

Bearing 315

Orienteering News in the Pacific Northwest

May - June 1992

Published by Cascade Orienteering Club

Inside this issue:

*Too Good To Miss --
Selected Upcoming
Meets*

*Standouts--
Recapping Selected
Events*

*From Our Own --
Locals Orienteers
Write*

*Club News--
From Ellensburg,
Eastern Washington,
Nisqually, and
Sammamish
Orienteering Clubs*

*Feature Article--
Mike Schuh on
Mapmaking*

Meet Results

*"Borrowed From Club
Newsletters Beyond
The Northwest"*

"The Best of O/NA"

May-July Meet Schedule

And A Surprise or Two

Issue Staff:

*Editor -
Rick Hood*

*Proof & Paste-up Editor -
Linda Hood*

*Results Editor -
Debbie Newell*

The Convention is Coming

Mark your calendars and schedule your vacation time now, for come July 15, Cascade and Sammamish Orienteering Clubs will host five full days of orienteering fun. Cascade will handle the convention and Sammamish the "A"-meet.

From Wednesday through Friday it's the United States Orienteering Federation Annual Convention at "our own" University of Washington. And if you're thinking that the USOF convention is only for die-hard orienteers, think again.

Every day there are plenty of outdoor activities like:

- the campus "O" relay evening meet plus an informal east vs. west pick-up mushball game or Woodland Park Trim "O" earlier on Wednesday
- the "Greenlake Run" and Canoe-"O" on Thursday
- a bird walk through the Arboretum and Arboretum "Sprugel-O" on Friday

Of course, there will be plenty of sessions and workshops on items of interest ranging from the general, like "Injury Prevention and Rehab for Runners" to the specific such as "Orienteers' vs. Non-Orienteers' Approach to Navigational Challenges." There are usually three session options for each time period, so you're likely to find something appealing.

And then there is the important exchange of orienteering ideas and concepts which always occurs at the: ice cream social, wine and cheese gathering, and the Ivar's Salmon House Banquet. (Did I mention door prizes?)

Mostly though, the convention is a great place to renew old acquaintances and make new friends. So, don't pass this up--we want and need your involvement. Please come and help us show our orienteering friends from around the country that we're glad they are here.

With Mark Howlett and Mark Hartinger we've got a good shot at taking the "Greenlake Run". How about it; can we count on you as a participant? Great, just send in \$20 for the convention (which includes the trim, relay, and canoe-O meet fees). Another \$19 gets you a great meal at the banquet at Ivar's Salmon House. But

don't forget to sign up for the weekend "A"-meet at Cle Elum hosted by Sammamish Orienteering Club.

What's an "A"-meet like? Absolutely Amazing; it's two great days of orienteering in the wilds of *Northern Exposure's* Alaska, ala Ros*Elem Ridge. Dave Enger and crew have designed some solid courses for this, The Western State Championships and Convention Meet. The Ellensburg Orienteering Club is hosting a BBQ Saturday night to boot.

Well, all the specifics on the meet are in the enclosed flyer, so fill out your convention and "A"-meet registration and become one of the good guys. Now, if you want to be one of the super guys, give Bruce at 821-6862 or Dave at 822-6254 a call and volunteer to help at the convention or meet. Hey, someone has to mention the "V" word. (The preceding has been a paid announcement sponsored by the Cascade, Sammamish, and Ellensburg Orienteers For A More Enjoyable Convention And "A"-Meet.)

May 30-31st Inland Empire Cup

Eastern Washington OC is all set to make The Second Annual Inland Empire Cup "B"-Meet even better than the first. (Hey, that doesn't happen all that often; check out a movie sequel if you doubt me.)

The meet will be held again at Riverside State Park in Spokane, Washington. The map is solid and, with Marshall Nelson and John Beck designed courses, how can you help but have a good run? For all the details, check out the enclosed flyer. However, you've only got to May 16th to get your registration mailed, so what are you waiting for (postage rates may go up).

Newcomers' Meet Huge Success

The April 18th Woodland Park Newcomers' Meet came off even better than expected--over eighty-four newcomers gave orienteering a try. Judging by the number that ran two, three, and

continued on page 4, column 1

The "Bearing 315" Metamorphosis Continues

One of the strengths of Cascade Orienteering Club is the bi-monthly "Bearing 315". Through the newsletter, orienteers in the Northwest can keep abreast of orienteering events and interest and, moreover, feel linked to the orienteering community.

Last issue, Cascade invited Sammamish OC to become part of this link; printing comprehensive results and schedules. This month, we are pleased that Ellensburg, Eastern Washington, and Nisqually have contributed articles and information as well.

Consequently, Cascade, or rather the May-June issue editor, offers a new look, especially for the front and back page, that is meant to accent the sport of orienteering in the Northwest rather than "our club". If this appeals to you let us know; if it doesn't--well, try to be constructive in your comments. Ah, the perils of metamorphosis...

Thank you for your articles and hope to see everyone at the convention and "A"-meet.

Rick Hood

Cascade Officers and Coordinators

Peter Golde	President	883-3732
Dave Petty	Vice President	822-4223
Ardis Dull	Secretary	364-4062
Margie Bone	Treasurer	634-2279
Bruce McAlister	Executive Board	821-6862
Mike Schuh	Executive Board	783-3960
Debbie Newell	Mapping Coordinator	488-7471
Eric Bone	Training Coordinator	634-2279
Harvey Friedman	Membership Coordinator	778-7202
Don Atkinson	Equipment Coordinator	488-0270
Rick Hood	External Affairs Coordinator	367-2606

Meet Fees at COC "C"-Meets (other clubs are generally similar)

Member of any orienteering club	\$2.50	\$3.00
Non-club member	3.50	4.00
First time orienteers	1.00	1.00
Families (regular for first two individuals, then \$1 per person)		

Special events, such as "B" and "A"-Meets, have higher fees.

-- Cascade Orienteering Club Membership Application --

Name: _____
 Address: _____
 Phone: _____
 Other Family Members: _____
 Club Interests: _____
 Other Interest: _____

Please mail this form along with the appropriate yearly fee to:

Cascade Orienteering Club PO Box 31375 Seattle, WA 98103

Fees: Under 18 Associate (\$5), Individual (\$10), Family (\$15),
 Local Business Sustaining (\$30), or Corporate Sustaining (\$90)

Too Good To Miss -- Selected Upcoming Meets

May is chock full of great two-day meets within driving distance. Before the Riverside Meet in Spokane, there are two tried and true meets and maps north of the border. So, change the oil and some money and follow the red swinging needle to Sage Stomp in Kamloops BC, May 16/17th. Then on Memorial Day Weekend head up and over to Newcastle Island, BC.

Sage Stomp is a classic; the maps are good and the Sage OC really puts on a great meet and BBQ. Here's the bad news; if you don't have a meet flyer yet, you won't be able to get one before the date you need to pre-register. (For those that haven't had the fun of an "A"-meet yet, the plus of pre-registering is you get a pre-marked map. If you miss the deadline, you can most likely still run, but you'll have to mark your own map and the clock will be ticking; which might add 5 minutes to your time.) So, here's the important stuff:

-- Call Allan Vyse (604 372-8607) by the 12th of May (he'd *really* prefer by the 10th). Allan will answer your questions and you can register over the phone. He'll send you a flyer or, better yet, you can pick one up at the Island Crest Meet Wednesday night the 13th of May.

-- When you arrive at the meet on Saturday, please pay the Sage OC in Canadian dollars: it's a lot easier on everyone.

-- You will be assigned a start time (unless you register as a map hiker) so you need to be there on time. The first starts on Saturday are at noon. The first day's event will be held on APOC map/day 2, which is south of town.

The Newcastle Island Meet is always good. This year, there will be a night O run as a fun event in addition to the usual bill of fare. Pick up a flyer at the Island Crest Meet, but mark your calendar now.

Come June, there's Aspen Grove. It's a "B"-meet this year, so registration isn't required. Just show up, pay your fee in Canadian dollars, pick a course, mark your map, and you're orienteering. Last year's T-shirt was the talk of the town. Make the drive and you won't be disappointed.

If you're still undecided about making the drive, read what Harvey has to say about two-day meets. (Remember, if you need a ride or can offer one, please leave a message on the hotline.)

Don't pass up the 2-day meets coming up in May and June. Put the skills that you've learned in small parks to good use on the top quality 1:15000 scale color maps. Car pooling and either camping or piling in motels makes O not just a solitary sport but a gratifying social experience as well. The Sage Stomp in Kamloops, B.C., Riverside Park in Spokane, and Aspen Grove near Merritt, B.C. on 6-7 June are the ones I shall try to attend. Some folks leave on

Friday evening and some (like me) arise at the cheerful hour of 5:00AM to get to our starts on Saturday. 1st start on these meets usually is not until 11 or 12 to make it easy on us distant travelers. See you in the woods. Harvey

Standouts -- Recapping Selected Events

Thumbs Up for Peter & Claudia's O-Clinic

What a treat! Peter Bonek and Claudia Kunzel, both members of the Austrian National Orienteering Team, donated their time to aid us in our orienteering growth. The focus of their clinic was orienteering training techniques in theory and practice for improving one's competitive performance.

Peter and Claudia started the clinic with a Friday evening presentation, complete with overheads and ice cream, followed by a full day of field training at Drunken Charlie Lake on Saturday the 2nd of May.

Sixteen orienteers took advantage of this opportunity. Others may have been put off by the fear that with someone like Peter running us through Drunken Charlie, only the brave and quick footed could survive. Fortunately, Peter and Claudia were kind and wise, realizing our limitations, and adjusted the exercises to our speed and ability.

OK, what did we learn and do:

- Peter started with the basics, "the red needle points north". But quickly progressed from there in an informal yet informative format.
- Claudia talked about how to best use catching funnels and features.
- In the field we did five courses, each with a short or long option. Of the five, my favorites were the three two-person exercises:

"Tell-O." An excellent exercise, that promotes a clear understanding of why a route plan is important, what are the important features on route, and how to "see the terrain".

It works this way: the second person is the backseat driver; he has the map and he must communicate, by words alone, what route to take. For example, "The control is on a knoll, 500 meters away, head downhill on the trail until..." (None of this, "turn left now," stuff.)

"Relocating." A good exercise encouraging terrain awareness and personal control. The idea is to, without a map, in hand, mentally check off features, and figure out where you are.

Here's how it works: you both know where you are starting from and each person is given a map; one marked with the

odd controls, the other with the even ones. The "odd" person takes off, with his partner following closely behind, and tries to note the terrain and features. For when the "odd" person reaches the control, he ask his partner, "OK, show me where we are on your map" (which doesn't have the odd controls marked). After a discussion, the roles are reversed. I must admit, I enjoyed this process but didn't do as well as I hoped; luckily I had an understanding partner. I'm looking forward to trying this again.

"Structuring." The last exercise of the day was a great way to bring things together. This is again an "odd/even" exercise, but with a common map that is held by the non-orienteering partner.

Basically, the "odd" person studies the map to the first control and hands it to his partner. He then heads off for the first control on the basis of what he has memorized. En route, the "even" orienteer is studying the route to control two. At control one, the roles are reversed. We did peek a bit, sorry Claudia, but did a pretty good job with this exercise, finishing on a positive note.

At the end, Debbie presented Peter and Claudia with COC T-shirts, patches, and duffel bags. (What can we say; we hope Peter and Claudia come to regard Seattle as a third home.)

Mark Hartinger, a past Cascade OC President, who has been a bit tied down with raising two great kids, summed up the day perfectly. After returning just five days earlier from running the Boston Marathon, when asked how he like the clinic Mark said, "I had a blast today. It was like running five good course but without the clock running, so I could really focus on techniques."

And Mark wasn't alone. The clinic was such a hit, everyone is talking about another in the fall. Peter said he's willing and Claudia is too (we hope her student visa is extended) but they would like to make it a two-day affair on more runnable terrain. We'll keep you posted of the dates, but you can be sure it won't be during the World Cup as Peter and Claudia have a prior engagement. (Good luck guys!)

Oh, thanks to the following who participated and collectively donated over \$150 to the US Orienteering Team. By the way, Debbie Newell came up with the good idea both for the clinic and the money.

Participating: Debbie Newell (driving force); Dave Tallent with Kids (dedicated dad); Margie, Eric, & Nick Bone ("My Two Sons" as an idea for a TV show, has it been done?); Mark Hartinger (can we run back to town, it's not even 40 miles?); Sandy Kish Miller (Robert should have been here, he'd have liked it); Ken Lew (this is goooood); Doug Sprugel (wearing the 'scientific method'); Bob Reddick (solid orienteer and cellular phone owner); Bob Williamson (are we having fun yet); Eric Frieden (lunch is a mere 20 controls away); and Rick Hood (game for some more relocating exercises, if he can locate a partner).

Congratulations UW Orienteers

It was a cold and snowy day (hey, I've waited a long time to write that) at Grafton Lakes State Park outside of Troy, New York

this April 25th and 26th. Yes, it really snowed and there wasn't a latte stand in sight.

Yet the University of Washington Team racked up a third place finish at the 1992 Intercollegiate Championships. Two teams from West Point finished first and second. (Ah, running on one's home turf.) Even still, we might have done even better if we had fielded a larger team for it's the top three orienteers' score that count. We had exactly three members.

So how did Nathan Tharp, Jeff Coker, and Jim McCaa do? Nate took 4th overall, Jeff came in just behind at 5th, and Jim finished a very respectable middle-of-the-pack.

Graduation will take its toll. But look for a solid showing from incoming team member Eric Bone--this year's WIOL Champion. Say now, if you went back to grad school at the UW....

Woodland Park Success (continued)

even four courses, it seems that most took to orienteering like a Seattleite takes to Latte.

The objective was simple: spread the word about the meet; design short fun courses that peaked at the intermediate level; and have plenty of club members around ready to get newcomers off on a good footing.

We got off to a good start with articles in *Northwest Runner*, *The Mountaineer*, and *Signpost* and *Super Jock 'n Jill* displayed our flyers. I must admit though, I was only expecting 20 to 40 newcomers, so a look of both all and concern crossed my face when I saw a line about 20 deep at the registration table at 10 am. (Many thanks to Linda who did such a super job with getting folks through registration painlessly.)

During the peak hours we had as many as 5 club members each conducting the 10 minute "getting started" clinic and they did a great job. Peter, true to his word, designed four solid short courses, with the later three being legs that could stand alone or become part of a combined event (a modified motala). Between courses many newcomers stopped in at the second clinic, "orienteering bag of tricks". Here folks were given a feel for thumbing, handrails, attack points, catching features, and aiming techniques. Of course, a lot said the third clinic was the best: an informal discussion of routes while sampling bread provided by *Great Harvest Bakery*.

Congratulations to the eighty-four who completed their first orienteering course. We hope your experience was challenging and rewarding with a large dose of pure fun. (We did our best to make them feel welcome. We're sending them a complimentary copy of this issue of the newsletter, suspecting they have already been bitten by the orienteering bug and will elect to try another meet or even join the club.)

Again, thanks to the meet staff who made our first newcomers' meet such a huge success. Rick

From Our Own -- Local Orienteers Write

Is There A "Whole" In The O-Zone?

by Robert Miller, Cascade OC

One day, while visiting Robert Miller, past Cascade OC President and current scriptwriter laureate, I spied his first draft of, "The Zen of Orienteering: An Autobiography". I said, please tell me more; he said sure, but he would have to retain movie rights, something about Robert Duval as the lead... -ed.

To reach the top of the 8,000 peaks, the ultimate in mountain climbing, one must enter the death-zone, a region above 20,000 feet where the air is so thin man cannot survive more than a few days without auxiliary oxygen.

To reach the ultimate in orienteering, to have fun while romping through the forest aided only by map and compass, I find it helps if I'm willing to enter the O-zone (Oz for short). No, you won't find Oz listed among your international symbols, for unlike the death zone, Oz is not a place, but rather a frame of mind.

Terrain might at first blush seem the most important in determining how good the orienteering is. Great terrain? Open, runnable forest? We all hope to experience this someday. OK, so we settle for interestingly varied and complex features free of thick vegetation and shallow re-entrants on featureless slopes. But combine great terrain with poor course design and an attitude problem and you've got the makings of a miserable day of orienteering.

What makes a course fun for me is when the designer gives me a choice between "directissima" the more navigable challenging direct route, and the safer but more roundabout route. It's especially satisfying when the more direct route gives me a better attack point and allows me to spot the marker from a greater distance than from the safer route.

Orienteering is really relocating. So I especially enjoy courses designed to take me along a route where the map gives me enough information to allow me to constantly relocate. Naturally, courses designed with handrails, funnels, and catching features in mind are greatly appreciated, but the single biggest factor contributing to my overall enjoyment is my attitude.

On a good day I can tune into my O-karma and become one with the vegetation and contour lines. Slipping around dense pockets of bush instead of crashing through them. Bodily sensing my gain and loss of altitude which translates into a 3-D image when I look at my map.

But most importantly when lost, if I'm willing to just let it be that wherever I am, I am, and that's the way it is--I can tap into a kind of Zen state. The O-zone, a whole brain processing that combines the linear sequencer of my left brain with the pattern recognition talents of my right. Then if I don't step in a gopher

hole, often something magical happens. I enter an altered state where there is no right or wrong choice. Instead of selecting a route, the route leads me. Every "way" is on the path to the next control.

I find I can best provoke this moment of wonder by applauding my every effort with profuse positive chatter. As I recognize stuff in the forest primeval, "Super route choice." When I find the marker, "Good job!" When I get tired, "You're doing great." When I trip, "God, am I lucky I didn't break my leg on that one." When I fall down, "That didn't hurt nearly as bad as I thought it would." When I plunge into the freezing stream, "Wow, how invigorating." When lost, "Let me start with what I know, planet Earth." And when I pause to pick a few blackberries instead of reading my map, I know I've entered the O-Zone.

Desert Rogaining

by Karen and Mac MacDonald, Sammamish OC

The next issue will have several articles on Rogaining or extended backcountry orienteering. Mac and Karen though, got an early start on the 1992 season by flying down to the Arizona Rogaine last month. They have teamed up twice before for a Roagine and their partnership is still blossoming, so I'm paying attention to what they have to say. Besides, they tell a good story. --ed.

The high desert provides a terrific setting for a springtime rogaïne. The site was Gardner Canyon by Mount Wrightson, a beautiful snow-capped peak southeast of Tucson. Set around 6000 feet, the climate was ideal -- 70 degrees and windy. It had rained for two weeks before the event, so the area was in spectacular bloom of yellow desert marigold, red hedgehog cactus, and towering white century plants.

The local birds in evidence were all hunters: hawks and vultures. It's pretty unnerving to sit quietly for a moment and see three vultures appear from nowhere, spiraling down, hoping you're meal worthy. It was a rattler that attacked us though-- a pretty four foot diamondback. Karen was cool; I was not. When he came after us, unimpressed by our sticks and stones, I didn't hesitate to get out front and break trail for Karen through the creosote bush.

For those unfamiliar with the term, a rogaïne is an extended backcountry orienteering event run like a score O and lasting from 8 to 24 hours. Some twenty to forty controls of varying difficulty are marked on the map and you decide which ones to get and in what order. A partner is required for safety reasons. Typically the map is a normal 7.5 minute USGS map, overlaid with magnetic north/south lines and a one kilometer grid. Rogaine supposedly stands for **R**ough **O**utdoor **G**roup **A**ctivity **I**nvolving **N**avigation and **E**ndurance, but some suspect it stands for **R**oger, **G**ail, and **N**eil, the three Aussies who popularized the event.

At the Arizona Rogaine, we navigated pretty well direct to the flags, and moved at a good pace, so thought we'd do pretty well in our class, the Mixed Category. Surprise, we finished in the middle of the pack, and discovered that rogaining requires another skill we'd skipped over: route planning! In contrast, the successful teams had their entire day planned out in advance, meaning they knew just how fast they wanted to move, and

where they had to be at each hour to get back just in time in order to avoid the severe overtime penalties. Who won: it wasn't the 21 year olds, but Ron Hudson and Steve Smith from the Bay Area, proving in rogaining, judgement and plan execution are the crux.

John Maier and Mark Parsons indeed set an interesting course, tempting the faster teams with thoughts of picking up those last few controls. The winning team skipped a few of the low-point value central controls and avoided the big OT penalty.

Overall, we had a great time on the course, can heartily recommend the event, and can't wait for the next rogaïne.

Orienteering Under the Southern Cross

by Sid Whaley, Nisqually OC

After spending the month of March bicycling with my wife on New Zealand's South Island, I found myself with a day to spare in Wellington, the capital. There was a notice of an orienteering meet in a local paper and a contact phone number. Roger and Rachel Shelton answered the phone and were glad to encourage new members, even for one day.

They kindly picked me up at my lodging and took me to some hilly farm land about 40 kilometers north of the harbor. I noted both my hosts and many others wore the same track suits and found out they were the official colors of the Wellington Club, one of five in the general area.

There were four courses and about forty participants, including kids, teenagers, and some spindly-legged oldsters wearing magnifying loupes. I chose course 3 (2.4 km, 9 controls), taking 43 minutes to complete. The course was along a long ridge with many side gullies, the bottom of which was quite muddy and marshy. There was a lot of steep up and down and some fairly thick forest. There were numerous wire fences you were supposed to cross only where there was support. The fences are not marked on the adult maps, only on the kids' versions.

On the back of the clue sheet at this meet was a series of route choices marked A, B, or C, to be used any way you wanted. I have been trying to aim off controls quickly in the proper direction, so elected to digest these suggestions after completing the course. The meet director said he was trying to add some instruction to their usual format. I thought the course was fairly strenuous due to constant elevation gains and losses.

The flags were easily seen, with both the punches and the control code mounted on pipes about waist-high. The double letter codes were in 3 inch high black letters like a mail box. No one wore gaiters, much to the delight of the biting flies. So much of New Zealand is thick gorse: only the pine forests and some sandy areas provide reasonable terrain.

New Zealand has a running tradition, and Peter Snell is apparently an active orienteer. They think of their sport as pretty small, compared to England or Scandinavia, but I feel they had greater numbers and social bonding than our area. Many of the people had been to a World Meet in Tasmania, and my hosts hope to go to the World Championships in Scotland in 1994. Everyone was very gracious as our people usually are to visitors.

After the event I was offered a delicious New Zealand apple and driven back to my lodging. I only had time to wipe the mud off my bike shoes, change socks, and mount my "push bike". The wind, notorious in Wellington, was blowing about 40 knots, but fortunately the airport was downwind, and 30 minutes later I was ready to start my flight home. Along with being passed by a "fell runner" about age 60 on one of my climbs, the meet was one of my trip highlights.

Club News From Around the Pacific Northwest

Cascade Chatter

by Harvey Friedman

As usual, we'll start with positive roster changes as of 1 May 1992. Words of both thanks and welcome go to the following new or renewing club members: Joseph Ablao, William Albert, Liz Anderson, Rich Anter, Don Atkinson, Bone family, Ellen Boomer, Rick & Eileen Breseman, Bill Cusworth, Greg Dinkleman, Suzanne & Peter Dueber, Martin "Ruh" Fox, Mike Fritz & Vivien A. Birtwistle Fritz, Lee Hirschhorn, Alison & David Keyes, Edward Ledger, Ken Lew, Norm & Jerri King, Paul Magnus, Bruce McAlister, Tom McKay, Jim McNamara, Linda & Carl Moore, Michael Odom family, Rick Reitz family, Roger Rosenblatt family, Rob Stevens, Einar Storakers, Steve Thomas, and associate members Brian Cox, Byron Hawkins, Mel Rader. (If you'd like a membership card, just ask me.)

If you move, don't forget to turn in a change of address card; you don't want your newsletter lost. Since we now send the newsletters out at bulk rate, we no longer know are informed in your newsletter doesn't reach you. If you know of someone who is not getting their newsletter, please let me know.

We're printing new punch cards, designed by Debbie Newell. These cards have a new box for map hikers. Everyone will still have their start times logged, but on returning, map hikers will get a check for their finish time. In the results section, rather than a time, you'll see "map hiker" or "MH". Now we really have a good option for recreational orienteers that don't want to have a time element.

Thanks to Jim Sisco for make 10 "COC Meet Staff" hats. They are a great option to the "Cascade Meet Staff" vests. So next time you're wondering who's in charge, look for the red and white baseball cap.

And now a few words from our new Training Coordinator, Eric Bone.

There was a large turnout for the Woodland Park Newcomers' Meet -- that's great! It's exciting to see so many new people interested in orienteering, and I was happy to see so many Woodland Park first timers at Lincoln Park last weekend. Those of us who are more experienced must always be open to address any questions

or concerns these newcomers to our sport may have, just as the crew at Woodland Park did. (Way to go meet staff volunteers!)

Also, I am planning on trying to sharpen my O-skills this summer. If anyone is interested in forming a training group, which would meet once or twice a week, please call me at 634-2279.

By the way, we're still looking for two more key members willing to help; one as Social Coordinator and another as Volunteer Coordinator. If you're interested or can recommend someone, please let me know. Till next issue... Harvey

Eastern Washington Words

Spoke with Scott Coble briefly. Scott ask me to extend a warm invitation to everyone in Western Washington to the Inland Empire Cup this May 30-31st. He also said the piece in O/NA about their treasury being in the \$50 range is no longer true; EWOC's got a cash flow (or is it cow) stemming from good turnouts to their local meets. Moreover, Scott told me a tale that made me envious: Last winter, some said let's do a ski-O and on an almost impromptu basis they not only had snow, but a 30-plus turnout. Lastly, Scott almost said he'd send in an club update for the next issue. Good choice; I could be dangerous. --ed.

Ellensburg Endnotes

The rumors about the famous homemade cookies no longer appearing at EOC meets is untrue! For more rumor corrections and EOC updates, tune in next issue for Will Sperry's endnotes.

Random Notes from Nisqually

by Carl Moore

Sid and Jan Whaley are back from spending the month of March in New Zealand. They spent most of the time on their bikes, but also kayaked, hiked, and rode local buses and ferries. Sid also participated in an "O" meet near Wellington.

Active Orienteers at the University of Puget Sound are Ellen Boomer and Melissa Moffatt. Melissa is currently running on the UPS track team along with veteran Wanda Howlett.

Gary McCausland has been doing such a fine job as Nisqually treasurer that the Club hasn't needed to collect dues from members for several years. In fact, if you write a check to Nisqually it rarely gets cashed. Nisqually recently added to its collection of control markers and purchased more Point Defiance maps.

Thanks to Steve Miner, Stuart Bradshaw and Bob Becker, Nisqually ran successful winter meets which were popular with the high school competitors. Mike Tharp spearheaded the winter WIOL competition. RAMBO IV, the 3-hour rogaine, was especially well attended.

Lisa Nordlund and Nate Becklund, both WIOL graduates, are spending a year living and studying in serious O-country. Lisa is in Norway and Nate is in Sweden. Lisa writes that she has done

quite a bit of orienteering. She sent one postcard from a side trip to St. Petersburg.

Carl and Linda Moore are planning to attend the Heartland Championships in Minnesota in early May. The location is Sand Dunes State Park, a glacial deposit from the last ice age. Carl and Mike Schuh attended the first meet on this map in the spring of 1990. The terrain is a cross between Tenalquot and the Manitoba COC maps with interesting, unpredictable contours and good open forest.

Sammamish Summary

"Hey Bud, drop me a letter," says Europe-bound Ben Hall. He took off in his truck via Canada to his family home in New York, though making a few O-meet stops in route. In Europe, he'll be on the go, planning to pick up 20-25 days of major meet competition. He'll be sending some letters our way and we've been selected as the exclusive, "Hall Column" journal. But, don't be a dweeb; write him first, c/o Martina Schmidt, Lerchenstr. 37, 2000 Hamburg 50, Germany. He'll be passing by there 3 or so times and said mail from home would be "great, Bud."

Speaking of travel, Mac MacDonald is spending the first week of May mountain biking in Utah: can mountain bike rogaining be far off? He'll let us know.

Also, Dave Lilly and Kathy Trost are off hiking, bicycling, and just having a good time in Alaska for a few weeks. (no, not Roslyn, Alaska.) Next issue, look for a double Sammamish News column replete with Alaskan tales.

For membership and other question, give Dave Enger a call at 822-3732 or write the club at PO Box 3682, Bellevue 98009.

We'd love to hear most of the news your willing to share--we have our "pg-13" rating to consider. Just drop a line to the Newsletter at PO Box 31375, Seattle, WA 98103 or phone it in on the hotline at 783-3866. Thanks. --ed.

Feature Article -- Mike Schuh on Mapmaking

A few months back, I asked Mike if he would write a short piece for the newsletter on what's involved in making an orienteering map. Not only did he turn in an interesting and informative piece explaining the process, but he gave it to me on 3.5" DOS diskette. Now that's service.

We are planning a similar article on course design. Please let us know what else you'd like to read about. Better yet, write a piece and send it in. (Did I mention that we're ever so grateful if you can give it to us on a DOS or WP5.1 diskette?) --ed.

Orienteering requires maps, and the sport is at its most interesting when the maps are accurate and very detailed. This

means that we usually make our own maps. I recently completed work on a couple of map projects - Kelso and Evergreen High Schools - and the projects illustrate the process.

The very first step is gaining access to the land. Most of our maps are on public land of one sort or another and permission to use the area is easily obtained. At Kelso HS, the map was produced for the school district, which made permission easy to get. For other maps, this is sometimes a lengthy and involved process, as we try to ease landowners' concerns about liability and environmental impact - basically, an educational process. Occasionally we are denied access to an area and we must turn our attention elsewhere (the middle of the Moran State Park map is an example of this).

Step Number Two is collecting materials for a "base map", a map of the area that will be used as a guide for the fieldwork. The better the base map, the better the finished map is likely to be. It is possible to produce an excellent map from a lackluster base map, but this is very difficult and rather unlikely. For Kelso HS, I was fortunate in finding recent building plans and an aerial photo in the school district's maintenance office. Because the school campus is flat, an aerial photo makes a good base map (this is not true for steep terrain) and the building plans allowed me to scale the photo to an acceptable scale - in this case 1:2400, or roughly double the final scale on the finished map. I used an enlarging/reducing photocopier to get the desired scale. The base map for Evergreen HS was a City of Seattle engineering department map, also at a scale of 1:2400.

For a high quality base map, the best way to go is a photogrammetrically produced base map. A series of overlapping aerial photos are combined with the aid of a stereoplotter to create a three-dimensional image of the terrain. A photogrammetrist then traces those features that are visible and of value to an orienteer. In relatively open terrain, the resulting base map is very detailed and can save days of fieldchecking. In Western Washington, however, our dense forests often make photogrammetric base maps of limited value.

Frequently, the economics of a given map project preclude the use of photogrammetric base maps and some other source must be used. Many times this is a US Geological Survey map (the Manitou Park map in Spokane started this way); sometimes a city topographic map can be used, as for the Evergreen HS map. At worst, no suitable base map can be found and the fieldchecker starts with a sheet of blank paper (the Ballard Community Center map was done this way).

The most time consuming step is the actual fieldchecking. No matter how good the base map, fieldchecking must be done. Even aerial photos can miss fence lines or boulders hidden under trees. Also, the terrain might have changed since the base map was prepared. And a government map maker might not interpret the topography and draw the contours as an orienteer might.

Fieldchecking involves making many subjective decisions: is this vegetation thick ("fight") or just a minor nuisance? is that rockface impassable? does this boulder appear to be significant? is this trail "indistinct" or a "minor footpath"? All of these considerations and more are taken into account by the fieldchecker, who must visually survey every square foot of the map area.

The time required for fieldchecking varies greatly, depending on the terrain and the quality of the base map. Kelso HS took me just a day and a half - mostly open fields and a recent aerial photo that showed individual trees made this possible. By contrast, the update of the Lake Tradition map went much more slowly. The terrain is more rugged than Kelso, and portions of the map area were never mapped for the original map, making it more like a new survey with a blank paper base map.

Nearly as time consuming as fieldchecking and needing a passion for perfection and a knack for neatness, cartography is the penultimate step in making orienteering maps. The most common method of drafting color O maps is to draw each color (the black, blue, brown, yellow, and green) on a separate sheet of drafting film. Many times, more than one sheet will be used for a given color. For example, sheets containing the solid green "fight" areas, the medium green areas, and the vertical green stripe symbol will be combined in a dark room procedure at the print shop. This yields a single negative that in turn is used to produce the printing plate for the green ink. Both the Kelso and Evergreen maps used seven sheets: black, blue, brown, solid green, medium (screened) green, solid yellow, and medium yellow.

Recently, several computer programs have been developed to do most (or all) of the drafting. Some are adaptations of conventional computer aided drafting software; at least one was designed specifically for O maps. Either way, they bring to cartography the same promises that word processing did to writing: ease of editing, electronic storage and transmission, and faster production. One definite advantage is having color separations - the separate sheets - done by the software, instead of the cartographer flipping back and forth from one sheet to another. The use of computers in O mapmaking is still very new, and many new changes are yet to happen.

Printing is the final step in producing orienteering maps. The sheets of drafting film are taken to a print shop that is capable of color offset printing and (ideally) has a darkroom on site (most do). A bit of education is often involved, as O maps have a few peculiarities. One such oddity is the desire to leave the registration marks (a small circle with a plus inside) on the map around the edges. For most print jobs, the marks are removed after each successive color is lined up with the previous ones. Why is this important? On many O maps, it would be very difficult to tell if the map colors are misregistered, while it is relatively easy to determine with, say, color photographs. If we didn't leave the registration marks visible, there would be no easy way to tell if a brown dot knoll is on the correct side of a blue stream...

I enjoy making maps. It is a creative effort that contributes in a very tangible way towards our sport. I have found that fieldchecking has sharpened my orienteering eye and aided my ability to quickly interpret the terrain around me. Sketching contours (and often re-sketching them!) has helped me to rapidly visualize the detailed shapes of complex topography. While fieldchecking does not provide the same physical conditioning gains as weight training or running intervals, it does greatly improve one's technical skills. Besides, it's fun. I would strongly encourage others to give mapmaking a try.

Borrowed From Club Newsletters Beyond The Northwest

Like us, many local orienteering clubs publish a newsletter. Some are just a few photocopied pages and come out irregularly, others are prepared by offset printers and appear as monthly booklets. The common denominator: keeping club members and the orienteering community informed.

We thought we'd share some selected pieces with you. Let us know if there is something special we should keep our eyes open for.

"From the Briar Patch"

Delaware Valley Orienteering Association, December 1991

The President's Corner

by Rob Wilkison

... A very positive sign in the dramatic increase in club memberships during 1991. We now have over 400 memberships (families counting as one membership), and as we were a close second in size last spring, we now may have the largest club in the U. S. This reflects, to a certain degree, the increased publicity which orienteering is starting to receive, but it is also a product of the strong efforts of some club members to promote orienteering at the grass-roots level and emphasize the recreational, as well as the competitive, joys of orienteering. We can only continue our growth if more people actively participate in our activities, whether as an event helper, conductor of a clinic for a school or scout group, course setter or mapper. A first step is to attend the winter meeting and express your opinions on the future of our club. I hope to see you there.

LOS ANGELES "ORIENTEERING"

MARCH/APRIL 1992

Ask the Chief Coordinator

(Your chance to pick the twisted mind of LAOC's highest official and an orienteering authority, as indicated by his title, Chief Coordinator, LAOC)

Dear Chief Coordinator,

I'm hoping you can help me -- I've been stumped by this for almost a week now: what is the meaning of life?

Wow -- good question! Well, consider this: life is like an orienteering course. You've got this series of checkpoints that you've got to get through, such as first day of school, buying your first car, finding a mate, getting that promotion, and so on up to, well, dying. How you get from point to point in your life is completely up to you, but the winner is the one who reaches all these checkpoints in the shortest amount of time! Well -- uh, maybe this isn't the perfect analogy.

Life is like a Score-O! There are all these goals out there, and it's up to you to pick and choose which ones you want to reach. Different goals have different values associated with them, and you try to maximize the total value achieved in the time limit! There's no set order for achieving these goals, though by looking at the placements, it does make sense to get some before others. And, if you stay out on the course too long, you get penalized! Hmm -- that doesn't quite seem to fit in either, but I'm getting closer.

I'm sure the meaning of life has something to do with Orienteering; let me work on it for a while longer and get back to you.

Thanks for the question --
Mick, the Chief Coordinator

Hints for Orienteers

by Tapio Leino, from the Jan-Feb 1992 issue of the Los Angeles OC newsletter

A recent article in the Swedish national O-magazine, *Skogssport* (forest sport), compared the techniques and methods of two test groups in the process of choosing their route from one control point to the next. One group was formed by the top level orienteers ("E" for elite) and the other by the young and less experienced orienteers (B-level).

Researchers found that the members of the E-group looked first at their maps to see the surroundings of the next control point. They were looking for an easily identifiable spot near the control which then would surely lead them to the control point. Thereafter, they planned the fastest route to the spot they had chosen. So they knew they could run there with a 95-105% speed and skip reading all the details of the map. Careful precise Orienteering was needed only for the last 200-300 meters. They chose their strategy for the course starting from the end! And they could not miss.

A typical B-group orienteer did it otherwise. He tried to find the best and fastest course, but his criteria were to minimize the climbing, to avoid the green areas and to lighten the task of running. The basic strategy was not the certainty of finding the next control point! Very often they were tempted to change their plans in the middle of their course which greatly increased the possibility to make mistakes.

The *Skogssport* article claimed, that because of this difference, the members of the B-group made many more mistakes near the controls than any E-group orienteers. They also used much more time recovering from their errors (my own statistics which I posted earlier this year show the same decrease and I must admit that last year I thought like a B person. This year I only run like one!)

I spoke about this with several top orienteers and they all said that the reason for it is quite logical (and E-level orienteers know it):

1) In Scandinavia, the people who design the routes in an Orienteering event have learned the same ideas. The route alternates (you can't find more than 2-3 sensible junctions and even less in the central Europe) from one control point to the next are generally as good, assuming that the plan is executed well. The times spent on different routes are almost the same if the choice is made early enough and executed as planned without any changes.

I could not believe it before I saw an analysis of the '90 Swedish O Champs in another *Skogssport* issue. The terrain was very good (difficult and very detailed) and there were lots of 30-70 m high hills. The maximum time differences between two orienteers at the exactly same course between two control points were almost as big (small!) as the maximum time differences between those orienteers who used different routes between the same two controls. This

was true even for the very long legs (2-3 km) where the time differences were only 3-4 minutes! You can't say that they made a mistake!

So it looks like it does not really matter which way you go if you choose one of the same courses. I am afraid most of my mistakes originated from quite insane choices.

2) We are taught to run faster at the beginning of a course from one control point to another and more slowly when coming nearer to the control point (only the best orienteers are able to maintain their speed). From this we can conclude that the mistakes at the end of a course take relatively more time!

So it is very important to plan your entry to the control point. At times I had a plan, but then I never bothered to go via the check point and missed.

3) The primary target of Orienteering is to minimize the time spent. It is not achieved by looking for easily runnable courses and this is something the B-level orienteers have not understood yet. Because of this basic rule the top level orienteers do not hesitate to choose the straight course with rougher (difficult to advance) terrain and more details if their entry to the control point is easier then. And for the same reason they also do not hesitate to choose a route which increases the total length they must run. But, of course, the choice depends also on the personal skills of an orienteer.

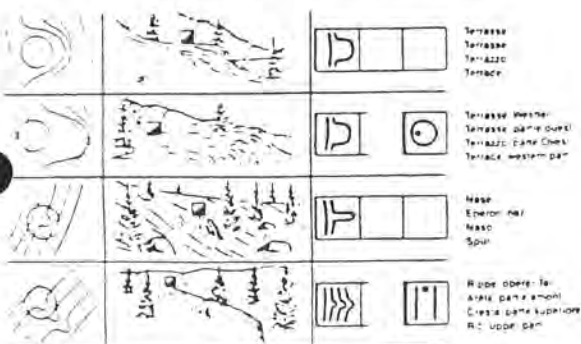
Question: So how do we minimize the total time?

Answer: We do not take chances where the penalty for making mistakes is serious! And we always make a plan a) for entering the control point and b) for the route, in this order! ☐

Tapio Leino competes for LAOC and promises more analysis on this in the future



Both O/NA and RMOC have featured the "three window shot". The middle portion is how the feature appears in the field, the left is how it looks on the map, and the right is how it is symbolized on the control description, or clue, sheet. We will put in several of these each issue, look for them here and interspersed between articles. —ed



Just For Beginner's

New members to the club are sometimes confused by the lingo used by more experienced orienteers. Here is a list of the more common terms that may not be known to all members:

Control—an orange and white "kite" that is hung adjacent to a visible landmark. The control is supplied with a punch to prove that the orienteer has found it. The control is represented by a circle on the map.

Fight—an area of impenetrable undergrowth represented on the map as dark green areas. So named because you would have to "fight" your way through; fight areas should always be avoided.

Attack Point—a feature near the control that is large or easy to find. After arriving at the attack point, precisely locating the control is made easier.

Contouring—a method of navigation where you follow the same contour line or elevation.

Catching Feature—a distinguishable feature used along your route to help you locate your position.

Spur—A narrow ridge on the side of a hill.

Re-entrant—a small valley cut into the side of a hill.

Thumbing—marking one's current location by keeping the thumb nail on the course map, updating your position when encountering a terrain feature.

Paast—Now that you have learned the "official" definition of some orienteering terms read on to find out what they really mean...

Control—The first thing that a meet director believes he loses at 10:00 on the day of his meet.

Fight—this is what usually breaks out when some kind-hearted soul brings in some snacks for the crew at registration but only includes one jelly donut.

Attack Point—the exact location of that lone jelly donut.

Contouring—the ripple effect caused when a newsletter editor, who has won too many jelly donut fights, lies on a light-fitting running suit.

Catching Feature—the enlarged abdominal region that causes the ripple effect on that donut-eating newsletter editor.

Re-entrant—the exact opposite of a re-exit.

Spur—small bits of debris that form spontaneously inside running shoes. Spurs are used as scapegoats for poor run lines.

Thumbing—also called hitch-hiking. This is the usual way that newsletter editors find their way back to the finish area when running a course. Thumbing is not usually required for String-O' courses, however.

"From the Briar Patch"
Delaware Valley Orienteering Association



Beginners' column --

A FEW MORE HINTS FOR UNEXPERIENCED ORIENTEERS

Some time ago I wrote about how important it is to choose a (correct) strategy for finding and entering the control point and how little it matters which way you run from one control point to the next (maybe I even underestimated the importance of choosing the correct course). One should though always remember that at terrains with lots of contours choosing the correct course is probably the most important skill in orienteering. What I was trying to say is that it does not pay to risk your race near the control where it takes a long time to recover from an error (where making errors is slow).

Last spring I tried to apply the strategies I described in my earlier article. Well, this is what happened:

My average amount of errors decreased to less than half of the amount in 1990, but something was still very wrong because I continued to make some very big mistakes (not so often though). The complete success (in finding of controls) was not even close. In my most important race in the spring '91 I made one huge error (16 minutes) and in the second biggest event I also made two quite large mistakes (7-8 minutes each). You might think it's not very much but in Finland such errors would at the final results drop you from the top to far below the middle!

Again I had to ask some more experienced orienteers about the possible reasons and I heard a few very good answers too:

1) The new excessively detailed maps tempt the inexperienced and young orienteers into very precise orienteering. The rookies try to do it too well! and they try to read everything on the map. It is not necessary, and one has to learn to identify what is important and what is not.

2) The inexperienced orienteers have too much faith in what is printed on the map. They use very small boulders and cliffs as their checkpoints when entering to the controls although one really should not rely on those features too much. Their position and existence on the map is not based on the aerial photo as almost all other features on the map. Their size, shape and existence depend on the skill and judgment of the one who draw them on the map while field checking, and he just may have had a totally different view. Or maybe there was a crowd of people checking the same terrain and they never saw all the details quite the same way.

This means that you can never be immediately quite sure

- that
- the boulder or the cliff has been drawn to a correct spot
- or position
- the boulder or the cliff you found is the same as the one on your map
- there really is a boulder which has been drawn on your map
- the size of the boulder or the length of the cliff was drawn correct

So we learn that the orienteering should be based on some very surely existing features like field corners, hill tops, isolated hills (two or more contours), roads, tracks, bends and junctions of paths, prominent cliffs, vegetation changes (on new maps only), ditch junctions etc. The boulders and some small cliffs are useful only inside the control circle.

3) At the flat terrains with lots of details it is a big temptation to try to find and use the very small "hills" and knolls (drawn with only one contour). Usually they are much less than 5 meters high and are drawn only to inform that the ground there is a little above the surrounding area. One can't be sure to find anything when trying to look for such a knoll (or a depression).

At a flat terrain it really pays to take the trouble and look for the two contour hills or other more prominent features which will guide you to the control point.

4) It is dangerous to exit from a path into the forest! While running fast it is very easy to make a mistake by choosing a wrong spot for the exit or a wrong angle from the path. As it is very infrequent that there is a path from one control point to the next one should anticipate some sort of a trap when such seems to exist. At terrains with lots of paths some very cunning track designers allure the orienteers into making small errors like running past the control, or choosing the wrong way for the rest of the course.

Very often the paths lead you to the wrong side of the hill! I can not remember how many times I have found myself near the control but at the same time so far away from it! Once in Hungary I noticed the control flag only 30 meters away, but I had to rest first before entering it (some 20 meters above my level!).

It always pays to remember that our sport is called orienteering, not the cross country running!

For the youngest orienteers however using the paths and tracks is always the best and safest choice!

☐ Tapio Leino

"The Best of O/NA"

Orienteering North America is published monthly. It's a great magazine for orienteers at any level. Articles range from family activities to World Cup competitions. We normally have some back issues at the meets that you can look over. We plan to make "The Best of O/NA" a regular feature. (If you'd like to subscribe to the magazine, call O/NA at 617-868-7416 or join the US Orienteering Federation and the magazine is included.)

A SUMMARY OF THE HISTORY OF ORIENTEERING

compiled by Bertil Nordenfält, BA, former president of SOFT and a founder of the sport (forwarded to O/NA by Carl Fey)

- 1886 - The word "Orienteering" is used for the first time to mean crossing unknown territory by the aid of a map and compass (Military Academy, Stockholm, Sweden).
- 1895 - True O-competitions were held for the first time by the military garrisons in the (at that time) united Kingdom Sweden/Norway (Stockholm and Oslo).
- 1897 - A public O-competition was organized for the first time by the sport club Tjalve, Oslo, Norway, on October 31. Eight participants, distance 19.5 km in real wilderness, 3 controls, winner Peder Fossum, 1 hr, 47 min, 7 sec.
- 1901 - A club-O was arranged in Sweden for the first time on March 17 by the sport club of Sundbyberg outside Stockholm. Six entries, 14 km, 4 controls, winner Victor Dahl, 1:35:34.
- 1918 - On March 25, the Stockholm sport president, Maj. Ernst Killander, organized the first modern national O-competition in the world. There were 155 participants, course 12 km, 3 controls, winner O.B. Hansson, 1:25:39. It was a great success, also in the press; interest in the new sport spread like wildfire all over Sweden, as well as Finland and Norway.
- 1920 - All the basic principles of competitive O, as it is known today, were laid down by Ernst Killander, Sweden (rules, type of courses, controls, age groups, and organization). Therefore, Killander is called the "Father of O".
- 1922 - On December 2, a Night-O was held for the first time outside Stockholm.
- 1923 - O is introduced in Finland by the Swedish sport coach Gösta Holmér.
- 1923 - For the first time regional O-championships (individual, men) were held in Sweden.
- 1925 - O is reintroduced in Norway.
- 1925 - For the first time a special ladies' class (Göteborg, Sweden).
- 1926 - For the first time an elite national O-competition, Stockholm. Winner the legendary Folke Thörn.
- 1932 - For the first time a national team O-competition. Sweden won over Norway outside Oslo.
- 1933 - For the first time public O in Switzerland.
- 1933 - The Silva compass system is devised.
- 1933 - For the first time an O-event in the USSR.
- 1934 - For the first time an O-competition in Hungary.
- 1935 - For the first time National Championships (individual, men) in Finland and Sweden.
- 1937 - Norwegian National Championships.
- 1938 - For the first time national O-sport federation (Sweden, SOFT).
- 1940 - For the first time O as a national mass sport gathered 380,000 participants in Sweden.
- 1941 - For the first time National Championships for ladies (Sweden).
- 1942 - For the first time National Championships in Denmark.
- 1946 - O-sport for Boy Scouts introduced in the USA by the Swedish O-champion Björn Kjellström.
- 1946 - A Nordic Committee for O-sport (NORD) became the first nucleus for international O-cooperation.
- 1948 - O introduced in Canada by Björn Kjellström.
- 1950 - For the first time an O-event in Czechoslovakia.
- 1950 - A series of O-competitions between Swedish and Swiss O-clubs started.
- 1952 - Norwegian and Swedish orienteers produced, for the first time, their own O-maps.
- 1953 - For the first time an O-event in Yugoslavia.
- 1955 - O introduced in Bulgaria.
- 1957 - For the first time O in Balcicum and Leningrad, USSR (compare 1933).
- 1958 - For the first time a 6-year O-series between the Stockholm O-club and several other O-clubs.
- 1958 - O introduced in West Germany by the Swede Gösta Lagerfeldt.
- 1959 - For the first time Estonian O-Championships.
- 1959 - For the first time an interest organization for O in Switzerland.
- 1959 - O introduced in Great Britain by Gösta Lagerfeldt.
- 1959 - For the first time an international O-conference organized by NORD/SOFT in Sandviken, Sweden, with participants from 11 nations.
- 1960 - For the first time an open international O-competition, "Nordloppet", with participants from 7 nations, organized by NORD/SOFT outside Stockholm.
- 1961 - For the first time special map-committees in Norway and Sweden.
- 1961 - The Swede Pen Bengtsson started a series of "missionary trips", first in Europe, later around the world. He is still working world-wide as an O-promoter.
- 1962 - "O-Ringen", an organization of Swedish elite orienteers.
- 1962 - For the first time European O-Championships for men and women (Løten, Norway).
- 1963 - For the first time O-Championships in USSR.
- 1965 - For the first time "O-Ringen" organizes the Swedish "5-Days", 156 participants.
- 1965 - O introduced in France.
- 1965 - "NORD" agreed on common standards for O-maps.
- 1966 - For the first time World O-Championships (Fiskars, Finland).
- 1966 - British O-Federation (BOF).
- 1967 - Canadian O-Federation (COF).
- 1967 - 4th IOF Congress (Moosboden, Austria) accepted international standards for O-maps, completed by later congresses.
- 1967 - For the first time an Israeli O-Association.
- 1968 - For the first time O-Championships in Canada.
- 1968 - O introduced in Japan by Swede Tord Kjellström.
- 1969 - For the first time O-competitions in Australia (Melbourne).
- 1969 - For the first time "5-Days" in Switzerland.
- 1970 - Hungarian O-Federation.
- 1970 - For the first time O-Championships in the USA (Carbonate, Ill.).
- 1970 - Australian O-Federation.
- 1970 - O introduced in the Brazil Army.
- 1970 - O introduced in New Zealand by ex-Olympic champion Gordon Pine.
- 1971 - United States O-Federation (USOF).
- 1974 - Symbols on the control card devised and tested by Kjell Larsson, Sweden. Later, (1979) accepted also by the IOF.
- 1976 - "5 Days" in Quebec, Canada, the first outside Europe. There were 1500 participants.
- 1978 - Swiss O-Federation.
- 1979 - O-Federation of the Soviet Union.
- 1983 - For the first time Veterans World Cup (Tampere, Finland).
- 1984 - For the first time O-Ringen international clinic.
- 1984 - For the first time public O-competitions in Brazil organized by the military.
- 1986 - For the first time IOF's World Cup (series). Winner Kent Olsson, Sweden, and Ellen Sofie Olsvik, Norway.
- 1987 - For the first time computer O-maps.
- 1989 - A new Japanese O-Federation.
- 1990 - Map-drawing by the aid of satellites.
- 1990 - The first World Championship for Juniors in Ålväby, Sweden.
- 1990 - 26th "O-Ringen 5-Days", this time in Göteborg, Sweden.

There are many other important O-dates that are missing above. Please complete it yourself! signed, Bertil Nordenfält

New Computer Mapping Developments

by Mark Smith

One of the Orienteering world's favourite computer programs for making O-maps is OCAD. Developed and released by Hans Steinegger of Switzerland, it has steadily grown into a good MS-DOS-based map-making program. In his last conversation with Hans, he noted that about 100 copies had been sold so far with 5 or 6 to Canada and a few less to the USA.

We started experimenting with computer cartography in the fall of 1989 when OCAD was not yet available. That, and a preference for Macintosh computers, led us to use the more versatile (but not specifically designed for O-maps) Adobe Illustrator program for our first computer-generated O-maps, published in January 1990.

We can also work with OCAD though, (the first Canadian O-map made from OCAD was Mt. Farlagne in New Brunswick, printed in January 1991) and with the recent release of version 3.0 (now a bug-free 3.0.5) the program has evolved to a stage where it can be highly recommended to O-mapmakers with access to an IBM-PC/AT compatible computer.

Here's more about how the program works: Information is fed into the computer via a digitizing pad (not included with the program), which is an array of finely aligned vertical and horizontal wires embedded in a smooth-surfaced plastic tablet. The survey notes or clean copy is taped to the tablet and traced using a stylus or crosshair device. The points selected are sent to the computer where they appear on the screen.

OCAD presents a variety of symbol and colour choices which can be selected and automatically applied to whatever is being drawn at the moment. Figure 1 is an example taken from one of our maps. The black symbols are currently displayed on the right side of the screen and the "drawing" mode selected. Whatever is traced on the digitizing pad will take the attributes of the selected symbol. Figure 2 shows a view of the "Edit" palette of commands (note that the fence has been selected, showing its anchor points), and an "Undo" button to reverse an action.

There are a few pull down menus as well. They handle such settings as the viewing scale (overview, 1:2x, 3x, 20x), viewing colour chosen, screen redraw, file opening, closing and quitting, and printing.

OCAD 3 supports all the new drawing specifications which means no more fiddling with pen or scribbling point sizes, measuring and cutting trail dashes, applying sticky Letratone pieces and other headaches. By the way, the symbol running across the bottom of the OCAD map is a new IOF symbol for a pipeline. Another new symbol for an uncrossable stone wall is shown in the upper right corner.

Printing of a draft copy can be handled in a variety of ways. Almost any 24 dot matrix printer can be used and some laser printers are also supported.

For final reproduction your printer will require colour-separated film. This can be obtained by sending Postscript language files to your favourite service bureau. Hans reports the odd compatibility problem with some commercial imagesetters, but that should not last. On one occasion we had to get into the Postscript file itself and tinker around until the Mt. Farlagne contours would print out, but that was an earlier version of OCAD. No trouble since, but Hans would be interested in hearing of your experiences with the program.

If you or your club have access to an IBM or IBM-compatible computer, preferably 386 or faster, and a Summagraphics or similar digitizing pad, then OCAD should help you make higher quality maps. At about \$200 the software is a bargain (remember software piracy is stealing), but a demo disk is available for those of you who would like to try before you buy. To order, contact Hans Steinegger, Christmatt 23, CH-6340 Baar, Switzerland.

Please note: the members of the IOF Map Committee are interested in further promoting and developing computer cartographic methods for Orienteering mapmakers. Please send you news, comments, ideas, and/or samples to Mark Smith, Sentinel Rd, Unit 617, Downsview, Ontario, Canada M3J 1V6.

Chrisma Mapping Services, owned by Mark Smith and his wife Christine Kennedy, provides professional mapping services.

Next month, O/NA will begin a series by Mike Waddington and Mark Adams and their experience using OCAD to draw maps, & by Pierre Brassard on plotting courses. ☐

ORIENTEERING NORTH AMERICA MARCH/APRIL 1992

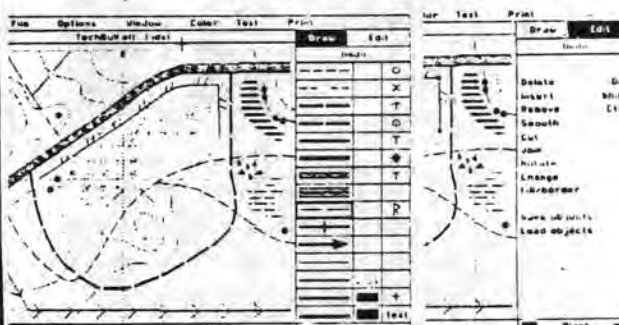


Fig. 1: The OCAD screen in drawing mode.

Fig. 2: OCAD screen in edit mode.

Pony Express "O"

by Joseph Huberman

When you see "Pony Express "O" do you see small horses sitting around drinking out of little cups? Well, shake that out of your mind. It is a new form of team Orienteering that combines armchair Orienteering, complex route choice, careful strategy, and good Orienteering in the forest.

The problem is: how can a team can work together to get the control card to all the controls as quickly as possible? It is a form of relay, but there isn't an assigned exchange point. The team decides where the

best exchange point for each person is. It has the flexible route choice of score-O, but you must get all the points.

Each competitor has a map with all the controls on it, but there is only one control card. There is plenty of time to study the map, and for your team to plan the best routes for each member before the start. Each member of the team must carry the control card to a minimum number of controls and punch the card with his or her map. Team members can run together, but for a

much better strategy they can plan to meet at pre-arranged locations so, like the pony express riders, each "leg" of the course has a fresh runner. Teams can be any mix of competitors because some controls will be close, some far, some easy, and some hard.

The Backwoods Orienteering Klub inaugurated Pony Express-O on November 17, 1991 at the More "O" at Morrow Mountain A-meet near Charlotte NC. The map, a new 10 sq. km. 1:15000 map was made by Mark Dominic. [Ed. note: We heard from some people there that this new type of Orienteering event was a great success. Though the field was small, those who went praised the courses, the map, and especially the hospitality.] (results appeared in Feb '92 O/NA) ☐

Los Angeles "Orienteering", March/April 1992

From the home office in Hawthorne, California, here are the

Top 10 reasons for directing an orienteering event:

- 10) You get to go orienteering, but there's no pressure to wear a funny looking orienteering suit
- 9) There is no record of any event director ever being kidnapped by aliens (while directing the event)
- 8) Improves your orienteering skills
- 7) You get to sit around on your butt while your friends go out on the course that you designed!
- 6) You can get away with not paying -- like, who's gonna know!!
- 5) People who've never even blinked at you before come up and say things like, "Thanks"
- 4) Didn't like the courses at last month's event? It's payback time!!
- 3) Re-entrants, Re-entrants, Re-entrants! Where should I put this control?!
- 2) Because the club can only hold events if people direct them
- 1) The more events you direct, the fewer Gary Dolgin will direct (****)

JUST DO IT

By: Bob McBride

"Just Do It!" they say. Just do it. Sure. But what is it I should just do? I mean, I jog a little and go to all the Orienteering meets I can. What else IS there for me to "Just Do"? How much can I expect myself to do and what is there that I can do that will add value to the "training experience"? Here I am, middle aged, sore feet, and now I find a sport I really like. If I had happened into this sport of Orienteering when I was in my teens and if I had lived in Europe (or Massachusetts for that matter) I could get into a close knit club, dive into a training program and perhaps learn Orienteering in a couple of years at a higher level than is likely in such a far-flung club as RMOC. What can I do NOW that can help me compete this year with other people in my age group?

There are lots of books and magazines with aerobic training advice and programs. There are entire college curricula on physical training. What I need is an Orienteering specific training. I've looked around and happened upon the newly-released U.S. Orienteering Federation coaching manual, available directly from USOF, and I've started studying it!

This manual has triggered some new thought processes in my brain. Orienteering is a running sport, for many of us, and so running training is helpful to build speed and endurance. Orienteering is done cross-country so training on varied terrain and trails is important to make running on uneven ground automatic, reflexive. Orienteering is done not only in the woods but through the woods as well...over dead wood, through thickets, low trees. Straight up road running won't make your reflexes sharp enough to maintain speed while running in the tough stuff.

Orienteering also requires navigational skills. They can be honed. This is something I rarely work on, though some experienced orienteers can see their complete course, know the control features and the control codes for their entire course by the time they reach the first control. I'll need a lot of work to get to that level.

So! The USOF Coaching Manual suggests that the physical portion of any training program requires a long-term training plan with small, incremental increases in distance and speed. Something I hadn't thought about is that some of the running needs to be on trails or open woods and some needs to be on thick stuff. In fact, they recommend 40% road or track running, 40% trails, and 20% woods running.

I've established a baseline to work from by running in a few road races early in the season. My running training now will include one workout in the woods along with my regular distance workouts and one interval training per week. I'll alternate short intervals one week, 220's or 440's, at what my body considers high speed, with moderate speeds over longer intervals, maybe repeat miles, the following week making careful notes of the times. I'll check my progress in May or June with another 10k road race.



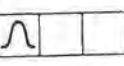


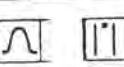

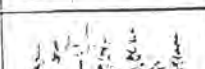
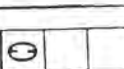

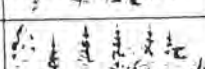
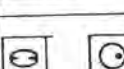

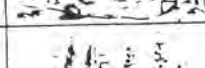
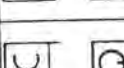

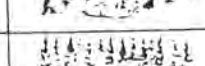
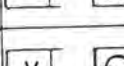


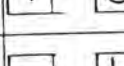


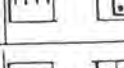

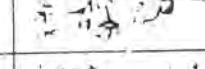
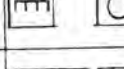


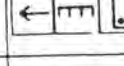


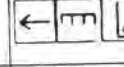

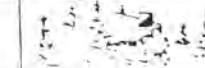
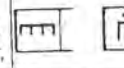





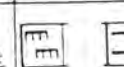
The orienteering specific map training is a little more foreign to me. When we run together, Beatrice likes to carry on meaningful discussions and plan vacations or perhaps solve the World's problems. I concentrate on more immediate







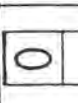
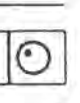


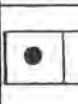
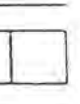




issues like breathing. I need to become more mentally active while running. Last year I had my best performance at our meet in Fox Run. I was meet director/course setter at the previous meet and, in the course of preparing the meet, copied master maps dozens of times and verified control locations and basically lived on the map for about 2 weeks. Then, at Fox Run, I copied the master map in about 20 seconds...about 1/10th of my normal time. I could read the map in no time. I knew where I was and what was next and was never misplaced that day. The USOF Coaching Manual concurs with this observation. If you want to learn to read maps you have to read maps. For the White Ranch meet in April I intend to run off a couple dozen copies of my map from last year and design some courses there. In this way I can become more familiar with the map. Study it. Become familiar with the trails, reentrants, boulders, fences, etc. As I run these hypothetical courses in my head, I'll try to visualize the control and it's actual location. What does the terrain look like as I approach? I'll study each control for the fastest and most bullet proof approach.

Palmer Park is where I normally run anyway, so I'm going to take my old Palmer Park map with me whenever I go there. I'll choose either a group of features or a line to practice following. I did a little of this last year before the US Championships and it helped a lot.

I also have a problem with thought processes when I work out. I day dream a lot and don't do any problem solving or analytical processing while I run. So, on my training runs I'll try something a little weird. I'm thinking about balancing my checkbook while I run. I hear some U.S. Congressmen may try this this year too! Another thought would be to try to solve crossword puzzles while running. While this may sound strange, at the Street-O in Boulder this month, there was one control with a question: "Name as many animals as you can that jump, excluding humans". I noticed that I couldn't think of even the most obvious jumping creatures while I was running, but I could when I slowed down. With training I expect to be able to do this even while running uphill. What are the capitals of the various states? The countries of South America? Africa? The remaining countries in the Confederation of Independent States?

I expect that my onemetering will respond to training if I am diligent enough and consistent enough. If I train in all the various aspects of the game I will improve. I'll keep you all posted regarding the results.

			Slide Curve Runtles Re-entrant
			Mute upper tail Curve, ante-ant Runtles ante superiores Re-entrant upper part
			Serie Depression Depression Depression
			Serie Other Depression ante-ant Depression ante superiores Depression system part
			Along Serie Other Pore depression, ante-ant E. side ante-ant Small depression ante edge
			Loch Westward Tow, ante-ant Bucca primos, ante-ant Dr. west edge
			Forward, Full Faint, ante-ant Rocca, ante-ant Cur, ante-ant
			Forward, Anterior Faint, ante-ant Rocca, ante-ant Cur, ante-ant
			Forward, Forward, Full Faint, ante-ant Rocca, ante-ant Cur, ante-ant
			Forward, Forward, Full Faint, ante-ant Rocca, ante-ant Cur, ante-ant
			Forward, Other, Full Faint, ante-ant Rocca, ante-ant Cur, ante-ant
			Forward, Other, Full Faint, ante-ant Rocca, ante-ant Cur, ante-ant
			Forward, Other, Full Faint, ante-ant Rocca, ante-ant Cur, ante-ant
			Forward, Other, Full Faint, ante-ant Rocca, ante-ant Cur, ante-ant

		 	Zwischen Hügel und Kuppe Entre colline et petite colline Tra collina e collinetta Between hill and knoll
		 	Hügel nord-westlicher Teil Colline partie nord-ouest Collina parte NO Hill north-western part
		 	Kuppe Petite colline Col. metta Knoll
		 	Kuppe Ost- Fuss Petite colline pied-est Col. metta piede Est Knoll eastern foot

Orienteering Meet Results

Compiled by Debbie Newell

We had a full schedule of meets over the past two months. Welcome to all those that will see their name in the results section for the first time and a sincere thanks to all those that made the meets so much fun – the volunteer meet staff, especially the director and course designer.

Meet Directors: Please send your results to Debbie Newell by June 25th. (It would be great if you could include an overview paragraph or two; then I wouldn't have to rely on my memory.) Thanks, Debbie.

Farrel-McWhirterPark

March 8th
Cascade Orienteering Club

Meet Director: Dave Petty
Course Designer: Harvey Friedman
Registration: Dave Petty
Timing: Harvey Friedman, Peter Golde

Taking advantage of the Trim Course permanent markers, Harvey set four clean and fast courses. Dave said throughout the day he heard, "Hey this is really fun" from new and seasoned orienteers alike. The Dave/Harvey Team efforts, aided by sunny skies, was enough to entice three more to join Cascade OC and many more to run an additional course. Remember, you don't have to wait for the next meet to enjoy orienteering at the park – the permanent trim course is just waiting for you.

Course 1 (6 controls)

Michael Austin	7:31
John Stevens	7:43
Johansen family	8:47
Martha Anderson	8:55
Tim Koffley	11:41
Stephen Marino	11:42
Roger Rosenblatt	12:34
Mark Millichap	14:00
Ruh Fox	15:26
Bill Lindsay/William Yost	16:31
Lael Smith	22:50
Paul Utley	23:37
Gail Green	25:00
Cherie DeKeyser	25:10
Dryden	38:20
Watkins	38:25
Paulette Base	46:42
Paul Murphy	Map Hiker

Course 2 (10 controls)

Ulrich Ganz	10:24
Robert Grover	10:35
Paul Hood	13:41
Martha Anderson	15:54
Eric Ganz	16:00
Nona Ganz	17:00
Bill Albert	21:21
Johansen girls	22:15
Joe Ablao	25:22
Norm & Gerri King	33:50

Dick Diesner	37:18
Paul Utley	47:32
Connie Chose	
& Kim Mennom	52:05
Sally VanderZee	55:47
Amy Wiedemeier	57:08
Bob Goldberg	69:49
Gail Green	
& Cherie DeKeyser	DNF

Course 3 (2.7k, 13 controls)

Johansen	27:57
Roger Sharp	31:09
Ruh	35:35
Nona Ganz	38:18
Byron Hawkins	39:40
Eric Ganz	39:58
Bill Albert	40:00
Christopher Benning	41:40
Don Atkinson	42:50
Jim Sisco	43:04
Mel Rader	44:29
Joe Ablao	46:05
Rebecca Crofton	
& Wayne McDonald	47:32
Stan Spurgeon	48:45
Paul Hood	49:10
Bruce McAlister	
& James Hopper	50:31
Anne York	55:05
Mari Friend	58:49
Neil Smith	58:58
Eric Riggers	59:37
Dave Lilly,	
Kathy Trost, & Garth	67:51
Rick Hood	
Rosenblatt	DNF

Course 4 (20 controls)

Mark Howlett	30:41
Dave Tallent	32:34
Eric Bone	32:35
Brian Cox	34:55
Debbie Newell	36:39
John Rogers	38:00
Fred Veler	38:29
Eileen Breseman	41:30
Ulrich Ganz	42:50
Rick Breseman	44:25
Steve McConnell	46:18
Nicholas Bone	46:45
Boomer/Reder	48:17
David Waller	48:58
Bruce Yocum	49:05
Ken Lew	53:33
Michael Austin	54:30
Vivien Birtwistle Fritz	55:09
Tim Koffley	66:12
Margie Bone	70:51
Michael Kenny	75:10
Linda Hood	DNF

Luther Burbank Park

March, 15th
Sammamish Orienteering Club

Meet Director: Kevin Finney
Courses: Bob Reddick
Registration: Pat Reddick
Starts: Kevin Finney

Finish: Virginia Finney

Bob came up with a good design that featured "O-technique" training legs on the course. Mark still won, but the grouping was tight. Nice job, Bob!

Mark Howlett	15:52
Dave Tallent	16:23
Noam Gundle	17:15
Eric Bone	18:10
Debbie Newell/Aska	19:58
Fred Veler	20:33
Mel Rader	22:27
Steve McConnell	23:07
Nicholas Bone	23:40
Roger Sharp	24:00
Peter Golde	24:08
Ken Lew	24:33
Stan Spurgeon	
& Wayne Johnson	25:45
Don Atkinson	27:05
Mike Sorbello	27:15
Byron Hawkins	27:33
Cabe Shephard	27:33
Eric Riggers	32:03
Sandy Kish Miller	34:44
Wayne Tomasello	
& Kirsten Tollefson	40:50
Dick Diesner	48:59
Camellia Clouse, Ann	
McNally, & Colleen	50:33
Sally VanderZee	66:33
Dave Enger & family	79:31
Andrew Watkins	89:00
John Bastunechury	89:25
Mark & Lea Marshall	97:12

University of Washington

April 5th
Cascade Orienteering Club

Meet Director: Margie Bone
Courses: Eric Bone
Registration: Margie Bone
Starts: Eric Bone
Finish: Nicholas Bone/James Hopper

The Mom & Sons Bone Team hosted an enjoyable event. Many were grateful that the Burke Museum Coffee House was open and added a Latte control. (The next UW meet, this July 15th, will feature a revised map, so keep your "old" map for that "map-O" swap meet scheduled for...)

Course 1 (1.1k, 8 controls)

Bill Cusworth	9:14
Marti Anderson	11:54
Ed Collins, Doug	
Northman, & Nick Mihai	14:41
Fox	30:50
Mike Bingle	40:50

Course 2 (2.3k, 10 controls)

Komamitsky	18:09
Steve Lang	29:10
Yost/Adair	37:06
Jim McCaa	39:46
Pat Vetter	40:30

VanderZee	61:01
Dueber	64:30

Course 3 (3.2k, 9 controls)

Jon Atkinson	24:39
Tomamitsky	25:04
Sandy Kish Miller	32:13
Ed Collins	34:50
Jim Siscel	36:58
Harvey Friedman	38:07
Doug Northman	38:40
Ken Lew	41:16
Neil Smith	48:46
Anne York	50:49
Nick Mihai	77:14

Course 4 (4.1k, 13 controls)

Debbie Newell	31:16
Brian Cox	33:06
Rick Breseman	36:22
Eileen Breseman	38:11
Bill Cusworth	41:08
Ellen Boomer	45:18
Peter Golde	48:32
Bolhev	52:28

Lake Sammamish

April 11th
Sammamish Orienteering Club

Meet Director: Kathy Trost/Dave Lilly
Course Designer: Dave Tallent
Course Setter & Marker Pickup: Mark Howlett
Registration: Dave Lilly
Start and Finish Timing: Rick Hood
Instruction: Mike Schuh
Weather: Sunny cool, windy

We knew Fred won, not so much by running the fastest, but by having the highest watermark on his leg of 29". Eric, Ken, and Bob were all plus 20" too. Hey, but that just added to the fun, right? Actually, the course were a blast and Kathy served her now famous Rice Crispy Cakes.

Course 1 (2.3k, 7 controls)

Eric Riggers	23:30
Blume family	28:02
Chip Curtis	29:45
Bill Baron	33:40
Steve Thomas/Greg Miller	42:03
Sally & Dave VanderZee	42:20
Jennifer & Bill Gowan	45:26
George Lilly	46:36
Enger family	90:54

Course 2 (3.3k, 11 controls)

Sandy Kish Miller	38:28
Roger Sharp	39:38
Dave Petty	40:53
Paul Hood	55:48
Susie Duber	61:34
Davey & Sally VanderZee	61:49
Dick Diesner	84:39
Sandy & Melissa	111:32

Course 3 (5.1k, 16 controls)

Fred Veler	53:14
Eric Frieden	66:57
Ken Lew	67:40
Bob Williamson	73:54
Peter Golde	75:55
Dave Waller	Map hike

Meet Director: Rick Hood**Course Designer: Peter Golde**

Registration: Linda Hood and Bruce McAlister

Timing: Harvey Friedman and Dave Petty

Clinic Leaders: Jim Siscel, Sandy Kish Miller, Robert Miller, Eric Bone, Mark Howlett, & Mike Schuh.

Promotional Support: The Mountaineers, Washington Trail Association, Super Jock 'n Jill, and Northwest Runner.

Eighty-four newcomers turned out for our first annual newcomers' meet and had a super time. (Please see the article about the meet elsewhere in this newsletter.)

Novice Course (1.1 km, 6 controls)

Paul Magnur	05:40
Eric Donaldson	06:30
Steve Cahan	06:55
Rob Stevens	08:00
Toby Dyer	08:25
Tim Pochop	08:28
Greg Kindelman	08:28
Steve Thomas	08:35
Larry Sorenson	09:15
Thea Brabb	09:40
Aaron Charlop	10:15
Bj Kriskov	10:40
Kirk Hoover	10:40
Bob Rios	10:50
Deann Kurina	11:25
Arthur Brooking	12:20
Rob Carlisle	12:40
Robert Rice	12:50
Larry Engel	13:00
C. & K. Zwick	13:05
Larry Sorenson	13:20
B. Carlisle	13:40
Sharon Paxson	13:40
Fred Desimone	14:35
Jesse Fraser	14:35
Andi Bensen	16:00
Michele Kincaid	16:30
Brad and Chris Harris	16:30
T. Soderguist	16:45
Amy & Melissa	17:10
Dueber Family	17:20
Lynn Knobbs	17:20
John Knobbs	17:20
Ann Camp	17:30
Sandy Perrin	17:45
Jim Elslip	17:45
James Smith	18:55
Jenny Smith	19:00
Evan Bryant	20:50
Spike Perry	21:50
Ryan Hutchinson	21:50
Shea Welke	23:40
Travis McAllister	24:00
David York	24:40
Shaun Sluman	24:40
Rick Ladzick	25:10
Rick Ladzick	26:20
Vivan and Moose Fritz	29:40
David Barr	30:45
Kay Clayton	31:00
Rob Carlisle	36:00
S. & M. Ocheltree	36:10
S. Throckmorton	45:35
Amy Halinger	45:35
Virginia Baker	52:00
Art Chu	Map Hiker

Leg One (1.5 km, 6 controls)

Paul Magnur	06:25
Mark Howlett	06:40
Eric Bone	07:15
Jeff Coker	07:38
Eric Donaldson	07:45
Steve Cahan	08:30
Toby Dyer	09:35

Tim Pochop	09:55
Kirk Hoover	10:10
Thea Brabb	10:20
Larry Engel	11:12
Steve Thomas	11:20
Jim Siscel	12:00
Jim Falkenburg	12:40
Dale Bryant	13:30
Cheryl Mehaffey	14:00
Tollefsen/Tomason	14:20
Sharon Paxson	14:20
C. & K. Zwick	16:50
James Smith	16:50
Mari Friend	18:00
Fred Desimone	21:40
Travis McAllister	23:20
D. Avery	24:00
D. & S. Vanderzee	24:00
Greg Dinkelman	29:55
Amy & Melissa	40:00

Leg Two (1.6 km, 6 controls)

Eric Bone	07:15
Mark Howlett	07:30
Jeff Coker	08:00
Thea Brabb	09:10
Tim Pochop	09:20
K. Johansen	09:30
Steve Cahan	09:40
Arthur Brooking	11:30
Paul Magnur	12:40
Rob Stevens	13:30
Mari Friend	14:10
Larry Engel	14:20
Steve Thomas	15:20
Jim Siscel	15:20
Sharon Paxson	15:40
Larry Sorenson	17:20
Katie Sprugel	18:50
Cheryl Mehaffey	19:00
C. & K. Zwick	26:00
Bob Rios	27:40
D. & S. Vanderzee	28:00
Pat Kennedy	32:40
Lynn Knobbs	45:10
John Knobbs	45:10
Gerry Croteau	47:10

Leg Three (1.6 km, 7 controls)

Eric Bone	09:20
Paul Magur	09:30
Jeff Coker	10:10
Mark Howlett	10:10
K. Johansen	12:50
Steve Cahan	13:00
Tim Pochop	14:10
Eric Donaldson	14:40
Arthur Brooking	15:30
Ken Lew	16:00
Ardis Dull	16:10
Larry Engel	17:00
Larry Sorenson	17:50
Thea Brabb	19:19
Sharon Paxson	22:00
Evan Bryant	26:00
Bud Carlisle	34:00
C. Ryan	36:00

Multi-Legs (One & Two, 3.1 km)

Katie Sprugel	13:45
---------------	-------

Multi-Legs (Two & Three, 3.3 km)

Tollefsen/Tomason	20:40
Sandy K. Miller	25:50

Multi-Leg Final Standing (One, Two, & Three, 4.8 km)

1. Mark Howlett	24:20
2. Jeff Coker	25:48
3. Eric Bone	25:50

"Newcomers' Meet"

Woodland Park
April 18th
Cascade Orienteering Club

4. Steve Cahan	31:10
5. Mike Fritz	31:40
6. Tim Pochop	33:25
7. Sue Moore	34:42
8. Paul Magnus	38:49
9. Thea Brabb	38:49
10. Larry Engel	42:52
11. Larry Sorenson	48:30
12. Sharon Paxon	51:00
13. Doug Sprugel	54:30

Durr Road

April 26th
Ellensburg Orienteering Club

Meet Director: Will Sperry
Course Designer: Mundi Hamilton

Since there were orienteers from Belgium, Japan, and the US, Will dubbed the meet the "Durr Inter-continental". Wild flowers, wonderful weather, and EOC homemade cookies made first-time course setter Mundi's courses even better.

The intermediate course yielded paces from 18 to 13 min/km, while the advanced course saw times from 16 to 8 min/km (with some impressive kicks to the finish to boot).

Beginner Course	
Susan & Kent Verbeck	54:40
The Forsyth Group	63:08

Intermediate Course	
Larry Sorenson	52:13
Yoko Ikeda	60:19
Beth Eliot	64:46

Advanced Course	
Ben Hall	49:34
John Rodgers	50:47
Mac MacDonald	57:33
Sid Whaley	60:42
Larry Sorenson	76:22
Michel Billaux	77:58
Jessica Rykken	79:02
Tom McKay	84:20
Kent Verbeck	85:18
Ardis Dull	94:41

Lincoln Park

May 3rd
Cascade Orienteering Club

Meet Directors: Jim Siscel, Jim McCaa
Courses: Jim Siscel
Registration: Harvey Friedman
Start: Tom Slocum/Dana Dick
Finish: Ulrich Ganz
Marker Pickup: Ulrich Ganz

What with warm weather and super views of the Olympics, who could help but enjoy being out on a course. It was great having Peter and Claudia, of the Austrian National Team, enjoy the park with us.

Course 1 (1.4k, 8 controls)	
Aaron Charlop	12:42
Jeff & Linda Hanson	14:12
Nancy & Ken Swartz	14:54
Marti Anderson	16:45
Lael Smith	17:34
Tim Anderson	17:40
Janet Hammes	26:49
Mark Anderson	28:38
Eric Guttorp	37:54
Suzanne Dueber	39:01

Pam Rutkowski	42:47
Rebecca Moxley	44:29
Evan Dick	50:09
Jim Curtain	53:24
James Hopper	DNF

Course 2 (11 controls)	
Eric Donaldson	25:09
Aaron Charlop	28:39
M. Rutkowski	33:00
Thea Brabb	33:34
Scott Boyd	37:45
Marti Anderson	42:17
Roger Sharp	43:28
Ken Swartz	48:24
Tom Soderquist	52:48
Mark Anderson	57:13
Cathy Pritchett & Steve McConnell	60:13
Nancy Weller	68:54
Pam Rutkowski	84:13
Engers	Map Hikers
Brent Knopp	DSQ
Paul Magnus	DSQ

Course 3 (3.8k, 13 controls)

Tom Slocum	42:22
Nicholas Bone	46:26
Peter Guttorp	53:21
Doug Stan	55:40
Todd Fairweather	56:07
Ken Lew	56:11
David Atkinson	57:40
Aaron Tate	57:53
Alison Keyes	58:58
Tomasello	70:15
Kynion	73:48
Michael Kenny	79:28
Neil Smith	DNF
Mark Rutkowski	DNF

Course 4 (5.8k, 16 controls)

Peter Bonek	37:45
Claudia Kunzel	45:39
Mark Howlett	47:47
Steve McConnell	53:39
Eric Bone	54:39
Paul Magnus	54:45
Dave Tallent	55:17
Debbie Newell	62:47
Ardis Dull	62:48
Thea Brabb	67:45
Ellen Boomer/Rene Reder	71:02
Bill Cusworth	74:24

Ranger Creek Landing Strip

Boy Scout Camporee
May 2nd & 3rd
Cascade Orienteering Club Support

Course Designer/Setter and Club Liaison:
Rick Hood
Survey Party: Dave Lilly, Kathy Trost, and Linda & Rick Hood

Approximately 600 Boy Scouts attended a weekend long campout held at the closed Ranger Creek landing strip about 12 miles south of Greenwater, WA. The area around the strip is flat and open with a large runnable wooden are adjacent. Unfortunately, the best map available was a somewhat outdated USGS 7.5" series, so a "small scale rogaine" format was selected. (17 controls, 38 points maximum, 1.5 hours)

Since the scouts ran the event themselves (as this was the same weekend as Peter and Claudia's O-Clinic) we don't have a complete list of patrols that participated, but

we were geared for 20-50 groups at 8 boys apiece. When I left on Friday afternoon, the scouts that went out with me seemed to have a great time.

Marymoor Park

October 26, 1991
(From our "never-before-seen-in-print" file!)
Sammamish Orienteering Club

Meet Director: Bob Reddick
Courses: The Finneys
Timing: Dave Lilly
Marker Pickup: The Finneys and Dave Tallent

Many new people, including two Boy Scout Troops, enjoyed the four courses on a cold but dry day.

Beginners Course

Harry Moore, Chuck Caessen, & Erich Eisew	8:16
Scott Denhart	10:46
John Egger	10:58
Shane Morlan	11:11
Kevii Washburn	11:12
Eric Bennet, Jon Schween, & Tam Pradel	11:16
Naomi Crowall & Danette Sullivan	11:30
Tim Provell	15:00
Scott Habenman & Eric Dianna Allen	21:00
Doug Winslow & Philip Watts	25:16
Zack Pradel & Dick	38:50
Steve Avolio & James Dooley	49:40
Rick Breseman & Ryan	60:50
	96:30

Intermediate Course

Tom Miller	36:46
Eric & Sally Riggers	38:15
Mike Carver	56:10
Naomi & Danette C.	57:59
Eric Tobin	63:30
Chuck & Mrs. Scheiber	75:00
Harry Moore, Chuck Caessen, & Erich E.	97:15
Josh Egger	100:39
Shane Morlan	100:41
George & Nancy Lilly	139:00

Short Advanced Course

Don Atkinson	29:14
Peter Golde	29:40
Knut Olson	54:47
James Dooley	58:24
Ellen Boomer	60:20
Jim Freeman	84:45
Pete Kenyon	101:20
Ken Lew	133:30
The Watts	58:00 (DNF)

Long Advanced Course

Dave Enger	34:15
Dave Tallent	37:12
Debbie Newell	41:15
Sid Whaley	42:08
Orville Rhine	42:50
Mike Fritz	43:00
Eric Frieden	47:07
Carl Moore	49:25
Brent Anibali	64:50
Linda Moore	68:03
Tom Slocum	77:50
B. P. Winact	87:50

Upcoming Orienteering Meets

Call the Orienteering Hotline, 783-3866, for the latest information and details

*There are some great two day meets in Washington and British Columbia in May, June, and July.
If you would like someone to carpool, with call the hotline. Note the "register by" date if you want a pre-marked map and want to avoid a late fee.*

<i>Date & (Start Times)</i>	<i>Location & Comments (Nearby Meets in Bold)</i>	<i>Host Club</i>	<i>Type (register by)</i>	<i>Contact</i>
May Meets				
Sat, May 9 (noon-2pm)	Powell Butte	Columbia River	C	K. Nieman (503)-292-1165
Mon, May 11	Newcastle Island - School Championships	Cowichan Valley	C	(604) 746-5955
Wed Night, May 13 (5:30-7:pm)	Island Crest Park on Mercer Island Go South on Island Crest Way from I-90	Sammamish	C	Dave Enger 822-6254
Weekend, May 16 & 17	US Relay Champs and One Day Individual Northfield Mt., MA	New England	A (past)	Gail Gagarin (415) 665-7573
Weekend, May 16 & 17	"Sage Stomp", Edith Lakes, Kamloops, BC	Sage	A (May 12, by phone)	Allan Vyse (604) 372-8607
Weekend, May 23 & 24	Newcastle Island, Nanaimo, BC	Cowichan Valley	B	(604) 746-5955
Weekend, May 30 & 31	"Inland Empire Cup", Riverside Park, Spokane	Eastern Washington	B (May 16 postmark)	John Beck (509) 536-0650

June Meets

Any Day (Park Hours)	Lynndale Park "Trim Orienteering" Get map from Lynnwood Parks Office or From Rick Call Times into Hotline, Results in July/Aug Issue	Cascade	special	Rick Hood 367-2606
Wed Night, June 3 (5:30-7:pm)	Kelsey Creek Park, Bellevue Go East on SE 8th St. from I-405	Sammamish	C	Dave Enger 822-6254
Weekend, June 6 & 7	Aspen Grove, Merritt, BC	Greater Vancouver	B	John Rance (604) 526-3319
Sat, June 13	Battle Ground State Park, Battle Ground, OR	Columbia River	C	Glen Cafferty (503) 281-5137
Weekend, June 13 & 14	Ruckle Park, Victoria, BC	Victorienteers	C	Jack Carson (604) 592-3559
Wed Night, June 24 (5:30-7pm)	Forest Park, Everett Go West on Mukilto Blvd, exit #192 from I-5	Sammamish	C	Dave Enger 822-6254

July Meets

Weekend, July 11 & 12	US Long O Championships, Colorado	Rocky Mountain	A (call)	Jim Plant (303) 668-1352
Wed-Fri, July 15-17	USOF Convention, University of Washington	Cascade	special (July 9*)	Bruce McAlister 821-6862
Wed morning through Friday afternoon	Orienteering Seminars, Workshops, Exchanges	USOF & Cascade	special	Bruce McAlister 821-6862
Wednesday (daylight)	Trim Orienteering Course at Woodland Park	Cascade	special	Rick Hood 367-2606
Wednesday Night (8pm)	Campus Orienteering Relay	Cascade	C	Eric Bone 634-2279
Thursday Daybreak (6:30am)	2 and 2.8 mile Fun Run, Greenlake	Cascade	special	Rick Hood 367-2606
Thursday Morning (10-noon)	Canoe Orienteering	Cascade	C	Rick Hood 367-2606
Thursday Night (5-7:00)	Banquet, Ivar's Salmon House	Cascade	special (July 14**)	Peter Golde 883-3732
Weekend, July 18 & 19 (11am-1pm Sat & 9-11am Sun)	Convention A-Meet and Western State Champs Take I-90 Exit #80 and follow signs	Sammamish	A (July 3)	Dave Enger 822-6254

Future Meets

Sat, Aug 24	Rogaine (Extended Backcountry Orienteering) (location pending due to high forest fire risk)	Cascade	special	Bruce McAlister 821-6862
Weekend, Sept 19 & 20	Washington State Championships	Cascade	B	Peter Golde 883-3732

Note: The Convention Seminars, Activities, and Meets are included in the \$20 registration fee. The July 9th deadline applies only if you are providing your own accommodations.

** Note: There is limited seating at Ivar's Salmon House, so please get your registration in early. It is a big help to both Cascade and Sammamish if you send in your fees as soon as possible as that gives the convention and A-meet fund some working capital. Thanks for your help.

Schedule Highlight -- Details Inside

<i>May 16/17</i>	<i>Sage Stomp</i>
<i>May 23/24</i>	<i>Newcastle Island</i>
<i>May 30/31</i>	<i>"Inland Empire Cup"</i>
<i>June 6/7</i>	<i>Aspen Grove</i>
<i>July 15-17</i>	<i>The Convention with three in-town meets</i>
<i>July 18/19</i>	<i>The Convention "A"-Meet and Western State Champs</i>

Kamloops, BC

Call By Tuesday the 12th

Nanaimo, BC

Spokane, WA

Mail by Saturday the 16th

Merritt, BC

UW

***June 20th for housing or
or July 9th for no-housing***

Cle Elum, WA

***July 3rd (except for map
hikers)***

Bearing 315 Orienteering News in The Pacific Northwest

Published by:
Cascade Orienteering Club
PO Box 31375
Seattle, WA 98103
(206) 367-2606

NON-PROFIT ORG.
U.S. POSTAGE
PAID
SEATTLE, WA.
PERMIT NO. 946

*If you label is marked with yellow
highlighter, your membership has lapsed.*