

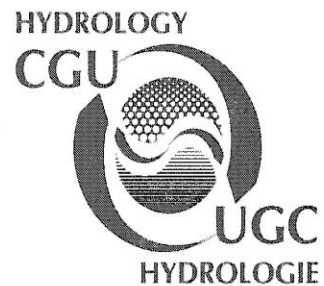
65th Annual Meeting

Western Snow Conference

May 4-8, 1997

Banff, Alberta Canada

**Joint Meeting
with the 54th
Annual Eastern
Snow Conference**



65th Annual Meeting
Western Snow Conference
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PREFACE

The 1997 Snow Conference Proceedings represent a combined effort between the Eastern and Western Conferences held in conjunction with the 23rd Annual Meeting of the Canadian Geophysical Union. The papers published in this Proceedings represent contributions from the special sessions on hydrology and snow, organized by the CGU-Hydrology Section and the Eastern and Western Snow Conferences.

WESTERN SNOW CONFERENCE

The origin of the WSC stems from the pioneering work in snow hydrology and runoff forecasting of Dr. James E. Church and has developed into a joint U.S./Canadian organization. Over the last 65 years, the WSC has provided an international forum "for individuals and organizations to share scientific, management, and socio-political information on snow and runoff from any viewpoint and to advance the Snow and Hydrologic Sciences."

Annual Meetings

Are normally held in the third week of April, with the meeting site rotating among states and provinces within an Area and through the four Areas of the Western Snow Conference. The four areas include: North Continental, North Pacific, South Continental, and South Pacific. They extend from Alaska to California and from the Pacific Islands eastward to the plains states and the Prairie Provinces. The annual meeting consists of two days of technical sessions with oral and poster paper presentations and a one-day field trip. An executive meeting is held before the technical sessions begin and a general business meeting during the meeting. An awards banquet and one or two social evenings are included. A spouse-program is held for part of the time during the technical sessions. Spouses are welcome to attend the field trip and social activities.

Awards

Best Papers: awarded annually to the best oral and the best poster papers presented at the Conference. These will be selected by the WSC Awards Committee and presented at the annual meeting.

Dr. J. E. Church Award: presented to an outstanding high school science student within the WSC North Continental area.

WESTERN SNOW CONFERENCE EXECUTIVES

Phyllis Snow, General Chair
Don Snow, Secretary
Jack Pardee, Treasurer
Gerrald Beard, Area Chair, North Continental Region
Charles Troendle, Area Chair, South Continental Region
Lisa von der Heydt, Area Chair, North Pacific Region
Frank Gehrke, Area Chair, South Pacific Region

Web Page:

<http://snobear.colorado.edu/WSC/WSC.html>

THE EASTERN SNOW CONFERENCE

The Eastern Snow Conference (ESC) is a joint Canadian/U.S. organization founded in the 1940s, originally with members primarily from eastern North America. Our current members are scientists, snow surveyors, engineers, technicians, professors, students, and operational and maintenance professionals from North America, as well as the United Kingdom, Japan, and Germany. There is a western counterpart to the ESC, the Western Snow Conference (WSC), also a joint Canadian/U.S. organization. Every fifth year the ESC and the WSC hold joint meetings.

The Eastern Snow Conference is a forum that brings the research and operations communities together to discuss recent work on scientific, applied, and operational issues related to snow and ice. The location of the conference alternates yearly between the United States and Canada, and attendees present their work by either giving a talk or presenting a poster. All resulting papers are reviewed, edited and published in our yearly *Proceedings of the Eastern Snow Conference*. In recent years, the ESC Meetings have included sessions on snow physics, winter survival of animals, snow and ice loads on structures, river ice, remote sensing of snow and ice, and glacier processes. Volumes of the *Proceedings* can be found in libraries throughout North America and Europe, and the papers are also available through the National Technical Information Service (NTIS) in the United States and CISTI in Canada.

*** **

Le Colloque sur la neige-région est (ESC) est une organisation américano-canadienne fondée dans les années '40 et dont les membres provenaient à l'origine surtout de l'est de l'Amérique-du-Nord. Actuellement, les membres, qu'ils soient chercheurs, techniciens en enneigement, ingénieurs, techniciens, professeurs, étudiants, ou spécialistes des services d'exploitation et d'entretien, viennent non seulement d'Amérique du nord, mais aussi du Royaume Uni, du Japon, et d'Allemagne. Le Colloque sur la neige-région ouest (WSC), aussi une organisation américano-canadienne, est l'homologue de l'ESC pour l'ouest nord-américain. Tous les cinq ans, l'ESC et la WSC organisent des réunions en commun.

Le Colloque sur la neige-région est un forum qui rassemble chercheurs et responsables des services d'exploitation pour discuter des travaux récents sur les problèmes scientifiques, opérationnels ou autres dus à la neige et à la glace. Le site de cette réunion annuelle alterne entre les Etats Unis et le Canada. Les participants y présentent les résultats de leurs travaux par des communications orales ou au moyen d'affiches. Ces communications, une fois revues et éditées, sont publiées dans les Annales de l'ESC. Dans les années récentes, les réunions de l'ESC ont inclus des sessions sur la physique de la neige, la survie hivernale de la faune, les forces exercées par la neige et la glace sur les structures et les bâtiments, la glace de riviPre, la télédétection de la neige et de la glace, et les processus glaciaires. Les annales de l'ESC sont accessibles dans la plupart des bibliothèques scientifiques d'Amérique-du-Nord et d'Europe. Des copies d'articles peuvent être obtenues du National Technical Information Service (NTIS) aux Etats Unis et son équivalent au Canada, le CISTI.

54TH EASTERN SNOW CONFERENCE EXECUTIVE OFFICERS

Past President	Michael Ferrick	CRREL
President	Michael Demuth	NHRI
Vice-President	Robert Davis	CRREL
Secretariat, USA	Austin Hogan	Retired
Secretariat, Canada	Miles Ecclestone	Trent University
Editors	Mary Albert	CRREL
	Susan Taylor	CRREL
Chair, Steering Committee	Jim Buttle	Trent U.
Chair, Research Committee	Jean Stein	INRS-Eau (U de Quebec)
Chair, Technical Committee	Max Perchanok	Ontario MOT
Chair, Local Arrangements	Michael Demuth	NHRI

54TH EASTERN SNOW CONFERENCE

Business Meeting

97.05.06 1700H @Max Bell Auditorium, Banff Centre

Welcome

1. Reports from Officers:

Programme Chair (R. Davis)

Chair, Steering Committee (C. Taylor for J. Buttle)

Chair, Research Committee (J. Stein)

Chair, Technical Committee (M. Ecclestone for M. Perchanok)

Secretariat (M. Ecclestone)

Editors (M. Albert)

2. Nomination Committee/membership voting

3. 55th Eastern Snow Conference, Mount Washington, U.S.A. (R. Chisholm)

4. Post-conference Executive Meeting "Round-table on the Future of the ESC"

5. Snow BBQ Activities

6. Other Business

Adjourn

PRESIDENT'S PAGE - 54TH EASTERN SNOW CONFERENCE, BANFF, CANADA

The 54th Eastern Snow Conference in Banff, Alberta was held jointly with the Western Snow Conference and the Hydrology Section of the Canadian Geophysical Union. The success of this joint meeting was not only guaranteed by the spectacular Rocky Mountain venue, but also by the enthusiasm and spirit of the three participating snow and ice societies. This meeting had the great privilege of hosting snow and ice workers from all across North America, including several participants from overseas. Exposure to scientific and operational topics occurred at varied scales- from the imaging of snow structure at the grain scale (or is it crystal!?) to the computer-aided visualization of the influence of planetary orbital parameters on the earth's climate. Such varied exposure assures the consideration of regular joint meetings in the future. As we return to our individual society meetings next year, I hope we all take the opportunity to reflect on the immense scale of geophysical and environmental study and affirm our own individual roles as scientists, technicians, engineers, snow surveyors, and educators.

The role and importance of student participation was again evident at this year's meeting with outstanding presentations and written contributions to the annual ESC Student Paper Competition. On behalf of the ESC, I congratulate Newell Hedstrom, University of Saskatchewan, on winning the ESC Student Award with his paper entitled "Measurements of Intercepted Snow in the Boreal Forest: Measurements and Modelling." The Research Committee did another fine job of managing the competition process and constructively reviewing the submissions, and they are thanked. My only regret is that Don Weisnet could not attend to formally present the Weisnet Medal. It is with hope and gratitude that we look forward to Don's presence next year.

Organizing any conference is a challenging and requires the dedication of numerous individuals. A joint meeting requires particular care and attention to detail; all ably provided by the Joint Local Organizing Committee, including Philip Marsh, (CGU-HS), Gerrald Beard and Peter Palmer (WSC). Phyllis Snow (WSC General Chair), Terry Prowse (CGU-HS President) and myself assisted where we were able. Brenda Doell (CGU-HS) and Heather Popov (NHRI) ensured a smooth running conference foyer, site logistics and author and local arrangement correspondence with CGU and The Banff Centre. The support of Environment Canada-National Hydrology Research Institute and the U.S. Army Cold Regions Research and Engineering Laboratory is also gratefully acknowledged.

The collective efforts of Bert Davis (ESC), Geoff Kite (WSC) and Scott Munro (CGU-HS) produced a varied and highly stimulating technical program, while the smooth progression of the poster and oral sessions was enabled by the courteous and professional manners of the session convenors. As you delve into the 1997 Proceeding contents that follow, I would like to express my gratitude to Chuck Troendle (WSC) and Mary Albert and Susan Taylor (ESC) and for putting together another fine Proceedings volume. The printing of the Proceedings was, in-part, enabled by the financial support of the Canadian Geophysical Union, and they are thanked.

The Banff rendezvous was round out with a festive Snow Barbecue in the company of vibrant Scottish Gaelic melodies by Seanachie and the black peaks and clear night ski of the Rocky Mountains. By all accounts, almost enjoyable field excursion to the Columbia Icefields, was ably guided by Mindy Brugman (Columbia Mountain Institute for Applied Ecology). I also understand that numerous individuals took advantage of excellent late season snow conditions- both on and off-piste (although I cannot speak from my own personal experience, of course!!)

The most distant Eastern Snow Conference allowed some earnest reflection and discussion on the future of the ESC during a Round Table Discussion hosted by the President. A number of issues related to attendance, community structure and ensuring relevance into the next millennium were discussed by members, new and old alike. Born out of these discussions was a reaffirmation of the need for strong

science-operational ties and the informal and friendly traditions of the Eastern Snow Conference. Several initiatives were proposed and we can all look forward to seeing and participating in their evolution in the coming years.

I would like to personally thank Past-presidents, Mike Ferrick, Colan Taylor, Derrill Cowing, Terry Prowse, and Gerry Jones and the entire 1997 ESC Executive for their support, hard work, and dedication to the conference and its future. I welcome the 1998 ESC Executive to what I hope will be a rewarding task and wish them the best of success in organizing next years meeting in Mt. Washington Valley, New Hampshire. We sincerely hope you will make plans to join us.

Michael N. Demuth
President
54th Eastern Snow Conference



Eastern Snow Conference



AN INTERNATIONAL ORGANIZATION
IN
EASTERN CANADA AND THE NORTHEASTERN UNITED STATES

CONCERNED WITH THE
ORIGIN, PRECIPITATION, ACCUMULATION, CHARACTER, MELT, AND RUNOFF OF SNOW

1996 December 30

On behalf of the friends and members of the Eastern Snow Conference, the ESC Executive hereby honors

Austin W. Hogan

for his substantive contributions to the field of snow science, and his steadfast and thoughtful dedication to the Eastern Snow Conference.

Austin's first association with the ESC was in 1966 at Hartford, CT. At that time Austin was with the Atmospheric Sciences Branch, State University of New York at Albany, working closely with Vince Schaefer. By 1971, Austin had become a regular face at annual ESC meetings. Austin was influenced at various stages in his life and career by numerous contemporaries and most certainly some of his closest friends, including Gordon Ayer, Livingston Lansing, Bob Sykes and Vin Schaefer; all sharing with Austin a fascination of winter and all its complexities. In 1971, at Fredericton, NB, Austin and Raymond Falconer presented a pivotal paper on a previously undiscussed snow-atmosphere phenomenon- The Capture of Aerosol Particles by Ice Crystals. Herewith, began a series of polar explorations that took Austin to Greenland, the Arctic and the Antarctic, in search of insight into the phenomenon of ice crystal precipitation and related optical displays.

By 1985 Austin had returned to the ESC fold at the Montreal meeting, and his annual presence since then has fortified numerous sessions concerned with snow and the atmosphere. Austin presented his first ESC paper as a member of CRREL in 1987. At the recent meeting in Dearborn, MI, Austin became ESC Secretary. He also joined the ranks of the ESC Research Committee, to which he has contributed invaluable experience and encouragement to many students of snow and ice vying for the annual ESC Student Award. As a member of the ESC Executive, Austin continues to bestow the all important corporate memory of the ESC to members young and old alike.

Austin's robust enthusiasm can perhaps best be summarized in his fervent and ever-present greeting "Hi, how-are-ya!", and it is with similar enthusiasm that we honor Austin- his kind and competent tutelage as a dedicated supporter of the ESC and his considerable presence in the field of snow research. We wish you a long and happy retirement Austin, and look forward to your long, continued association with the Eastern Snow Conference.

With thanks and gratitude,

Michael N. Demuth
President, 54th Eastern Snow Conference

**Western Snow Conference
Executive Committee Meeting
04 May 1997**

**MINUTES OF THE 1997 EXECUTIVE BUSINESS MEETING
WESTERN SNOW CONFERENCE
BANFF, ALBERTA, CANADA**

May 04, 1997

65.1 Welcome to the Conference

The 65th Executive Committee of the Western Snow Conference was called to order by General Chair, Phyllis Snow, at 1:15 P.M. Sunday, May 4, 1997. Phyllis welcomed everyone to the conference. In attendance:

Committee

Phyllis Snow	General Chair
Chuck Troendle	General Chair Elect, Proceedings Editor,
Don Snow	Secretary
Jerry Beard	North Continental Area Chair
Keith Cooley	NC
Bob Jairell	NC
Peter Palmer	NC
Chuck Troendle	South Continental Area Chair
Ken Wahl	SC
Randy Julander	SC
Frank Gehrke	South Pacific Area Chair
Hal Klieforth	SP Proxy for Dan Greenlee
Bruce McGurk	SP
Doug Powell	SP
Phil Farnes	Past General Chair
Jack Hannaford	Past General Chair
Bob Richards	Past General Chair
Robert Swanson	Past General Chair
Mike Demuth	Representative of Joint Meeting Committee
Maureen Hannaford	Guest

65.2 Approval of Minutes of 1996 Annual Executive Committee Meeting

Motion 1

Moved by Bruce McGurk and seconded by Chuck Troendle to approve the 1996 Executive Committee Meeting minutes.

.....Motion carried.

65.3 Treasurer's Report

The treasurer's report was deferred to the General Business Meeting due to late arrival of the treasurer, Jack Pardee.

65.4 Secretary's Report

With memberships being handled by the treasurer and document sales and membership mailing by the documents manager, the secretary had little to do during the year. In the few weeks before the annual meeting secretarial activity increased slightly but the Canadian Geophysical Union handled most details of the annual meeting.

65.5 1997 Annual Meeting Report - Banff, Alberta, Canada

Mike Demuth of the Eastern Snow Conference reported on the 1997 meeting. Packets of information about the Western Snow Conference (WSC), Eastern Snow Conference (ESC), and Canadian Geophysical Union--Hydrology Section (CGU-HS) would be available at the respective registration desks. The object of these packets is to give people information about the societies to encourage membership.

WSC will take the lead in publishing the 1997 proceedings from the joint meeting. Papers from WSC and ESC will be included. CGU publishes only abstracts. These are in the program available for use at the annual meeting.

Logistics of the joint meeting preclude WSC obtaining revenue from this year's annual meeting. This puts a financial burden on WSC because part of the WSC annual operating budget is obtained from the annual meeting. Inclusion of both WSC and ESC papers in this proceedings nearly double the usual number of pages. The Canadian Geophysical Union (CGU) will give \$2500.00 (Cdn) to the WSC to help defray costs of printing the proceedings from this meeting. Based on costs associated with the ESC printing the ESC/WSC proceedings from Quebec City in 1993, the documents committee feels that a surcharge of \$10.00 (US) will be adequate to publish this year's proceedings.

Four exhibitors signed up to have displays at this meeting but only three have come. It is planned to use the fees paid by the exhibitors to (help) defray the cost of the author's breakfast.

The barbecue to be held on Tuesday evening will cost \$15 (Cdn) per person. The remaining cost of the meal and all the entertainment costs will be subsidized by CGU-HS. All WSC and ESC members are encouraged to attend. During this event awards for WSC and ESC will be presented.

The banquet for all conference attendees and their spouses is on Wednesday evening. Everyone pays their own way to the banquet. The evening will include a short presentation for CGU activities followed by a talk by Michael Schmidt of the Pacific Geoscience Center, the leader of the recent expedition to measure the height of Mt. Logan in British Columbia.

The spouses' program was discussed at length. Due to the numerous possibilities of entertainment for spouses at Banff, the high cost of developing an extensive spouses' program, and having no idea how many spouses might attend, the decision was to have a brunch at Lake Louise Chateau. It was decided that WSC will pay for brunch for those spouses who want to attend. A sign-up sheet will be put at the WSC registration desk for names of spouses wanting to go and those who will drive.

65.6 1998 Annual Meeting Preparations - Snowbird, Utah

Chuck Troendle reported on the 1998 Annual Meeting. It will be at Snowbird Ski Resort in Utah from April 19 to 23, 1998. Snowbird is located about 29 miles from the Salt Lake City Airport.

Randy Julander is the local chairman.

Room rates will meet the government per diem rate at that time--probably about \$75 per room per night. No extra charge will be made for a second person. One hundred rooms have been reserved. If WSC members register for 80 or more rooms there will be no charge for facilities. If only 60 rooms are used, facilities for the meeting events will cost about \$200.

Skiing will still be available during our meeting. The resort says they will have a good ski package for us.

65.7 1999 Annual Meeting Preparations - Lake Tahoe (tentative)

Frank Gehrke reported the dates are April 11 to 15, 1999. Use of the U.S.F.S. Camp Richardson facilities at Lake Tahoe are being investigated. The facilities are excellent for meetings such as ours.

65.8 Constitution Changes

Changes proposed at the 1995 Annual Meeting were deferred to the 1998 meeting because the respective roles of secretary and treasurer have not been resolved. These roles are dependent on the type data base that is developed for the WSC. The data base has been under development for several years.

When the data base is in place, the general chair, general chair-elect, secretary, treasurer, and area chairs will finalize the constitutional changes so the general membership can see the proposed changes and be prepared to vote on them at the 1998 meeting.

65.9 Standing Committee Reports

65.9.1 Documents Committee

Chuck Troendle reported that several members did not receive the 1996 Proceedings, an oversight that will be corrected. It appears the members omitted from the proceedings mailing are Life Members who do not pay yearly dues and thus were not on the membership list for mailing proceedings.

Colorado State University (CSU) requests that WSC use electronic submission of papers for future printing of the proceedings. Pros and cons of electronic submission of papers was discussed.

Motion: 2

Moved by Bruce McGurk and seconded by Bob Swanson to have the 1998 proceedings, to be published by CSU, submitted in electronic form. Bob Swanson suggested that WSC provide authors with a template of the format. Further discussion followed. Bruce McGurk then amended his motion to have the 1998 proceedings, to be published by CSU, submitted in electronic form to fit the template to be developed by the documents committee. Bob Swanson seconded the amended motion.
.....Motion carried as amended.

Interest in having the proceedings published before the meeting was again expressed. This subject has been brought before previous executive committees. Discussion centered around the fact that material presented at the meeting is frequently information that has been gathered within a few days, or week or two, of the meeting. Timelines of printing are not compatible with presenting such recent material. One of the assets of the WSC meeting is having such recent information to present to the members.

Motion 3

Moved by Bob Swanson and seconded by Doug Powell to eliminate any further consideration of publication of papers before the annual meeting.....Motion carried.

A question was asked regarding the possibility of preparing the proceedings on a CD-ROM as an alternate format. Would it be cost effective? Discussion followed but no action was taken.

65.9.2 Wilderness Committee

Frank Gehrke reported that last year the WSC Executive Committee discussed sending a letter to Regional Foresters and maybe Forest Supervisors stating the WSC position about snow sensors in the wilderness. It was tabled because the group felt that the subject should be left alone for the time being. That situation probably is still the same. The US Forest Service special use permits program has been undergoing revision in California. The selected alternative is unacceptable for snow sensors. However, the decision notice has not been published yet. So far it is informational only. This will be pursued politically this summer to take advantage of the recent floods in California. Information from wilderness snow sensors was key in reservoir operation related to flood events, particularly for New Year's day in California. This may be a good time to take advantage of that circumstance.

Jack Hannaford reminded the group that the Wilderness Committee has a WSC position paper about snow sensors. It is still available if or when we need it. It was published in the 1996 proceedings.

Frank Gehrke told of a ranger in Sequoia National Park saying that a bill is before congress to regulate sightseeing flights over national parks and wilderness areas. If such a bill exists it would be our intent to amend that bill to specifically allow helicopter access to wilderness areas. However, congress people in California could not find such a bill. Phyllis Snow will send information to the Wilderness Committee about helicopter and airplane overflights of Glacier National Park.

65.9.3 Awards

Jack Hannaford pointed out that the award for best poster and oral paper presentations cannot be announced at this meeting due to the schedule of events. The winners will be announced in the proceedings. Jack asked that the chairman of the technical committee submit to him the two award-winning papers as soon as possible after the end of the meeting. It was emphasized that the content of the papers rather than only the presentation, which can "be bought" with artistic talent, needs to be the main consideration for judging.

Area Chairs should give Jack Hannaford information on life and retired members in their area so these members can be included on the proceedings mailing list. Jack also requested information about deceased members.

Jack Hannaford said that a question was raised at last year's annual meeting regarding whether "El Farsante" should be changed to something less ethnic in nature. A humorous discussion ensued.

Motion 4

Moved by Randy Julander and seconded by Bob Jairell to retain "El Farsante" in its present form.

.....Motion carried.

James E. Church Award

This award has historically been given to a Reno High School Student with high academic potential, not necessarily to someone wanting to go into snow science. Hal Klieforth presented a proposal by his committee that the award be given to a college student with a paper on snow science and be presented at the annual meeting. A stipend would be given for travel to the meeting. Also, the Church award plaque would be part of the award.

Motion 5

Moved by Peter Palmer and seconded by Ken Wahl that an under-graduate or a graduate student paper award be presented to a student enrolled in a degree program, which may be a field related to snow science. The local area committee will decide upon the geographic area of consideration for that conference. The award will be in the amount of \$250. The student will also receive free registration to the meeting that year. The paper must be presented at that year's conference.

.....Motion carried.

Jack Hannaford pointed out that the process of selecting a recipient for the Church Award will require long lead time. If this will be implemented for the 1998 meeting, the process will have to be started by mid-summer. The student may appropriately wish to do an oral or a poster paper. Other details will be left up to the local committee.

65.9.4 Western Snow Conference Home Page

Peter Palmer reported on the history of the WSC Home Page. At the meeting in Bend last year, Frank Gehrke offered that the California Department of Water Resources (CDWR) would host our WSC home page in return for a fee of \$50 per year. A motion was made and carried to that effect. At the business meeting, Mark Williams, agreed to design the home page and solicited input from the membership at large. Shortly after the Bend meeting the CDWR determined that they should not become involved in our home page. However, Mark Williams went ahead and designed a home page and put it on the University of Colorado at Boulder server. The existing home page is a good start, but needs modification. The map of the WSC area needs to include Alaska and Canada and show more clearly which states are in each area. The present officers and area chairs with their email addresses are needed so an interested party knows who to contact. The ski and snowboard equipment needs to be replaced with equipment related to snow hydrology. Names of exhibitors at the meetings will be included. The WSC is a long-running organization that has been producing scientific research for more than 60 years. The bibliography, that Bob Swanson put on a disk, has papers starting with 1936. We could include the abstracts of those papers with title and author and year.

Mark has offered to continue hosting the WSC home page. He would appreciate input regarding the homepage. Once we get the page built, maintenance will be needed. Officers change and other information will be needed occasionally.

Motion 6

Moved by Peter Palmer and seconded by Ken Wahl to revise the map to include Alaska and Canada, expand the area pages to include states and email contacts, add officers, and change ski and snowboard equipment to equipment related to snow hydrology. Names of the most recent exhibitors will be listed. The General Chair, in consultation with area chairs, will approve the changes. Changes will then be made by Mark Williams.

.....Motion carried.

The WSC Home Page is located at
<http://snobear.colorado.edu/WSC/WSC.html>

65.9.5 Data Base

Bob Swanson handed out a sheet explaining his efforts to find a suitable data base. After trying several programs that could utilize out existing information, Bob settled on Quick Books as one which will serve the WSC needs. He will be working with Jack Pardee to get the data base set up as soon as possible.

65.9.6 Art Crook Memorial Scholarship Fund

This will be deferred to the 1998 meeting. The General Chair will follow up and report to Jack Hannaford.

65.9.7 Snowshoe Thompson Stamp

The status of the Snowshoe Thompson Stamp was asked about. Phyllis Snow reported that little had been done about it but promoting it is ongoing and will be pursued in the coming months. Phyllis Snow will work with Hal Kleiforth, who has already put effort into the project.

65.9.8 Membership Recruitment: New and Student members

In the discussion of recruiting new members several suggestions were made. Develop a brochure to be included on the WSC Home Page. Lower the membership rate for first year members and student members. Contact colleges and universities in the area of the next annual meeting to encourage student participation in the meeting and paper presentation.

No specific person or committee was assigned to develop the brochure. It was suggested that WSC membership dues are already lower than most other professional societies and that lowering dues further would neither be needed or nor, financially, wise. The local committee and General Chair will pursue contacting colleges and universities in and hear the host area. It was noted that colleges may be in their finals week when WSC normally meets. Recruiting new members from colleges and universities may be difficult for that reason.

65.9.9 Emolument for treasurer, Jack Pardee

Motion 7

Moved by Bob Richards and seconded by Bob Jairell to award the \$700 emolument to treasurer Jack Pardee for 1997.

Mandatory attendance of the treasurer at the executive committee meeting was discussed. The motion and second to the motion were amended to include the emolument be contingent upon attendance at the annual executive meeting.
.....Amended motion carried.

65.9.10 Resolution of WSC Accounting

The resolution of finances of WSC with the new data base was discussed. The concern is having a standard accounting package with easy-to-follow displays. Problems began when WSC lost its permanent treasurer. Problems were compounded with intertwining of WSC and ESC finances for the Quebec meeting (1993). WSC had an easily followed accounting procedure for 1994 (the year we changed our financial year to the calendar year). We do not have the years 1995 and 1996 up-to-date. With the data base not yet completed our accounting relies on older methods.

Motion 9

Motion by Bruce McGurk and seconded by Keith Cooley to have the treasurer's records up to date and the data base running by 1 July 1997.
.....Motion carried.

65.9.11 Email addresses

Phyllis Snow noted the near-necessity of having email addresses to correspond with WSC executive committee members adequately. She encouraged everyone to get and use them.

65.10 Adjournment

Motion 10

The motion to adjourn was made by Ken Wahl and seconded by
Chuck Troendle.....Motion carried.

The meeting was adjourned at 5:15 p.m.

**Western Snow Conference
General Business Meeting
05 May 1997**

**MINUTES OF THE 1997 GENERAL BUSINESS MEETING
WESTERN SNOW CONFERENCE
BANFF, ALBERTA, CANADA**

May 05, 1997

65.1 Welcome to the Conference

General Chair, Phyllis Snow, called to order the 65th General Business meeting of the Western Snow Conference (WCS) at 5 p.m. Monday, May 5, 1997. Phyllis welcomed everyone to the conference.

65.2 Minutes of 1996 Annual General Business

Minutes of 1996 Annual General Business were approved.

65.3 Secretary's Report

Little work has been needed by the secretary due to most of the work being done by the treasurer, the documents chair, and for the Banff meeting, by the committee for the joint meeting.

65.4 Treasurer's Report

Jack Pardee reported that the treasury had \$2,696 less at the end of 1996 than at the beginning of the year.

65.5 1998 Annual Meeting

Chuck Troendle presented information about the meeting at Snowbird Ski Resort in Utah from April 19 to 23, 1998. Snowbird is located about 29 miles from the Salt Lake City Airport. Room rates are expected to be about \$75. This will include a second party in the room. One hundred rooms have been reserved for WSC. If WSC registers for 80 rooms, facilities rooms will be free. Skiing will be available. The resort plans to offer attractive ski packages to WSC members and their families.

65.6 1999 Annual Meeting

Frank Gehrke reported the Lake Tahoe has been tentatively picked for the 1999 meeting. The Forest Service has meeting facilities at Camp Richardson. These facilities are being investigated. They are reportedly excellent.

65.7 Standing Committee Reports

65.7.1 Documents Committee

Three hundred and fifty copies of the 1996 proceedings were mailed. Several members did not receive the 1996 Proceedings, an oversight that will be corrected. It appears the members omitted from the proceedings mailing are Life Members who do not pay yearly dues and thus were not on the membership list for mailing proceedings.

Electronic submission for 1998 papers in Work Perfect format will be required. The necessary guidelines will go in advance to the authors. Prepublication of papers for the annual meeting will not occur. Much of the information presented at the annual meeting is gathered within a few days or weeks prior to the meeting date. Publications timelines will not permit inclusion of this information. Having recent information to present to the conference is one of the assets of the WSC.

65.7.2 Wilderness Committee

Frank Gehrke reported that the WSC will continue to hold the position paper regarding snow sensors in wilderness areas. He will, though, be pursuing with appropriate political entities how useful those sensors were in predicting floods in California this past year.

65.7.3 Awards

Jack Hannaford said that winners of the oral and poster paper awards will be announced in the proceedings. The Banff meeting has no appropriate time to announce the winners.

Jack asked that information on life members, as well as deceased members, be relayed to him.

Hal Klieforth reported that requirements for the Church Award are being revamped to be more in line with today's student situation. If time allows, the local committee for the Snowbird meeting will implement the redesigned Church Award.

Art Crook Memorial Scholarship

A scholarship in honor of Art Crook, recently deceased past General Chair of WSC has been established. It will be awarded soon.

65.7.4 Western Snow Conference Home Page

Peter Palmer presented a synopsis of history and recent discussions about the WSC Home Page. The home page will be maintained by Mark Williams at Colorado. A number of suggestions for the home page were made at the executive committee meeting. These will be incorporated. Future suggestions will be reviewed by the general chair, and forwarded to Mark Williams to include in the home page.

The WSC Home Page is located at
<http://snobear.colorado.edu/WSC/WSC.html>

65.7.5 Data Base

A revamped data base that will incorporate WSC finances with the membership list is expected to be ready for testing about July 1, 1997.

65.7.6 Snowshoe Thompson Stamp

Hal Klieforth reviewed the story of Snowshoe Thompson and his exploits on skis while carrying the U. S. mail. Efforts to have a stamp honoring Mr. Thompson will continue to be pursued. Hal Klieforth and Phyllis Snow will carry on this project.

65.7.7 New Member Recruitment:

Recruiting new members is an ongoing need. The local committee for each annual meeting will pursue colleges and universities and other professionals who might be interest in WSC who live in and near the meeting site. It is recognized that school schedules will preclude certain people from attending, even if they want to, because WSC commonly meets during finals week for some of the schools.

65.8 Adjournment

The meeting was adjourned at 5:50 p.m.

ATTENDANCE AT THE 1997

WESTERN SNOW CONFERENCE

Beard, Jerry
Becker, Sue
Carroll, Tom
Cline, Don
Cooley, Keith
Cowling, Derrill
Davis, Bert
Demuth, Mike
Elder, Kelly
Farnes, Phil
Ford, Glenn
Freeman, Gary
Hannaford, Jack
Homan, Ron
Ingersoll, George
Jairell, Robert
Johnson, Tammy
Julander, Randall
Kite, Geoff
Kjosnes, Ole
Klieforth, Harold
Lynch, Frank
Marsh, Philip
Martinez, Manuel
McGurk, Bruce
Palmer, Peter
Pardee, Jack
Powell, Douglas
Roos, Maurice
Snow, Don
Snow, Phyllis
Strauss, Fred
Troendle, Charles
von der Heydt, Lisa
Wahl, Ken

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