# BEARING 315

The Newsletter of the Cascade Orienteering Club

January-February 1990



## World Cup/PNWOF Update

Staffing Needs

Plans for the big Pacific NorthWest Orienteering Festival (and World Cup meet) next August have reached the stage where we are now looking for help from people who do not have to know anything about orienteering at all. First, we can use a few carpenters, craftspeople, or able-bodied volunteers to work under Dave Lilly's direction building signs, finish chutes, banners, railings, etc.

Next, we could use a few vans and/or minivans and people to drive them for a few hours shuttling people from and to the assembly area and the start and finish areas. A

service-minded van club would be ideal.

Despite what some might think, it is not too early to make such a request now. If we want this to be successful, we must plan ahead.

**Ouestions** or offers

Any volunteers (for those needs listed above or for any thing else you can think of) should contact the meet director, Harvey Friedman, either in person (preferably with your name, phone number, and what you want to do) or by phone at 784-2774.

#### Return to Riverside!

(or visit for the first time)

the Washington State Orienteering Association presents a

Two-Day "B" Meet

at

Riverside State Park

Spokane, WA

April 28-29, 1990

entry form in next issue

If you've been there, you'll want to go back. If you haven't been there, don't miss the opportunity to run in open pine forest with no underbrush!

## Enter Early and Receive a Discount!

Those of you who intend to enter North American 7-Day events other than PNWOF (see meet schedule for list of events), get your entries in early and receive a substantial discount. The deadline for receiving the discount is March 1, which is just around the corner. If you plan to enter only the PNWOF, you will receive an entry form in the next issue of "Bearing 315."

All USOF members and/or subscribers to Orienteering North America magazine will receive an entry form for all of the events in the 7-Day series in an upcoming issue. If you do not receive ONA, but would like an entry form, send a stamped, self-

addressed 81/2 X 11 envelope to:

PNWOF entry P.O. Box 31375 Seattle, WA 98103

## **Election Results**

The officer elections at the November club meeting produced a few changes in Cascade's Board of Directors. Doug Sprugel handed over operation of the club to Mike Schuh, while Katie Sprugel and Ardis Dull will continue in their respective positions of Treasurer and Secretary. Although nobody could be persuaded to run for Vice President, Mike will undoubtedly continue to search for someone to replace Linda Botich in that position.

Thanks to last year's officers and coordinators for their hard work, and to this year's board for the year to

come.

## Clinic Scheduled For August

Tentative plans are underway for the Norwegian National Orienteering Team to conduct an orienteering skills clinic in Spokane on August 15. The clinic would be part of the North American 7-Day Orienteering Competition, and arranged with the help of the Sons of Norway, whose national convention will be held in Spokane during that week. More information will appear in "Bearing 315" as it becomes available.

### Course Analysis

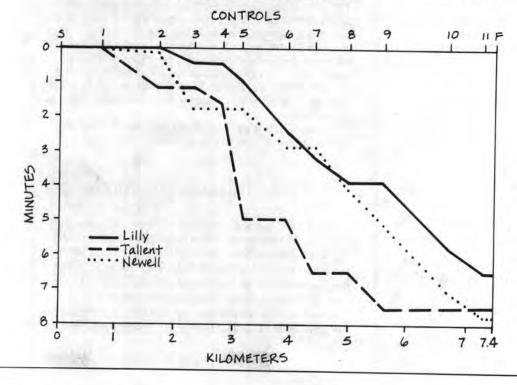
by Don Quixote

Through the miracle of modern technology (in other words, a stop watch with 30 split times), we can compare not only the total times of orienteers, but leg times as well. At the December 17 Ft. Steilacoom meet, Dave Lilly, Dave Tallent, and Debbie Newell recorded the time it took them to complete each leg on the 7.4-kilometer, 11-control Advanced course. What follows is an analysis of that course.

- S-1 All three ran identical routes at a 4:20 min/km pace. Dave Lilly (obviously quicker with the punch) gained a 2-second advantage.
- 1-2 Lilly's more direct route across the fields paid off and he was able to increase his lead over Debbie Newell by 11 seconds. Dave Tallent ran further south, using roads and trails. However, this longer route didn't pay off, dropping him to 70 seconds behind Lilly.
- 2-3 All three chose different routes for this leg. Newell had difficulty seeing the control from a distance. Tallent used the most direct "fast" trails, cutting across the field only when he saw the control. This enabled him to pass Newell's elapsed time by 36 seconds and gain on Lilly. Tallent ran this leg in under 6 minutes/km.
- 3-4 Both Newell and Tallent ran similar routes through the rough and between thickets. However, Lilly chose the best route, using a trail which ran up a reentrant. Tallent was very slow up the hill ('cause he's an old man!) and dropped further behind Lilly. Newell, on the other hand, "anteloped" it up the hill and pulled to within 6 seconds of Tallent.
- 4-5 All three again chose totally different routes. Tallent decided to backtrack and use the longer trail route to

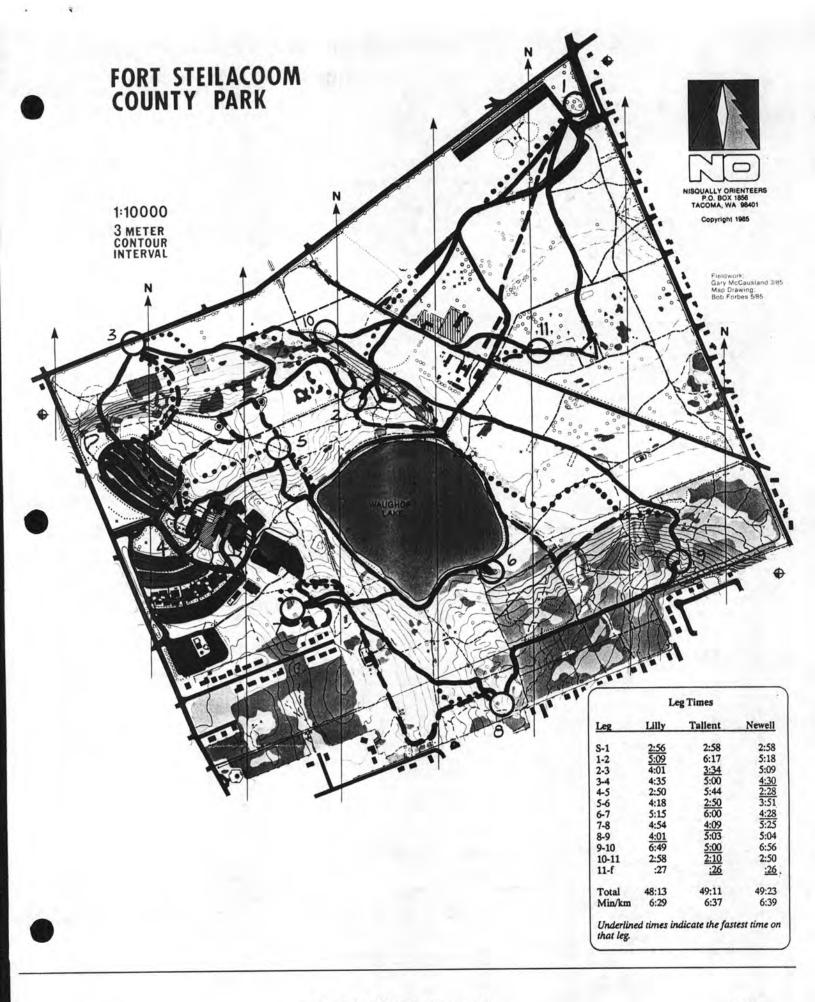
- the north. However, nearing the control, he got turned around and proceeded to get lost! Like Don Quixote, he was chasing imaginary water tanks. Lilly chose a more direct route through the rough open, approaching the control from the south. Newell drifted further north and did more climbing than necessary, but still had the fastest time on the leg and was now just 52 seconds behind Lilly, with a comfortable cushion of 3 minutes over Don Quixote.
- 5-6 This leg was basically trail running, first downhill, and then around Waughop Lake. Tallent was able to use his running ability on this running (no navigation necessary) leg to gain back 1 minute of his mistake on the last leg. He ran this leg at a pace of 3:38 min/km. Newell, also running fast at under 5 min/km, was able to further close the gap on Lilly to within 25 seconds.
- 6-7 Newell, even with some hesitation between the thickets near the control, ran an excellent leg, moving into the lead by 22 seconds. Tallent was put off by sighting Newell, thinking she was at the control, and was drawn off. Newell actually used pure psychology at this point by faking she was running to the control she had actually already punched and was heading off towards the next control. After relocating at the fence corner, Tallent was able to get back into the race. However, the damage had been done and Tallent fell to 3:19 behind Lilly and 3:41 behind Newell.
- 7-8 Tallent, unraveled by the fiasco at the last control, ran this leg by the long, safe, "highway" route and gained back over 1 minute on Newell. Lilly, also having a good leg, regained the lead by 9 seconds over Newell.

continued on page 4



Competitors' times compared to ideal time. The graph shows each competitor's relative position

during the course of the 7.4-kilometer course and compares his/her time to the "ideal" time. The horizontal line across the top of the chart represents the ideal time -- the fastest time recorded by any of the three competitors for each leg.



- 8-9 Lilly executed perfectly on this leg, running under 5 min/km pace. Tallent exited #8 the wrong way and got tangled in brambles. Newell had problems seeing the control, foolishly pursuing a reentrant instead of the pit. Result: Newell dropped further behind Lilly (72 seconds worth) and Tallent was just 2:24 behind Newell.
- 9-10 This was the longest leg on the course (1.08k), and was basically a road race. Tallent took advantage of this fact, completing the leg at a pace of 3:54 min/km. Tallent's speed, coupled with the length of the leg, enabled him to make up ground, arriving at #10 just 28 seconds behind Newell, gaining almost 2 minutes on Newell and Lilly.
- 10-11Another road race. Tallent finally overtook Newell and closed the gap on Lilly to 59 seconds. However, time had run out for Tallent.
- 11-F All three sprinted the last 150 meters to the finish in 26 seconds, that's 2:53 min/km pace (a 17-second 100 meters). Newell probably ran the fastest - she has a devastating 100-meter speed. However, any longer than that and she dies.

## Strengths and Weaknesses

All three averaged 6:29-6:39 min/km for this course. Newell is probably the most consistent, running all types of terrain

at a constant speed. She also makes good route choices, navigates well, and has few problems close to the control. Tallent runs at every speed, from very fast to very slow. On the track, Tallent can still run 5km in 15 minutes, and under 19 minutes cross-country. However, he is very slow in junky forest and on hills. He doesn't always make the best route choices (wrongly choosing longer trail running, which doesn't always pay off), and his poor eyesight doesn't give him any advantage near the control. Lilly is strong through junky forest, on hills, and in rough open. He is a good runner and makes good route choices.

In junky forest, three can be summed up as: DL is the "Tasmanian Devil," and like a tornado crushes everything in his path. Newell is a gazelle, leaping over obstacles, and Tallent is a klutz - tripping over even the smallest twigs.

#### Conclusion

So, can we predict how these three will place over various terrain? Probably yes.

- Open parkland Tallent. His chances of beating the other two depend on the runnability of the area. Take away the junk and the necessity for precise navigation and he'll win.
- Junky woodland Lilly. His ability to run "through" junk gives him an advantage. He's strong and wellsuited for this abuse.
- Open woods/difficult navigation Newell. Her nimbleness and fine o' skills make her a winner.

## Cross-country

## NAVIGATION

Rod Phillips \*\*\* Neil Phillips \*\*\* Graham Foley

For the first time comes a book that thoroughly discusses the various aspects of cross-country navigation as it is actually performed by the experts. The authors have developed their theme of "feature-based" navigation from their experiences leading expeditions to all parts of the continent and from years of teaching navigation. They have put this to the test by founding rogaining, the sport of cross-country navigation, by promoting the sport and by their performances in competition.

A book like this cannot be written from the desk alone. It represents the careful synthesis of ideas and experiences collected during many years of navigating in all sorts of conditions. The authors have extensive experience in fields related to land navigation including orienteering, canoeing, rafting, caving, rock climbing, skiing, flying and sailing.

Rod Phillips is a paediatrician in Melbourne, Neil Phillips is a consulting geologist in Western Australia, and Graham Foley is a civil engineer in Melbourne. All have been cross-country navigation champions.

#### For the beginner

- feature-based navigation
- choosing and following a route
- en route surveillance
- \* compass technique
- lost? how to recover

#### night navigation

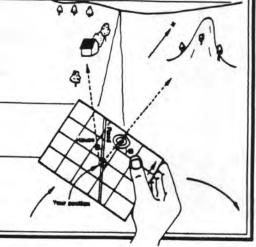
#### For the advanced navigator

- navigation in special situations
  - -desert -cliff country
  - -snow -four-wheel drive
  - -rivers -swamps
- \* using the sun, moon and stars
- \* altimeters

Rogaining, the sport of cross-country navigation: a complete description for the competitor and a must for the organizer.

To order this beautiful, hard-cover book send \$15.00 plus postage to:

Patricia Albright Washington State Orienteering Association 3251 43rd Ave W Seattle, WA 98199



#### Perfect For Pie

by Gwen White

The following article originally appeared in the August 13, 1989 edition of Pacific magazine supplement to the Seattle Times.

To Northwesterners, ripe, roadside blackberries are such a common sight that most scurry past without thinking. In their haste, they miss free produce for tasty pies, jelly, and cobblers.

Put on those brakes. Better yet, plan an outing to capture the local bounty. First, check to see if the berries have been sprayed. If not, then identify your find. Not all wild blackberries are alike. Here in the Northwest you'll find three varieties: Pacific, Himalayan, and Evergreen.

Pacifics are the only native black-

berry. The fruit is



small and the stems are long. slender, and prickly. White, five-petaled blossoms signal tasty summer-time berries.

Ask outdoor enthusiasts which blackberry is preferred and they'll choose the Pacific. They like the flavor. Pacific blackberries possess a unique sweet-tart taste worthy of the woodland hunt.

As the name implies, Himalayas aren't native to the Pacific Northwest. Original Himalayan stock arrived from India. Luther Burbank developed the berry and named it in 1885. Vines were commercially grown until the 1960s. Years ago, Himalayas

escaped cultivation and now grow wild in western regions of Oregon, Washington, and British Columbia.

Who hasn't noticed Himalaya vines in vacant lots? Their huge, stiff, thorny runners sprawl across our landscape. Picking Himalayas demands determination. Prepare for battle. Vines snag clothes and scratch unprotected skin. Arm yourself with boots, long sleeves, and a big stick. Again, be sure to check if vines have been sprayed. Then set to work.

A third wild blackberry is the Evergreen. Vines are similar to the Himalayas, but some berry fanciers think its fruit isn't as flavorful. They say it lacks the tart taste of the Pacifics or the sweetness of the Himalayas. Leaves are noticeably notched.

Retain your armor, More bramblepicking is ahead.

Even Pacific
blackber
Pacific Blackberry

ries' superior qualities can't compel all pickers to thrash through open fields. What's the solution? Locate Farm Guides free at your Chamber of Commerce and libraries. Check for U-pick berry farms. Directions and harvest dates are given. Better yet, note lists of roadside stands featuring fresh-picked blackberries in mid- and late summer.

Still, some blackberry fans have no time for picking or find boxed berries too remote. They head down the byways for family-owned restaurants specializing in blackberry desserts. Or they may select an urban gem where the chef still knows how to turn out a flaky crust.

At the end of your trail, indulge in warm blackberry pie or cobbler.

Order a scoop of ice cream. You're ready for an unsurpassed delicacy straight from your own Northwest.



Evergreen Blackberry

#### Vancouver Island Series

The folks in British Columbia are reviving the "Island Series," a legendary series of four 2-day meets in various locations scattered across Vancouver Island. It begins with Thetis Lake Park in March and ends with Mt. Douglas in October. Prizes will be awarded based on accumulated results from all 8 days of competition. The full schedule of meets is:

March 10/11 April 21/22 May 26/27 October 13/14 Thetis Lake Park Maple Mountain Newcastle Island Mt. Douglas

Look for additional information in future issues of "Bearing 315."

## **Meet Results**

LAKE TRADITION - November 5				and the American		
LAKE TRADITION - November 5		Course 1		Course 2 (14 controls	2	
Meet Director: Doug Sprugel		John Evavold	19:50	Jim Siscel D		18:46
Course Setter: Dan Waugh		Access to		Kathy Miner		19:20
Registration: Sherrill Pattee		Course 2	67, 937	Terry Bryant		20:39
Start: Don Atkinson		Mac MacDonald	21:29	Jim Siscel A		20:40
Finish: Dave Petty, Mike Schuh, Gk	enn Gordon	Bryce Jensen	23:55	Denise Klein		21:47
Beginner Instruction: Tom Slocum		Chris Olmsted	24:19	Andy Craig/Kelly Roi	mano	22:25
Control Pickup: Don Atkinson, Ard	lis Dull.	Tony Adamski	25:15	Greig Rolfe		23:40
Doug Sprugel	The same	George Lilly David Stein	55:35	David Catlow		24:37
		Sandra Finn family	78:51	Eugene Hall		24:44
Course 1 (2.7k, 6 controls)			92:44	Rick Fojtik		25:27
Jacob Carton	22:07	David George	DNF	Robert Whittle		25:28
Tim Lippert	34:30	Course 3		Jim Siscel C Jim Siscel B		25:53
Ed Vervoort	65:51	Mark Howlett	***			26:53
Sean Harvey	66:22	Greig Rolfe	28:10	Williamson David Soper		28:46
Amy Nordstron/Marcia Walters	67:35	Knut Olson	46:10			28:55
Kurt Oberloh & family	67:35		54:34	Marcia Walters		33:32
Bob Williamson	69:30	Larry Sarar	58:43	Dick Diesner		36:18
Linda Griesbach	91:29	Kathy Trost	78:30	Oberloh		38:22
George & Nancy Lilly	124:39	Harvey Friedman	80:03	Else Mans		38:31
,,				Ruth Farber		38:51
Course 2 (4.0k, 8 controls)		Course 4		Ruth McCormick		40:34
Mike Schuh	50:18	Mark Howlett	34:19	Rouke		40:35
Ben Hall	56:46	Dave Enger	35:25	Willie & Dave Enger		40:58
Jacon Carton	57:47	Dave Tallent	39:32	R. Harris		41:23
TomSlocum	61:32	Debbie Newell	43:23			
Knut Olson	65:13	Arne Lund	43:23	Course 3 (15 controls)		
John Sincock	71:37	Ben Hall	43:54	WIOL	2.5.1	
Ardis Dull	76:07	Sean Olmsted	46:07	Thanh Pham	Wilson	23:08
Harvey Friedman	78:00	Mike McManamna	47:27	Dennis Poon	Wilson	24:43
Chris Olmsted	86:00	Jacob Carton	48:10	Adam Winterhowse	Wilson	25:05
Roger Sharp	104:42	Mac MacDonald/John Evavold	48:37	Tony Willis	Wilson	27:51
Bruce McAlister	106:30	Keith Bittner	50:10	Lisa Nordlund	Wilson	28:19
Lars West	108:55	Robert Olsen	55:09	Noam Gundle	Garfield	
Scott Miller	112:20	Steve Herber	59:23	S. Madson/E. Bone	JPS277 S.ZS27 TV	28:42
Carl Mann/Cathy Jackson	128:31	Sandy Miller	61:25		Garfield	29:36
Eileen Breseman	128:33	Bob Reddick	64:41	Joseph Ho	Wilson	32:01
Denise Klein	149:42	Ardis Dull	65:46	Kristopher Brinnon	Wilson	33:49
David Stine	151:00	Ken Peters	70:00	Nicholas Bone	Garfield	34:26
Kathy Trost	168:00	Carl Moore	74:16	Vi Nguyen	Wilson	35:37
David Soper	169:38			Nate Backlund	Wilson	35:52
Bob & Diane Rhea	171:24			Ellen Boomer	Wilson	36:42
Greig Rolfe	DNF	VOLUNTEER PARK - December 9		Valerie Moffett	Stadium	40:48
Al Thatcher	DNF			Vinh Tran		
	DIVI	Meet Director: Doug Sprugel		viiiii Tian	Wilson	55:58
Course 3 (5.2k, 12 controls)		Course Design: Sandy Miller		Out		
Dave Enger	90:21	Registration: Katie Sprugel		Others		
Dave Tallent	17.5 5.75.7	Timing: Harvey Friedman, Sandy Mi	iller, Doug	Melissa Moffett		22:37
Debbie Newell	112:26	Sprugel	100	Ken Peters		29:59
Arne Lund	130:01	Control Pickup: Debbie Newell, Day	e Tallent	Haines family		34:41
ohn Lilly	142:23 183:24			Patty Bailey/Diane Sava	ige	42:27
Mac MacDonald		Course 1 (7 controls)				
Eric Edeen	190:20	Johann Gomez/Chris Stevens	7:08	Art Alexander		
Rick Breseman	234:10	Bob Reddick	7:36	Course 4 (Memory, free	style, 21 contro	ols)
im Gallant	DNF	Jim Siscel D	8:18	Debbie Newell	The contract of the	25:10
	DNF	Tony Bryant	9:08	Dave Tallent		27:15
Glenn Gordon Mark Howlett	DNF	Eugene Hall	10:38	Scott Coble		28:15
CONTROL OF THE PARTY OF THE PAR	DNF	Jim Siscel A	11:03	Jacob Carton		31:05
Bill MacDonald	DNF	Ed Robinson/Bryan Champ	11:21	Rick Breseman		35:38
Martin Mellish	DNF	Jim Siscel B	12:00	Rob Knudsen		36:22
Steve Minor	DNF	David Catlow	12:34	Mac MacDonald		37:41
Carl Moore	DNF	Rick Fojtik	14:39	S. Miller		37:52
ean Olmsted	DNF	Robert Whittle	14:43			37:32
(INVINCANTAL III		Nicholas Bone	14:45			
IARYMOOR PARK - November 12		Eric Bone/Stephen Madson	14:56			
ammamish Orienteering Club		Marcia Walters	16:56	TROLLHAUGEN SKI-	O scheduled for	Daggert
		Jim Siscel C		16 was cancelled due to l	lock of man	December
feet Director: Arne Lund		Ani Raymond	19:24	. o muo cuncenteu une 10 I	uck of snow.	
ourse Setter: John Sincock		Andrew Craig/Kelly Romano	21:17			
egistration: Arne Lund		motor Claig Acity Romano	23:43			
mine: Debbie Newell Dave Tallant	Dave I ille					
iming: Debbie Newell, Dave Tallent, I	Dave Lilly					
iming: Debbie Newell, Dave Tallent, I control Pickup: Dave Lilly, Ame Lund ock	Dave Lilly d, John Sin-				cont	inued ⇒

FT. STEILACOOM	PARK - 1	December 17,	1989
Nisqually Orienteers			

Meet Director: Bob Reddick,
Courses: Bob Reddick
Vetting/Marker setting/Pickup: Mark Howlett
tart: Carl Moore & Stuart Bradshaw
Registration: Pat Reddick & Laura Skog,
Results: Mike Tharp,
Participants: 82

Course 1 (3.1 km, 42 m climb, 7 cont	rols)
Brian Tost(3)	26:57
Nat Crawford(G)	28:31
John Millard/Chris Rawnsley	36:38
Greg Heasley/Ronnie Bales	39:10
Chris Folsom/Sheila Falk	42:46
John Garrett	50:05
Margie Bone	51:36
George Skea/Zaraya	68:08

Bryce Jensen	Bremerton	30:58
Rachel Tharp	Timberline	34:42
Matthew Chapman	Stadium	36:15
Liesinger/Bunnell	Yelm	37:45
Jeff White/T. Regala	S	40:16
Roger Sharp		41:22
Todd Feltus	Gig Harbor	42:46
Eric Bone	Garfield	43:42
Dennis Poon	Wilson	47:20
Robinson/T. Bryant	В	48:26
T. Dat Nguyen	T	49:13
Steve Madson	G	52:45
Lyon/Donovan/Nelson	S	52:49
Vi. Nguyen	W	54:13
Andy Craig/K. Romano	В	54:42
Kris Brannon	W	55:41
Jesse Davis	Y	55:42
D.Wollform/D.Wingard	GH	58:00
Ellen Boomer		60:51
Nate Beckland	W	62:03
S.Fashant/P.Hinderle	?	63:00
Valerie Moffett	S	65:18
Bales/Heasley	BS398	67:05
David Catlow/E. Hall	В	68:53
R. Fojtik/R. Whittle	В	70:13
Kathy Miner		72:38
C. Brooks/J. Gomez	В	72:56
Andy Miller	4.1	76:16
Bryan Champ/T. Smith	В	80:49
Lani Alfiche	w	91:13
Joseph Ho		DNF
Nick Bone		DNF

Nick Bone		DINE
Course 3 (5.28 km, 84 m	climb, 9 cont	rols)
Nathan Tharp	T	34:31
Keith Bittner	В	40:30
Mike McNamana	В	40:42
Jason McDermott	Y	46:35
Andrew Miller	COC	55:08
Scott Miller		55:18
Laura Skog	SAMM	55:33
Willis/Tong	W(-#4)	59:08
Bryant/Gomez/Cullen	В	59:52
Ken Lew	COC	62:42
Don Denbo	Sequim	73:13
Lisa Nordlund	w	77:28
Kathy Trost	SAMM	101:52

Course 4 (7.43 km, 1 Dave Lilly	SAMM	48:13
Dave Tallent	SAMM	49:11
Debbie Newell	COC	49:23
Arne Skog	SAMM	50:33
Ben Hall	SAMM	53:09
Ken Peters	NISQ	58:03
Sid Whaley	NISQ	58:05
Carl Moore	NISQ	58:08
S. Miner	NISQ	58:33
Jacob Carton	SAMM	58:44
Brad Miner		86:30

#### ST. EDWARD STATE PARK - December 31 10th Annual Bog Slog

Meet Director: Bruce McAlister
Course Design: Bruce McAlister, Ardis Dull
Registration: Robert & Sandy Miller
Timing: Jean Davis, Dave Tallent

Timing: Jean Davis, Dave Tallent	
Course 1 (8 controls)	2.75.50
Terry Bone	14:03
Kevin & Matt Crouthamel	19:42
Pat Reddick	26:10
Lisa Archer	32:00
Bob & Berit McAlister	38:32
Course 2 (10 controls)	42.00 to
David Soper	27:42
Maren Johnson	36:12
Trish Olson	36:15
Burke Kennedy	36:18
Margie Bone	40:26
George & Nancy Lilly	43:55
Nicholas Bone	45:12
Kathy Miner/Julie King	54:56
Denise Klein	DNF
Course 3 (3.0k, 10 controls)	244
Gary McCausland	49:20
Don Atkinson	54:18
Paul Bullard	54:31
John Sincock	60:28
Katie Sprugel	63:32
Knut Olson	67:47
Eric Bone	71:27
Sidney Whaley	76:46
Steve Herber	80:41
Dave Petty	83:54
Harvey Friedman	87:28
Jim Siscel/Erik Maynard	96:54
Patty Bailey/Maggie Coughlin	DNF
Course 4 (3.9k, 14 controls)	
Dave Enger	40:05
Dave Lilly	49:41
Jeff Coker	52:40
Glenn Gordon	53:20
Debbie Newell	55:57
Rick Breseman	56:10
Robert Miller	59:57
Dave Tallent	62:01
Sandy Kish Miller	63:18
Brian Hart	63:33
Doug Sprugel	64:10
Sean Olmsted	70:57
Carl Moore	72:08
Scott Coble	78:17
Thurston Miller	78:25
S. Miner	84:22
Bob Reddick	90:38
Bill Rogers/Bill McKenzie	91:53
Scott Donald	92:29
Popus Stocker	97:09

Rob Knudsen	103:06
Shirley Donald	125:03
Matthew Coulter	DNF

#### 1989 U.S.O.F. NATIONAL RANKINGS

Below are the local orienteers who were nationally ranked in 1989. In order to be ranked, you must be a member of the U.S. Orienteering Federation and, for Washington residents, finish at least 4 days of U.S.O.F. Class "A" meets (or 2 days of American "A" meets and 2 days of Canadian "A" meets). Those who competed in A categories are also eligible to receive an award based on the number of ranking points they earn. The top 3 ranked people in each A category receive gold awards. Those people who score at least 80% of the average of the top three scores receive silver awards. And those with between 70% and 80% of the average receive bronze awards.

Twenty-three people from Washington were ranked last year; 5 received gold awards, 4 silver, and 4 bronze.

F	RED	COU	RSE
			-

Rank Name	Club	Award
F21A		
7. Debbie Newell	COC	silver
M19-20A		
<ol> <li>Nathan Tharp</li> <li>Jeff Coker</li> </ol>	NISQ NISQ	gold gold
M35A		
Dave Enger     Dave Tallent     Mike Schuh	SAMM SAMM COC	
M40A 16. Mac MacDonald	NISQ	
M45A	2500	
<ol> <li>Fred Veler</li> <li>Mike Tharp</li> <li>Dan Waugh</li> </ol>	NISQ NISQ COC	bronze
M21B		
13. Rick Breseman	COC	
GREEN C	OURSE	
F35A 5. Ardis Dull 7. Sandy Kish Miller	COC	silver
F45A 5. Pat Albright	coc	
M55A 9. Bob Reddick 12. Carl Moore	NISQ NISQ	
M60A 1. Knut Olson 10. Ken Lew	COC	gold
F21B 4. Eileen Breseman 5. Katie Sprugel	COC	
M45B 8. Harvey Friedman	coc	
ORANGE O	COURSE	
F15-16A 2. Rachel Tharp	NISQ	gold
M15-16A 7. Bill MacDonald	SAMM	silver

Roger Stocker

97:09

	Sched	ule			
Date/Time	Location	Type	Club	Мар	Information
Sat, JAN 20	Seward Park, Seattle	W	COC	color	Mike Schuh
10 - noon				1:10,000	(206) 783-3960
Thu, JAN 25	General Club Meeting, University Branch Library		COC	2123/000	Mike Schuh
7:00 p.m.	50th & Roosevelt, Seattle				(206)783-3960
Sat, JAN 27	Spanaway Park, Tacoma	W	NISQ	color	Fred Veler
10 - noon	. 75 111				(206) 572-4498
Sun, FEB 4	+ Trollhaugen, Ski-O (call Hotline for meet status)	S	COC	color	Debbie Newell
11 - noon	I-90 exit 62, park in Sno-Park lot (parking fee: day use \$2,	season \$10)		1:15,000	(206) 488-7471
Sat, FEB 10	Lake Sammamish State Park, Issaquah	W	SAMM	color	Dave Tallent
10 - noon	South end of Lake Sammamish			1:10,000	(206) 392-3061
Thu-Sun	Tacoma Sport & Leisure Show			1110,000	Pat Albright
FEB 15-18	South Sound Center, Lacey				(206) 285-8674
Sat, FEB 17	Naval Ammunition Depot (NAD) Park, Bremerton	W			Sean Olmsted
10 - noon				1:5,000	(206) 697-4303
Sat, FEB 24	WIOL Championships, St. Edward State Park, Kirkland	W	COC	color	Mike Schuh
10 - noon	Juanita Drive at N.E. 145th St.			1:10,000	(206) 783-3960
Sat-Sun	« Thetis Lake Park, Victoria, B.C.	В	VO	color	Steve Chatwin
MAR 10-11	Meet 1 of the Island Series (4 meets total)			1:10,000	(604) 592-3559
Sun, MAR 11	Island Crest Park, Mercer Island	C	SAMM	color	Dave Tallent
0 - noon	avitation and the second			1:10,000	(206) 392-3061
Mon, MAR 12	Club Meeting, University Branch Library		COC		Mike Schuh
7:00 p.m.	50th & Roosevelt, Seattle				(206) 783-3960
Sat, MAR 17	Lake Tradition, Issaquah	C	COC	color	Mike Schuh
0 - noon		49 76 7		1:15,000	(206) 783-3960
5	APRIL IS ORIENTEER	RING MONT	H!		(200) 703-3700
Sun, APR 1	Marymoor Park, Redmond	C	SAMM	color	Dave Tallent
0 - noon	north end of Lake Sammamish			1:10,000	(206) 392-3061
APR 6,7,8	Thrill Search (sports show), Seattle Center	S			Pat Albright (285-867
Sat, APR 7	Lincoln Park, West Seattle	С	COC	color	Mike Schuh
0 - noon	Fauntleroy Way			1:5,000	(206) 783-3960
Sat. APR 7	Lincoln Park, Spokane	C	EWOC	b/w	John Beck
0 - noon				1:5,000	- Collin Dock
Sun, APR 8	Pt. Defiance Park, Tacoma	C	NISQ	color	Fred Veler
0 - noon				1:10,000	(206) 572-4498
at, APR 14	Lynndale Park, Lynnwood	C	COC	color	Mike Schuh
0 - noon				1:5,000	(206) 783-3960
at-Sun	« Maple Mountain, Duncan, B.C.	В	CVO	color	1000000
PR 21-22	Meet 2 of the Island Series (4 meets total)		25 Y 1	1:10,000	
un, APR 22	Ft. Steilacoom Park, Tacoma	С	NISQ	color	Fred Veler
0 - noon at-Sun	Pi		-075	1:10,000	(206) 572-4498
The state of the s	Riverside State Park, Spokane	В	WSOA	color	Debbie Newell
PR 28-29				1:15,000	(206) 488-7471
	NODER AMERICAN				
at-Sun	NORTH AMERICAN 7-DAY	COMPETI	TION		
	Canadian Orienteering Championships	A	SOCK	color	Charlie Fox
UG 4-5	Kamloops, B.C.	Days 1, 2		1:15,000	(604) 533-3352
Ion, AUG 6	APOC/Canadian Relay Championships	Α	SOCK	color	
ad ATICO	Kamloops, B.C.			1:15,000	
ed, AUG 8	Asia-Pacific Orienteering Championships	Α	SOCK	color	
4 ATIC 11	Kamloops, B.C.	Day 3		1:15,000	
it, AUG 11	North American Orienteering Championships &	A		color	Adrian Zissos
- ALIC 10	World Cup event, Innisfail, Alberta	Day 4		1:15,000	(403) 274-6259
in, AUG 12	North American Orienteering Championships	Α		color	
- W-4	Innisfail, Alberta	Day 5		1:15,000 .	
ie-Wed	ROGAINE, Innisfail, Alberta				Kitty Jones
UG 14-15					(403) 282-5235
t, AUG 18	Pacific Northwest O' Festival & World Cup event	A	WSOA	color	Harvey Friedman
- 110.10	Cle Elum, Washington	Day 6	1300	1:15,000	(206) 784-2774
ın, AUG 19	Pacific Northwest O' Festival Cle Elum, Washington	A	WSOA	color	Harvey Friedman

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

#### Event Key

A - major event on good quality color map, 5 courses minimum

3 - major local event, 3-4 courses minimum

C - local club event, 3 or 4 courses

- special event (bicycle, canoe, ski, night, etc.)

W - Washington Interscholastic O' League meet (everyone welcome)

#### Club Key

COC - Cascade O Club; EOC - Ellensburg O Club; EWOC Eastern Washington O Club; NISQ - Nisqually Orienteers;
SAMM - Sammamish O Club; WSOA - Washington State O Assoc.
CVO - Cowichan Valley Orienteers; SOCK - Sage Orienteering Club
of Kamloops; VO - VictOrienteers

#### Changes from last issue:

« Part of Vancouver Island series (see notice on page 5)

+ Meet added

#### Cascade Chatter

#### compiled by Harvey Friedman

As usual, we'll start with positive roster changes asof 20 December 1989. Words of both thanks and welcome go to the following new or renewing club members: Pat Albright, Liz Anderson, Steve Avolio, Dan Beach, Kurt Blakstad, Jo Brown family, Stanton Brown, Robert Carlson family, James Davis, Dick Diesner family, S. Donald, Rick Donaldson, Dick Eitel, Scott Elich, Enger family, Harvey Friedman & Anne York, Paul Gustie & Rebecca Blackwell, Haines family, Rick Hood, Horiuchi family, Earl Hunt, Peter Kehoe, Ken Knapp & Katherine Schubert-Knapp, Lauri Kohli, Michael Mahoney, Randy Mahr, Carl Mann & Cathy Jackson, Else Mans, Bruce McAlister, Martin Mellish, Robert Miller & Sandra Kish Miller, Knut Olson family, Brad Payne, Christine Pester, Walbridge Powell, Bob Reddick, Jim Siscel, Tom Slocum, Neil Smith, Einar Storakers, Dwight Thompson family, Marcia Walters, Doug Woods family.

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 meet, meeting, pot-O-luck, but not at any ski-O meets, nor night-O meets, nor canoe-O meets (unless you are lucky), nor training events, nor workshops. If you want to get your handsome membership card, contact the membership coordinator, me (Harvey), at a Cascade sponsored meet or at one of the above-mentioned happenings. I do not have blank membership cards with me when I attend other clubs' functions. If you move, don't forget to turn in a change of address card; you don't want your newsletter to be late.

Now on to the fun stuff. Scott Coble successfully defended his dissertation on 8 December; he should receive his Ph.D. in Mathematics in January 1990....Sandy Kish Miller's dad, Paul Kish, was married on 2 December 1989...J'o Brown and Al have tied the knot as well; they are spending lots of time redoing their 'new' house.... Mark Hartinger is doing his part to help the club grow. Allison was born on 16 October 1989....Continuing in the tradition, Dave and Valerie Enger are parents for the 3rd time; Molly was born on 15 December 1989....In addition to the usual Christmas greeting card that we get from Lennart Levin and the IOF Secretariat, this year we also received one from Heinz Tschudin of Switzerland; he is president of the International Orienteering Federation this year .... Pam & Sture Carlsson write that it is cold and snowy in Sweden this winter as they enjoy the seasonal smörgåsbord....Some of you might have met the Juntilla family at a few O' meets when they lived in Corvallis last year. They sent an insightful Christmas letter about there experiences living abroad and traveling home via the Orient Express right after the carnage in China. On a lighter note, we read about the minor difficulties that they had adjusting to life back in Trømso, Norway. Since Trømso is so far north, the sun last appeared on 20 November, not to be seen again until 21 January or the next clear day. See me if you want to read it....If you want more news about people in the club, you'll have to tell me something or preferably write or scribble me something that is for this column since I have such a bad memory.

#### COC OFFICERS AND COORDINATORS

President	Mike Schuh	(206) 783-3960
Vice President Secretary	Ardis Dull	(206) 364-4062
Treasurer	Katie Sprugel	(206) 365-8742
Mapping Coordinator Membership Coordinator	Bruce McAlister Harvey Friedman	(206) 821-6862 (206) 784-2774
Newsletter Editor	Debbie Newell	(206) 488-7471
Training Coordinator	Pat Albright	(206) 285-8674
Publicity Coordinator Equipment Coordinator	Don Atkinson	(200) 200-0014
Volunteer Coordinator		

#### COC MEMBERSHIP DUES

Single	\$10.00/year
Family	15.00/year
Associate (under 18)	5.00/year
Newsletter Only	6.00/year

#### COC "C" MEET FEES

	b/w map	color map
Orienteering club members	\$2.50	\$3.00
Non club members	3.50	4.00
Novice (first time orienteering)	1.00	1.00
Families (regular fee for first 2 fam	nily members, \$1.	00/person thereafte

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

#### "BEARING 315" PUBLICATION SCHEDULE

"Bearing 315" is a bi-monthly publication of the Cascade Orienteering Club. You are encouraged to submit orienteering-related material for publication. Send items for publication to the address below by the scheduled deadline. Material received after the deadline may not appear in the next newsletter issue.

Issue	Publication Date	Submittal Deadline
JAN-FEB	December 31	December 10
MAR-APR	February 28	February 10
MAY-JUN	April 30	April 10
JUL-AUG	June 30	June 10
SEP-OCT	August 31	August 10
NOV-DEC	October 31	October 10
Mail material to:	Debbie Newell	
	6216 N.E. 154th St.	

Bothell, WA 98011



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

ADDRESS CORRECTION REQUESTED