



## LAKEHEAD UNIVERSITY - 1968

### PORT ARTHUR, ONTARIO - JUNE 11 - 14

Arrangements for the third annual meeting of CBA-ABC are almost complete. Local Chairman, Dr. D.R. Lindsay and Programme Chairman, Dr. J.C. Ritchie have set the programme as follows:

- Monday - June 10 Pre-registration for early arrivals
- Tuesday - June 11 Pre-meeting trip to Raith Bog and Abitibi Woodlands Laboratory, Raith, Ontario\*
  - Registration (all day)
  - Evening: President's Reception, Lakehead University
- Wednesday - June 12 - Registration (a.m.)
  - Introductory Session
  - Symposium: Boreal Forest (Ecology, Systematics and Phytogeography Sections)
  - Contributed Papers (General Section)
  - Symposium: Aspects of Spore Formation and Germination in Fungi (Mycology Section)
  - 4:00 Sectional Business Sessions
  - Evening: Symposium: Natural Areas (Ecological Reserves) in Canada (Ecology Section)

### Thursday - June 13

- Field trip Day (D.R. Lindsay, Leader)
- Sibley Peninsula\*, Kaministiquia Valley\*, Quimet Canyon\*
  - Evening: Banquet - R.D. Gibbs, MacDonald Professor of Botany, McGill University "40-odd Years in Research - Mostly Fun"

### Friday - June 14 Symposium: (a.m.) Fungal Systematics in the Sixties (Mycology, Systematics and Phytogeography Sections)

- Contributed Papers (Mycology, Systematics and Phytogeography, Ecology, General Sections)
- Symposium: (p.m.) Research Methods in Taxonomy (Systematics and Phytogeography Section)
- 4:00 Annual General Meeting CBA-ABC

(In the event of impossible weather, the programmes of the 13th and 14th will probably be interchanged)

### Saturday - June 15 Post-meeting trip to English River Bog\*

\*Abitibi Woodlands Laboratory - Mr. S. Losee, Chief Photogrammetrist, will be in charge of this trip. The experimental work in silviculture undertaken here will be an excellent introduction into the boreal symposium. It is hoped to have a brief orientation on Monday evening for those attending this trip.

\*Sibley Trip - Will include a look at the Lake Superior shore flora including Arctic-Alpine disjuncts, etc., as well as other habitats on the Sibley Peninsula.

\*Kaministiquia Valley - Will include a look at some relict stands of sugar maple, talus and cliff flora of one of the mesas. A visit to a stand of bur oak will also be scheduled.

## CANADIAN JOURNAL OF BOTANY - 1968

As of January 1968, the *Canadian Journal of Botany* has a new look! There is a two-toned cover in place of the chlorophyll-a-green of prior volumes. Inside the format has been changed from one-column to two-columns with the pages slightly wider and taller. This, in combination with a new type face, promises easier reading as well as greater economy of space. For all articles (both papers and notes) some innovations have been introduced. The headings 'Abstract' and 'References' have been dropped, whereas the 'Materials and Methods' section (if present) is set in smaller type. Articles accepted by the Editor as Notes are grouped, as before, in a section at the end of each issue, but the text is preceded by a short abstract, date of receipt, and authors' affiliation. The *Journal* name, volume number, page number, and year appear just below the abstract, rather than at the foot of the title page; and in references to periodicals, a colon has been reinstated as the punctuation between volume number and page number.

Editors and publishers may create a 'new look' for the *Journal* but only the contributors can 'induce mutations' in the manuscripts and illustrations. Manuscripts would be in better form and the work would be reduced or simplified if every contributor would ensure, for example, that: (1) all parts of a manuscript are typed with double spacing; (2) capital letters are used only where they will appear in the *Journal*; (3) underlining is used only for letters or words that will appear in italics in the *Journal*; (4) captions and footnotes are typed as paragraphs; and (5) the first sheet of a manuscript has on it only the title, authors' names, authors' affiliation, date of receipt, and relevant footnotes. (concluded p. 10)

---

### DATE-LIMITE DU BULLETIN: LE 1 JUILLET

---

\*Quimet Canyon - It is somewhat doubtful if there will be enough time. However, if descent is made into the canyon, Arctic relicts will be observed.

\*English River Bog - This is an outstanding example of a bog and patterned fen lying adjacent to each other. Mr. M. McEwen, Department of Lands and Forests will discuss bogs and Mr. S. Zoltai the glacial background.

Housing includes dormitories for 109 (45 single rooms and 32 double rooms). All married couples and women will be placed in nearby motels. Reservation forms will be mailed in May.

At this time 60 people have indicated they intend to come - whereas 30 'hope' to come. Another 50 do not plan to attend. Thus, some 260 members are completely non-committal! Do come! Get to know other Botanists - especially in other areas!

**CBA-ABC NEWS**

1967/1968 Executive Committee

President . . . . . R.L. Taylor (Plant Research Institute, Ottawa)  
 Vice-President . . . J.C. Ritchie (Trent University, Peterborough)  
 Secretary . . . . . H.R.N. Eyd (University of Waterloo)  
 Treasurer . . . . . J.H. Soper (National Museum, Ottawa)  
 Past President . . . E. Rouleau (Université de Montreal)

## Directors:

L. Cinq-Mars (Université Laval); D.B.O. Savile (Plant Research Institute, Ottawa); F.A. Staplin (Calgary, Imperial Oil); T.A. Steeves (University of Saskatchewan); J.R. Stein (University of British Columbia); K.E. von Maltzahn (Dalhousie University).

**SECTION NEWS - ACTUALITES DES DIVISIONS**

This column will regularly carry news as submitted to the Editor by each Section. An asterisk (\*) preceding a section name indicates a formally organized and recognized Section of CBA-ABC.

Sous cette rubrique se trouvera des nouvelles des Divisions. Un Astérix (\*) précédent indiquera une Division formellement reconnue. (\*La rédactrice se perfectionne.)

**\*ECOLOGY SECTION**

Chairman: H. Dale, Department of Botany, University of Guelph  
 Secretary: J.S. Rowe, Department of Biology, University of Saskatchewan

The Ecology Section plans to have a full schedule at the Lakehead meeting. In conjunction with the Systematics and Phytogeography Section a symposium on the Boreal Forest is planned for the first day. A second symposium will consider Natural Areas as Ecological Reserves. The annual business meeting of the Section and a contributed papers session are also scheduled. Several field trips before, during, and after the meetings will provide opportunity to study this interesting area.

**GENERAL SECTION**

Chairman: T.A. Steeves, Department of Biology, University of Saskatchewan.

Three contributed paper sessions and the annual section business meeting are scheduled for the Lakehead meetings. Plans for recognition as a formally organized and recognized section will be presented to the Executive Committee at this meeting.

**MYCOLOGICAL SECTION**

Chairman: D.M. MacLeod, Insect Pathology Research Institute, Sault Ste. Marie, Ontario

Plans call for two symposia and a contributed paper session in addition to the annual section meeting. The first symposium is on Aspects of Spore Formation and Germination, whereas, the second will consider Fungal Systematics.

**PALEOBOTANY SECTION**

Chairman: G.E. Rouse, Department of Botany, University of British Columbia

Secretary: Mrs. T.A. Steeves, Department of Biology, University of Saskatchewan

This section will not meet formally at the Lakehead meeting. Contributed papers are being presented with the General Section.

**PHYCOLOGY SECTION**

Chairman: R.F. Scagel, Department of Botany, University of British Columbia

Secretary: R.K.S. Lee, National Museum, Ottawa

This section will not meet formally at the 1968 annual meeting. Contributed papers will be presented with the Mycology Section, the Systematics and Phytogeography Section, and the Ecology Section. There will be a section business meeting, however.

**\*SYSTEMATICS AND PHYTOGEOGRAPHY SECTION**

Chairman: W.K.W. Baldwin, National Museum, Ottawa

Secretary: B. Boivin, Plant Research Institute, Ottawa

At present 177 members are affiliated with this Section. The winter committee meeting was held in Ottawa on March 1. The proposed constitution was presented and the revised form will be distributed to the membership so it may be voted on at the Lakehead business meeting. The committee meeting also considered a variety of items including the plans for the annual meeting. We are sponsoring several symposia including the Boreal Forest, Fungal Systematics in the Sixties, and Research Methods in Taxonomy. In addition there will be a contributed paper session. It was recommended that a CBA-ABC subcommittee be appointed to insure continuity of experience and planning from one annual meeting to the next. This is especially important as there will be no regular meeting in 1969 due to the International Botanical Congress in Seattle, Washington. Progress reports on the activities of Section subcommittees were made and more complete reports will be ready in June. (Editor's note: Gold star to this section - it turned in a report!)

Members wishing to affiliate with any Section should write either the Section Secretary (as listed on page 8) or Dr. H.R.N. Eyd, Secretary of CBA-ABC (Department of Biology, University of Waterloo, Waterloo, Ontario).

**NATIONAL MUSEUMS ACT**

On December 1, 1967, Parliament established a single government corporation responsible for several institutions including the National Museum of Canada. The government has named 14 to the Board of Trustees. These include David C. Spurgeon, Editor of the newly formed *Science Forum* and J. Tuzo Wilson of the University of Toronto. W. Schneider, President of National Research Council is an ex-officio trustee.

The National Herbarium of Canada will be affected by the Museums Act. The Herbarium was founded in 1882 by the Geological Survey of Canada and has played a major role in botanical exploration of Canada. Until now the Herbarium has been allied to a museum under administration of various government departments, most recently by the Secretary of State through the National Museum of Canada (Natural History).

**ERRATA**

Dues for graduate students are \$2 per year (not \$3 as reported in Vol. 1, no. 1 of the *Bulletin*). In addition, if not affiliated with any other Canadian biological society there is a \$1 Biological Council of Canada fee.

Incorrect spelling of several names: including *Science Forum* Editor, David C. Spurgeon; Director D.R. Savile; and Vice-President J.C. Ritchie.

Pages 5 and 6 of the Volume 1, no. 1 were inadvertently unnumbered.

### IBP - MATADOR PROJECT

The Canadian Committee on the International Biological Programme (IBP) announced in mid-summer that the Matador Project near Saskatoon, Saskatchewan, had been organized as the Canadian IBP Grassland Zone Study under the PT (Productivity Terrestrial) and PP (Production Processes) Subcommittees. The work will be done on the old Matador ranch, about 120 miles southwest of Saskatoon. A field station is being constructed by the University of Saskatchewan with National Research Council funds on land contributed by the Saskatchewan Departments of Agriculture and Natural Resources. Research will be aimed at providing a complete ecosystem study of energy flow, carbon turnover, nitrogen cycling, phosphorus cycling, and water budget. Research funds have been made available to the Universities of Manitoba, Saskatchewan, and Calgary to support the work. The number of professionals so far involved exceeds twenty. Three ecosystems are available for study; namely, wheat land, natural grassland, and land seeded to introduced perennial grasses. These are all on the same soil type and in the same climate.

This Project has led in the IBP grassland programme. The United States programme has been developed along the same lines with the idea of assisting international cooperation. Several exchange visits have taken place between Canada and the United States and one with Mexico. The first international PT Section working group meeting on grasslands was held at Saskatoon in September with a view to defining the minimum programme to recommend to participating countries. At this meeting it was agreed to hold a large international meeting at Saskatoon (and Matador) in 1969 to evaluate the ecosystem approach to the study of productivity of grassland. R.T. Coupland, Director

### STANDARDIZATION OF NAMES

A proposal by Cronquist, Takhtajan and Zimmermann is being brought to the International Botanical Congress in Seattle next year (*Taxon* 15: 129-134) for the standardization of names of higher plant taxa. The work, if adopted, would bring several tangible benefits to the practice and teaching of systematic botany; viz, (1) standardization of the ending of a name of any given taxon in the hierarchy (division (-ophyta); sub-division (-icae); class (-atae); subclass (idae); super-order (-anae)); (2) basing of each name upon a well-known genus of plants in accordance with modern trends at familial and ordinal levels (e.g.: Equisetophyta based upon the extant *Equisetum* would displace Sphenophyta, Arthropphyta, or Articulatae, etc.); (3) provision of a system reflecting modern thinking about possible relationships, in so far as any linear structure based upon attained stages of evolution might be expected.

A one-page *Conspectus* of the proposed system is available on request from W.I. Illman, Department of Biology, Carleton University, Ottawa 1, Ontario.

### FNAP MEETS IN OTTAWA

The Editorial Committee of the Flora North America Project (FNAP) will meet in late May in Ottawa at the invitation of the Canadian representative, R.L. Taylor. This is the first meeting to be held in Canada and it is possible that some Committee Members will attend the June meeting of the CBA-ABC. As this is a long-term project the Committee is always open to suggestions concerning the Flora.

### MEMBERSHIP NEWS

As of March there are 416 members of CBA-ABC. Of these 327 have paid 1968 dues. Thus, 89 members have not and should! Consider this a reminder (if you cannot remember whether you have paid or not, just drop a note to Dr. J. H. Soper, Treasurer, National Museum of Canada, Ottawa 4). Of the 327 paid members, 233 also subscribe to the *Canadian Journal of Botany*. The thirty new members since June 1, 1967, include equal numbers of regular and student members. Does this mean we have a 1:1 ratio of practicing botanists to students? As usual, Ontario leads the way with the most botanists!

The new members, by locality, are (s - student):  
 Newfoundland - *G. Robin South* (Memorial University) Phycology.  
 Nova Scotia - *Louis Hanic* (Dalhousie University) Phycology  
 Quebec - *Jean Paul Bernard* (Université Laval); *Matilda Cheung* (s-McGill University); *Pierre Landry* (Hull); *Jacques Op deBeeck* (s-Montreal) Ecologie; *Pierre Richard* (s-Montreal) Ecologie végétale.  
 Ontario - *P. Barclay-Estrup* (Lakehead University); *Dianne Fahselt* (University of Western Ontario) Chemotaxonomy-Genetics; *D.M. MacLeod* (Sault Ste. Marie) Mycology; *J.K. Morton* (University of Waterloo) Biosystematics-Distribution-Ecology of Vascular Plants; *W.F. Warwick* (Burlington); *R.G. Fulcher* (s-Ottawa) Developmental Botany-Phycology; *V.F. Haavisto* (s-Toronto) Ecology-Forestry; *Wayne E. Hawthorn* (s-McMaster University) Ecology; *Michael B. Jackson* (s-University of Guelph); *T.R. Nag Raj* (s-University of Waterloo) Ecology.  
 Saskatchewan *G. Michalenko* (University of Saskatchewan).  
 Alberta - *Y. Hirastuka* (Calgary) Mycology; *John R. Seaborn* (s-Calgary) Bryophyte Ecology-Physiology.  
 British Columbia - *Louis D. Druehl* (Simon Fraser University) Marine Phycology-Ecology; *Tom Booth* (s-University of British Columbia) Mycology; *Soong-Ming Chu* (s-University of British Columbia) Physiology; *Lawrence D. Cordes* (s-University of British Columbia) Ecology; *J.F. Gerrath* (s-University of British Columbia) Phycology-Ultrastructure; *P. Jan Scheffer* (s-Notre Dame University) Taxonomy-Physiology; *B.I. Wiebe* (s-Notre Dame University) Plant Physiology-Nutrition.  
 United States - *P.W. Cook* (University of Vermont) Phycology-Cytochemistry; *John E. Hendrix* (Colorado State University) Plant Physiology; *Ian M. Sussex* (Yale University) Developmental Botany.

### CANADIAN DIRECTORY OF BOTANISTS - RELEVÉ DES BOTANISTES AU CANADA

Vous trouverez ci-joint une formule à remplir pour le Relevé des Botanistes au Canada. Prier de la remplir aussitôt et de la renvoyer à Dr. R.J. Moore. Si vous connaissez un botaniste qui n'a pas reçu ce questionnaire, nous vous prions de lui en faire une photocopie.

Enclosed with the number is the questionnaire necessary for the next issue of the Directory of Canadian Botanists. Please fill it in promptly and send by return mail to Dr. R.J. Moore. If you know of other Botanists not receiving this questionnaire, please duplicate it so they too may reply.

## PERSONALIA

*T.M.C. (Tommy) Taylor*, Professor of Botany and Curator of the Vascular Plant Herbarium, University of British Columbia, will officially retire in June. Dr. Taylor was Head of the Department of Biology and Botany at UBC from 1954-1964. Prior to moving to Vancouver in 1946 he was in the Department of Botany, University of Toronto, and during the war he was Director of Personal Selection for the Canadian Navy. Dr. Taylor received his B.A. from U.B.C., his M.S. from the University of Wisconsin, and the Ph.D. from the University of Toronto under the direction of R.B. Thompson. He is known for his survey of the north shore of Lake Superior sponsored by the National Museum of Canada and his survey work in British Columbia. He has completed a manuscript on "Ferns and Fern Allies of the Pacific Northwest (Oregon to the Arctic)" and hopes it will be published by August, 1969. Upon retiring Dr. Taylor plans to move to Victoria, to continue writing a flora of British Columbia based, in part, on collections at the Provincial Museum.

*Pearl Weinberger*, University of Ottawa, and her sound-treated wheat seedlings, were written up in *Time*, April 12 (in company with Pierre Elliot Trudeau).

*Gilbert C. Hughes*, University of British Columbia will spend the summer at the Memorial University of Newfoundland as Visiting Research Scientist at the Marine Sciences Research Laboratory.

*Wilfred B. Schofield*, University of British Columbia, plans to spend May collecting and visiting herbaria in Japan and Taiwan.

*Roy L. Taylor*, Plant Research Institute in Ottawa, attended the international 'Symposium on Information Problems in Natural Sciences' held in Mexico City in late December, 1967. He presented a paper, "Use of Data-Processing Methods in the Herbarium" for *J.H. Soper* who was unable to attend due to illness.

---

 NEXT DEADLINE FOR BULLETIN: JULY 1
 

---

(from p. 7)

Drawings and photographs would become more acceptable line cuts and halftones if contributors would always remember, as publishers admonish, that: (1) lines should be thick enough and dots large enough for suitable reduction; (2) lettering should be planned for the same reduction as the illustration on which it appears; (3) all inking should be a good solid black; (4) figures (especially photographs) should be grouped to make the best use of the space available; (5) photographs should be cropped to show essential features only; and (6) photographs should be printed on glossy paper and with as much range of contrast as possible.

Pauline Snure

## POSITIONS AVAILABLE

University of British Columbia - Director of the Botanical Garden - full Professor. Write: Chairman, Division of Plant Science, Vancouver 8.

University of British Columbia - Plant Pathology. Duties include one undergraduate course, graduate teaching, and research. Rank: Assistant Professor with salary range \$9500 - 11,500. Write: Chairman, Division of Plant Science, Vancouver 8.

## GLEB KROTKOV - 1901 - 1968

On the morning of January 29, 1968, the Canadian Botanical Association lost one of the outstanding plant physiologists. Gleb Paul Krotkov, Queens University, died suddenly of a heart attack. At the time of his death he was the R.S. McLaughlin Research Professor of Biology. He was born in Moscow, Russia, in 1901, and had many interesting vignettes concerning his travels out of Russia. He received training at Prague Agriculture College and his M.A. (1931) and Ph.D. (1934) from the University of Toronto. While completing his doctorate he began the long association with Queens - first as a lecturer and then through the professional ranks. In 1947 he became Professor of Biology and later Chairman of the Department.

Dr. Krotkov's research was concerned mainly with intermediary metabolism. His many graduate students and post-doctorate fellows are now spread all over the world. In recent years he was involved in carbon metabolism in photosynthesis and the effect of environmental factors on photosynthetic rates and products. He was one of the first Canadian researchers to employ radioactive isotopes as a tool. Earlier work involved control of respiration as applicable to storage of fruits and vegetables. During the war he was one of several botanists concerned with production of latex as a substitute for rubber.

Gleb Krotkov was well known for his effervescence, his twinkling eyes, and his countless tales and stories. He was a tireless worker and during the summer often escaped to the family cottage on a lake near Kingston, where he was well away from ringing telephones and departmental problems. Many colleagues remember (somewhat fondly) his invitations to the cottage for a day or so. However, the hoped for relaxation came only after long hours of strenuous work on the current manuscript. Fortunately the presence of Mrs. Krotkov and the atmosphere tempered the work-load!

Dr. Krotkov was a charter member of the Canadian Society of Plant Physiologists and also served as President. He was a member of the Royal Society of Canada, serving as President of the Section on Biology, and was a member of the Council of the National Research Council of Canada. He is survived by his wife Valia and two children, Bob and Mary.

ENQUETE SUR LA RECHERCHE EN BIOLOGIE -  
SCIENCE SECRETARIAT STUDY

The questionnaire prepared by the Biological Council of Canada - Conseil Canadien de Biologie (BCC-CCB) has been distributed throughout Canada. If you have not completed your copy, please do so immediately (today!) and return it to Ottawa. Support of biological research in the future may depend on your answers today!

Tout chercheur indépendant dans le domaine des sciences de la vie a reçu, le mois passé, le questionnaire des études du Secrétariat des Sciences sur la Recherche en Biologie et en Agriculture. Si vous n'avez pas encore complété votre questionnaire, nous vous prions de la faire au plus tôt. (C'est à dire, aujourd'hui!) Rappelez-vous que la politique du gouvernement vis-à-vis de la recherche en biologie serait déterminée par vos réponses.

*CBA-ABC Bulletin* is published four times a year, in January, April, July, and October by the Canadian Botanical Association - L'Association Botanique du Canada, c/o Department of Botany, University of British Columbia, Vancouver 8, Canada: J. Stein, Chairman Publication Committee.