you determine the number of paces you personally need to cover the distance you have measured on the map. The pace scales are designed for fast and easy conversion of your pace length to distance in metres, calibrated for different map scales. e.g.

1. You have located your present position and destination on the map. Using Willy's pace scale you measure the distance between these points to determine the number of paces required to reach your goal.

2. In route between two points you want to know how far you have travelled. Place Willy's pace scale on your map and simply read the number of paces you have taken -- that's where you are.

Willy's pace scales are self-adhesive and easily attach to the front edge of your SILVA protractor plate compass. There are 8 different scales for pace lengths from 36/37 paces to 52/54 for 100 metres. Each set consists of 5 scales for one specific pace length, for map scale (1:15,000, 1:20,000 and 1:25,000), for a total of 15 scales.

To select the proper scale for your needs, measure a distance of 100 metres on the ground and pace (double-step) it off. Then choose the pace scale that most closely matches your pace count for 100 metres. Set of 15 scales $2.00.*

Order from: ORIENTEERING SERVICES, 446 McNicoll Ave. WILLOWDALE, Ontario, M2H 2E1.

*ONTARIO RESIDENTS: Please include 7% Ont. Sales Tax with your order.
Designed especially for the elite orienteer who needs only to keep the map oriented while racing to the next control. Attaches to the thumb of map hand, giving instant orientation.

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446 McNicoll Ave.,
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M2H 2E1, for complete catalogue on orienteering equipment.