

# Bearing 315

The Newsletter of the Cascade Orienteering Club

July-August 1988

## Course Setting (Part I)

by Mike Schuh

**B**efore anyone can try their hand at orienteering, a course must be set out in the forest. This is the task of the course setter, sometimes referred to as the course designer. Technically, the course designer is the one who figures out where to place each control marker and writes the description for each control location. The markers are then physically placed in the forest by the course setter. At some of our more important events, the placement will be verified by a course vetter; ideally, the course design at our largest events is also carefully scrutinized in the forest by a course controller (this is required in many foreign countries; in the United States, the design is approved on paper by a course consultant). At most Washington State events, the course designer and course setter are the same person; we rarely have a course vetter and only once or twice has anyone served as a course controller.

### Course Standards

First, a bit of background on the different courses offered at various orienteering events. In the United States, events are classified as Class A, B, or C. The first two must meet certain rules set by the United States Orienteering Federation, while Class C events have no national rules (most of the events in Washington State are Class C).

USOF has specified the following courses for sanctioned Class "A" meets:

<u>Course</u>	<u>Winning Time</u>	<u>Approximate Length</u>
White	30 minutes	less than 3 km
Yellow	40	3.5 - 4.5
Orange	50	4 - 5
Green	50	4 - 5
Red	60	5 - 7
Blue	60 - 80	7 - 12

The use of colors to identify the courses is historical. Nearly all other national federations use numbers, as do the clubs in Washington State and British Columbia.

Beginning in April of this year, COC will set at least four courses at our regular events (novelty and special events - canoe and ski O, for example - might have fewer courses). The courses will strive to meet the following criteria:

<u>Crs.</u>	<u>Win. Time</u>	<u>Approx. Length</u>	<u>Description</u>
1	10-20 min.	1.0-2.5km	EASY! on handrails
2	15 - 30	1.5 - 3.0	still easy, controls adjacent to handrails
3	30 - 40	2.5 - 4.0	controls just beyond collecting features
4	40 - 50	3.0 - ?	controls in front of collect. features

Some definitions: a handrail is an easily followed linear feature, such as a trail or road; a collecting feature is a linear feature perpendicular to the direction of travel which provides the orienteer with an unmistakable navigational aid. "Winning time" is loosely defined as the time the fastest participant will take to complete the course, typically by running. It should be remembered that everyone else will take a much longer time, particularly on Course 1, which will be attempted by many first-timers.

The lengths given can only be approximate, as differences in the forest - topography, vegetation, amount of detail, map scale, quality and accuracy of the map, even the weather and time of day and season - will affect how fast an orienteer can move through it. The best way to judge the length of a course (in minutes, not kilometers) is to test run it. If, for example, you typically take twice as long as the fastest person on Course 4, then you should be able to get around your proposed Course 4 in 80 to 100 minutes OR LESS. Less because you will have the advantage of knowing in advance where the course goes and will have studied it, thereby gaining an intimate knowledge of it, which will make it easier for you to go around it quickly. Rarely will participants complain if the course is too short; you can be assured that they WILL complain if the course is too long.

### Technical Difficulty

Strive to find interesting legs FIRST, then look for control locations for the endpoints of the legs. For the more advanced courses, a leg becomes more interesting as it has more opportunities for fine map reading (through areas of fine detail) and many possible route choices. Remember that orienteering is a combination of running/walking and navigation. The goal is to combine these skills in equal amounts. Generally speaking, if you have found a course leg on an advanced course where the fastest route is the one requiring the most attention to the map - the most map reading - then you have probably found a good advanced leg.

### Physical Difficulty

Technical difficulty, however, should NOT be confused with physical difficulty. Physical difficulty arises from the amount of climb and the condition of the forest. Climb is measured by tracing, on the map, the "best" route (the route the winner will most likely take) and counting the number of contour lines that are crossed in the uphill direction and then multiplying this number by the contour interval. Generally, this should not exceed 4% of the length of the course; it should never be as high as 10%! Thick vegetation will also increase the physical demands of a course, as will a rocky forest floor. Compare

a 10km course at Cle Elum Ridge (a joy!) to 10km at St. Edward State Park. . . If you would not enjoy running the course that you have designed, then DON'T SET IT!!

## Novice Courses

The novice courses (1 and 2) require a different mind set. The goal here is to provide an enjoyable experience (as it is on Courses 3 and 4) with the understanding that finding out who is the fastest is quite unimportant. Ideally, everyone who tries a novice course should finish it. Therefore, the novice course should be as easy as you can make it, with few route choices. One idea is to set the first control marker so that it is visible from the start - and why not? It is not a serious championship, but rather is often the first introduction many individuals have to the sport of orienteering. We can help our sport and ourselves by making the novice course fun and "doable" to those people who might be unfamiliar with basic map concepts.

## Western States Championships Update

by Katie Sprugel

Our club will host the Western States Orienteering Championships September 9-10 of next year. It will be a two day U.S. Orienteering Federation-sanctioned "A" meet attracting (we hope) many orienteers from outside our region. We have found a truly gorgeous site at Moran State Park on Orcas Island. The terrain has lovely open, runnable woods, minimal undergrowth, and lots of fine point and contour detail. In addition, there are wonderful views of the Cascade and Olympic Mountains from many points.

Sandy Kish Miller and I, as meet directors, have several goals. First, we want an excellent map, good courses, and a glitch-free meet (i.e., orienteering at its best). Second, we want this to be a fun social event for everyone. Camp Orkila, a YMCA camp on Orcas, has offered us a great package: 2 nights lodging, 5 meals, 2 snacks, and bus transport to and from the ferry dock, all for \$34 per person. They can take up to 400 people, so it should be feasible to have everyone stay in one place. We would also like to have an activity to bring everyone together Saturday night (contra/square dancing, ice cream social, "see how they ran," other; suggestions welcome).

A meet of this magnitude requires a great deal of long range planning. Throughout the next year, Sandy and I will provide a series of progress reports to keep everyone apprised of where things stand.

### Status Report, June 1988

The Map. Aerial photos have been ordered so that a base map can be made. Rami Pitkanen, a Finnish mapper who field-checked the Drunken Charlie Lake map, will be here in September and October to do the field-checking at Moran. Sanctioning. We have applied for "A" meet sanctioning from USOF. We should hear about that later this month.

Funding. We anticipate the map will cost between \$5,000 and \$6,000, depending on the exact area mapped. Meet fees alone will not cover this amount, so we need to acquire sponsors for the map and meet to make this effort a success.

#### Staffing.

Meet Directors:	Sandy Kish Miller, Katie Sprugel
Course Design:	Mike Schuh
Registration:	Debbie Newell
Awards:	Amy Loomis
Communications & First Aid:	Arnold Kay
Start Crew Chief:	Harvey Friedman

## DNFs and DSQs

At every meet and on any course, someone will either not finish (DNF, Did Not Finish) or will mispunch a control (DSQ, Disqualified). DSQs are usually the fault of the participant, though confusing description sheets, illegible master maps or poorly placed control markers tend to exacerbate the problem. Some DNFs arise when a participant attempts a course that is beyond his/her ability or the weather is extreme, but most are caused by courses that are more difficult than usual. If the total DNFs for a course exceed about 4 or 5%, then the course probably should have been easier.

In the next issue of "Bearing 315," I will give some specifics on course design and a few practical tips on course setting. Sometime soon COC will hold a clinic on course design, open to interested orienteers. If you would like to attend, please contact Betty Berreth, Volunteer Coordinator, at 564-2128.

To make this meet a success, everyone's help is needed. Volunteers are needed to help with every aspect of the meet. Please think about what you'd like to do and talk to Sandy (782-1437) or me (365-8742). Some of your choices follow.

**Before the Meet** - publicity; logistics (e.g., how are we going to get people up Mt. Constitution?); fundraising (sponsorship); course printing; T-shirt (design and printing); Saturday social event.

**At the Meet** - start & finish crews; first aid; child care; control collection; on-site registration; beginners' instruction; string course.

## HELP WANTED

*No Experience Necessary. Receive On-the-Job Training*

Join a Winning Team. Become part of the tradition set by the Cle Elum, Tenalquot, and Trollhaugen "A" meets

### POSITIONS OPEN

Course Designer - Learn to set national-level courses from an experienced teacher: Mike Schuh

Sponsor Coordinator - Need a go-getter who believes everything is possible to get sponsors for the meet

Publicity Chief - Need someone who will enjoy getting the word out on what a great meet this will be

Information/Competition Center Coordinator - Someone to organize and run the Meet Information Center

Beginners' Clinic Instructor - Persons to make certain that beginners from 8 to 80 have a pleasurable experience

Equipment Coordinator - a responsible individual to make sure everything is where it is needed when it is needed

Finish Crew Chief - well-organized, detail-oriented person to run finish area

### JOB BENEFITS

Make friends, gain experience that looks great on a resume. No money, but great memories.

**JOIN US NOW! CHOOSE YOUR POSITION NOW  
AND HAVE THE TIME TO MAKE IT FUN!!**

Call Sandy (782-1437) or Katie (365-8742)



## Cascade Chatter

compiled by Harvey Friedman

After missing the last two issues, this column is back. Because there have been so many renewals and new memberships since January, I'll use most of the space to list them, as of June 7, 1988. Words of both thanks and welcome go to the following new or renewing club members: Elizabeth Anderson, Mia Barbera, Kurt Blakstad, Boy Scout Troops 123, 358, and 367, Rick & Eileen Breseman, Scott Coble, Sharon del Moral, Jed Dixon family, Ardis Dull, Dick Eitel family, Scott Elich, Dave & Valerie Enger, Sandi Evans, Melissa Fleming, Glenn Gordon, Robin Harvard, Li-Chuan Huang, Duane Hudson, John Huth, Kent Jameson, Gro Jonsberg family, Ken Knapp & Katherine Schubert-Knapp, Laurie Kohli, Steve Layman family, Ken Lew, Amy Loomis, Bob & Suzy Lynch, Barbara Maly, Bruce McAlister, Gary McCausland, Jim McNamara, Robert & Sandy Miller, Carl Moore, Harry Morgan family, Mark Moulton family, Arnold Kay & Debbie Newell, Vernon & Lisa Oshiro, Bill Pendergrass family, Dave Petty family, Mariah Pobanz, Jack Raidy, Cheryl Raleigh, Bob Reddick, Hans Saxer family, Mike Schuh, Tom & Gloria Schuh, Roger Sharp, Peter Smith, Brad & Jenny Solomon, Doug & Katie Sprugel, Ross Stevens, Rich Stolmeier family, Einar Storackers, Mary Ann Smith, Walt & Nancy Turley, Tim Vargo, Jan Vrana, Dan Waugh, Dale Width family, Ken Wiljanen, Douglas Woods family, Bill & Lisa Yost.

If you all don't come to meets, you'll probably not see your name in the newsletter until the next time you renew; also, membership cards are only available in person at a club function such as regular meets, meetings, or pot-o-lucks, but not at any ski-o meets, nor night-o meets, nor canoe-o meets (unless you are lucky), nor training events, nor workshops.

Now, on to the fun stuff. It was a pleasant surprise to see our Czechoslovakian transplant, "capitalist" Jan Vrana at the March 12 Lake Tradition meet. Maybe when he makes his million dollars, he will have the time to attend regularly again. . . Paul Kish, Sandy Kish Miller's father, is back on the East Coast, but as soon as the summer heat hits, he'll probably be back here. . . Thanks to freelance writer Mike Hofferber (who decided he liked orienteering so much that he joined Sammamish O Club), an article on Knut Olson and our sport appeared in "Modern Maturity," a magazine with a

circulation in the millions. As a result, we have had about 50 inquiries so far and USOF and "Orienteering North America" have received many more. Now, if some of those folks with free time would join the club and help in the workings, we would be in great shape. . . Stein Sandven, COC member living in Bergen, Norway, visited briefly in May. He plans on going to the American 6-day this fall for the North American and U.S. Championships, so anyone going there should be sure to say hello. . . Doug Sprugel had chicken pox in early June. . . Membership in the club continues to grow. We have had 8 new individual memberships and 10 new family memberships in the past six months. . . We also had growth in a different fashion. Harry & Lesley Morgan are proud new parents of a girl born in early May, and Dave & Valerie Enger thought it was such a good idea that they also had a girl a couple of weeks later. . . One of the new members mentioned way above hadn't been orienteering in about 30 years before she joined our club. Gro Jonsberg read the article in "Modern Maturity" and found out about us by writing to USOF. She and her family had been living in San Diego for several years, but had not discovered the San Diego O Club. Maybe if she comes to all the meets in the region, she can make up for missing out. . . Premier cartographer, newsletter editor, active worker, and top-ranked female orienteer in the state, Debbie Newell graduates with a B.S. degree in Scientific and Technical Communication from the U.W. this quarter. . . Anyone who wants information about the 1989 New Zealand 6-day orienteering event, give me, Harvey, a call. . . If you want more news about people in the club, you'll have to write something for me to include. I want just the facts, and I'll contort them to fit; or, if you prefer, give me something to be printed verbatim.

I am looking for someone to take over as club librarian to keep track of the newsletters we get from other clubs, i.e., make them available to club members and track them down when someone has borrowed one for too long. This would be a good way for a new member to meet others. Also, does anyone want to be apprentice membership coordinator? Learn how to maintain a database of members and print labels for the newsletter or at other times when required. Again, already-active club members need not apply. In fact, any of the newcomers are welcome to approach a current officer or board member and ask to be taught the functions of that position. As you can see from the list, we are always in need of willing volunteers, especially in view of the ambitious national and international schedule we have for the next few years.

## Orienteering Class in Redmond

This summer the Redmond Parks and Recreation Department will hold a class in orienteering. The class will be taught by COC member Eileen Breseman, and will be held on two Saturdays - July 9 and July 16 - from 10 a.m. to noon. The class is for those 14 and older, and will cost \$15.00. For more information, call the parks department at 882-6432.



## Club Patch

Available soon at finer o' meets.

Be the first in YOUR neighborhood to own an official Cascade Orienteering Club patch! This attractive 3" diameter patch, embroidered in red and black, can be yours for a donation of \$3.00 for one, or \$2.50 each for 10 or more. Look for it soon at a local meet.

### Keeping Sore Muscles At Bay

Muscle cramps after arduous exercise? Immediately, you drag out the salt pills, because you learned from your high school P.E. coach this is the answer for cramps. New information says that for many cramps, this is not the answer. In fact, it may aggravate the problem.

Our muscles under heavy work or exercise deplete the energy stores of glucose, glycogen, and oxygen - oxygen and nutrient debt then sets in. This is called the lactate threshold, and is associated with the buildup of lactic acid and the development of pain. We can condition the muscles to deliver more oxygen (aerobic training) or store glycogen by carbohydrate loading. These approaches may not be enough, however, if we are depleted in the nutrients magnesium and calcium.

The average American consumes only about 40 percent of the RDA of magnesium. While this deficiency produces no readily identifiable symptoms, it probably does contribute to muscle cramping, alterations in blood sugar levels, heart rhythm changes, and increased blood pressure.

Data derived from work by Dr. Mildred Seelig of the American College of Nutrition suggests many people face serious consequences from preventable magnesium deficiency.

Dr. Kenneth Weaver, an obstetrician at East Tennessee State College of Medicine, has found that toxemia of pregnancy is associated with magnesium deficiency. Magnesium supplements of 400-600 milligrams per day (as citrate or oxide) were found to reduce headaches and toxemia associated with pregnancy.

But what about muscle soreness or cramping after exercise? Because magnesium is found in high quantities within the muscle cell, it helps to neutralize lactic acid and eliminate it. Magnesium deficiency sets up spasms of the muscles and blood vessels, the blood becomes thicker, and oxygen is not delivered to the muscles as readily.

We aggravate the dietary magnesium deficiency problem by consuming phosphate-containing soft drinks, which prevent magnesium absorption. We also use alcohol and certain drugs, which deplete magnesium stores in the body. Dr. Seelig believes 80 to 90 percent of the U.S. population is magnesium deficient. Maybe we shouldn't be so surprised that muscle cramps happen after exercise. Studies indicate that heavy exercise actually increases the need for magnesium.

What's the solution? Rather than take a salt pill for cramps, consider green, leafy vegetables, seafoods, and whole grain cereals, which are rich sources of magnesium. If this doesn't do it, then consider a modest magnesium supplement of 400-600 milligrams per day. The answer is not just salt, but getting proper magnesium along with calcium and potassium - this translates to "eat your vegetables."

### General Meeting July 18

The next general club meeting will be held on Monday, July 18 at the University Branch Library at 50th and Roosevelt. Mike Schuh will discuss plans for and show slides of next year's Centennial Games orienteering meet in Spokane.

### Visit Beautiful Orcas Island in July

On July 30-31, we will hold our 2nd annual Orienteering Retreat at Moran State Park on Orcas Island. We will again be lodging at the Environmental Learning Center at the park to plan for next year's Western States Championships. We may even get in some orienteering training.

Don't miss this opportunity; the views of Puget Sound and the Strait of Georgia from the top of Mt. Constitution are incredible. And the price isn't bad, either. The fee for the Center is \$205, to be divided among everyone who stays. Join the 10 people who already plan to go, and make it even cheaper.

The Center has dormitory style bunks, hot showers, and cooking facilities.

Join us for a great weekend on Orcas. To sign up, call Mike Schuh at 783-3960. Call soon so we can arrange community meals.

### Mountain Orienteering in July

The Mountain "Marathon," originally scheduled for June 11-12, was postponed because the area was buried under a couple of feet of snow. We plan to try again on July 16-17.

The "Marathon" part of the name is misleading, since the courses are not 26 miles long. That name comes from the first event held at Tumac in 1982, at which the courses *seemed* 26 miles long. At that event, teams of two started on one side of the map and orienteered their way to the other side, carrying all their camping gear with them. After camping overnight, the teams orienteered their way back to the other side of the map, again carrying all their camping gear.

The present form of the event is just like a two-day orienteering meet. Participants hike 1-1/2 miles to the Start area at Big Sister Lake campground, and orienteer each day from there.

### Drunken Charlie Awaits

Now is the time to send in your entry to the Washington State Championships at Drunken Charlie Lake. Enclosed in this issue of Bearing 315 is an entry form. If you enter before August 1, you will receive a discount, so enter now!

### Sperrys Leave Ellensburg (Temporarily)

Will and JoAnne Sperry, longtime members of the Ellensburg Orienteering Club, moved to Boston in mid-June, where Will is doing research. They will be gone for 15 months, and hope to take part in some of the many orienteering meets in that part of the country. We wish them luck, and look forward to their return next year.



# Meet Results

## Cle Elum Ridge - May 15 Ellensburg Orienteering Club

Meet Director: Dale Width  
Registration: Addie Graaff, Betty Wiberg  
Start & Finish: Sally Evans, JoAnne Sperry  
Cookies: Evans, Graaff, Sperry, Wiberg

## 6th Annual Kittitas Valley Orienteering Festival

*Spring has sprung  
the grass has ris  
On Cle Elum Ridge  
wildflowers is*

Can no one except Dave Enger break the nine minute kilometer? The vaunted bear is probably using Nathan Tharp's compass now. A salute to Andy, Ben, Jess, and Tom Stevenson, three generations of orienteers. Found: 35mm camera. Call (509) 925-4716 Will Sperry

### Course 1 (2.2k, 7 controls)

Nancy Oakes-Width and clan	26:00
Jennifer Vincent	32:01
Carrahan family	38:59
Sara and Kate Carrahan	45:12
George & Kay Sprugel	52:00
Jess Stevenson	55:44
Ben & Tom Stevenson	59:51
Tuck-Forsythe family	85:55

### Course 2 (3.5k, 8 controls)

Roger Sharp	37:47
Arne Lund	41:07
Moyfrid Larsen	44:17
Brad Erven	59:15
Pat Reddick	60:00
Jason Smith	65:43
Jess & Andy Stevenson	66:00
Kim Siebs/Tina Kondo	78:47
Karen MacDonald	DNF
Nancy Oakes-Width	DNF

### Course 3 (5.8k, 8 controls)

Arnold Kay	74:18
Kent Verbeck	74:53
Sandy Kish Miller	77:36
Scott Donald	82:47
Robert Miller	91:15
Will Sperry	95:20
Debbie Newell	95:45
Anne York	99:54
Rich Vaughan	102:08
Eileen Breseman	102:56
Pat Albright	103:19
Ardis Dull	104:16
Kurt Blakstad	110:10
Jack Hodgson	114:32
Doug Sprugel	118:18
Shirley Donald	119:08
Dave Tozer/Thomas Henchman	128:46
Katie Sprugel	145:12
Amy Loomis	160:12

Bruce McAlister	181:55
Martin Vincent	DNF
Harvey Friedman	DNF

### Course 4 (8.8k, 12 controls)

Dave Enger	76:08
Ivar Larsen	84:36
Nathan Tharp	87:10
Mike Schuh	100:15
Scott Elich	108:33
Michel Tharp	121:51
Dave Tallent	126:12
Rick Breseman	128:03
Dave Lilly	129:44
Martin Mellish	139:30
Carl Moore	144:15
Knut Olson	148:53
Bob Reddick	155:05
Sid Whaley	260:15
Mac MacDonald	DNF

## Lincoln Park - May 21

Meet Director: Doug Sprugel  
Course Setter: Mike Schuh  
Registration: Katie Sprugel  
Start/Finish: Don Atkinson, Joe Saba

### Course 1 (1.2k, 7 controls)

Greg Thompson	10:27
Matt Hinckley	15:13
Jan & Jerry Zachary	15:55
Frank & Howard Johnson	27:10
George & Nancy Lilly	27:22
Shirley Blackstad/Casey Bringham	30:34

### Course 2 (1.6k, 8 controls)

Arne Lund	9:28
Tony Blackstad	10:47
Dave Petty	11:16
Don Atkinson	12:51
Kathryn Fisher	15:24
Frank Johnson	16:46
Howard Johnson	18:27
Matt Hinckley	20:09
R & J Stolmeier	20:21
Li Chuan Huang	21:54
Jan & Jerry Zachary	23:20
Shirley Blackstad/Casey Bringham	36:38

### Course 3 (2.7k, 13 controls)

Arne Lund	22:38
T. Shumaker	23:46
Roger Sharp	24:22
John Lilly	24:41
Joe Saba	25:11
Kurt Blakstad	28:55
Dave Petty	30:35
Dick Eitel/Mike Sheehan	33:05
Brad Solomon	33:27
Walt & Nancy Turley	35:33
Howard & Frank Johnson	39:25
Greg Thompson	43:12
Pat Pruden	48:48
Jan & Jerry Zachary	49:28

### Course 4 (freestyle, 22 controls)

Jeff Coker	19:38
Dave Lilly	23:09
Dave Tallent	25:50
Mac MacDonald	26:29
Martin Mellish	29:19
Ken Knapp	35:13
Eileen Breseman	35:30
Ken Lew	49:13

## Trollhaugen - June 12

*This meet replaced the mountain orienteering meet scheduled for Tumac Mt., which was postponed due to snow.*

Meet Director: Mike Schuh  
Courses: Mike Schuh, Pat Albright  
Registration: Debbie Newell, Bruce McAlister  
Timing: Debbie Newell, Pat Albright

### Course 1 (2k, 7 controls)

Gill Teichert	31:15
Mark Rowe/Lisa Joseph/Jean Ostebo	50:55
Jane Lewis/Gro Jonsberg	51:18
Nicodemus	59:30
David & Hall Nicodemus	62:36
Brian Portwood	68:10

### Course 2 (4k, 13 controls)

Kurt Blakstad	50:09
Ardis Dull	87:58
Harvey Friedman	88:10
Nancy Oakes-Width	102:56
Brian Portwood	103:30
Pat Reddick	118:47
Tania Hernandez/Alan Altman	179:40
Joseph/Rowe/Ostebo	195:25

### Course 3 (7.7k, 14 controls)

Dale Width	78:00
Debbie Newell	91:44
Scott Elich	93:38
Arnold Kay	97:50
Rick Breseman	98:08
Bob Reddick	105:28
Eileen Breseman	106:43
Martin Mellish	124:33
Jessica Hirschfelder	148:03
Lewis/Jonsberg	158:50
Bob & Suzy Lynch	167:01

### Course 4 (10k, 18 controls)

Dave Enger	87:47
Arne Skog	93:35
Dave Tallent	102:05
Mac MacDonald	185:05

## Lynndale Park - April 23

Left out last issue were the people who helped at the meet: Mike Schuh, Debbie Newell, Arnold Kay, Jed Dixon, Betty Berreth, and others too numerous to mention. Thanks to all!

## SCHEDULE OF EVENTS

Date/Time	Location	Type	Club	Map	Information
Sat-Sun JUL 2-3	Orienteering Festival, Whistler, B.C. Brandywine Falls-Whistler	B	GVOC	color 1:10,000	George Pugh (604) 261-1075
Tue, JUL 5 † 7:00 p.m.	Board Meeting		COC		Harvey Friedman (206) 784-2774
Sun, JUL 10 9-11 a.m.	Foster Island Canoe-O & pot-o-luck U.W. Waterfront Activities Center, Montlake Blvd.	S	COC	b/w 1:5,000	Mike Schuh (206) 783-3960
Sun, JUL 10 10:30 a.m.	Canada Dryathlon, Duncan, B.C. 20k bike, 6k run, 6k orienteering	S	CVO		Peter Smith (604) 748-3235
Wed, JUL 13 5:30-7:00 p.m.	Robinswood Park, Bellevue 148th S.E. & S.E. 24th St.	C	SAMM	color 1:3,000	Dave Enger (206) 822-6254
Sat-Sun JUL 16-17	Mountain Orienteering, Deep Creek Campground TENT. rescheduled from June 11-12 (see related article)	C	COC	b/w 1:32,000	Mike Schuh (206) 783-3960
Mon, JUL 18 † 7:00 p.m.	General Meeting, Seattle University Branch Library, 50th & Roosevelt		COC		Mike Schuh (206) 783-3960
Sun, JUL 24 10-11 a.m.	Ferry & Island O, Vashon Island meet at Burton County Park on Vashon	S	NISQ	b/w	Bob Reddick
Sat, JUL 30 † 8-10 a.m.	Lake Union Kayak-O, 2100 Westlake Ave. N. conducted by NorthWest Outdoor Center. \$10 incl. kayak	S	NWOC		Herbie (206) 281-9694
Sat-Sun JUL 30-31	Orienteering Retreat, Moran State Park, Orcas Island planning for Western States O Championships	S	COC		Mike Schuh (206) 783-3960
Fir-Sun JUL 29-31	B.C. Summer Games & "A" meet, Victoria relay Friday at Beaver Lake, Ind. Sat-Sun at Thetis Lake	A	VO	color 1:10,000	Alan Philip (604) 598-2553
Tue, AUG 7 † 7:00 p.m.	Board Meeting 10559 41st Pl. N.E., Seattle		COC		Doug Sprugel (206) 365-8742
Sun-Sun AUG 7-14	Manitoba 5-Days, Hartney, Brandon, Carberry includes Transatlantic Cup & Canadian Champs.	A		color 1:15,000	Jack Forsyth (204) 859-2797
Wed, AUG 10 † 6:00-7:00 p.m.	Magnuson Park meet & pot-o-luck Sand Point Way, Seattle	C	COC	b/w 1:5,000	Mike Schuh (206) 783-3960
Wed, AUG 17 5:30-6:00 p.m.	Luther Burbank Park, Mercer Island I-90 exit 7, turn north	C	SAMM	color	Dave Enger (206) 822-6254
Sat, AUG 20 10-12 noon	Woodland Park, Seattle N.E. 50th St. entrance	C	COC	color (rev.) 1:5,000	Mike Schuh (206) 783-3960
Sun, AUG 28 9-11 a.m.	Union Bay Canoe-O, revised & expanded map U.W. Waterfront Activities Center, Montlake Blvd.	S	COC	color (rev.) 1:10,000	Mike Schuh (206) 783-3960
Sat-Sun SEP 3-4	Western Canadian Championships Prince George, B.C.	A	PGOC	color 1:15,000	Karen Peterson (604) 562-8711
Sat, SEP 10 10-12 noon	Bridle Trails State Park, Kirkland 116th Ave. N.E. & N.E. 60th St.	C	SAMM	color	Dave Enger (206) 822-6254
Tue, SEP 13 7:00 p.m.	Board Meeting 6216 N.E. 154th St., Bothell		COC		Arnold Kay (206) 488-7471
Sat-Sun SEP 24-25	Washington State Championships Drunken Charlie Lake, near Duvall	B	COC	color (new!) 1:15,000	Mike Schuh (206) 783-3960
Sat-Sun OCT 2-3	B.C. Championships Merritt-Kamloops	A	SOCK	color 1:15,000	Murray Foubister (604) 374-6497
Tue, OCT 4 7:00 p.m.	Board Meeting 1706 N.W. 57th #3, Seattle		COC		Mike Schuh (206) 783-3960
Sun, OCT 9 10-12 noon	Easton Grade, near Easton I-90 exit 70	C	EOC	color 1:7,500	Dale Width (509) 925-5873
Sat, OCT 15 6:00-7:00 p.m.	Lynnndale Park Night-O, Lynnwood 188th Pl. S.W. & 72nd Ave. W.	S	COC	color 1:5,000	Mike Schuh (206) 783-3960
Sat, OCT 22 10-12 noon	Big Finn Hill, Kirkland (LOCATION TENTATIVE) Juanita Dr.	C	SAMM	color (new)	Dave Enger (206) 822-6254
Sun, OCT 23 10-12 noon	Seward Park, Seattle Lake Washington Blvd.	C	COC	color 1:10,000	Mike Schuh (206) 783-3960

For the latest meet information, call the ORIENTEERING HOTLINE - 783-3866

### Event Key

A - major event on good quality color map, 5 courses minimum  
B - major local event, 3-4 courses minimum  
C - local club event, 3-4 courses  
S - special event (bicycle, canoe, ski, night, etc.)

### † Changes From Last Issue

Mountain Orienteering added July 16-17  
General Meeting added July 18  
Magnuson Park meet & pot-o-luck added August 10  
Kayak-O added  
July and August board meetings added

### Club Key

COC - Cascade O Club; EOC - Ellensburg O Club; NISQ - Nisqually Orienteers; SAMM - Sammamish O Club; CVO - Cowichan Valley Orienteers; GVOC - Greater Vancouver O Club; PGOC - Prince George O Club; SOCK - Sage O Club of Kamloops; VO - VictOrienteers

The Cascade Orienteering Club presents the  
**1988 Washington State Orienteering Championships**  
September 24-25, 1988

**Drunken Charlie Lake**  
*Marchworth Experimental Forest, Duvall*

**Terrain** - open, runnable forest, moderately hilly, detailed contour and rock features

**Map** - new 1:15,000-scale 5-color IOF map, produced in 1988. Field-checking by Raimo Pitkanen, cartography by Debbie Newell.

**Courses** - six courses will be offered, ranging from 2 to 10 kilometers.

**Location** - Drunken Charlie Lake is near the town of Duvall, northeast of Seattle. To get there, use the attached map, then follow the orange and white orienteering signs. Allow at least one hour to drive from Seattle.

**Registration**

*Fees* - please pay in U.S. funds only. You will receive a discount if we receive your paid entry by August 1 (see below)

<u>Age</u>	<u>One Day</u>	<u>(before Aug. 1)</u>	<u>Both Days</u>	<u>(before Aug. 1)</u>
18 & under	\$4.00	\$3.00	\$7.00	\$5.00
19-59	6.00	5.00	10.00	8.00
60 & older	4.00	3.00	7.00	5.00
Family Maximum	15.00	13.00	22.00	19.00

**Credit Cards** - for an additional 5%, you may pay your entry fee with a VISA or MasterCard. Canadians, this is a good way to avoid the problems (for both you and the meet organizers) associated with writing checks in U.S. funds. In most cases it is cheaper than buying a foreign money order.

**Deadline** - if we receive your entry by **September 17**, you will get a pre-printed map. If we receive your entry after this date, you must use a master map and mark your own course (yes, it will be included in your time). Please send entries to:

Eileen Breseman  
9528 Densmore Ave. N.  
Seattle, WA 98103

Please send *entries only* to Eileen. Other correspondence should be sent to COC at P.O. Box 31375, Seattle, WA 98103.

**Cancellations** - if you can't come to the meet and let us know by **September 17**, your entry fee (minus \$1.00) will be returned to you. After September 17, no refunds will be given.

Name/Address/Phone No.	Club	Age on Dec. 31 1988	Sat, Sun, or Both	Course	Class	WA State Resident?	Reg. Fee
.....							
.....							
.....							
.....							

Please make checks payable to Cascade Orienteering Club

☐ VISA      ☐ MasterCard      Acct. No. \_\_\_\_\_ Exp. Date \_\_\_\_\_

Notes, requests, doodles: \_\_\_\_\_

Total Reg.

Add 5% for Credit

Total Enclosed



**Courses and Classes** - the following courses and classes will be offered:

Course 1 2-3k beginner	Course 2 3.5-4.5k adv. beginner	Course 3 4-5k intermediate	Course 4 4-5k advanced	Course 5 5-7k advanced	Course 6 7-12k advanced
F12A M12A F Open C M Open D	F13-14A M13-14A F15-16B M15-16B F Open B M Open C	F15-16A M15-16A F17-18A M17-18B F19-20B M19-20B F35-B M50-B F40-B M Open B F45-B F50-b F Open A	F19-20A M17-18A F21B M35B F35A M40B F40A M45B F45A M50A F50A M55A F55A M60A M Open A	F21A M19-20A M21B M35A M40A M45A	M21A

### Start Times

**Pre-registered Participants** - all pre-registered participants will have pre-assigned start times. First start time on **Saturday** is **11:00 a.m.** First start time on **Sunday** is **9:00 a.m.** If you want to request a special start time, please write it on your entry form. We will honor special requests if we can. To find out your start time before Saturday, call (206) 522-1098 on **Thursday, September 22** from **6:30-9:30 p.m. only.**

**Day-of-Race Registration** - participants who register the day of the meet will be started as space allows.

**Awards** - the top three finishers in each class will receive awards. The top Washington state resident in each class will receive a special award.

**Camping** - camping is available at **Tolt River/MacDonald County Park** in Carnation, approximately 10 miles from the meet site. The park is \$5.00 per night and has showers. For reservations, call (206) 885-2553 Monday, Wednesday, or Friday from 10 a.m. to 2 p.m.

**Lodging In Homes** - several COC members are offering space in their homes for Friday and/or Saturday night. Please call Harvey Friedman at (206) 784-2774 for more information.

**Parking** - because parking space near the start is *very limited*, we encourage you to share rides. Park is so limited, in fact, that we are offering incentives for carpooling. The more people you have in your car, the closer you can park to the Start. Possible meeting sites for carpooling are the Park and Ride Lots in Redmond, Woodinville, or Kirkland.

**Information** - for more information, call the **ORIENTEERING HOTLINE** at (206) 783-3866 or Mike Schuh at (206) 783-3960.

### Waiver of Liability

In consideration of the acceptance of this entry, intending to be legally bound, I do hereby, for myself, my heirs, executors and administrators, waive and release any and all rights and claims for damages I may have against the United States Orienteering Federation, the Cascade Orienteering Club and its members, the U.S. Government, the Washington State Government, and private land owners and lessees, their representatives, successors and assigns for any injuries or damages occurring during or resulting from this event. I further attest that I am physically fit, able, and qualified to participate in this event.

Signed \_\_\_\_\_ parent or guardian \_\_\_\_\_ Date \_\_\_\_\_

Signed \_\_\_\_\_ parent or guardian \_\_\_\_\_ Date \_\_\_\_\_

Signed \_\_\_\_\_ parent or guardian \_\_\_\_\_ Date \_\_\_\_\_

Signed \_\_\_\_\_ parent or guardian \_\_\_\_\_ Date \_\_\_\_\_



## COC OFFICERS AND COORDINATORS

President	Mike Schuh	(206) 783-3960
Vice President		
Secretary	Robin Harvard	(206) 622-0918 (day)
Treasurer	Doug Sprugel	(206) 365-8742
Mapping Coordinator	Katie Sprugel	(206) 365-8742
Membership Coordinator	Harvey Friedman	(206) 784-2774
Newsletter Editor	Debbie Newell	(206) 488-7471
Training Coordinator	Pat Albright	(206) 265-6710
Publicity Coordinator	Tony Saulewicz	(206) 784-5398
Equipment Coordinator	Arnold Kay	(206) 488-7471
Volunteer Coordinator	Betty Berreth	(206) 546-2128

## COC MEMBERSHIP DUES

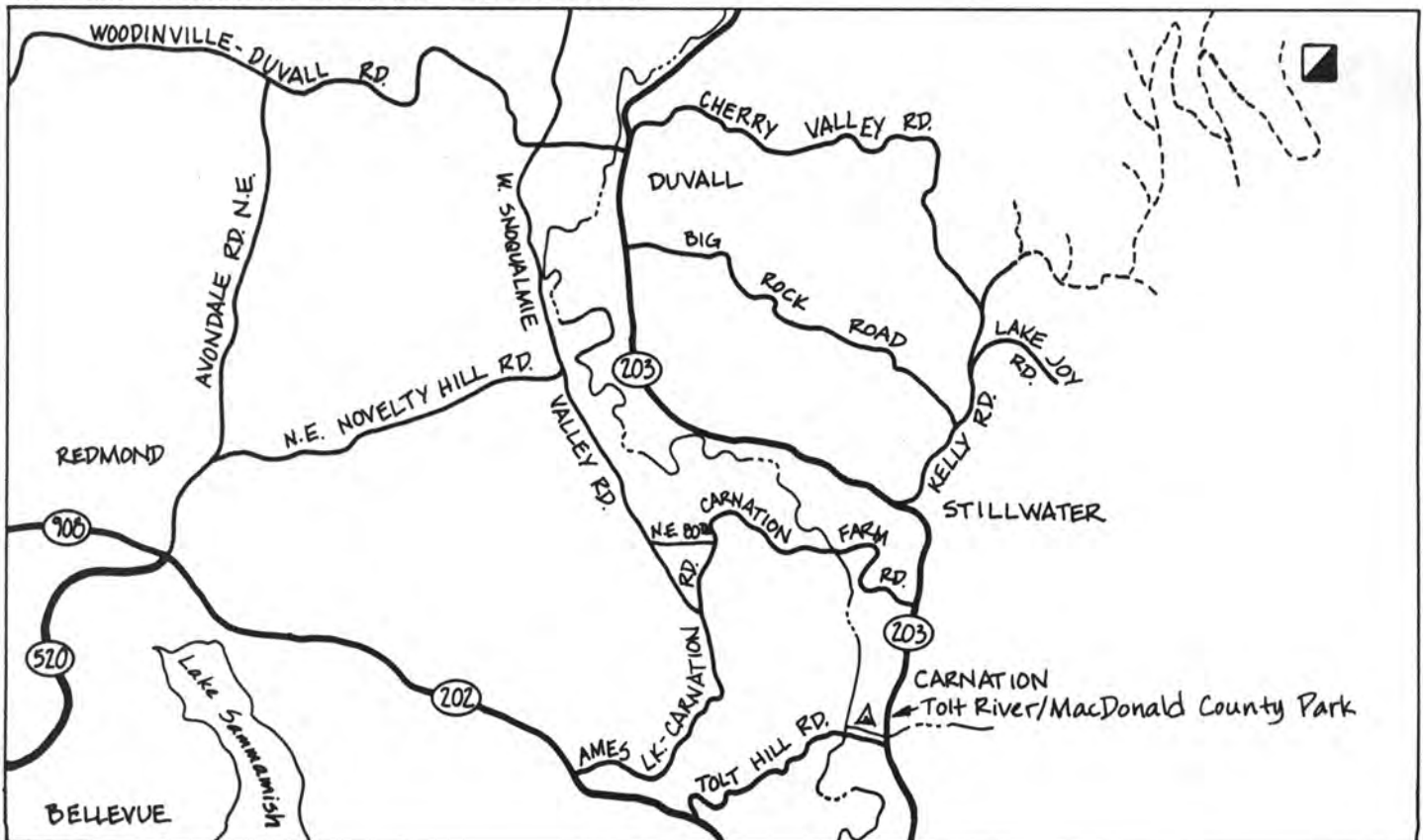
Single	\$7.00/year
Family	10.00/year
Associate (under 18)	4.00/year
Newsletter Only	5.00/year

## COC "C" MEET FEES

	<u>b/w map</u>	<u>color map</u>
Orienteering club members	\$2.00	\$2.50
Non club members	3.00	3.50
Novice course	1.00	1.00
Families (regular fee for first 2 family members, \$1.00/person thereafter)		

Special events such as the State Championships and "A" meets, have higher fees.

## Where the Heck is Drunken Charlie Lake?





**Cascade Orienteering Club**  
**P.O. Box 31375**  
**Seattle, WA 98103**  
**(206) 783-3866**

Address correction requested