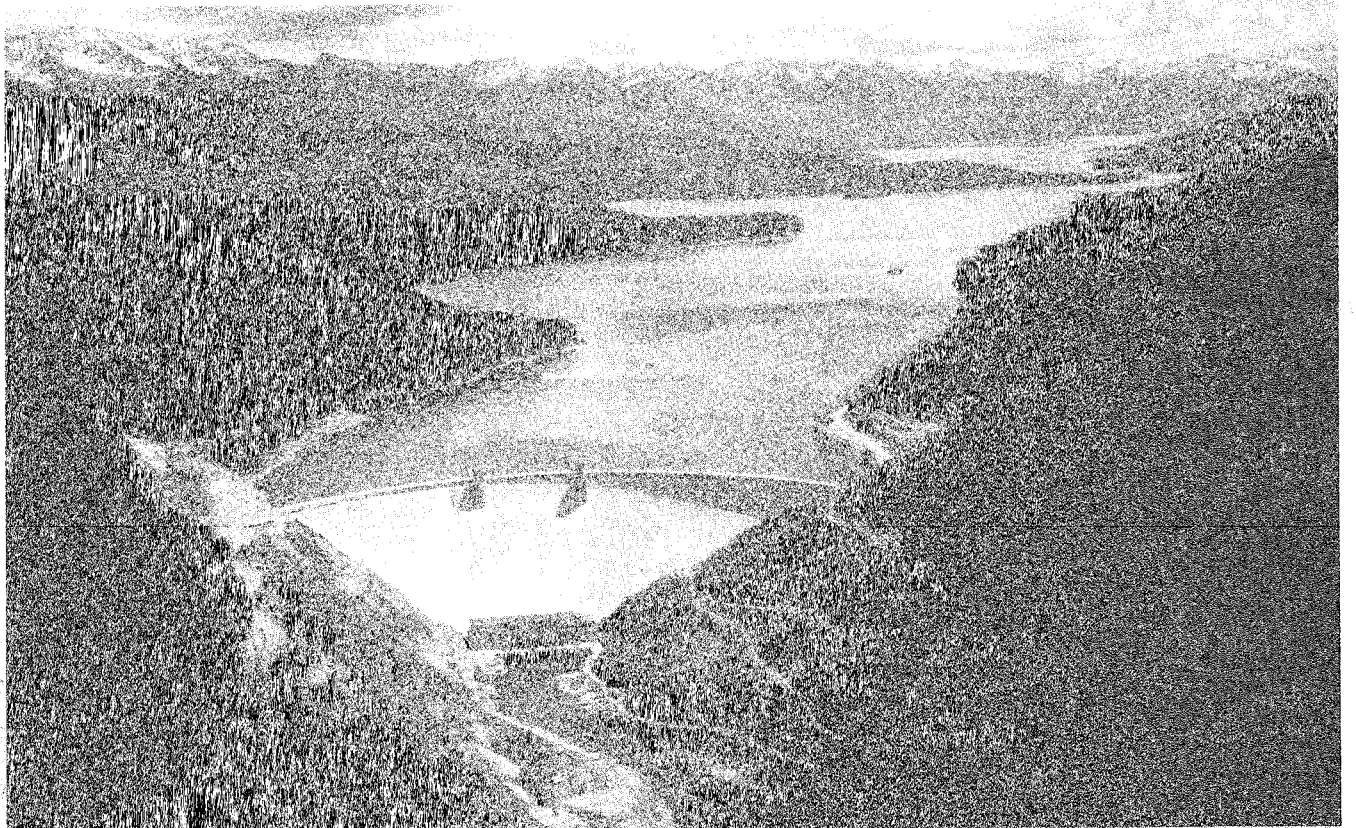


56th Annual Meeting

# Western Snow Conference

April 19-21, 1988  
Kalispell, Montana



PROCEEDINGS  
OF THE  
WESTERN SNOW CONFERENCE

Vancouver, British Columbia, Canada

April 14 - 16, 1987

FIFTY-FIFTH ANNUAL MEETING

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PROCEEDINGS OF THE WESTERN SNOW CONFERENCE

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MINUTES OF THE EXECUTIVE COMMITTEE  
WESTERN SNOW CONFERENCE  
VANCOUVER, BRITISH COLUMBIA

The Executive Committee meeting of the Western Snow Conference was called to order by General Chairman Arthur G. Crook at Noon April 14, 1987 in the Trafalger Room of Trader Vics at the Bayshore Westin in Vancouver, British Columbia Canada. The General Chairman expressed a hope that the meeting could be concluded in time for the members to return to the Technical Session.

The General Chairman announced that there were only two Executive Committee members not present, Bruce Van Haveren, who was represented by his proxy Dale Pfankuch and Harold Klieforth who was represented by Douglas Powell.

The General Chairman announced a couple of organizational changes since the last meeting, Don Huffman has moved from Bozeman Mt where he was Area Chairman to Portland and Robert Swanson has been named Chairman in his place and Bob Whaley from Boise has been appointed to the Executive Committee to replace Don.

The General Chairman welcomed the Past General Chairmen that were in attendance, Harry Hunter, Jack Hannaford and Phil Farnes and thanked them for their time.

The General Chairman then asked the Secretary for the reading of the minutes of the 1986 meeting of the Executive Committee, held in Phoenix AZ. R. Davis stated that the minutes of that meeting were published in the 54th Annual Proceedings and moved that they be accepted as published. The motion was seconded and passed.

The General Chairman asked for the presentation of the Financial Statement from the Secretary. R. Davis asked for a delay of the report of the Financial Statement until he could get the copies, for the members, from the Registration Desk.

The General Chairman then read the letter of resignation that the Secretary had sent to him and the Area Chairmen and asked the membership if they had any names to be put up as successor. B. Shafer suggested the name of Jim Marron from Portland as a candidate for the position of Secretary of the Western Snow Conference. He stated that he had the backing of his supervisor and that he had the necessary computer support to continue the job in fine style. C. Slaughter asked if that was the only name to be put forth, and B. Shafer stated that that was the only name that he could recommend. B. Shafer asked if R. Davis had any comment regarding J. Marron. R. Davis stated that in his estimation there was no candidate that was better qualified. R. Davis was asked if he had discussed in depth the duties of Secretary with J. Marron. Davis stated that he had not as it would have been inappropriate to do so before the Executive Committee had acted. A. Crook asked H. Hunter if he would consider accepting the position. H. Hunter stated that he was enjoying retirement too much to accept the responsibility. The General Chairman asked again if there were any other names that anybody wanted to bring forth. There being none, the General Chairman then appointed Jim Marron as Secretary of the Western Snow Conference, with the concurrence of the Executive Committee, for the next two years in accordance with the Constitution and By-Laws of the Western Snow Conference.

The General Chairman asked B. Shafer or C. Troendle for the report of the Publication Committee. C. Troendle stated that there was very little to report this year. He would like to get out the Conference Program a little earlier as it entailed an additional mailing to get the program in the hands of the members this year. He stated that the CSU presses have been reserved for the first of July again so that it is imperative that all authors get their papers in to the editors immediately. He stated that there would be a meeting of the Publication Committee this afternoon to go over the material that had all ready been submitted, i.e. Sno Notes, to determine what would be included in this years Proceedings. B. Schafer stated that as Editor, he was seeing a better quality of reproductions especially the illustrations. R Jones congratulated the Publications Committee for their fine work. He stated that he had received good comments from many sources about the Proceedings. B. Shafer stated that R. Richards had done an outstanding job in soliciting papers for the Sno Notes this year and that there should be a fine collection of papers.

B. Brown was asked to present the Awards Committee report. He stated that there were three names submitted to him for consideration as Life Members: Dale Pfankuch, Chauncey Beach, and Harry Brence and asked if there were any other names from the Committee. One other name was suggested but the person had not been a member long enough. There being no other names proposed, B. Brown moved that these three persons be awarded Life Membership. The motion was seconded and passed. B. Brown stated that he expected each of the Area Chairmen to have a candidate for El Farsante to be presented at the Awards Banquet on Wednesday night.

The General Chairman announced that the name of the recipient of the Dr. Church Award was in the hands of D. Johnson, who is not at the Executive Committee meeting, but that the name of the recipient will be given to B. Brown before the Banquet for announcement at that time.

The General Chairman asked R. Davis to present the financial statement of the Conference. R. Davis stated the the unaudited financial report of the conference has been prepared and is in front of the members for their consideration. He stated that the Phoenix meeting was an expensive one and that the Secretary did not set the Registration Fee high enough to cover all the cost of the meeting. There was even an additional cost that was covered under the previous years statement that would have made the cost even greater. A review of the itemized statement presented to the members in attendance, showing a annual loss of \$1123.43. He stated that the financial books were in his control and that any member that wished to review them or any specific item was welcome to do so. R. Davis then asked if there was any questions regarding the statement. R. Swanson asked about the "Canadian checks" item. It was explained that some of the members write checks in Canadian Funds and these checks have to be discounted when banked and the cost of this discounting has to be itemized. C. Troendle asked about the large difference between the cost of printing the Proceedings and the income from them. R Davis explained that the income opposite the expense for Proceedings was the sale of Proceedings. There was also income under Membership dues both Corporate and Individual. B. Shafer asked about the cost of this Conference and R. Richards stated that the initial breakdown was to make approximately \$1000.00 but that additional expenses were encountered so that it was hoped that there would be a surplus of about \$500.00. J. Beard asked about the use of bulk mailing to save money. The secretary stated that bulk mailing was used as much as possible and that third class mail was costing 12.5 cents per piece. C Slaughter suggested that the next years registration fee be increased by about \$5.00 to absorb some of this financial loss. R. Davis then made a motion to accept the Financial Statement as presented. The motion was seconded and passed.

The General Chairman asked G. Schaefer if there was any thing to report from the Committee on Instrumentation in the Wilderness Areas. G. Schaefer stated that all the requests had been submitted to the Forest Service and were supposed to have been back out for review but to date he has seen nothing. Essentially the recommendations were to look at a few areas, fewer than were originally proposed, and to analyze the data to see if it was doing the job necessary.

The General Chairman reported that last year there was some discussion regarding the AGU Front Range Chapter Hydrology Days at Ft. Collins Colorado and asked G. Leavesley for his report. G. Leavesley stated that last year there was some discussion as to how the Conference could become more visible to the scientific community. One way was to hold a joint meeting with the AGU Hydrology Days. One reason was that we were competing with each other for similar papers for a conference at the the same time. They did move to next week this year but are interested in holding a joint meeting in 1989 when the meeting moves to that area. The constitutional question arises due to the fact that we held the last South Continental meeting in Colorado and the normal rotation sequence would be for the 1989 meeting to be held in New Mexico. In discussion with Art, there has been precedence set in moving out of sequence such as happened for the 50th Conference held in Reno. The Chairman of the AGU Hydrology Days is very interested in a joint meeting. The format would not be different following the Tuesday-Wednesday papers but with one day devoted to the Snow Melt Processes and the second day to applications. We would then have our Field Trip on Thursday and they would continue with their sessions. This is the proposed format but of course the details would have to be worked out. The General Chairman asked that any comment be deferred until we come to that point where we discuss the 1989 meeting.

The General Chairman stated that under the heading of Membership these handy dandy folders the the members had in front of them were, in large measure, the responsibility of T. Carroll. He did the graphic and scouted out the source of supply etc. and with the concurrence of the Area Chairmen we decided to go ahead, they cost approximately \$3.50 each. He thanked T. Carroll for his endeavors on behalf of the Conference.

The General Chairman announced that the 1988 Meeting is the next order of business and asked D. Huffman for the report. D. Huffman reported that the 1988 Meeting of the Western Snow Conference will be held April 18, 19, & 20 at the Cavanaugh Center, Kalispell Montana. Cavanaugh's is a new Motel Complex that was built in 1986, complete with a convention center that was associated with a shopping center in the middle of downtown Kalispell. R. Huffman stated that the conference has tentatively booked 100 rooms which will give the conference the whole facility to them selves. There is approximately 10,000 sq. ft. of conference room that can be divided into different size rooms. The complex is completely enclosed with an atrium restaurant, a bar with live music and a casino, indoor pool and spa. Pamphlets are at the Registration desk for those that wish further information. Air access to Kalispell is currently by two commercial airlines, Horizon and Western, and we have been told that air access should be good next April. Kalispell is on the East-West Amtrak route, and is the junction of Highway 93, north-south and Highway 2, east-west. When asked how far it was from somewhere, Don stated that it was about 110 miles north of Missoula. When asked if there was something bigger Don said that they had nothing bigger but it was about 250 miles east of Spokane and 60 miles south of the border. It is right on the border of Glacier Park in a beautiful setting at the head of the Flathead Valley. There is an option of getting into the Park for our tour but the Going To The Sun highway will not be open. There is also the option of getting right down into he guts of Hungry Horse Dam, down where the water drips. With the block of rooms, the rates have also been set at \$24.00 single and \$36.00 double. This based on Federal per diem. And for those

prices it is a very excellent facility. The Local Arrangement Chairperson has been selected and that is Phylis Snow, Hydrologist for the Flathead National Forest. The General Chairman then asked if there was a motion to accept Kalispell as the location for the 1988 Meeting of the Western Snow Conference. It was moved, seconded and passed.

The General Chairman then asked G. Leavesley for his report on the 1989 meeting. G. Leavesley asked the committee what they thought of the concept of a joint meeting. C. Slaughter stated that it was a good idea to get the student turnout, because these will be the members of tomorrow. G. Leavesley went on to say that if we met with the Front Range group we would get additional publicity that would help the conference. Asked if there would be any cost savings, he said that he did not see any because we would be using the facilities during our regular meeting days. There would not be any facilities used at the same time but one would follow the other. If the meeting were held on campus at Ft. Collins, the Holiday Inn has facilities within walking distance of the campus. B. Shafer stated that it would be a good idea to have a "co" meeting and the selection of Colorado over New Mexico would in his opinion cause no problems since the preponderance of the membership is in Colorado and it would be easier to administer. The General Chairman asked for a motion supporting the concept of a joint meeting with the AGU to be held at Ft. Collins in 1989. It was moved by C. Slaughter, seconded by R. Swanson and passed.

The General Chairman asked if there was any item to be brought up under old business. R. Jones stated that there had been some discussion last year about increasing membership. He had talked with professors at Arizona State and at the University and they suggested that a student paper contest be considered. One where the Student Paper would be judged by the conference and the winner be awarded an all expense trip to the conference. Not necessarily to give his paper but it would be published in the Proceedings. The General Chairman stated that T. Carroll solicited information from the Eastern Snow Conference on this same subject and it turns out that the ESC sends out about 200 letters to different Universities and they get four to six paper entries each year on their program. They have established an award for the best student paper. T. Carroll's observation is that there does not seem to be any increase of membership as a result of this activity. B. Brown suggested that the cost of this activity would probably be far in excess of its merits. B. Shafer stated that by quick calculation it could cost \$400.00 to \$500.00 a year which the Conference could not afford. He stated that he thought it would be better to work with the Engineering Depts. and Natural Resources Depts. of the different Universities to develop some involvement instead of a single shot paper. He further stated that having the conference at a University such as CSU the number of registrants is usually increased. There was further discussion by G. Leavsley, D. Powell and C. Slaughter.

The General Chairman stated that according to his notes G. Leavsley and R. Davis were to develop some guidelines for Area Chairmen to use in preparing for the Conference. G. Leavsley stated that as yet there had been nothing accomplished.

The General Chairman asked C. Slaughter about the table display that was to be at the AWRA meeting in Fairbanks to promote memberships out of that organization. C. Slaughter stated that the cost of a table display was \$75.00 so the Proceedings and Bibliography were placed on the end of the SNOTEL exhibit table. B. Shafer stated that there were a number of persons that did flip through the Bibliographys but that there were no buyers of either publication.

The General Chairman asked if there was anything further under old business. R. Swanson asked if there was any persons going to attend a couple of workshops that were being held in Canada later on in the year



(the name location and time were given but the recorder did not pick up this information). The General Chairman stated that he would be attending and would bring up some brochures.

The General Chairman then stated that under new business it was time to acknowledge the gentlemen waiting in the wings. First of all Al Isaacson from the Community College in Spokane has requested to have a few moments to discuss his concern with respect to student involvement. A. Isaacson thanked the group for the opportunity to speak and stated that he had brought about twelve students from the Spokane Community College where there is a two year Watershed Tech Program that is about 15 years old. We place a lot of our students with the GS, SCS, and Irrigation Districts. A lot of the same people that are involved with the Western Snow Conference. I have talked to Bob about starting a Student Chapter, affiliated with this group with our Program. The benefits of that to our students is that there is money available through the Associated Student fund that would help pay some of the expenses. At this time we don't have student organization in Water Resources so any funds that are there are not available to the students. I think that the people that the students meet here, and prospective employers, is well worth their time to take part in this. I talked to some of them today and they are really enjoying it. The proposal I have is that we would affiliate a student Chapter with our Spokane Community College in the Water Resources Program. The General Chairman stated that there had been some discussion as to how this could be done in the structure of the Western Snow Conference and asked the Secretary for his comments. R. Davis stated the an organization such as was being proposed was foreign to our Constitution and By-Laws but that that would be no problem if it was the wishes of this group. He said that he had not talked to A. Isaacson enough to get the nuts and bolts of what the Conference would be expected to do and what they could expect to receive in return. C. Slaughter asked A. Isaacson just what the advantage of forming a student Chapter were, since the Western Snow Conference met only once a year and the Chapter activities were ongoing. Since the two serve different functions he could not see an advantage other than the opportunity of taking his group to the meeting at Kalispel in 1988. A Isaacson stated that the advantage to the group would be the use of the name and affiliating with an organization that has a place in the Professional community. By being affiliated with an organization the Chapter would have monies made available to them from the college that would allow students to travel to meetings such as this. Monthly meetings would be held on campus but these would in no way impact the Conference. A Crook thanked A. Isaacson for his interest and said that he appreciated the fact that he had brought 12 students here. A. Crook asked if there were any further thoughts from the group. There being none he stated that it was his inclination to constitute a Committee of Student Activities to look into the Constitutional questions as well as procedural matters. There was a general consensus that the formation of a Student Group would not be detrimental to the Conference but would be good for the students. A committee chaired by G. Leavesley and composed of A. Isaacson, D. Felgenhauer and R. Davis. The General Chairman asked that this committee be ready to report by mail by the first of the 1987-88 academic year.

The General Chairman stated that T. Carroll had asked for some time to address the Committee re the recent events under the NWS Satellite Snow Cover Mapping Program. The Office of Hydrology evaluated the Program and decided that there were only two ways to go: 1) operate the Program with proper funding or 2) drop it entirely. In December there was held a users group meeting in Denver that discussed the current status and the potential use of the Snow Cover Mapping Program and also the Airborn Snow Survey Program. The NWS proposed combining the two Programs and generate Aerial Snow Cover Maps using all available information. Three things came out of the December Meeting: 1) A technical working group was established, 2) A policy committee at the Washington level was identified and met March

5 to discuss funding for both current and future years. Future funding is not the problem but current funding is short. It was suggested that the agencies involved canvass outside entities that have an interest in real time snow cover information and would be in position to supply some of the shortfall funding. Most of the targeted entities have been contacted by the Policy Committee as well as by T. Carroll. It is proposed that the General Chairman of the Western Snow Conference send a letter to these targeted entities requesting their support for this worthwhile program. After much discussion as to the time frame of this request, and the availability of the written proposal for study, the General Chairman asked if it was the will of this Committee to support the Proposal along the lines T. Carroll requested. B. Shafer moved that T. Carroll be requested to prepare a draft of a proposed letter for the Area Chairmen to see and that if the Draft was acceptable that the final letter be sent by the General Chairman. This was seconded by C. Slaughter. Further discussion by the General Chairman, G. Leavlesley, T. Carroll and others of the Executive Committee were put forth regarding the contents of this letter and it was finally settled that T. Carroll would write the general letter in draft form and that it would be passed by the General Chairman and the Area Chairmen and sent out in final form. The motion passed.

It was suggested by H. Steppuhn that the name of the Western Snow Conference could be considered for change as the name "Conference" has a connotation that some bosses don't understand. As an example, he said that he was allowed to attend only one conference a year but there were no restrictions on meetings. In addition, H. Steppuhn asked if the Conference had ever considered going into the video business. Such as a clearing house for video tapes that had been shot at one location for use at many other locations. For example taping the WSC presentations for use at times and locations other than now. The General Chairman stated that the concept is good but that to produce a quality product is very costly. The simple method of taping a presentation does not result in a product that you would want your name attached to. R. Brown stated that he had been involved in producing some quality work and agreed that it was expensive. The consensus was that it would cost in the neighbourhood of \$25,000 to produce an hour of good presentation. After some additional discussion the concept was dropped.

J. Hannaford stated in the light of the financial statement, as presented, it would be in the best interest of the conference to vote an increase of the annual dues to an amount of \$15.00. It was moved and seconded that a Constitutional/By Law amendment be presented at the General Business Meeting authorizing a dues increase from \$10.00 to \$15.00. The Secretary stated that he was in error and that it was not necessary for the Constitution to be amended just to set the amount of the dues. According to the current Constitution, as amended last year, the responsibility for setting the annual dues rest with the Executive Committee. The General Chairman then asked for an amendment to the above motion setting the dues at \$15.00 per year. N. Berg moved the amendment which was seconded by G. Leavlesley. The amendment was passed as was the amended motion. The General Chairman then announced that the dues beginning with 56th Conference will be \$15.00. There was some discussion as to the cost of the Proceedings to the Corporate members as well as to the cost to the Purchasers. The General Chairman asked J. Hannaford to make this announcement at the General Business Meeting.

There being no further business the General Chairman adjourned the meeting.

MINUTES OF THE BUSINESS MEETING  
WESTERN SNOW CONFERENCE  
VANCOUVER, BRITISH COLUMBIA

The meeting was called to order at 8:17 A.M. April 15, 1987 by the General Chairman Arthur G. Crook who thanked everybody for coming.

The first order of business was the reading of the minutes of the 1986 meeting and the General Chairman asked the Secretary to comply. The Secretary stated that the minutes of the 1986 meeting were published in the Proceedings of that year and moved that they be accepted as published. A. Rango seconded the motion which passed.

The General Chairman then asked the Secretary to present the Financial Statement for the 1986-87 Fiscal Year. The secretary gave a brief resume of the finances of the conference and stated that the unaudited financial statement had been accepted by the Executive Committee (see minutes of Executive Committee) and moved that the Financial Report be accepted. R. Swanson seconded the motion which passed.

The General Chairman asked for the reports of Standing Committees. The Publication Committee report was given by C. Troendle (see minutes of Executive Committee). The Awards Committee report was given by B. Brown (see minutes of the Executive Committee) in addition it was announced that the recipient of the Dr. Church Award was Eric A Sohns. R. Brown also stated that it was appropriate at this time to announce the passing of former members of the Conference. They are Chat Cleary, Jess Honold, Saul Rantz, and Jess Ellis.

The General Chairman announced the formation of a Committee called "Student Activities Committee" chaired by G. Leavesley. He then asked if there was anything to report. G. Leavesley then reviewed the discussion held by the Executive Committee (see minutes of Executive Committee).

The Chairman then thanked the Standing Committees as well of the Annual Committees for their continuing hard work for the good of the conference.

The General Chairman announced the resignation of the Secretary of the Western Snow Conference and announced the appointment of James K. Marron to be Secretary of the Conference.

There being no Old Business the General Chairman called J. Hannaford to report on the action taken by the Executive Committee regarding the Annual Dues of the Western Snow Conference. The Annual Dues have been raised to \$15.00 per annum starting April 1, 1988. (See minutes of Executive Committee)

A. Rango reported on the request that T. Carroll had put before the Executive Committee (see minutes of Executive Committee).

The General Chairman asked G. Leavesley to report on the plans for the 1989 Western Snow Conference (see Minutes of Executive Committee meeting).

The General Chairman asked D. Huffman to report on the plans for the 1988 meeting of the Western Snow Conference (see Minutes of Executive Committee meeting).

The General Chairman then thanked the members and committees for

their untiring work in making this one of the memorable Conferences: R. Richards, Local arrangements aided by D. Golding, J. Matthews and D. Thompson, H. Coulson and the Ministry of Environment and Parks for their support, D. Golding and his Technical Committee composed of B. Shafer, C. Slaughter and J. Stanley, and Bev Wallace for her help directing the ladies bus tour and Jackie Davis for her help with the Spouses Brunch.

There being no further business the General Chairman adjourned the meeting.

ATTENDANCE ROSTER  
WESTERN SNOW CONFERENCE  
Vancouver, B.C.

Adams, Bob	Salt Lake City, UT
Albrecht, Robert & Margi	Seattle, WA
Anderson, Robin	Phoenix, AZ
Baird, G.H. (Pete)	Roseville, CA
Baker, Dennis	Loveland, CO
Baker, Randal	Moscow, ID
Bates, William & Susan	Denver, CO
Beach, Chauncey & Joyce	Seattle, WA
Beard, Jerry	Boise, ID
Beaudry, Pierre	Smithers, B. C.
Berg, Neil	Berkeley, CA
Bergman, James	Soda Springs, CA
Bluhm, George	Ridgefield, WA
Brandow, Clay & Brooke	Davis, Ca
Brown, Bob	Rosemead, CA
Buer, Stein	Sacramento, CA
Campbell, E.	Hope, B. C.
Campbell, Peter & Edith	Prince George, B. C.
Carroll, Tom	Minneapolis, MN
Cheng, Jack	Kamloops, B. C.
Clagett, George & Sharon	Anchorage, AK
Claus, Berni	West Vancouver, B. C.
Cooley, Keith	Boise, ID
Coulson, Hal & Carol	Victoria, B. C.
Crook, Art & Gwen	Beaverton, OR
Dahl, Robert & Media	Oakdale, CA
Davis, Bob & Jackie	Spokane, WA
Dreher, Wilfred	Smithers, B. C.
Ester, Charles	Phoenix, AZ
Farnes, Phillip	Bozeman, MT
Fike, Richard	Portland, OR
Fong, William & Marie	Sacramento, CA
Fox, Stanley	Beaverton, OR
Freeman, Gary	San Francisco, CA
Gabel, Gail	Victoria, B. C.
George, Tom	Centreville, VA
Giever, Paul	Moscow, ID
Gillespie, Mike	Wheat Ridge, CO
Gluns, David	Nelson, B. C.
Golding, Douglas & Jennie	Vancouver, B. C.
Goodwin, Greg	Spokane, WA
Gordon, Bill	Vancouver, WA
Gordon, John	Vancouver, WA
Grimstead, Laurel & Rick	Portland, OR
Hannaford, Jack & Maureen	Placerville, CA
Hannaford, Margaret	Sacramento, CA
Haunschild, Karen	Spokane, WA
Hess, Dan	Spokane, WA
Hester, Gary	Sacramento, CA
Horton, Carrol	Fresno, CA
Howlett, George, Jr.	Spokane, WA
Huffman, Don	Portland, OR
Huffman, Mike	Spokane, WA
Hundal, Liv	Kamloops, B. C.
Hunter, Harry & Wilma	Victoria, B. C.
Isaacson, J. Allen	Spokane, WA

Jairell, Robert  
Jensen, Donald  
Johnson, David  
Johnson, Janice  
Johnstone, Kirk  
Jolly, Peter  
Jones, Clifford  
Jones, Ron  
Kilgore, Craig  
Kohler, Wm.  
Kreiter, Mark  
Kuehl, Donald & Gertrude  
Ladine, D. A.  
Lawford, Richard  
Leavesley, George  
Lemay, J. L.  
Letvak, Bruce  
Leupold, Norbert & Chris  
Lieshman, Doug  
MacKay, Don  
Madelung, L. Martin  
Marsh, Phil  
McGurk, Bruce  
Metcalf, John  
Molnau, Myron  
Moore, David  
O'Leary, Scott  
Palmer, Peter & Amy  
Panas, I. J. & Helen  
Petersen, Eric  
Pfankuch, Dale & Thelma  
Potter, Val  
Powell, Douglas  
Rango, Al  
Richards, R. P. & Mary Bell  
Reilly, Bernard  
Rehman, Ibadur  
Roberts, Ralph  
Rockwood, David & Marge  
Sack, Ronald & Peg  
Salway, Anthony  
Schaefer, Garry  
Schaefer, Peter & Jean  
Schermerhorn, Vail & Trula  
Schmidt, R. A.  
Shafer, Bernie  
Shillinglaw, Robert & Peggy  
Skinner, John  
Slaughter, Charles & Mary  
Steppuhn, Harold, Suher & Bruno  
Stevens, Charles  
Swanson, Angela  
Swanson, Robert  
Sytsma, Don  
Tabler, Ronald & Alicia  
Taylor, Don  
Tremblay, Troy  
Troendle, Charles  
Ulness, Denise  
Wahl, Kenneth & Marcelyn  
Wallace, Jack & Bev

Laramie, WY  
Clackamas, OR  
Portland, OR  
Victoria, B. C.  
Vancouver, B. C.  
Kanata, Ont.  
Spokane, WA  
Mesa, AZ  
Spokane, WA  
Seattle, WA  
Spokane, WA  
Portland, OR  
Glendale, CA  
Saskatoon, Sask.  
Denver, CO  
Kitimat, B. C.  
Victoria, B. C.  
Beaverton, OR  
Logan, UT  
Saskatoon, Sask.  
Victoria, B. C.  
Saskatoon, Sask.  
Berkeley, CA  
Downsview, Ont.  
Moscow, ID  
Nanaimo, B. C.  
Spokane, WA  
Boise, ID  
Edmonton, Alberta  
Whitehorse, Y. T.  
Lakewood, CO  
Logan, UT  
Berkeley, CA  
Beltsville, MD  
Victoria, B. C.  
Spokane, WA  
Lahore, Punjab  
Beltsville, MD  
Vancouver, WA  
Moscow, ID  
Winlaw, B. C.  
Thornton, CO  
Vancouver, B. C.  
Portland, OR  
Ft. Collins, CO  
Beaverton, OR  
Seattle, WA  
Oakland, CA  
Fairbanks, AK  
Swift Current, Sask.  
Toronto, Ont.  
Kent, WA  
Edmonton, Alberta  
Kent, WA  
Laramie, WY  
Ottawa, Ont.  
Spokane, WA  
Ft. Collins, CO  
Kent, WA  
Lakewood, CO  
Victoria, B. C.

Washichek, Jack & Ena  
Weiss, Eric  
Weller, William  
Werner, Jon  
Whaley, Bob & Virginia  
Whaley, Jay  
Wheeler, Kend  
Wilson, Wally  
Whitaker, Robb

Ft. Collins, CO  
Victoria, B. C.  
Spokane, WA  
Salt Lake City, UT  
Boise, ID  
Seattle, WA  
Ft. Collins, CO  
Glendale, CA  
Los Angeles, CA

SNOW NOTES

This section of the Western Snow Conference proceedings is supplemental to the purely technical reports published each year. The material ranges from instructive to entertaining to humorous, and while none of it may be suitable in our regular technical proceedings, there is usually a message of some sort.

In the murky past, the Western Snow Conference published questionable stories, anecdotes, quotes and cartoons in a separate "Snow Surveyor's Forum," which was put out of business, I believe, by the Temperance League. It is now time for you story tellers, cartoonists and other assorted fabricators to get unfrozen and flood the editor with your hidden talents.

Toward that end, we offer the following, with many thanks to those who have contributed. By way of suggestion, record your experiences without delay and send them to the Secretary anytime, or to the Organizing Committee at the time of the "Call for Papers." We will make every effort to include them in future editions of Snow Notes.

For 1987, we have specified a particular theme as a means of focussing our thought processes. It seems to have worked. The theme:

"BEAR ENCOUNTERS OF THE FURRY KIND"

While entertainment plays a major part in this offering, it should be said that real encounters with bears can never be taken lightly. Bears are one of nature's most interesting, and unpredictable creatures, and we suggest that you fully enjoy them, but at the same time giving them all the respect they deserve.

The Editor  
April 1987

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We would like to introduce SNOW JOE, a character from the Newcastle Ridge snow course on northern Vancouver Island, contributed by observer Paul Horvath.

Please complete in field or as soon  
after snow sampling as possible

Time sampling began 2 p.m. ended 5 p.m.

Weather Conditions at Snow Course  
Thawing  Temp +3 °C  
"Describe"  Cloudy  Overcast \_\_\_\_\_  
E. Remarks: \_\_\_\_\_  
 Snowing \_\_\_\_\_

THIS IS A SNOW JOB



Please complete in field or as soon  
after snow sampling as possible

Time sampling began 1 p.m. ended 3 p.m.

Weather Conditions at Snow Course  
Thawing  Temp +5 °C  
"Describe"  Cloudy  Overcast \_\_\_\_\_  
E. Remarks: \_\_\_\_\_  
 Snowing \_\_\_\_\_



SNOW JOE



## A GRIZZLY TALE\*

Tim Cushman, former observer for the Bowron Lake snow course, has a trapline cabin on Kruger Lake, 10 km northeast of this snow course. In 1975, his father Frank, had an encounter with a large grizzly near the cabin. The complete story was published in the July, 1986 edition of the "B.C. Outdoors" magazine, but the photographs that Frank sent us are noteworthy and herewith supplemented with a brief explanation.

On the 29th of October of that year, at 3:05 p.m., Frank was confronted by an angry grizzly known as "Old Ephriam." Although the bear charged immediately, Frank was able to fire two shots before he lost his balance and fell backwards into Kruger Lake. Instead of being mauled as expected he was relieved to see the bear collapse dead beside him on the beach. The interesting thing was that he had loaded the wrong ammunition into his rifle and while the first shot hit the bear and the second missed completely, a third shell misfired. In later reflection, it was unnerving to realize that if the first shell had misfired, the outcome would have been entirely different.

The bear was skinned (Photo 1) and the incident reported to the local wildlife authorities, who promptly confiscated the hide as Frank had no permit. After protesting that the killing was the result of self-defence, the hide was sold back to him for \$300. The bear was mounted (Photo 2), and the fatal bullet attached to his belt buckle as a constant reminder to check the load in his rifle.



PHOTO 1



PHOTO 2

For the hunters among you, the bear's skull measured just under the 61 cm (24 inches) needed for the Boone and Crockett record book, and its claws were 11 cm (4.5 inches). Examination of the animal's teeth, of which several were broken, indicated his age was about 25 years. It is likely that "Old Ephriam" was suffering with a toothache from the exposed nerves. Many thanks to Frank for sharing these photographs and story.

\*Snow Survey Office, Ministry of Environment and Parks, Victoria, British Columbia

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