

C. M. S. NEWSLETTER 1977 FEBRUARY NUMBER 1

Living With Climate Change, Phase II, Canadian Meeting, Winnipeg, January 13, 1977, by John E. Hay, President, CMS.

This Canadian seminar on Food and Climatic Change completes the Living with Climate Change programme which was formalized in discussions between the Science Council of Canada, the American Meteorological Society, the Geophysical Institute of the National Autonomous University of Mexico, the Mexican Geophysical Union and the Canadian Meteorological Society. The programme was designed to improve the communication between the meteorologists and decision-makers and planners particularly in the area of climatic change and its possible impact on both the social and economic activities of man.

Previously there has been a meeting of meteorologists in Toronto in late 1975 to lay the meteorological and climatological basis for the future discussions with planners and decision-makers. The results of the meteorological deliberations have been published by the Science Council of Canada in a document entitled "Living with Climate Change." The Mexican and U.S. components of the second phase (to assess the utility of the meteorological information to the planners and dececision-makers) were held in 1976. The Canadian meeting, co-sponsored by the Science Council of Canada and the CMS, restricted itself to the food sector and hence its Prairie location was quite appropriate as was the fact that the seminar was held the day after a well-attended meeting of the Canadian Committee on Agrometeorology.

The Science Council plans to publish the proceedings of the Winnipeg seminar very shortly. In the meantime I believe the following observations might be of interest to CMS members. The food sector, and particularly the producers, are vitally interested in the provision of accurate forecasts, ideally exhibiting skill out to three or four months. Confirmation of the absence of such predictive capabilities appeared to result in a response that climatological information was therefore of little use given the variety of other inputs into the planning and decision-making strategies of the Canadian food sector. Speakers from the farming, equipment, marketing and transportation components who assessed the impact of a variable climate on their particular operations did little to dispell this impression. There was a general consensus that the variations in climate the agricultural sector is now tuned to will enable it to survive any climatological fluctuation likely to occur within the relevant planning periods. Certainly part of this optimism is justified because of technological and other advances. Nevertheless the fact remains that the present practices and technologies have not been tested under adverse climatic conditions such as those of the 1930's, which in themselves were not extreme events in the recent climatic record.

While skepticism about the value of climatological information might characterize the attitude of many people in the agricultural sector I believe that the meteorological community would level a charge of complacency against these same people given the historical evidence of the strong impact variations in climate have had on Canadian and world food production, marketing and consumption patterns. The seminar did go some way towards documenting the variable characteristics of our climate, the sensitivities of the food sector to these variations and the consequent need to plan for a climate more variable than that of the 1950's and 60's. It is obvious that further effort is needed here. And then there are all the other areas of our society: water, energy, transportation, northern development, human settlement,...

Eleventh Annual Congress, Canadian Meteorological Society.

This is a reminder that the 11th Annual Congress of the CMS will be held in the Winnipeg Convention Centre June 1-3. The theme will be "The Meteorology of the Great Plains".

The keynote speakers will be Dr. J.D. McQuigg, Director, Centre for Climatic and Environmental Assessment, University of Missouri and Dr. N.P. Fofonoff, from Woods Hole Oceanographic Institution.

A summary of the sessions follows:

Wednesday June 1st

Time	Session	Room			
0830-0850	Opening Welcome				
0850-1030	Theme: The Meteorology of the Great Plains				
1100-1300	0.1 Offshore Oceanography	16			
1100-1200	M.1 Weather Forecasting	1			
1330-1500	M.2 Weather Forecasting	1			
1530-1700	M.3 Acoustic Sounding of the Atmosphere	1			
1400-1710	0.2 Limnology	16			
1930	Annual General Meeting CMS				
Thursday June 2nd					
0900-1200	0.3 Estuaries	16			
0900-1200	0.4 Coastal Processes	15			
0830-1000	M.4 Numerical Modelling of the Atmosphere	13			
1030-1200	M.5 Climatology	13			
1200-1430	Banquet and Awards Speaker: Dr. Paul Hiebert, Professor Emeritus, University of Manitoba.				

Thursday June 2nd (cont'd)					
1430-1630		nography Division Business Meeting and tion of Officers			
1430-1700	M.6	Meteorological Applications	13		
1430-1700	M.7	Boundary Layer Mesometeorology	15		
Friday June 3rd					
0900-1210	0.5	Canadian Arctic - Research	16		
0830-1000	M.8	Solar and Wind Power	13		
1030-1200	M.9	Air Quality	13		
1400-1710	0.6	Canadian Arctic - Operation	16		
1330-1500	M.10	Cloud Physics	13		
1530-1700	M.11	Hail	13		

For further information on the Congress or for registration information, contact K.A. Fluto, 600-185 Carlton Street, Winnipeg, Manitoba, R3C 3J1.

Symposium "Canada and World Food".

The Royal Society of Canada and the Agricultural Institute of Canada are joint sponsors of a symposium on "Canada and World Food" to be held at Carleton University, Ottawa, Ontario, August 22-24, 1977. Prominent speakers representing agricultural, health, economie, political, social, biological and engineering sciences have been drawn from the international scene. The registration fee is \$40.00. For further information, contact The Royal Society of Canada, 344 Wellington St., Ottawa, Ontario, KIA ON4.

Ninth International Conference on Atmospheric Aerosols, Condensation and Ice Nuclei.

This Conference, sponsored within IAMAP by the International Commission on Cloud Physics through its Committee on Nucleation and by the Internal Commission on Atmospheric Chemistry and Global Pollution and co-sponsored by the AMS and by University College will be held at University College, Galway, Ireland, 21-27 September 1977. For further information refer to The Secretary, National Organizing Committee, Department of Physics, University College, Galway, Ireland.

PROGRAM of the Conference on Air Quality Meteorology and Atmospheric Ozone, August 1-6, 1977, Boulder, Colorado.

Sponsored by the American Society for Testing and Materials; co-sponsored by American Meteorological Society, American Pollution Control Association, Environmental Protection Agency, International Ozone Institute, National Bureau of Standards, National Oceanic and Atmospheric Administration, and National Science Foundation

Program Chairmen:

Alvin L. Morris Richard C. Barras

General Information:

The Conference on Air Quality Meteorology and Atmospheric Ozone will be held August 1-6, 1977, at the University of Colorado, Boulder. The first five sessions, Monday morning through Wednesday morning, will be devoted to air quality meteorology. The next six sessions, Wednesday afternoon through Saturday morning, will be devoted to atmospheric ozone.

Purpose:

The Conference is designed to acquaint engineers, chemists, and meteorologists who are working in the field of air quality with the latest developments and concepts in meteorology and atmospheric ozone.

Accommodations:

All sessions will be held in the Physics Building on the University campus. Housing will be available in Kittredge Commons and meals will be served in the Commons cafeteria. Both will be at reasonable rates. Families are welcome.

Registration:

Pre-registration is necessary. Fees will be \$150 for both conferences; \$95 for either conference. The registration fee includes a copy of the proceedings. A registration form is available from Alvin L. Morris, President, Ambient Analysis, Inc., P O Box 4056, Boulder, CO 80306; telephone: 303/442-5305.

Registration for the meteorology and combined sessions will be open from 7:00 to 9:00 PM, July 31, and will continue Monday, 8:00 to 8:45 AM. Registration for the ozone session will be open Wednesday, 9:00 to 11:30 AM.

Transportation:

Transportation from the Denver Airport to Boulder is available on a regularly scheduled basis - a total of fourteen buses each day.

Call for Papers.

Fifth Conference on Probability and Statistics in Atmospheric Science,
November 15-18, 1977, Las Vegas, Nevada.

The American Meteorological Society's Fifth Conference on Probability and Statistics in Atmospheric Science will be held in Las Vegas, Nevada, November 15-18, 1977. The conference is being organized by the AMS's Committee on Probability and Statistics.

The conference will stress recent developments in probability and statistics of importance to atmospheric scientists and innovative uses of probabilistic and statistical methodology in atmospheric science. Papers are solicited in the following areas:

- 1) Statistical dynamics and stochastic dynamic processes;
- Statistical and probabilistic forecasting;
- 3) Decision models and decision analysis;
- 4) Time series and spectral analysis;
- Statistical applications in the analysis and assimilation of data into meteorological fields;
- 6) Statistical applications in satellite meteorology, air pollution, weather modification, atmosphere-ocean coupled problems, and climate related disciplines.

There will be a special session devoted to statistical <u>verification</u> of forecast products which depend upon the evolution of the earth's atmosphere — either directly or indirectly. This is an especially important and timely subject prior to the First GARP Global Experiment. There is a need to establish a firmer baseline of current predictive skills — against which to measure future improvements. Authors are encouraged to submit papers on procedures, results, and problems of verification of forecast skill for a broad range of objective and subjective models and products.

Titles and abstracts must be received by April 29, 1977 and should be sent to: Program Chairman, Dr. Rex J. Fleming, NOAA (EM-6), 6010 Executive Blvd., Rockville, Maryland, 20852, (301-443-8415).

Authors of accepted papers will be expected to have a camera-ready copy of their paper, not exceeding six pages in length, in the hands of the Program Committee by July 29, 1977. Page charges will be assessed to help defray the cost of printing. Special copy paper (11 x 14 inches), which will be reduced to 8 1/2 x 11 inches, will be supplied.

A preprint volume containing the contributed papers will be prepared and distributed to all of the speakers, session chairman, and pre-registered participants before the conference.

Stanstead Seminars

This year the Twelfth Stanstead Seminar will be held at Bishop's University, Lennoxville, Que. The original Stanstead Seminar in 1955 was organized by Ken Hare, then head of McGill's Arctic Meteorology Research Group, as part of the arctic program of the McGill Geography Summer School. The seminar ran for two weeks, with the leisurely pace of two papers per day, often presented outdoors, leaving ample time for discussion.

Since the U.S. Air Force was, at this time, keenly interested in the Arctic, the second seminar was arranged as a joint meeting with the USAF Research and Development Command. The trend of future seminars was set by papers on graphical prediction models by Mariano Estoque and Dick Reed.

By the third seminar in 1959, it had become apparent that the Arctic circulation could not be understood without consideration of its stratosphere - the keynote paper, by Warren Godson, was on ozone, radiation and the stratosphere.

Stanstead IV, billed as a Seminar on the Stratosphere and Mesosphere again starred Godson, who presented six papers. Other striking presentations were by Reed on the 26-month cycle, Boville on the polar-night vortex, and Schiff, on ozone chemistry, before freons and SST's.

Stanstead V attempted to get back to polar meteorology, but three papers by George Cressman and two by Colin Hines and a total of six papers on numerical methods indicated that no one believed that the Arctic could be treated in isolation. By Stanstead VII, the topic was stated to be the dynamics and energetics of large scale motion.

In 1969, the National Research Council replaced the USAF in financial support. While the sponsorship thus became wholly Canadian, the attendance remained multinational. The dynamicists had completely displaced the geographers with the theme of GARP - general circulation studies and numerical prediction models.

The seminars have moved from Stanstead to Lennoxville (better) and have been cut from two weeks to one (worse) but the presentations are still electrifying and the discussions intense. Any members wishing to combine a pleasant vacation with intellectual stimulation at quite a reasonable cost should contact Prof. Philip Merilees, Department of Meteorology, McGill University, 805 Sherbrooke St., W., Montreal, Que. Canada, H3A 2K6.

Notes from the Ottawa Centre

On 25 Jan., Mr. W.E. Markham, Chief of the Ice Forecasting Central, AES, spoke on "Where is Canada's Ice Program Going?". He discussed the problems and costs of collecting and transmitting ice coverage data and demonstrated the contributions of satellite imagery to this task.

The guest speaker for the annual dinner meeting on 22 Feb., was Dr. John H. Chapman, Assistant Deputy Minister for Space Programs in the Department of Communications, who has been actively involved in Canada's space program from the days of the Alouette satellites. He discussed past, present and future satellite systems and their scientific and social benefits to Canadians.

It is with pride and delight we record that one of our Ottawa Members, Miss. I. Moira Dunbar, has been appointed an Officer of the Order of Canada. Miss Dunbar is a well-known Arctic geographer, who is working at the Defence Research Establishment at Shirley Bay, Ottawa. Her present research is concerned with sea-ice climatology. She has contributed to setting up a sea-ice nomenclature and is involved in the use of side-ways looking radar for ice research.

Miss Dunbar has made numerous on-site studies in the Arctic, one of which was aboard the ice-breaker "John A. Macdonald" when it accompanied the "Manhattan" on its historic voyage through the North-West Passage in 1969.

Congratulations Moira!

H.H. Watson, Chairman.

Our Members Write:

4 Mar., 1977

Dear Bill:

I have read with interest the statement by President Hay in your Newsletter regarding "Oceanography within the CMS". Since I hold a strong personal opinion on the subject of the name of our Society, I am writing to you.

I welcome the Oceanographic Division within the Society and I would have no objection to our adopting a double-barelled name such as "Canadian Meteorological Society - Canadian Oceanographic Society" with common membership. I do, however, object to the idea of abandoning the Canadian Meteorological Society and taking the name Canadian Meteorological and Oceanographic Society.

Over the past 25 years we have seen both the Royal Meteorological Society and the American Meteorological Society expand their memberships to include professionals and laymen in many disciplines, but the names of those societies have not been changed. For a few years, in Britain, the Editor of the Quarterly Journal of the Royal Meteorological Society was an oceanographer. In the United States the American Meteorological Society effectively took over physics of the upper atmosphere and devoted much space in their publications to the subject. But the names of the societies were not changed.

As one who helped in the birth of the Canadian Meteorological Society when we separated from the Royal Meteorological Society, I must object to the idea of changing the name of our Society. A few years ago when we were considering some type of affiliation with the Canadian Association of Physicists, I am sure that that organization never once considered the possibility of changing their name to accomodate us. Membership in the Canadian Meteorological Society is open to all who are interested in the subject, but let us not abandon the name "Canadian Meteorological Society". Sincerely, M.K. Thomas

New Members:

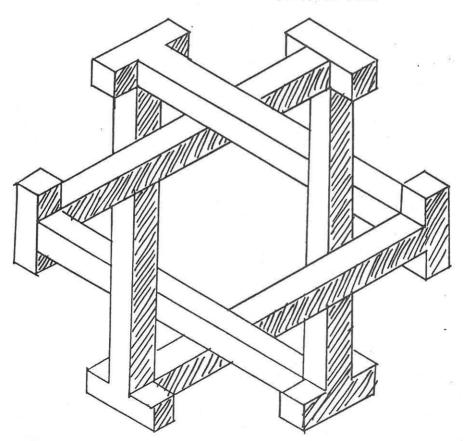
18 Nov., 1976 M.R. Rabin, Montréal, Qué. Dr. Bjorn Sundley, Rimouski, Qué.

10 Jan., 1977

Michael Balshaw, Winnipeg, Man. Richard Chagnon, Verdun, Qué. R. Grant Ingram, Montréal, Qué. Charles D. Manson, Dartmouth, N.S. Patricia Murray, Winnipeg, Man. Luc Pouliot, Pincourt, Qué.

WSC/amd

W.S. Creswick, Editor, Newsletter 2121 Trans-Canada Highway, Room 508 Dorval, Québec, Canada Tel: (514)683-7622



Wooden model of dendrite grown on cubic nucleus