THE CANADIAN BOTANICAL ASSOCIATION

BULLETIN

L'ASSOCIATION BOTANIQUE DU CANADA

ISSN 0008-3046

July 1984 Volume 17 Number 3 Vancouver

FIRST WINNER OF WERESUB MEMORIAL AWARD

Keith Seifert has been chosen as the first recipient of the Luella Weresub Memorial Award, on the basis of his paper "Decay of wood by the Dacrymycetales" (Mycologia 75:1011-1018).

Keith is 26 years old, and a native of Sudbury, Ontario. He did his undergraduate training at the University of Waterloo, where, through what he describes as a 'series of accidents', he eventually graduated with an Honours B.Sc. in Biology, along the way developing an interest in Mycology (via Bryce Kendrick). Keith also spent the summers of his undergraduate years at the NRC Prairie Regional Laboratory in Saskatoon, finding out (via Ian Reid) how to use fungi to decay wood. This knowledge led him to the University of British Columbia, where, under the supervision of R.J. Bandoni (who knows about jelly fungi) and E.C. Setliff (who knows how to decay wood), he produced an M.Sc. thesis concerning wood decay by the Dacrymycetales, which gave rise to the prize-winning paper.

Keith is one of a trio of UBC graduate students (Andy MacKinnon and Dick Summerbell being the others) who were responsible for the notorious 'RotNots', the fungal voice of western Canada (la voix fongueuse ....), a fanciful and at times profane newsletter intended to make other mycologists sit up and laugh. This and various other desiderata show Keith's lively and humorous imagination, and his interest in writing.

Keith is now pursuing a Ph.D. in Rob Samson's laboratory at the Centraalbureau voor Schimmelcultures in the Netherlands. His aim is to monograph the synnematal hyphomycete genus *Stilbella*.

The judging committee found Keith a worthy winner of the 1983 award. He was sole author of the winning paper, and was given full credit for it by his sponsors. His passion for fungi, and for writing, also make him the kind of student of whom Luella Weresub would have approved.

The Committee would like to remind all potential nominees for the 1984 Weresub Award, and their supervisors, that the Award will be given for the best mycological paper published during 1984 by a graduate or undergraduate student at a University in Canada, or by a Canadian student at a University abroad. The value of the 1983 Award was $1000, but this amount is subject to review in each year as and when bank interest rates are reviewed.

Details of the nomination procedure can be obtained from:- Dr. Bryce Kendrick, Dept. of Biology, University of Waterloo, Waterloo, Ontario N2L 3G1

OFFICERS OF CBA/ABC 1983-1984

President:	Dr. W. George Barker Univ. of Guelph
Past-President:	Dr. James H. Soper Nat.Mus.Nat.Sci., Ottawa
Vice-President:	Dr. A.R.A. (Ron) Taylor Univ. of New Brunswick
President-Elect:	Mr. Gerald A. Mulligan Biosyst.Res.Inst., Ottawa
Secretary:	Dr. Iain E.P. Taylor Univ. of British Columbia
Treasurer:	Dr. Douglas Davidson McMaster Univ.
Directors:	Dr. Luc Brouillet Univ. de Montréal
	Dr. Paul M. Catling Biosyst.Res.Inst., Ottawa
	Dr. Keith E. Denford Univ. of Alberta
	Dr. J. André Fortin Univ. Laval
	Dr. Richard Hebda B.C. Prov.Mus., Victoria
	Dr. Vipen K. Sawhney Univ. of Saskatchewan
Editor *Bulletin*: (ex off.)	Mrs. Sylvia Taylor UBC Botanical Garden
Archivist:	Dr. W.I. Illman Carleton Univ.

NEWS FROM THE SECTIONS

NOTE: All Sections will hold Business Meetings during the Annual Meeting at Fredericton, N.B., June 24-27, 1984.

General Section
Chairman: Joanne MacDonald, Dept. of Forest Resources, Univ. of New Brunswick, Bag Service #44555, Fredericton, N.B. E3B 6C2

Mycology Section
Chairman: James A. Traquair, Harrow Research Station, Harrow, Ont N0R 1G0

Phycology Section
Chairman: Gordon G.C. Robinson, Dept. of Botany Univ. of Manitoba, Winnipeg, Man R3T 2N2

Structure & Development Section
Chairman: Richard I. Greyson, Dept. of Plant Sciences, Univ. of Western Ontario, London, Ont N6A 5B7

Systematics & Phytogeography
Chairman: Keith E. Denford, Dept. of Botany, Univ. of Alberta, Edmonton, Alta T6G 2E9

Representatives to BCC
Executive: Member: W.G. Barker
Alternate: G.A. Mulligan
Council: Member: J. McNeill
Alternate: G.A. Mulligan

Representative to I.U.B.S.: J. McNeill

CALL FOR NOMINATIONS – EXTERNAL AWARDS 1985

The CBA/ABC invites its entire membership to make nominations for the following two Awards by other organizations. All nominations will be considered by the CBA/ABC Awards Committee, and one name for each Award will be submitted to the appropriate organization, assuming sufficient merit for endorsement of the nomination by the Association. All nominations should be as strong as possible.

Biological Council of Canada Gold Medal

The Gold Medal Award of the BCC is made annually to a member of a constituent society *who has made outstanding contributions to the advancement of biology in Canada.* Such contributions are not intended to be solely in scholarship; significant service in national agencies, institutions and societies will also be recognized.

The individual Societies are expected to forward nominations from their members to the BCC Gold Medal Committee, and this is taken as endorsement of the nominee(s) by the Society. Nominations for the Award must be submitted in writing, and will stand for 3 years, although they should be revised annually and may be renewed.

A nomination for the Gold Medal must contain a citation drawing attention to all the achievements that should be considered by the Gold Medal Award Committee, with stress laid on those of particular significance. This must be accompanied by an up-to-date curriculum vitae (information about graduate students and post-doctoral fellows supervised is important), and a list of publications. It is not necessary to have extra letters of support from individuals.

John and Alice Tyler Ecology/Energy Prize

This international prize is awarded to *individuals or organizations for outstanding achievements benefiting mankind.* Nominees can be associated with any field of science. The term "organization" includes universities, foundations, corporations or other types of organization.

Prizes are awarded for the protection, maintenance, improvement and understanding of ecological and environmental conditions anywhere in the world; or for the discovery, further development, improvement or understanding of known or new sources of energy.

Nominations must include the name and address of the nominee (or administrative office of an organization), summary of accomplishment, detailed description of the contribution (including publications or other evidence), and 3 letters of recommendation plus the names of 3-5 further referees. Nominations will stand for 2 years.

Please submit nominations for either of these Awards to the Chairman of the CBA/ABC Awards Committee before December 31, 1984, with all necessary documentation:-

Mr. Gerald A. Mulligan
Biosystematics Research Institute
Central Experimental Farm
Ottawa, Ont K1A 0C6

CBA/ABC ANNUAL MEETING 1984

Congratulations to all those involved in the organization and running of the Annual Meeting in Fredericton.

A full report of the meeting will appear in the next issue of the *Bulletin*.

FORTHCOMING MEETINGS

International Society for Evolutionary Protistology, June 10-14, 1985, Carleton University, Ottawa.

This will be the 6th biennial meeting of the Society. There will be papers on evolution of algae, protozoa, zoosporic fungi and other primitive eukaryotes, and a symposium on molecular systematics and cellular evolution. A workshop on cytological terminology will explore means of standardizing names of organelles and cellular systems in algae, protozoa and fungi. These meetings provide the unique opportunity for an exchange of ideas and technology between internationally recognized authorities from different disciplines who would otherwise not meet at more traditionally structured conferences.

For further information, contact: ISEP Secretariat, Conference Services, National Research Council of Canada, Ottawa, Ont K1A 0R6.

Third International Congress of Systematic and Evolutionary Biology (ICSEB), July 4-10, 1985, University of Sussex, Brighton, U.K.

For further information, contact: Prof. Barry Cox, c/o ICSEB Congress Office, 130 Queen's Rd., Brighton, Sussex, BN1 3WE, U.K.

XVI International Congress of Genetics, August 20-28, 1988, Toronto.

International Congress on Cell Biology, August 1988, Montréal. (To be held during the week immediately preceding the XVI ICG.)

WHAT'S MISSING?

Members may have noticed something different about the front page of the CBA/ABC *Bulletin*.

Missing is the indication of the Patronage of the Governor-General of Canada.

Each Governor-General decides what societies and organizations he/she wishes to honour, and the patronage is given only for the term of office of that particular personage. Therefore, we lost our "Patron" as soon as the Governor-Generalship changed, and can no longer carry it on our masthead — unless Her Excellency Madame Jeanne Sauve, the new Governor-General of Canada, should agree to become Patron of the Association.

We were honoured that His Excellency The Right Honourable Edward Schreyer was the Patron of CBA/ABC from November 1979 until this year.

INTERNATIONAL ORGANIZATION OF PLANT BIOSYSTEMATISTS

Plant Biosystematics: 40 Years Later was the theme for a symposium sponsored by IOPB at McGill University in July 1983. Delegates from 16 countries participated. The presentations of 37 speakers are as follows:

Biosystematics 1983, B.K. Vickery; Cytology and Biosystematics: 1983, K. Jones; The Genome, the Natural Karyotype, and Biosystematics, M.D. Bennett; Chromosome Pairing in Species and Hybrids, R.C. Jackson; Nuclear DNA Variation and the Homology of Chromosomes, H. Rees; Chromosome Banding and Biosystematics, I. Fukuda; Chromosome Evolution and Adaptation in Mistletoes, B.A. Barlow & N.J. Martin; Differentiation and Evolution of the Genus *Campanula* in the Mediterranean area, J. Contandriopoulos; The Biological Species Concept Reexamined, B.E. Jonsell; The Pursuit of Hybridity and Population Divergence in *Isotoma petraea*, S.H. James; The role of Hybridization in the Evolution of *Bidens* on the Hawaiian Islands, F.R. Ganders & K.M. Nagata; Hybridization in the Domesticated-Weed Complex, E. Small; Plant Reproductive Strategies, K. Urbanska; The Relationships Between Self-Incompatibility, Pseudo-compatibility, and Self-compatibility, D.L. Mulcahy; Apomixis and Biosystematics, S. Asker; Constraints on the Evolution of Plant Breeding Systems and Their Relevance to Systematics, C.J. Webb; Pollination and Biosystematics, P.G. Kevan; The Biosystematic Importance of Phenotypic Plasticity, P.Morisset & C. Boutin; A Biosystematic and Phylogentic Study of the Dipsacaceae, R. Verlaque. Evolution of rDNA in *Claytonia* Polyploid Complexes, J.J. Doyle, R.N. Beachy & W.H. Lewis; Isozyme Evidence and Problem Solving in Plant Systematics, L.D. Gottlieb; Phytochemical Approaches to Biosystematics, K.E. Denford; Pollen Morphology and Biosystematics of the Subfamily Papilionoideae (Leguminosae), I.K. Ferguson; Numerical Taxonomy and Biosystemaitcs, J. McNeill; Problems of Hybridity in the Cladistics of *Crataegus* (Rosaceae), J.B. Phipps; Population Biology and Biosystematics: Current Experimental Approaches, B.A. Schaal; Cytogeography and Biosystematics, C. Favarger; Biosystematics of Tropical Forest Plants: A Problem of Rare Species, P.S. Ashton; Biosystematics of Bryophytes: An Overview, R. Wyatt & A. Stoneburner; Biosystematic Studies on Pteridophytes in Canada: Progress and Problems, D.M. Britton; Biosystematics and Medicine, W.H. Lewis; Modes of Evolution in Plants under Domestication, D. Zohary; *Zea* - A Biosystematical Odyssey, H.H. Iltis & J.F. Doebley; Biosystematics and Hybridization in Horticultural Plants, W.A. Brandenburg; Biosystematics and Conservation, D. Bramwell; A Comparison of Taxonomic Methods in Biosystematics, W.H. Wagner; Observations on IOPB 1983 and Notes on the Discussions Among Participants, J.C. Semple.

The proceedings are scheduled for publication in May, 1984, under the title Plant Biosystematics, edited by William F. Grant. The book is available from: Academic Press Canada, 55 Barber Greene Road, Don Mills, Ont M3C 2A1. 684 pp. Price: $49.50 U.S. ($49.50 Can. to Canadian addresses).

II. ONTARIO

(Susan E. Weaver, Harrow)

UNIVERSITY OF WESTERN ONTARIO (P.B. Cavers)

Paul Cavers — (1) Proso millet (*Panicum miliaceum*): a comparison of crops, crop weeds and weedy types with emphasis on seed production, dispersal, dormancy and germination. We would welcome seed samples of proso millet from across Canada. (2) The effects of herbicides on seed banks in the soil. Students:

- Diane L. Benoit (Ph.D. completed) — has just returned to her position as weed specialist with Agriculture Canada, St. Jean, Que. Her interests are in seed banks of weedy species, especially those with herbicide resistance.
- Marguerite Bough — germination performance and response to herbicides of different populations of proso millet.
- Dan Broderick — dispersal strategies: The role of the berry in dispersal and seed dormancy of *Solanum dulcamara* (climbing bittersweet).
- Rudy Brown — the ecology of velvet leaf (*Abutilon theophrasti*) at the northern edge of its range.
- Brenda Frick - life history strategies in the genera *Silene* and *Saponaria*; multiple life history strategies in one species.
- Stephen J. McCanny — principles of seed dispersal, with special reference to proso millet.
- Clarence Swanton — the ecology of Jerusalem artichoke (*Helianthus tuberosus*) with special reference to its means of vegetative propagation.
- Paul Threadgill — the 'biennial' life cycle strategy as exemplified by the flora of abandoned gravel pits.

M. Anwar Maun — population dynamics of two sand binding perennial grasses: *Ammophila breviligulata* and *Calamovilfa longifolia*. Students:

- Josee Lapierre (M.Sc. completed) — Thesis: Effects of sand burial on *Ammophila breviligulata*.
- Felicite Stairs (Ph.D. stud.) — population differentiation in life history characters among *Artemisia campestris* populations.
- Irene Westelaken (M.Sc. completed) — Thesis: Some aspects of the population dynamics of *Lithospermum caroliniense*.

Laszlo Orloci — mathematical ecology, theory and applications; environmental impact studies; convergent evolution of plant communities. Books: "Multivariate Analysis in Vegetation Research" (Junk, 1978); "Introduction to Data Analysis with Applications in Populations and Community Biology", with Norm Kenkel (U.W.O., 1983); "Information Analysis of Vegetation Data", with E. Feoli & M. Lagonegro (Junk, 1983). Students:

- Peter H. Fewster (Ph.D. student) — multivariate data analysis, modelling ecosystems. Thesis: "Predicting Vegetation Response to Perturbation".
- Norm Kenkel (Ph.D. student) — multivariate data analysis, sampling problems, boreal ecosystems. Thesis: "Vegetation of a Sandy Outwash Plain, Elk Lake, Ontario".
- Janos Podani (Ph.D.) — Thesis: "Spatial Processes in the Analysis of Vegetation".
- Shadid S. Shaukat (Ph.D. student) — multivariate analysis, niche structure, weed communities. Thesis: "Multivariate Approaches to the Analysis of Urban Weed Communities".

James B. Phipps — evolutionary biology of *Crataegus* (Hawthorn) Rosaceae (with associates Paul Smith, Flemming Ulf-Hansen and Tom Wells). Investigations into the relationship of population structure and breeding systems are being conducted, with particular emphasis on the frequency of and effect of apomixis. The frequency of hybridisation is under investigation, as is the study of the magnitude of population changes, since they bear on genic and genomic computation. Effects of light and agricultural practices on the latter are being studied. *Crataegus* is under revision for the "Vascular Flora of the Southeastern United States", and gifts of material from anywhere in North America would be appreciated. Student:

- Timothy A. Dickinson (Ph.D. completed) — Thesis: "*Crataegus crus-galli* L. sens. lat. in Southern Ontario".

QUEEN'S UNIVERSITY (L. Aarssen)

Lonnie Aarssen — experimental studies of the evolutionary consequences of neighbour interactions (e.g., competition and beneficience) between plants; the specific attributes of plants important in biotic specialization and in permitting species coexistence in managed grasslands and other natural communities; patterns of adaptive variation and resource allocation during community evolution.

- Adele Crowder — wetland ecology including eutrophiation in the Bay of Quite and metal uptake; rare plants of eastern Ontario, mainly in relation to those in the St. Lawrence Islands National Park.
- Gregory Taylor (Ph.D. completed) — copper and nickel tolerance in clones of *Typha latifolia* L. from contaminated wetlands near Sudbury, Ont. Now working as PDF on aluminum tolerance by wheat at Belleville Agric. Research Center, MD.
- Brian McLaughlin (M.Sc. completed) — relationship of grasses, *Agrostis gigantea* and *Poa pratensis*, to environmental factors on a reclaimed tailings area near Copper Cliff, Ont. Now working as a research assistant in toxicology.
- Jean Gagnon (M.Sc. student) — working on succession on mine tailings at Rouyn, Que, in relation to soil toxins and nutrients.
- Sheila Macfie (M.Sc. student) — working on the formation of iron plaques on roots of wetland plants.
- Timothy Conlin (M.Sc. student) — working on oxygen release by roots.
- Louise St. Cyr (Ph.D. student) — working on metal uptake by *Phragmites*.

UNIVERSITY OF GUELPH (R.J. Reader)

- H.M. Dale — role of hydrostatic pressure, light and temperature as determinants of the maximum depth distribution of aquatic macrophytes.
- D.W. Larson — experimental analysis of physiological processes regulating growth and distribution of lichens in the field.
- R.J. Reader — modelling the dynamics of plant populations in space and time.
- D.W. Smith — effect of disturbance on plants and plant communities.

UNIVERSITY OF TORONTO (R.L. Jefferies)

P. Ball (Erindale College) — taxonomy and evolution of the Cyperaceae.

K.D. Bennett (Scarborough College) — Holocene migration patterns and population dynamics of tree species in southern Ontario (PDF)

T.J. Carleton (St. George Campus) — ecology and limnology. Forest ecology of Canadian boreal regions; succession of jack pine and trembling aspen forests; quantitative analysis of vegetation data.

J.E. Cruise (St. George Campus) — flora of Ontario, the Great Lakes drainage basin, and northeastern North America.

W.R. Cummins (Erindale College) — stress physiology - studies on plant responses to drought and low temperature; arctic adaptations in plants; thermal acclimation of photosynthesis.

L.C. Cwynar (St. George Campus) — history of vegetation and migration of tree species in Alaska-Yukon using pollen and plant macrofossil analysis. Vegetation and climate dynamics in Beringia.

J.E. Eckenwalder (St. George Campus) — classification and evolution of woody plants with particular reference to polars, cycads and conifers.

J.A. Hellebust (St. George Campus) — membrane transport; heterotrophy and biochemical aspects of osmoregulation in algal cells; ecology of Arctic freshwater and marine algae; oil-spill effects.

T.C. Hutchinson (St. George Campus) — applied ecology, responses of ecosystems to antropogenic stress, principally to heavy metals, acid precipitation and oil spills; arctic ecology.

R.L. Jefferies (St. George Campus) — plant-herbivore interactions; population biology and physiology of halophytes.

P.F. Maycock (Erindale College) — vegetation ecology; vegetation complex of central eastern Canada; conservation ecology.

J.H. McAndrews — vegetation and climatic history of North America, from analysis of fossil pollen; pollen systematics; archaeobotany.

D. Malloch (St. George Campus) — ecology and biogeography of ectomycorrhizal associations, particularly in boreal forest areas in Canada; taxonomy of Agaricales and Ascomycetes.

C. Nalewajko (Scarborough College) — phosphorus cycling in acid lakes and the effects of aluminum and lake acidification on phytoplankton are under investigation in two Shield lakes.

J.C. Ritchie (Scarborough College) — Late-Pleistocene, Holocene and modern plant ecology of northwest Canada and the Circum-Mediterranean region.

T. Sawa (St. George Campus) — systematics and cytology of algae, particularly Charophyta

P.M. Stokes (St. George Campus) — phytoplankton response to heavy metals, including adaptation, mechanisms of tolerance and uptake, metal localization in algal cells; effects of acidification on plankton and periphyton in shield lakes; metal cycling in acid stressed aquatic systems; reclamation of damaged systems.

J. Svoboda (Erindale College) — Arctic vascular plant species and communities; evolution, production, distribution and southern boundaries; autecology of Arctic plants; low-level radiation in the environment.

G.R. Thaler (Erindale College) — applied ecology and environmental toxicology; effects of pesticides on plant-pollinator relationships, plant fecundity, and forest successional patterns.

R.C. Wyndham (St. George Campus) — microbial degradation of organic compounds in aquatic and terrestrial environments and in continuous culture; microbial interactions and adaptations.

Spencer C.H. Barrett — ecological and evolutionary genetics, plant population biology plant reproductive biology. Research projects: Evolution of plant breeding systems in Pontederiaceae (*Eichhornia* and *Pontederia*) and Turneraceae (*Turnera*); Ecological genetics of weeds (*Echinochloa crus-galli* complex); Gender variation in plants.

AGRICULTURE CANADA, HARROW RESEARCH STATION (S.E. Weaver)

Susan Weaver — population biology of weed species in agrecosystems at the northern end of their range; weed-crop competition; changes in the weed flora due to crop management practices; population variation in *Datura* and *Amaranthus*.

UNIVERSITY OF WINDSOR (I.M. Weis)

I.M. Weis — population and community ecology of prairie plants and weeds; weed-crop competition; biogeography of *Betula glandulosa* and other Arctic plants.

Luise Hermanutz (M.Sc. completed) — Thesis: The effect of clone size on seed production in Canadian goldenrod (*Solidago canadensis*).

Jess Zimmerman (M.Sc. completed) — Thesis: Competition in natural and experimental monocultures of *Xanthium strumarium* L.

David Innes — evolutionary genetics of algae.

Greg Barclay — physiological ecology; phloem transport, cell motility; heavy metal uptake and cytotoxicity in plants.

Donovan des Thomas — breeding systems in fungi.

Donald Wallen — physiological ecology of algae.

III. NEWFOUNDLAND

(Bruce Roberts)

MEMORIAL UNIVERSITY OF NEWFOUNDLAND

Guy Brassard — working on moss flora of Newfoundland; moss flora of Arctic North America; epiphytic mosses. Students:

Terry Hedderson — working on the Arctic moss element of northern Newfoundland.

Mae Favreau — epiphytic Bryophytes of sugar maple trees in Gaspé.

James Bridgeland — completing study on flora of Cape Herschel, Ellesmere Island.

Rene Belland — working on the disjunct mosses in the Gulf of St. Lawrence and the snow bed ecology of Atlantic Canada.

Bob Hooper — continuing algae ecology studies with emphasis on ecology of ice scoured shorelines, endemic algae species of Newfoundland and Labrador; working on "Marine Benthic Algae Flora of Newfoundland" jointly with G.R. South, illustrated by Sue Meades.

Peter Scott — continuing flora studies of Newfoundland; taxonomy of *Geum*; population genetics of conifers (isozymes). Student:

John Pratt — working on ecology of ferns of Cape St. Mary's area.

G. Robin South — continuing research on the ecology of marine benthic algae; sea urchin grazing in the subtidal (with D.H. Steele and D.W. Keates); biogeography of the marine algae of the North Atlantic Ocean in collaboration with E.C. Henry (MUN) and I. Tittley (British Museum of Natural History).

Allan Whittick — continuing research on ecology of red algae. Student:

J. Jones — working on spatial and temporal distribution of reproductive structures on the brown algae (Pilayella).

NEWFOUNDLAND FOREST RESEARCH CENTRE

E. Doyle Wells — peatland classification of Labrador; working jointly on wetlands map of Canada, and book chapter for Atlantic Canada; afforestation of peatlands in central Newfoundland.

W.J. Meades — succession studies on heaths and forests of eastern Newfoundland; habitat mapping of Grey River Caribou Herd Range in central Newfoundland; succession studies of major forest types following severe budworm infestations of last decade.

F.C. Pollett — moved to directorship of Petawawa National Forestry Institute.

B.A. Roberts — autecology studies of red pine, larch and white spruce; ecology of Newfoundland soils; ecology of serpentized areas; forest site classification studies.

A.W. Robertson — working on biological indicators of climate; willows - their ecology and use for boreal energy plantations; recently produced a phytogeographic map of the island of Newfoundland.

S.S. Sidhu — pollution studies including fluoride and acid rain; foliar buffering capacity; effects of acid rain on pollen of major tree species.

If you know of anyone who has been omitted from the list, would you please contact the Chairman of the Section: Dr. B.A. Roberts, Newfoundland Forest Research Centre, Canadian Forestry Service, P.O. Box 6028, St. John's, Nfld A1C 5X8. Volunteered information for future lists would also be most welcome.

DIRECTORY OF CANADIAN FIELD RESEARCH STATIONS

Copies of this recently published 260-page directory of all Field Research Stations in Canada are now available.

It includes over 175 field stations. These are located in all 12 Canadian provinces and territories, and include a substantial number in the arctic and boreal regions. Maritime stations are also included. Details are provided for each station of location, facilities and availability to researchers.

The Directory costs $10 Can., and is available from: Dr. M.B. Fenton, Secretary, Biological Council of Canada, Dept, of Biology, Carleton Univ., Ottawa, Ont K1S 5B6

FIFTH ANNUAL REGIONAL MYCOLOGY WORKSHOP

The Fifth Annual Regional Mycology Workshop was held at the Biology Department, University of Waterloo, on the weekend of February 18th and 19th, 1984. Dr. Bryce Kendrick and the other denizens of the Waterloo Mycology Lab. (Adina Fronda, Suha Jabaji-Hare, Bryden Jones, Gracia Murase, Tumkur Nag Raj) hosted the meeting. Wearing T-shirts specially designed for the occasion, they welcomed more than 50 mycologists who had come, aided and abetted by the unseasonably warm weather, from as far away as Minneapolis, Chicago, Ithaca, Quebec City, Montreal and Ottawa.

The theme of the meeting, "Teaching Mycology" was explored in many ways by the various speakers, and in several 'hands on' demonstrations. The tone of the gathering was set by our distinguished guest speaker, Dr. Rolf Singer (Field Museum, Chicago), world-famous Agaricologist, who discussed the integration of new knowledge about the biology of agarics into mycology course, giving us some titillating glimpses of the mushrooms of Amazonia. Dr. Ralph Estey (McGill) gave a witty discourse on how to solve the problems associated with teaching mycology during the Canadian winter, including a delightful anecdote on how his efforts to acquire teaching material led to a lucrative consulting business that now supports his research. Dr. Dave Malloch (Toronto) then discussed many of the fascinating ramifications of the fungal succession on dung, and how they could be used, both to arouse interest in undergraduates, and to teach a great deal about fungal taxonomy and ecology. Dr. Yves Piche (Guelph) showed how the growth pouch technique can be used in teaching about ectotrophic mycorrhizae. Dr. Brent Heath (York) rounded off the session by showing how students interested in genetics, ultrastructure and molecular biology could be shown that fungi are excellent organisms with which to pursue those studies. He hoped that in this way we could recruit bright young people who now bypass mycology.

A combined Poster and Demonstration session provided further stimulation, and there were several more talks on Sunday morning. The last hour or so was given over to a lively and stimulating discussion on how mycology can best be taught. Many excellent points were raised, and will be more fully documented elsewhere. The many mycology teachers present resolved to jointly produce a new Mycology Laboratory Manual. This was followed by a visit to the Chemical Engineering Department to see a pilot plant using *Chaetomium* to produce protein on a large scale from cellulosic plant wastes such as corn stover.

A banquet was held on the Saturday evening - a 12-course mezza, an excellent and satisfying sampler of Lebanese cuisine, further enlivened by the gyrations of a belly dancer. Films and videotapes planned for later were cancelled.

The next meeting will be held at the University of Guelph in 1985.

Bryce Kendrick
Univ. of Waterloo

NOTICE OF PUBLICATION

Grassland Ecology and Classification. Symposium Proceedings, June 1982, edited by A.C. Nicholson, A. McLean & T.E. Baker. 1982. Publication No. R28-82060, B.C. Ministry of Forests, Victoria. 353 pp. Price: ? (none given).

The Symposium was held in Kamloops, B.C., June 2-4, 1982, and focussed on various aspects of the ecology and classification of grasslands in western North America. Particular attention was directed to climate, surficial geology, soils, palaoecology and vegetation. It brought together a great deal of expertise , and the general ecological information presented may be of interest to members of CBA/ABC.

Copies of the Proceedings may be purchased from the Queen's Printer Bookstore in Victoria.

CANADIAN HERITAGE RIVERS SYSTEM

The following is taken verbatim from a brochure on The Canadian Heritage Rivers System issued by Parks Canada and received recently.

Federal, provincial and territorial governments have been discussing ways to ensure that some of Canada's great rivers are protected. They are actively working on the development of the Canadian Heritage Rivers System. Rivers which are outstanding examples of Canada's natural heritage, which played a significant role in Canadian history or which offer outstanding opportunities for recreation could be designated "Canadian Heritage Rivers". Each river so designated will continue to be managed by the federal, provincial or territorial government in such a way that its distinctive heritage values and resources will be conserved, and increased opportunities for public use and enjoyment of the river will be provided.

Creation of the Canadian Heritage Rivers System is just the first step toward protecting our important heritage rivers.

Comments, suggestions or requests for information about the Canadian Heritage Rivers System should be addressed to:- Canadian Heritage Rivers, Parks Canada, Ottawa, Ont K1A 1G2

FUTURE MEETINGS OF CBA/ABC

1985 - London, Ont, June 23-29
Canadian Congress of Biology

1986 - Sudbury, Ont, June 22-26

1987 - Montréal, Qué, June 14-18

1988 - Victoria, B.C., date not yet known

1989 - Open
Suggestions and/or invitations would be welcomed by the President or Secretary of the Association.

1990 - Possible date of 2nd Canadian Congress of Biology

The great tragedy of Science — the slaying of a beautiful hypothesis by an ugly fact.
T.H. Huxley

BOOK REVIEW

Die Küstenvegetation Ostkanadas, by Dietbert Thannheiser. 1981. Geogr. Arb. 10, Ferdinand Schöningh, Paderborn. 204 pp. with 41 tables and 166 figures. Softcover. Price: 41.50 DM

Il s'agit d'une monographie descriptive de la végétation des marais salés, des dunes et des plages du Canada oriental. L'Auteur a parcouru les côtes des provinces maritimes, de la Gaspésie et des îles de la Madeleine dans le but d'en faire une étude phytosociologique et écologique et de les comparer avec la côte occidentale de l'Atlantique.

Le travail est divisé en six parties traitant, respectivement, du cadre physiographique, des méthodes, de la flore et de la végétation des trois habitats mentionnés. Le chapitre sur la flore comprend quelques extensions d'aire intéressantes, comme la mention du *Limonium nashii* à Terre-Neuve, mais, le lecteur apprend peu de choses nouvelles sur la végétation et quasi rien sur son écologie à part la position topographique occupée par les communautés et traduite par des esquisses à main levée et quelques données sur la salinité. Il y a bien un chapitre sur les méthodes, mais l'Auteur n'y dit pas comment et lesquels des facteurs écologiques on été mesurés et/ou analysés (exception faite, partiellement, pour la salinité et le pH). Et pourtant, il est parfois question des sols, de leur richesse, de leur assèchement, de la biomasse, etc., (p. ex. à la p. 51, fig. 53) ou des courbes de salinité (p. 49, fig 52) dont les valeurs restent difficiles à interpréter. Il n'y est pas dit, non plus, de quelle manière a été déterminée l'homogénéité physionomique des groupements végétaux et comment a été choisi l'emplacement des places-échantillons, ni quelle a été l'hypothèse de ce travail.

Pour ce qui est de la végétation, l'effort principal semble avoir porté sur sa classification phytosociologique. La nouveauté concerne le rattachement des associations décrites aux unités supérieures (alliance, ordre, classe) du système hiérarchique des communautés végétales-types et une tentative de reconnaissance de quelques unités symphytosociologiques du niveau synassociation. La cartographie des syntaxons représente également un début interessant bien qu'en réalité il s'agit de la localisation des relevés de l'Auteur et non pas, comme le titre des cartes le laisse croire, de la véritable distribution des syntaxons (voir p. 153, fig. 150, p. ex.). La végétation des dunes fixées, des sillons humides et des caoudeyrs n'est pas traitée. De plus, un tableau hiérarchique de toutes les unités mentionnées au Canada et en Europe aurait aidé le lecteur a acquérir une vue d'ensemble que ce travail, qui visiblement manque de synthèse, ne lui fournit pas.

En somme, il s'agit d'un ouvrage géographique purement qualitatif, axé sur la végétation, qui laissera bien des lecteurs sur leur apétit.

Miroslav M. Grandtner
Dir. Etudes écologiques
Université Laval , Qué

PERSONALIA

Dr. William F. Grant, McGill University, has been invited by the Japan Society for the Promotion of Science to lecture at 6 Universities in Japan. His topics will be "Higher Plant Genetic Test Systems for the Detection of Environmental Mutagens", "The Cytogenetics of *Lotus* (Leguminosae)" and "The Role of the International Organization of Plant Biosystematists". Dr. Grant is currently President of IOPB.

There have been 40 new members of CBA/ABC so far in 1984, plus about 15 changes of address (some minor). Listed below are the new members and changes of address that were not received in time to be included in the Membership Directory that was included with the April 1984 issue of the *Bulletin*.

New Members

Arthur Davis, Dept. of Environmental Biology, Univ. of Guelph, Guelph, Ont N1G 2W1 (S)
Stephen R. Downie, Dept. of Botany, Univ. of Alberta, Edmonton, Alta T6G 2E9 (S)
Mr. Jean Y. Gagnon, Dept. of Biology, Queen's Univ., Kingston, Ont K7L 3N6 (S)
Dr. Louis A. Hanic, Dept. of Biology, Univ. of Prince Edward Island, Charlottetown, P.E.I. C1A 4P3 (R)
Edward H. Hogg, Dept. of Biology, Univ. of New Brunswick, Bag Serv. #45111, Fredericton, N.B. E3B 6E1 (S)
Brian Charles Husband, Dept. of Botany, Univ. of Alberta, Edmonton, Alta T6G 2E9 (S)
Dan MacIsaac, Dept. of Botany, Univ. of Alberta, Edmonton, Alta T6G 2E9 (S)
Mary Louise McCluskey, Univ. College of Cape Breton, Sydney, N.S. B1P 6L2 (R)
Ewa Mellerowicz, Dept. of Biology, Univ. of New Brunswick, Bag Serv. #45111, Fredericton, N.B. E3B 6E1 (S)
Nina Naumenko, 372 - 2 St. Martial St., Sudbury, Ont P3B 2A4 (S)
Kevin E. Percy, Can. Forestry Serv., Maritimes Forest Research Centre, P.O. Box 4000, Fredericton, N.B. E3B 5P7 (R)
Christopher Perumalla, Dept. of Biology, Univ. of Waterloo, Waterloo, Ont N2L 3G1 (S)
Doug Strongman, Dept. of Biology, Univ. of New Brunswick, P.O. Box 4400, Fredericton, N.B. E3B 5A3 (S)
Kenneth J. Tosh, Fac. of Forestry, Univ. of New Brunswick, Bag Serv. #44555, Fredericton, N.B. E3B 6C2 (S)
William D. Towill, Reg. Forest Ecologist, Reg. Forest Management, North Central Reg., Ont. Min. of Natural Resources, P.O. Box 5000, 435 S. James St., Thunder Bay F, Ont P7C 5S6 (R)
Dr. Robert van Hulst, Dept. of Biology, Bishop's Univ., Lennoxville, Que J1M 1Z7 (R)
Dr. Patrick von Aderkas, NRC Atlantic Res. Lab., 1411 Oxford St., Halifax, N.S. B3H 3Z1 (R)
Ronald E. Wall, ,aritime Forest Res. Centre, P.O. Box 4000, Fredericton, N.B. E3B 5P7 (R)
Dr. Donald G. Wallen, Dept. of Biology, Univ. of Windsor, Ont N9B 3P4 (R)
Ms. Leila I. Wallenius, Dept. of Biology, Laurentian Univ., Sudbury, Ont P3E 2C6 (S)
Dr. Norman J. Whitney, Dept. of Biology, Univ. of New Brunswick, P.O. Box 4400, Fredericton, N.B. E3B 5A3 (R)
Maria Zbigniewicz, Dept. of Botany, Univ. of Manitoba, Winnipeg, Man R3T 2N2 (S)

Address Changes

S. Charlton, 4815 Nordegg Cr. NW, Calgary, Alta T2K 2M3
Sylvie Laliberte, Dept. ecologie, Fac. de foresterie, Univ. Laval, Ste-Foy, Que G1K 7P4
Dr. D. Thannheiser, Inst. fur Geographie Universitat, Bundesstr. 55, D-2000 Hamburg 13, Fed. Rep. Germany
Dr. Barry G. Warner, #59 - 6 Leith Hill Dr., Willowdale, Ont M2J 1Z2

Additions - New Members

Helene Brousseau, Institut Botanique, 4101 est rue Sherbrooke, Montréal, Qué H1X 2B2 (S)
Dr. David Garbary, Dept. of Biology, Saint Francis Xavier Univ., Antigonish, N.S. B2G 1C0 (R)
J.R.D. McLeod, 75 High St., Apt. 644, London, Ont N6C 4J8 (R)
Louise St-Cyr, Dept. of Biology, Queen's Univ., Kingston, Ont K7L 3N6 (S)

The Bulletin of the Canadian Botanical Assoc.
Editor: Mrs. Sylvia Taylor
Office of The Botanical Garden
University of British Columbia
6501 NW Marine Drive
VANCOUVER, B.C. V6T 1W5

Issued quarterly in January, April, July and October, and sent to all members of the Association. Non-members may subscribe at a price of $20.00 p.a. ($5.00 per issue) post free. Cheques or money orders (in Canadian funds ONLY) should be made payable to "The Canadian Botanical Association" and addressed to the Editor.

Advertisements for Positions Open and Classified categories may be placed at a cost of $10 (Can) per published column inch. Advertisements by individual members for post-doctoral opportunities and Positions Wanted are carried free.

Material for inclusion in the Bulletin should reach the Editor at least one month prior to the date of publication of that issue.

To ensure prompt delivery of the *Bulletin* please notify the Editor of any change of address as soon as possible.

Inquiries about membership of the CBA/ABC should be addressed to the Secretary of the Association:- Dr. Iain E.P. Taylor, Department of Botany, University of British Columbia, Vancouver, B.C. V6T 1W5