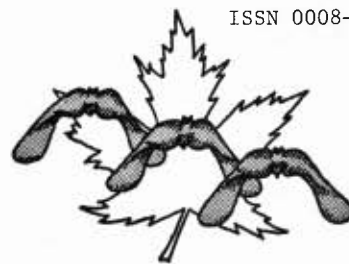


**BULLETIN**

L'ASSOCIATION BOTANIQUE DU CANADA



July 1978

Volume 11 Number 3

Waterloo

## THE ANNUAL MEETING

Our local committee reports that everything is proceeding well for the annual meetings which are being held in Newfoundland between August 13 & 17. Registrations are very encouraging and it looks as though we should have over 100 main registrants plus wives etc. Field Trip No. 1 is filled and consideration is being given to organizing a post meeting field trip to the western side of the island! Those members who have not booked airline or ferry tickets are reminded to do so at once in order to avoid disappointment. Both services are heavily booked at this time of year. The prospects are for a splendid meeting - see you there!

## BIOLOGICAL COUNCIL OF CANADA - Report by the President

The 1978 Spring Meeting of the BCC/CCB was held in Ottawa, April 13th-14th, with representatives from the CBA/ABC and other societies.

In the early part of the week, meetings were held with Mr. Gordon MacNabb, the new President of the Natural Sciences and Engineering Research Council, a number of members of the House of Parliament, Mr. John Shepherd, Science Council, Dr. Louis Lemieux, National Museum of Natural Sciences and the ADM's of Agriculture, Finance and State. Following the meeting the President met with officials from MOSST, including Dr. Frank Maine and Dr. Gingras, retiring Vice-President (University Grants and Scholarships) of the N.R.C. We were delighted that Dr. Gingras is continuing as a Vice-President of the N.R.C. with new responsibilities, particularly in the area of international affairs.

Since my last report, the brief to the Secretary of State on 'Museum Collections and Canadian Science' has been endorsed by the National Museum Corporation, and reviewed by both the National Museums of Canada (Secretary-General's Office) and by the Secretary of State's office for Cultural Affairs. The proposal for a study contract to be awarded to the BCC/CCB is now ready to go to the Minister for a decision.

A new brief 'Canadian Biology - Our National Science' addressed to the Task Force on Canadian Unity, was strongly endorsed during the meetings of Council. This brief is the only statement from the scientific community in Canada that has been presented to the Task Force and reaffirms the position of biology as the leading force in Canadian science at the present time. The two key 'messages' of the brief are that the response from individuals in the anglophone scientific community to try and bridge the communication gap is vital to counteract the isolation between francophone and anglophone biologists. Secondly, there are a number of essential supporting services which the federal and provincial governments must provide through financial support. Specific examples of what is required of individual biologists and of governments are detailed in the brief. As a national body, Council is facing the facts of the present situation, in the belief that, as in any scientific research problem, when one can articulate and define the problem one is also identifying where the solution must be found. The challenge presently facing the anglophone scientific body is whether we as individuals are prepared to give the respect and consideration to which francophone biologists are entitled. In the view of Council we, as Canadians, can do nothing less. I urge you all to read the brief and respond as Canadians. Copies are/will be available at society meetings this summer and through all chairmen of biology departments.

The new Natural Sciences and Engineering Research Council continues to give us considerable concern. At the time of writing, only Mr. MacNabb, the President, has been appointed, although the first 15 council members are expected to be announced very shortly. As an indication of why we should be concerned, Dr. Frank Maine, M.P., Parliamentary Secretary for MOSST, publicly stated at the University of Guelph on the 17th April that "the appointment of MacNabb was made directly from the Prime Minister's Office - the appointment went against the advice and the recommendations of both the Minister (Hon. J. Buchanan) and myself". That is a re-

markably frank (and, I believe true) statement for a junior minister to make. Our own meeting with Mr. MacNabb did nothing to dispel, but in fact increased, our concern. It appears, at least as far as the President is concerned, that the opportunity will be taken for a major review of the entire grants and scholarship programme including peer-adjudicated grant awards, continuing installments, percentage success (far too high!) and review by the new Council of actual recommended awards. There has been no consultation with the N.R.C. on the transfer of responsibility and on April 24th a dinner was held by the N.R.C. "to mark the termination of the activities of the Committee on Grants and Scholarships of the National Research Council of Canada". The word "extraordinary" does not do full justice to the events currently taking place in Ottawa. Bearing in mind that it is the entire university research programme that is now left in limbo, it is indeed a national tragedy and disgrace that the Prime Minister's Office has treated this whole business in such a cavalier fashion. The only bright spot for the future is that the number of enraged voices at MacNabb's appointment has led to an increase in the number of scientists who will sit on the new council.

The President of SCITEC, Dr. Bergeron, attended the Council meeting in order to inform members of the new activities of SCITEC and, in particular, of their plans for increasing public awareness of science. It is surprising that while the profile of SCITEC among the scientific community is low, it has very high credibility in Ottawa.

David F. Mettrick  
President  
25th April 1978

## NEWS FROM THE SECTIONS

### SYSTEMATICS AND PHYTOGEOGRAPHY SECTION

The Annual Meeting of the Section will be held in conjunction with the CBA/ABC meetings at St. John's, Newfoundland. At present the proposed agenda is:

1. Approval of minutes for 1977
2. Chairman's report
3. Proposed amendments to the constitution
4. Elections
5. Reports of subcommittees (Endangered species; Bryology; Lichenology)
6. Proposed consortium of Eastern Herbaria
7. Russian-Canadian Exchange of Scientists
8. Flora North America
9. New Business

Further information on items 3, 4 and 7 is given below. A list of nominees for the section's committee will be mailed to all current members. It will include a brief note concerning each candidate and a ballot form. If the amendments are passed, and if no further nominations are received, the results of the mail ballot can be used in determining next year's executive. If there are objections to this the election will take place at the meeting, only those present being able to vote, as has been the case in the past.

AMENDMENTS PROPOSED FOR THE "GENERAL STATUTES OF THE SYSTEMATICS AND PHYTOGEOGRAPHY SECTION OF THE CANADIAN BOTANICAL ASSOCIATION" TO BE CONSIDERED AT THE ANNUAL MEETING IN ST. JOHN'S, NEWFOUNDLAND 1978.

### Part II - The General Meeting

#### Add:

#### Item 5: (New Item)

Members shall be entitled to vote by mail or, by giving written notice of their intent to the section's secretary, by proxy, on any motion that has been distributed to the membership at least one month in advance of the annual meeting. These votes will be counted with those cast at the meeting. If a minor amendment to the motion is passed, the amended motion will not be resubmitted. If, in the opinion of those present, a major amendment has been approved, a second mail vote will be solicited.

### Part IV - The Executive Committee

#### Delete:

#### Item 11:

The Nominations Committee shall put forward a nucleus of essential nominations, bearing in mind some continuity of membership of the Committee.

#### Item 12:

The membership at large shall be advised by mail at least one month in advance of the proposals of the Nominations Committee. At the same time further nominations by mail shall be solicited from the membership.

#### Item 13:

The nominations so proposed shall be presented to the membership at the annual meeting for its approval. The five nominees obtaining the highest number of votes shall, with the past Chairman, comprise the new Executive Committee, exclusive of co-opted members.

#### Substitute for old items 11, 12, 13:

#### Item 12:

The nominations Committee shall put forward a nucleus of essential nominations, bearing in mind some continuity of membership of the Committee. The list of nominees shall be distributed to the membership at least three months in advance of the annual meeting. At the same time further nominations shall be solicited, the names to be submitted to the secretary of the section.

#### Item 13:

The secretary shall distribute the revised list of nominees together with a ballot to the membership at least one month prior to the annual meeting. The five nominees obtaining the highest number of votes shall, with the past Chairman, comprise the new Executive Committee, exclusive of co-opted members.

#### Renumber:

- Item 5 to Item 6
- 6 to Item 7
- 7 to Item 8
- 8 to Item 9
- 9 to Item 10
- 10 to Item 11

Rationale: In any one year only a small proportion of our members are able to attend the annual meeting. As a result, the majority are unable to express an opinion on the officers for the next year or any other matter scheduled for discussion. The above amendments are intended to make it possible for a larger proportion of the members than at present to express an opinion on matters that interest them and to encourage them to play a more active role in the section. The proposed renumbering is "house-cleaning" that would be necessary if the other amendments are passed.

#### Nominations for the Executive Committee of the Systematics and Phytogeography Section, 1978-1979

The following members have been nominated to serve on the committee. All have agreed to serve if elected. Five elected members are needed; the present chairman, Dr. J.M. Gillett, will be an ex-officio member of the committee.

- Dr. M. Barkworth - Biosystematics Research Institute, Agriculture Canada, Ottawa, Ontario
- Dr. C. Hamel - Université de Québec à Montréal, Montreal, Quebec
- Dr. V. Harms - University of Saskatchewan, Saskatoon, Saskatchewan
- Mr. D. Lindsay - Lakehead University, Thunder Bay, Ontario
- Dr. J. Maze - University of British Columbia, Vancouver, B.C.
- Dr. D. Woodland - Macdonald Campus, McGill University, Ste Anne de Bellevue, Quebec

#### Consortium of Eastern Herbaria

As announced in the previous issue, the formation of a Consortium of Eastern Herbaria has been proposed, and time to discuss the idea has been set aside at the annual meeting. Dennis Woodland has come up with a number of items for discussion at this meeting. Among them are:

- A type inventory
- Duplication of Exchange material
- Specialization of herbaria
- Field activities, co-ordination and co-operation
- Shifting collections
- Limits of growth
- Vouchers for biological surveys, etc.
- Formation of a supplies co-operative
- Loan procedures
- P.R. for herbaria

This list is not intended to be all inclusive! Anyone with other topics they would like to bring up should do so at the meeting, or, if this is impossible, by writing to Dennis Woodland (Dept. of Plant Sciences, Macdonald College, Ste Anne de Bellevue, P.Q.

#### WHAT'S ON IN SYSTEMATICS AND PHYTOGEOGRAPHY IN CANADA

Compiled by Mary Barkworth and Jack Gillett

UNIVERSITY OF ALBERTA (Contact: J. Packer)

Dr. J. Packer is currently finishing up his Flora of Alberta. He hopes to have it completed by Christmas. In addition to the traditional features, it will include distribution maps of all the species. He is also studying the genus Parnassia.

Wayne Ellisens is completing a revision of Oxytropis campestris, sensu lato, for his M.Sc. thesis.

Dale Vitt has undertaken preparing a monographic and phytogeographic study of the genus Arnica in North America.

Dr. K. Denford is conducting chemotaxonomic studies of Arctostaphylos and Arnica.

Pat Mortimer has almost finished her comparative study of alpine communities in two areas of the Rocky Mountains.

UNIVERSITY OF NOVA SCOTIA (Contact: M.J. Harvey)

Dr. M.J. Harvey is planning to map the Flora of Nova Scotia on a 10 km grid. He envisages using the enthusiasm of the Field Naturalists to help him with this project. The results of a pilot project conducted last summer on the ferns of Nova Scotia encouraged him to set up this mapping scheme.

He went on to say:

"The project will also test whether it is possible to harness the energy of a group of amateurs in the North American context while still retaining control of information quality. There is no way that a mapping scheme of the detail envisaged could be accomplished by professional botanists alone; we are spread too thinly on the ground and the amount of data to be collected is so enormous. The tradition of studying natural history as a hobby is not as strongly established here as it is in the more northern countries of Europe; our amateur base is smaller and less expert but the phenomenal growth of the Halifax Field Naturalists over the two years of its existence demonstrates the remarkable interest that now exists in the environment.

A phenomenon which was revealed in the Botanical Society of the British Isles mapping scheme is that the existence of the scheme can actually generate enthusiasm. It served to give a direction to amateur energy by making them feel that they were contributing to something useful and generated a competitive spirit in terms of the number of records which each individual collected from their 10 x 10 km square. I can only hope that a similar happy set of circumstances can be brought about here."

UNIVERSITY OF BRITISH COLUMBIA (Contact:  
J. Maze)

#### Vascular Plant Group

Katherine I Beamish is continuing her studies on the cytotaxonomy of Saxifraga.

Richard Gornall is continuing taxonomic studies on Boykinia, Subsдорfia, Sullivantia, and Bolandra, and is contemplating a mapping project for the Saxifragaceae subtribe Saxifraginae in the Northwest as part of his Ph.D. studies.

Ethen Perkins is continuing his Ph.D. studies on the systematics and cytotaxonomy of Saxifraga in British Columbia and the Columbia River gorge.

Dr. B.A. Bohm is involved in studies of the chemosystematics of the Compositae, Saxifragaceae (s. l.) and Menyanthaceae.

Dr. Elizabeth Wells, from the University of North Carolina is a postdoctoral fellow with Dr. B.A. Bohm.

Wilf Nicholls is continuing his Ph.D. studies on intraspecific variation within Lupinus sericeus and hybridization with L. leucophyllus.

Gerald Straley is conducting a biosystematic study of Arnica subgenus austromontana for his doctorate.

Jack Maze, William H. Parker, Gary E. Bradfield and S-C. Lin are continuing studies of variation in the genus Abies.

Murray Clark and Jack Maze are continuing a study of wood anatomy of Cannabis - flavonoid variation also.

Fred R. Ganders, Charles R. Layton and Ken Carey are continuing studies of evolution and population biology of Plectritis.

Fred R. Ganders and Gerda Krause are continuing genetic studies of Collinsia parviflora. Dr. Ganders is also continuing his work on heterostyly in various plant families and on gynodioecy in Nemophila.

Dr. Roy L. Taylor is conducting a detailed cytogenetic analysis of local variant populations of Sambucus racemosa from British Columbia.

Carole Jones and R.K. Scagel are completing identification of vascular plants for the British Columbia Research Council herbarium.

Dr. S. Buttrick recently completed his thesis on the vegetation of Teresa Island, Atlin Lake, B.C. He was a student of Dr. R.L. Taylor.

The flora of Ilgachug Mountain in B.C. is being prepared by Roy Taylor and others at the Botanic Garden. They are also co-ordinating the preparation of a list of the rare plants of B.C. for the National Museums of Canada Syllogeus Series.

L. Keith Wade has written a book entitled Rhododendron Phenology for Lower Mainland, B.C. which is slated for publication next year.

#### Non-Vascular Plants

Judith Godfrey completed her Ph.D. in 1977 and was appointed Herbarium Research Associate as hepaticologist. She will be continuing her studies of the hepatics of the Northwest.

Willa Noble is continuing her Ph.D. studies on the lichens of the Coastal Douglas-Fir Dry Zone.

McGILL UNIVERSITY, MACDONALD CAMPUS RESEARCH PROJECTS (Contact: D. Woodland)

H. Cohen, The Analysis of the Early Bronze Age Vegetal Remains from Lake Vouliagmeni, Perakhor, Greece.

S. Dobrofsky, Incompatibility in Lotus.

W.F. Grant, Biosystematics of Lotus.

G. Seguin, Haploidy in Lotus.

A. Russell, Cytophotometric studies in Impatiens.

D.E. Swales, Nectaries and Pollination of Arctic and sub-Arctic plants.

Y. Prenoveau, Ecotypic variation in Cornus canadensis.

L. Thatcher-Newstrom, Flora of Mont Rigaud, Vaudreuil Co., Quebec.

M. Waterway, Biosystematics of Lycopodium.

D.W. Woodland, Biosystematics of the North American Species of Urtica.

\_\_\_\_\_, Flora of the Island of Montreal.

#### UNIVERSITY OF WESTERN ONTARIO

Dr. F.S. Cook is studying the phytogeography of the bryophytes of Eastern Canada, particularly Ontario.

Dr. D. Fahselt is studying ways of using proteins in lichen taxonomy. Currently she is attempting to develop ways of extracting proteins in their active states from lichens of the genus.

Dr. R. Jancey is looking at geographic variation in lodgepole pine (Pinus contorta). Some interesting variation has been found in the front ranges of the Rockies, an account of which will be appearing toward the end of the year. He is also interested in theoretical models for groups.

Dr. J. Phipps and his co-workers are examining the breeding systems and evolution of Ontario Crataegus (Rosaceae) and are preparing a taxonomic revision of the genus.

BIOSYSTEMATICS RESEARCH INSTITUTE, Agriculture  
Canada

Vascular Plant Section (Contact: E. Small)

The vascular plant herbarium in the Biosystematics Research Institute of Agriculture Canada is the largest in Canada, both in terms of the number of specimens and the number of scientists associated with it. Research programmes are concerned with the systematics of cultivated plants, weeds, and other noxious plants of Canada, as well as the floristics and taxonomy of the native and introduced flora of Canada. The research interests of specific staff members are given below.

Dr. M. Barkworth is conducting taxonomic research on grasses with the aim of preparing a manual for Canadian grasses, which will include distribution maps, descriptions and keys to flowering, vegetative and, in so far as it is possible, leaf material. At present she is preparing the accounts of the Stipeae and Oryzeae. It is planned to publish these and subsequent tribal accounts as they are prepared.

Mr. I.J. Bassett is preparing taxonomic revisions and conducting cytological and palynological investigations in the Chenopodiaceae and Solanaceae. The emphasis in these studies is on the morphological features of the reproductive organs and seeds in Atriplex and Chenopodium. An Atlas of Pollen and Common Spores of Canada is now complete and should be available this summer (see notice in book section of this issue of the Bulletin).

Dr. B.R. Baum is conducting systematic studies of the Triticeae, and is preparing a monograph of Hordeum.

Dr. B. Boivin is studying the flora of Canada and completing his Flora of the Prairie Provinces. In addition to the Canadian flora, Dr. Boivin is interested in nomenclature, the history of Canadian botany, biographies of Canadian botanists, and a bibliography of sources for botanical bibliography. (He has accumulated an extensive collection of bibliographies of Canadian botanists.) He has nearly completed an account of Canadian herbaria. He is also a specialist on Apocynum, Thalictrum, and Westringia.

Mr. W.J. Cody has been guiding the Flora of the Continental Northwest Territories, of which he and the late Dr. A.E. Porsild are co-authors, through the final stages of preparation prior to its publication by the National Museum. He is continuing his phytogeographic work on the arctic flora while preparing an illustrated account of the ferns and fern allies in Canada. He is also the curator of DAO, the Departmental vascular plant herbarium.

Dr. F.W. Collins is studying the biosystematics of the cultivated brassicas with particular emphasis on biochemical characteristics including flavonols, anthocyanins and glucosinolates. His eventual goal is to publish a practical revision of the genus Brassica, reflecting the available cytogenetic, biochemical and morphological data.

Dr. J. McNeill is engaged in biosystematic studies of Canadian weed species and their relatives, particularly members of the Carophyllaceae and Polygonaceae. He is also involved in application of numerical techniques to the taxonomy of vascular plants and is interested in the theory and principles of biological classification.

Mr. G.A. Mulligan is studying the systematics of Cicuta, Rhus, Prunus, Draba, Stachys palustris and Rorippa islandica. He is also Assistant Director of the Biosystematics Research Institute.

Dr. E. Small is completing systematic studies of the Cannabaceae, conducting studies of Medicago and its relatives, and surveying the cultivated plants of Canada. He is also the head of the vascular plant section in the Institute.

Dr. S.I. Warwick, is conducting genecological studies on weeds, including the intra-specific systematics of Plantago major, and herbicide resistance in Chenopodium album, Senecio vulgaris, Amaranthus retroflexus, and Poa annua.

Mycology Section B.R.I. (Contact: R. Shoemaker)

The major emphasis is on taxonomic research of fungi. The National Mycological Herbarium (DAOM) and Culture Collection are essential to this function. Considerable service is supplied to plant pathology through the National Identification Service. Descriptions of Canadian Fungi are published in Fungi Canadenses.

Staff:

Donald Barr has been investigating the ultra-structure of chytrid zoospores and finds certain cytological characteristics correlate with thallus characteristics seen in the light microscope. He has recently published on the evolution of chytrids and is working towards a complete reclassification of these primitive fungi.

John Bissett's current research activities include:

- taxonomy of the genus Septoria on Gramineae
- ecology and taxonomy of fungi from tundra soils
- taxonomy of the genus Trichoderma
- development of a computer data bank to process herbarium label information.

Michael Corlett is preparing a taxonomic paper on the species of Didymella (Ascomycetes) and Didymella-like species in the National Mycological Herbarium. A manuscript on the morphology of Spilocaea pomi (the apple scab fungus) on benlate sprayed apple leaves, is being prepared jointly with R.G. Ross, Agriculture Canada, Kentville, N.S.

Jim Ginns spent 5 months in 1977 studying the wood-rot fungi of Canada and associated tropical areas at the Royal Botanic Gardens. He then worked 4 months with Dr. John Eriksson, University of Göteborg, Sweden on specific problems in the identification of members of the Corticiaceae. From November 1977 to March, Ginns was based at the Naturhistoriska Riksmusem, Stock-

holm and visited the University of Oslo, Institute of Systematic Botany, Uppsala and University of Helsinki all in connection with cooperative studies on the taxonomy of wood-rot fungi. Ginns is currently studying the taxonomy and cultural characters of the genera Hericium, Coniophora, and Ramaricium. He has just completed a study, with T. Nilsson, Royal Forestry College, Sweden, on the cellulases of known-rot fungi.

Dr. S.J. Hughes is revising the genus Endophragma and editing Fungi Canadenses.

J.A. Parmelee's research, in association with D.B.O. Savile, concerns a study of the autoecious species of Puccinia on the tribe Cichorieae (Asteraceae). As Curator of the National Mycological Herbarium, he has planned an expansion of the collection utilizing movable shelving (compactors). Installation of the system is scheduled for August 1978.

S.A. Redhead is preparing an illustrated guide to the Sphagnicolous fleshy basidiomycetes of the eastern Canadian targa, taking part in a survey of fungi of Kouchibouguac National Park, N.B. in 1977/78, and is initiating a study of Collybioid fungi in Canada.

R.A. Shoemaker - Head of Mycology Section (combining previous sections for Biodegrading Fungi and Plant Disease Fungi)  
-Taxonomy and life histories of Pleosporales, currently Cochliobolus and Leptosphaeria.

Dr. L.K. Weresub is participating in the preparation of four chapters on pleomorphic fungi resulting from a specialists conference at Kananaskis.

#### Research Associates:

Mr. I.L. Connors continues his bibliographic research on names of genera of fungi and descriptions of species that are types of generic names.

Dr. Ruth Macrae is continuing to identify accumulated collections of polypores for DAOM and maintains her special interest in the genus Poria.

Dr. Mildred K. Nobles, while visiting England, spent several days in June 1977 studying wood-rot fungi at the Royal Botanic Gardens, Kew. She also continues the development of a classification scheme for the Polyporaceae (wood-rots) which emphasizes cultural characters and biochemical tests.

Dr. D.B.O. Savile continues work on co-evolution of plants and parasitic fungi but is incorporating new information on insects as agents of dispersal. He combines the three major specialties of B.R.I. insects, plants and fungi. He was recently awarded an honorary Doctorate of Science by McGill University.

#### Visiting Scientist:

John Cooke, from the University of Connecticut at Avery Point, is spending 6 months with Dr. Hughes on Hyphomycetes.

*(to be continued in the October Bulletin)*

#### PHYCOLOGY SECTION - not disbanded

At the 1977 annual meeting in Winnipeg, the Phycology Section passed a motion of disbandment which was duly accepted by the Executive and reported in "News from the Sections" on page 32 of the Bulletin, Volume 10 (4), October 1977.

By-Law 7 states that "A Section may be dissolved by the Executive Committee at such time as the Section becomes inactive or for sufficient reason at any other time with the consent of 2/3 of the members of the Section."

At the time the motion to disband was made, the Phycology Section was not inactive. Under the sponsorship of the Section, 12-14 phycol-ogical papers had been, or were being, presented at the 1977 meetings at Winnipeg and a symposium was held at the 1976 meetings at Lennoxville. I understand that only five of the seven members that were present and voting at the Phycology Section meeting in Winnipeg were eligible to vote on the question. This number cannot be regarded as support of 2/3 of the members of the Section. Therefore, the motion to disband must be considered disqualified on constitutional grounds and CBA/ABC still has a Phycology Section.

Under the circumstances, I have spoken to the last-elected Chairman of the Phycology Section, Dr. M. Munawar, Great Lakes Biolimnology Laboratory, Department of Fisheries and Oceans, Canada Centre for Inland Waters Research, P.O. Box 5050, Burlington, Ontario L7R 4A6. With his consent, I have appointed him, and the last-elected Secretary, Dr. C. Nalewajko, Division of Life Sciences, Scarborough College, University of Toronto, 1265 Military Trail, West Hill, Ontario M1C 1A4 to carry on as the Section officers for the balance of this year and throughout 1978/79. They have been asked to determine what the 1976/77 membership of the Phycology Section wants to do about continuing or whether a 2/3 majority are in favour of disbanding. The value of future scientific programmes, field trips and annual get-togethers of phycologists from across Canada will be reviewed. I have asked Dr. Munawar to report to the Executive Committee on the results of the inquiry in plenty of time for appropriate action to be taken prior to the 1979 annual meeting.

Phycologist members of CBA/ABC, please give Dr. Munawar and Dr. Nalewajko your support. You can help by sending them your views on the role of the Section and any activities or functions you would like to see it perform.

Paul R. Gorham  
President

#### FORTHCOMING MEETINGS

5th Annual Aquatic Toxicity Workshop, November 7-9, 1978, Royal Connaught Hotel, Hamilton, Ontario, hosted by the Canada Centre for Inland Waters. The programme themes include:- Canada's environmental laws and aquatic toxicology; waste treatment effects on toxicity and mixed effluent studies; water quality objectives; new techniques in bioassays. Papers are being solicited (abstracts approximately 500 words). For more information contact Dr. P.V. Hodson, Canada Centre for Inland Waters, 867 Lakeshore Road, P.O. Box 5050, Burlington, Ontario L7R 4A6.

## OBITUARY

Ruth Marion Horner Arnold died on 1 June 1978 at the Ottawa Civic Hospital. She is survived by her husband, Dr. John Arnold, her mother, Mrs. V. Horner of London, Ontario, and her brother, V.H. Horner.

Ruth was a keen naturalist and specialized on the life histories and taxonomy of pyrenomycetes on trees and shrubs. She collaborated in studies of tree diseases, notably birch die-back. She studied with Dr. J.H. Miller, Georgia and Dr. L.E. Wehmeyer, Michigan, in relation to taxonomy of Xylariaceae and had, more recently, studied collections at Commonwealth Mycological Institute, Kew.

She graduated from University of Western Ontario in 1944, and was granted her Master's degree in 1948. She joined the staff of Agriculture Canada in 1946 and, until her death, was a member of the Mycology Section of the Biosystematics Research Institute.

Her friends will remember her generous spirit and concern for the welfare of others.

## PUBLICATIONS

Zlaki SSSR (Grasses of the U.S.S.R.) by N.N. Tzvelev, Leningrad, 1976. (Reviewed in the April issue of the Bulletin). A translation of the first 75 pages of Tzvelev's book has been prepared by the government translation service at the request of M. Barkworth, Dept. of Agriculture. The translation is available to other interested research workers, either through an inter-library loan arrangement with Agriculture Canada or through CISTI. The translation is intended as a working copy for personal use and as such is not "polished". The portion translated includes Tzvelev's discussion of the taxonomic philosophy he followed and an account of the evolution of grasses. A translation of the complete work is going to be prepared by the Smithsonian Institution. This translation will be designed for general distribution and sale and will, therefore, be a polished edition. Taxpayers, particularly those in the U.S., will be happy to hear that a copy of the Canadian government's translation has been made available to the Smithsonian so there will not be unnecessary duplication of effort!

M. Barkworth

How to Identify Grasses and Grasslike Plants by H.D. Harrington, Swallow Press Inc., Chicago 1977, 142 pp. Price: \$3.95 U.S.

This is an excellent, well-illustrated glossary of the specialized terms that are encountered in identifying grasses, rushes and sedges. It is quite evident that Prof. Harrington has long experience with the problems that students encounter for his explanations go beyond a bald definition. In his introduction he warns that the only way to learn to identify grasses, rushes and sedges is to work at it, but his book will take much of the unnecessary frustration out of the task. The tone of the book is set by a delightful poem which forms the preface, the opening verse which goes:

A grass can be "glumey" in more ways than one,  
When its classification remains to be done;  
You pull off the parts, and soon feel your age  
Chasing them over the microscope stage!

My only complaint is that some of the writing is unnecessarily colloquial but, in view of the clarity of the explanations given and the understanding of students' problem that is shown, this is a minor complaint.

M. Barkworth

An Atlas of Airborne Pollen Grains and Common Fungus Spores of Canada by I. John Bassett, Clifford W. Crompton and John A. Parmelee.

This publication has been prepared for all those who are interested in identifying airborne pollen grains and fungus and nonfungus spores. It will be helpful particularly to workers in allergology, botany, geology, and palynology. Descriptions and keys of 143 pollen and several spore types that have been found to be airborne in different locations are presented. These are accompanied by photographs made by using light and scanning electron microscopy. The general abundance, distribution of taxa, time of pollen shedding, significance in causing hay fever, and other pertinent data are included. The observations were made in Canada, but most of the information is applicable to the northern part of the United States.

This hard-cover book will contain 4 line drawings, 707 photographs, and approximately 350 pages. The price will be \$12.00 in Canada and \$14.40 (Canadian Funds) when ordered from other countries. The book is in press, and if you would like to receive an order form, please write to: Scientific Editing Section, Research Programme Service, Research Branch Ottawa, Ontario, Canada K1A 0C6.

## POSITIONS AVAILABLE

### Whiteshell Nuclear Research Establishment

Environmental Research Branch requires a plant scientist in ecological research. The position requires a plant environmental biochemist, physiologist or ecologist with an interest in radionuclide cycling and/or soil-plant interactions. Modeling and model verification using field experimentation with an ecological approach will constitute a large part of duties. Ph.D. in plant physiology, biochemistry or ecology required. Some background in computer techniques, statistics, plant genetics and cytogenetics is desirable. Application to be referred to Dr. S.L. Iverson, Environmental Research Branch, Whiteshell Nuclear Research Establishment, Pinawa, Manitoba, R0E 1L0.

## INCORPORATION OF THE CBA/ABC

By-Laws proposed for adoption in connection with incorporation of the Association were published in the CBA/ABC Bulletin Volume 11 (1), January 1978. Members were asked to consider these carefully and submit any recommendations for alteration or amendments to the President, before March 1, 1978. Notice was given that after that date final approval of the revised by-laws by the membership would be sought either at the next annual meeting or by referendum.

It is gratifying to report that a number of suggestions for important changes were received from members in response to this request. These recommendations have been carefully considered and incorporated, for the most part, in the revised by-laws published below. These have been prepared after detailed study by a task force composed of the President, Past-President and Treasurer.

According to the Constitution, Section VI (a), "Amendments to the Constitution shall be by mail ballot, mailed to each member in good standing

not less than four weeks in advance of the Annual Business Meeting. Ballots must be returned to the Secretary prior to the closing date which shall be established as seven days before the Annual Meeting". Section VI (c) states: "Amendments shall require a majority vote of returned ballots from regular members; approved amendments to become effective at the conclusion of the next annual business meeting".

The revised by-laws for incorporation of the Association, published below, are submitted for the approval of the membership. A ballot is enclosed with this issue of the Bulletin. The ballot should be returned to Dr. Janet Dugle, Secretary, on or before August 8th, (since the annual business meeting is on August 15th). Regular members (which includes retired and life members) in good standing are eligible to vote. The Executive hopes that a high percentage of the membership will participate in this referendum since approval will significantly affect the future operations of the Association.

Paul R. Gorham, President

## THE CANADIAN BOTANICAL ASSOCIATION

## L'ASSOCIATION BOTANIQUE DU CANADA

### BY-LAWS

#### CORPORATE SEAL

1. The seal, an impression of which is stamped in the margin hereof, shall be the seal of the CANADIAN BOTANICAL ASSOCIATION-L'ASSOCIATION BOTANIQUE DU CANADA.

#### MEMBERSHIP

2. Membership in the corporation shall be limited to persons having a scientific interest in Botany and shall consist of anyone whose application for admission has been accepted by the Board of Directors on behalf of the Association.

3. There shall be the following classes of membership:

- (i) Regular members
- (ii) Student members
- (iii) Retired members
- (iv) Life members

4. Regular members shall consist of persons who pay full annual dues. Regular members shall have full privileges of the Association.

5. Student members shall consist of persons registered in undergraduate or post-graduate programs in botany, plant science or biology at a recognized institution of higher learning. Student members shall pay reduced annual dues and shall have full privileges of the Association except eligibility for nomination and election to the Board of Directors of the Association. Student members shall be automatically eligible for regular membership at the end of the Association's fiscal year in which the individual ceases to be a registered student. Applications for student membership must be sponsored by a supervising professor.

6. Retired members shall consist of those who have been regular members for five (5) years or longer and have retired from formal professional employment. Retired members retain all privileges of a regular member but shall pay reduced annual dues. Regular members shall be automatically eligible for retired membership at the end of the Association's fiscal year in which they become qualified.

7. Life members shall consist of those regular members who have elected to pay a one-time fee. Life members retain all the privileges of a regular member but are released from the payment of annual dues.



8. All applications for membership, change of membership class, or reinstatement of membership shall be submitted to the Treasurer of the Association. Applications for regular membership must be sponsored by a member in good standing.

9. Any member may withdraw from the Association by transmitting his resignation in writing to the Secretary of the Association. Any regular, student or retired member who has resigned is eligible for reinstatement upon payment of the current year's annual dues.

10. Members who are six months in arrears in payment of their dues shall be removed from the membership but may be reinstated upon payment of current dues.

11. Any member may be required to resign for just cause by a resolution signed by two (2) members and approved by a vote of three-quarters of the members at an annual meeting or a special general meeting of the Association.

#### HEAD OFFICE

12. Head Office of the Association shall be as follows: Department of Biology, Carleton University, Ottawa, Ontario, K1S 5B6.

#### BOARD OF DIRECTORS

13. The affairs of the Association shall be governed by the Board of Directors of the Association.

14. The following shall be members of the Board of Directors: The President, the immediate Past-President, the President-Elect, The Vice-President, the Secretary, the Treasurer, the Editor of the Association's Bulletin (ex officio) and six (6) Directors at least two (2) of whom shall reside west and two (2) east of the Ontario-Manitoba provincial boundary.

15. The Applicants for incorporation shall become the first Directors of the Association whose term of office on the Board of Directors shall be until they are replaced at the first annual meeting of the Association following incorporation.

16. Membership in the Board of Directors automatically terminates if a member of the Board:

- (i) dies;
- (ii) resigns his office by delivering a written resignation to the Secretary of the Association;
- (iii) is declared a lunatic or becomes of unsound mind;
- (iv) becomes bankrupt or suspends payment of accounts with his creditors; or
- (v) is removed from office by a resolution signed by two (2) members and passed by three-quarters of the members present at an annual meeting or a special general meeting of the Association.

If any vacancy in the Board of Directors shall occur for any reason contained in this paragraph, the Board may, by appointment, fill the vacancy with a regular, retired or life member of the Association. The Appointee shall hold office until the next annual meeting of the Association when any unexpired term shall then be filled by election.

17. A retiring Director shall remain in office until the dissolution or adjournment of the meeting at which his retirement takes effect.

18. Directors shall not receive any stated remuneration for their services nor directly or indirectly receive any profit from their position as Directors; but may be paid reasonable expenses incurred by them in the performance of their duty. Nothing contained in this paragraph shall be construed as precluding any Director from serving the Association in any other capacity that creates no conflict of interest and receiving compensation for so doing.

19. The Board of Directors may appoint such agents and engage such employees as it shall deem necessary from time to time and such persons shall have such authority, perform such duties and receive such remuneration as shall be prescribed by the Board of Directors at the time of such appointment.

20. The remuneration of all officers, agents and employees shall be fixed by the Board of Directors by resolution. Such resolution shall have force and effect only until the next annual or special general meeting of the Association when such resolution shall be confirmed by a resolution of the members, or in the absence of such confirmation by the members, then the remuneration to such officers, agents or employees shall cease to be payable from the date of such annual or special general meeting of the Association.

#### MEETINGS OF THE BOARD OF DIRECTORS

21. Meetings of the Board of Directors may be held at any time and place to be determined by the Directors provided that two (2) full days notice of such meeting shall be given to each Director by the Secretary of the Association.

22. No error or omission in giving notice of any meeting of the Board of Directors, or any adjourned meeting of the Board of Directors, shall invalidate such meeting or make void any proceedings taken thereat and any Director may at any time waive notice of any such meeting and may ratify, approve and confirm any or all proceedings taken thereat.

23. There shall be at least one meeting of the Board of Directors held each year.

24. A quorum of the Board of Directors shall be six (6) members of the Board or one-half of the members whichever is the lesser.

#### MINUTES OF THE BOARD OF DIRECTORS

25. The Minutes of the Board of Directors shall not be available to the general membership of the Association but shall be available to the Directors, each of whom shall receive a copy of such minutes.

#### POWERS OF MEMBERS OF THE BOARD OF DIRECTORS

26. The Directors of the Association may administer the affairs of the Association in all things and may make, or cause to be made for the Association, in its name, any kind of contract which it may lawfully enter into and, save as hereinafter provided, may exercise all such other powers and do all such other acts and things as the Association is by its letters patent or otherwise authorized to exercise and do.

27. The Directors shall have power to authorize expenditures on behalf of the Association from time to time and may delegate by resolution to an officer or officers of the Association the right to employ and pay salaries to employees. The Directors shall have the power to enter into a trust arrangement with a Trust Company for the purpose of creating a trust fund in which the capital and interest may be made available for the benefit of promoting the interest of the Association in accordance with such terms as the Board of Directors may prescribe.

28. The Board of Directors shall take such steps they deem advisable to enable the Association to acquire, accept, solicit or receive legacies, gifts, grants, settlements, bequests, endowments and donations of any kind whatsoever for the purpose of furthering the objects of the Association.

#### INDEMNITIES TO DIRECTORS AND OTHERS

29. Every Director or officer of the Association or other person who has undertaken or is about to undertake any liability on behalf of the Association and his heirs, executors, and administrators, and estate and effects, respectively, shall from time to time and at all times be indemnified and saved harmless out of the funds of the Association, from and against:

- (i) all costs, charges and expenses whatsoever which such Director, officer or other person sustains or incurs in or about any action, suit or proceedings which is brought, commenced or prosecuted against him, or in respect of any act, deed, matter or thing whatsoever made, done or permitted by him, in or about the execution of the duties of his office or in respect of any such liability;
- (ii) all other costs, charges and expenses which he sustains or incurs in or about or in relation to the affairs thereof, except such costs, charges or expenses as are occasioned by his own wilful neglect or default.

#### OFFICERS

30. The Officers of the Association shall be a President, Past-President, President-Elect, Vice-President, Secretary, Treasurer, Editor of the Association's Bulletin, and an Archivist.

31. The President shall be the chief executive officer of the Association; shall preside at all meetings of the Association and of the Board of Directors; shall have the general and active management of the affairs of the Association; and shall see that all orders and resolutions of the Board of Directors are carried into effect.

32. The immediate Past-President shall be the Chairman of the Nominating Committee and shall perform such other duties as shall from time to time be directed by the Board of Directors.

33. The President-Elect shall, in the absence or disability of the President, perform the duties and exercise the powers of the President and shall perform such other duties as shall from time to time be requested by the President or directed by the Board of Directors. He shall ordinarily have served a term as a Director or have given equivalent service elsewhere in the Association (e.g., as an officer of a section).

34. The Vice-President shall be the Chairman of the Programme and Local Arrangements Committee for the annual meeting. He shall be appointed by the Board of Directors not later than ten (10) months prior to the annual meeting for which he is responsible. He shall perform such other duties as shall from time to time be directed by the Board of Directors.

35. The Treasurer shall have the custody of the funds and securities of the Association and shall keep full and accurate accounts of all assets, liabilities, receipts and disbursements of the Association in the books belonging to the Association. He shall collect and disburse all funds of the Association except for those for which other provisions shall have been made in the by-laws.

He shall deposit all monies, securities and other valuable effects in the name and to the credit of the Association in such chartered bank or trust company, or, in the case of securities, with such registered dealer in securities as may be designated by the Board of Directors from time to time. He shall disburse the funds of the Association as may be directed by the President or Board of Directors, taking proper vouchers for such disbursements, and shall render to the President and Directors at any meeting of the Board of Directors, or whenever they may require it, an accounting of all the transactions and a statement of the financial position of the Association. The Treasurer shall maintain a list of members in good standing. He shall also perform such other duties as may from time to time be directed by the Board of Directors.

36. The Secretary shall keep the records of the Association and shall attend all meetings and act as clerk thereof and record all votes and minutes of all proceedings of the Board of Directors and of the Association in the books to be kept for that purpose. He shall give or cause to be given notice of all meetings and shall perform such other duties as may be prescribed by the Board of Directors or President, under whose supervision he shall be. He shall be custodian of the seal of the Association, which he shall deliver only when authorized by resolution of the Board of Directors to do so and to such person or persons as may be named in the resolution.

37. The duties of all other officers of the Association shall be such as the terms of their engagement call for or the Board of Directors requires of them.

#### TERMS OF OFFICE OF MEMBERS OF THE BOARD OF DIRECTORS

38. The President, Past-President, President-Elect and Vice-President shall hold office for one year. The President shall be ineligible for election to a second term.

39. The Secretary, Treasurer and other Directors shall hold office for two (2) years and shall be eligible for election to one successive term.

40. The Secretary and three (3) Directors shall be elected in any one year; the Treasurer and other three (3) Directors shall be elected the following year. The Editor of the Association's Bulletin shall hold office for three (3) years, renewable for successive terms by mutual agreement.

#### NOMINATION AND ELECTION OF MEMBERS OF THE BOARD OF DIRECTORS

41. A call for nominations shall be made at the annual meeting of the Association for the year prior to that in which the nominees will serve. A call for nominations shall also appear in the Association's Bulletin immediately following this annual meeting of the Association. All nominations must be delivered in writing to the Secretary of the Association by December 31st. Nominations must be signed by not less than three (3) members in good standing. If the membership does not provide a sufficient number of nominations by the deadline of December 31st, then it shall be the duty of the Nominating Committee to complete the slate of nominations.

42. The Nominating Committee shall be composed of the immediate Past-President as Chairman and three (3) regular, retired or life members in good standing. The term of appointment for each member of this Committee other than the Chairman shall be for three (3) years. Their appointments shall be made by the Board of Directors in such a way that only one member of the Nominating Committee will be retired each year. In a given year, one member will be appointed by the Board of Directors for a three (3)-year term. This appointment is to be made within four (4) weeks following the annual meeting of the Association.

43. All nominations must be accompanied by the consent of the nominee.

44. A ballot bearing the names of the nominees listed in alphabetical order by office with their addresses shall be mailed to each member in good standing not less than four (4) weeks in advance of the annual meeting of the Association. Ballots must be returned to the Secretary of the Association prior to the closing date which will be established fourteen (14) days before the date of the annual meeting of the Association. If the Secretary is a nominee, the President shall appoint a returning officer who is not a current nominee.

#### MEETINGS OF THE ASSOCIATION

45. Thirty (30) members present at a meeting shall constitute a quorum. Each member present at a meeting shall have the right to exercise one vote.

46. Meetings of the Association shall be held at any place and at such time as the Directors shall determine after due consideration of any advice given by members at previous meetings.

47. There shall be three (3) types of meetings of members:

- (i) Annual meetings;
- (ii) Special Scientific meetings;
- (iii) Special General meetings

(i) Annual Meetings

(a) Notice of the annual meeting of members with general program details and the call for papers for scientific sessions, shall be mailed to all members at least sixteen (16) weeks in advance of the annual meeting.

(b) At every annual meeting, in addition to any other business that may be transacted, the report of the Directors, the financial statement and the report of the auditors shall be presented and a Board of Directors elected and auditors appointed for the ensuing year.

(c) A paper shall be eligible for presentation at a scientific session or meeting of the Association if at least one author is a member of the Association. A paper submitted by one or more non-members may be accepted for presentation, at the discretion of the Board of Directors, if the authors are introduced in writing by a member when the paper is submitted. The name of the member who is sponsoring the paper must appear in the program and on the abstract.

(d) A Chairman of a Program and Local Arrangements Committee shall be appointed by the Board of Directors as long in advance as possible but not later than ten (10) months prior to each annual meeting after consultation with local members of the Association. The Chairman shall appoint the members of the Program and Local Arrangements Committee. The Chairman shall be appointed as Vice-President for the year of the Annual Meeting.

(ii) Special Scientific Meetings

(a) Notice of special scientific meetings shall be mailed to all members at least thirty-two (32) weeks in advance of the meetings.

(b) A Chairman for a committee to look after the program and local meeting arrangements shall be appointed by the Board of Directors as long in advance as possible but not later than ten (10) months prior to each special scientific meeting after consultation with local members of the Association. The Chairman shall appoint the members of the Program and Local Arrangements Committee.

(iii) Special General Meetings

(a) The Board of Directors shall have the power to call, at any time, a special general meeting of the Association.

(b) Fourteen (14) days prior written notice shall be given to each member of any special general meeting of members.

48. No error or omission in giving notice of any meeting of the Association shall invalidate such meeting or make void any proceedings taken thereat and any member may at any time waive notice of any such meeting and may ratify, approve and confirm any or all proceedings taken or had thereat. For the purpose of sending notice to any member, Director or officer for any meeting or otherwise, the address of the member, Director or officer shall be his last address recorded on the books of the Association.

VOTING AT MEETING

49. At all meetings of the Association every question shall be determined by a majority of votes unless otherwise specifically provided by statute or by these by-laws.

FINANCES

50. Unless otherwise ordered by the Board of Directors, the fiscal year end of the Association shall be May 31st.

51. The annual dues for regular, student and retired members and the one-time fee for life members shall be set from time to time by the Board of Directors and ratified by a majority of returned ballots sent by mail to all members in good standing. Dues for the calendar year are payable on or before the 1st day of each year. The annual dues shall include identified assessments occasioned by cooperative of affiliation agreements with or corporate membership in other organizations as approved from time to time by the Association.

52. When the Treasurer is unable to sign cheques and pay all accounts, the President shall perform the duties.

53. The members shall, at each annual meeting, appoint two (2) members as auditors or retain a firm of chartered accountants to audit the accounts of the Association. The auditors shall hold office until the next annual meeting of the Association provided that the Board of Directors may fill any casual vacancy in the office of auditor. The remuneration of professional auditors shall be fixed by the Board of Directors at the time of appointment.

54. An annual audit shall be made at the end of the fiscal year and reported at the next annual meeting of the Association.

55. At the annual meeting of the Association, the Treasurer shall present a report on the current status of the Association's finances.

56. The Treasurer shall be bonded by the Association.

57. An out-going Treasurer shall have thirty (30) days grace in which to close the books, have them audited and transfer all financial business to the in-coming Treasurer.

EXECUTION OF DOCUMENTS

58. Contracts, documents or any instruments in writing requiring the signature of the Association shall be signed by the President and Secretary or by any two other officers authorized by specific resolution of the Board of Directors and all contracts, documents and instruments in writing so signed shall be binding upon the Association without any further authorization or formality. The Board of Directors by resolution may give or revoke the Association's power of attorney to any

registered dealer in securities for the purpose of the transferring of and dealing with any stocks, bonds and other securities of the Association. The seal of the Association when required may be affixed to contracts, documents and instruments in writing and signed as aforesaid.

#### SECTIONS

59. The organization of groups to be known as Sections may be authorized by the Board of Directors. The Sections may be dissolved by the Board of Directors at such time as the Section becomes inactive or for sufficient reason at any other time with the consent of two-thirds of the members of the Section.

60. A member may belong to any number of Sections.

61. The members and duly elected officers of such Sections shall be responsible to the Board of Directors for the conduct of the affairs of their Section and shall render to the Board of Directors an annual report from their Sections. Each Section shall be known as "The -----  
Section of the Canadian Botanical Association/L'Association Botanique du Canada."

62. Although the Board of Directors, at its discretion, may contribute Association's funds to a Section, the Sections shall not commit any Association funds for any purposes without the authorization of the Board of Directors.

63. Each Section, may, with the approval of the Board of Directors, make its own arrangements for the raising of the necessary funds for the proper conduct of its operations. Accounting of all such funds shall be rendered to the Treasurer of the Association at the end of each fiscal year.

#### COOPERATION WITH OTHER ORGANIZATIONS

64. The Board of Directors may arrange for cooperation, not inconsistent with the Letters Patent and by-laws of the Association, with other organizations having similar interests for mutual benefit and for the further advancement of botany and biology.

#### THE ASSOCIATION'S ARCHIVES

65. The Association will maintain archives. The Board of Directors shall appoint a member to serve as the Archivist to receive, catalogue and maintain records and correspondence of the Officers, Board of Directors, annual and special meetings, programs, abstracts, histories, photographs and any other form of archival material about the Association. The Archivist's term of office shall be three (3) years, renewable by mutual agreement.

#### AMENDMENT OF BY-LAWS

66. The by-laws of the Association may be repealed or amended by by-law enacted by at least two-thirds of the Directors at a meeting of the Board of Directors and ratified by a majority vote of the returned ballots sent by mail to all members of the Association.

#### THE ASSOCIATION'S BULLETIN

67. The Association will maintain a publication, to be called the C.B.A./A.B.C. Bulletin. The Bulletin will publish timely articles and news of interest to the membership. The Board of Directors shall appoint a member to serve as Editor in charge of the publication. The Editor shall serve as an ex officio member of the Board of Directors. The Editor's term of office shall be three (3) years, renewable by mutual agreement.

#### RESOLUTIONS

68. With the exception of the "housekeeping" resolutions (such as the expression of thanks to the host institution of the Association) a resolution declares the policy of the Association on a matter or matters that shall be forwarded outside the organization, i.e. to the public or to responsible government departments, agencies or individuals.

69. Resolutions should be carefully and precisely worded since, when passed, they represent an expression of the collective opinion of the Association. They should, as a general guideline, deal primarily with subjects of obvious relevance to the objectives of the Association as stated in the Letters Patent, or to the reasonable professional concerns of the members.

70. Resolutions shall be called for each year in an issue of the Bulletin at least four (4) months prior to the annual meeting of the Association.

71. Resolutions require a mover and four (4) seconders, all of whom shall be members in good standing.

72. Resolutions must be accepted by the Board of Directors before they can be admitted to the agenda for the annual meeting of the Association.

73. Resolutions shall be submitted to the Secretary at least ten (10) weeks prior to the annual meeting of the Association. To be admitted to the agenda, each resolution must specify to whom it will be addressed, and must be accompanied by a supporting brief. The Board of Directors will decide whether a resolution conforms to the general guidelines for resolutions. If so, it will be admitted to the agenda; if not it will be returned to its sponsors with a request that specific revisions be made. Such specifically revised resolutions must be submitted to the Secretary for acceptance by the Board of Directors and admission to the agenda for the annual meeting six (6) weeks prior to the annual meeting of the Association.

74. Resolutions acceptable to the Board of Directors, together with abstracts of their supporting briefs, should be mailed to all members of the Association before the annual meeting, preferably along with the program and other information about the meeting.

75. Each resolution must be presented at the annual meeting by at least one person from among its sponsors.

76. Recognizing that an emergency situation may occur, however, from time to time, "emergency resolutions" may be submitted to the Board of Directors at any time prior to their meeting immediately before the annual meeting. The Board of Directors will then decide whether or not they conform to the general guidelines for resolutions sufficiently well to admit them to the agenda of the annual meeting.

77. All resolutions require the approval of a two-thirds majority of the members present and voting at the annual meeting.

#### AWARDS

78. The Association may establish and maintain awards for the purpose of fostering botanical excellence in Canada and/or providing a collective, formal expression of the admiration and respect of the members of the Association and, thereby, of botanists in Canada for the meritorious contribution of an individual to Canadian botany.

79. Possible categories of botanical excellence or meritorious contribution to Canadian botany are set out below:

(a) A single contribution to botanical knowledge of outstanding distinction. Commonly this would take the form of a published paper, monograph or book, reporting a contribution to knowledge of singular significance to the discipline at large.

(b) (i) The cumulative, distinguished contributions of a senior investigator who has worked in Canada for the greater part of his career.

(ii) An academic career of distinction in teaching and inspiring students in a Canadian institution at the undergraduate and/or graduate levels, and in training scientists to meet the basic and applied needs of botany in Canada.

(iii) Significant contributions to the growth and development of botany in Canada by administrative, policy-making initiative in government or other agencies.

(c) Outstanding service to the Association.

80. Any professional botanist working permanently in Canada is eligible for consideration for awards established by the Association. For the present, at least, the awards shall not be available to Canadians who have made distinguished contributions to botany but who reside permanently in another country.

81. An Awards Committee shall be responsible on an annual basis for receiving nominations from the membership-at-large, for proposing candidates and for recommending candidates for awards established by the Association. The Awards Committee will consist of:

- The President of the Association, Chairman,
- The President-Elect of the Association,
- Three (3) members chosen from the community of Canadian botanists, named by the Board of Directors annually. These should include as closely as possible a range of age, specialization and professional affiliation of the membership as a whole,
- One senior scientist from a discipline related to botany, named by the Board of Directors annually (to be involved in recommending awards for categories described in 78 (a) and (b) only).

82. The Awards Committee will consider the lists of nominees for the established awards, each supported by a concise statement of meritorious contribution. From each list, from one to three candidates will be selected on the basis of the merit of the contribution. The Chairman will then obtain and circulate the following documentation on each of the candidates to the Committee along with suitable mail ballots:

The published contribution(s), where appropriate;

A condensed curriculum vitae;

An assessment of the merit of the contribution by an established, internationally recognized authority, where appropriate (categories (a) and (b), by-law 78).

83. The Awards Committee shall recommend which candidates merit awards to the Board of Directors. The Board of Directors shall approve the recommendations. The President will announce the recipients of the awards, usually at the annual meeting.

84. For the George Lawson Award established for botanical excellence, two awards can be made annually, one in each of categories (a) and (b), by-law 78, but the Awards Committee may recommend at its discretion that one award or no awards be made in any year. For the Mary E. Elliott Award established for outstanding service to the Association one award can be made from time to time as the Awards Committee may recommend at its discretion. An award will consist of a medal or other memorial to be presented at the annual meeting of the Association. A recipient, where appropriate, may be invited to give a special lecture at the annual meeting.

#### BOOKS AND RECORDS

85. The Directors shall see that all necessary books and records of the Association required by its by-laws and by any applicable statute or law are regularly and properly kept.

#### RULES AND REGULATIONS

86. The Board of Directors may prescribe such rules and regulations not inconsistent with these by-laws relating to the management and operation of the Association as they deem expedient, provided that such rules and regulations shall have force and effect only until the next annual meeting of the members of the Association when they shall be confirmed or failing such confirmation at such annual meeting of members, shall at and from that time cease to have any force and effect.

#### WINDING-UP

87. Upon the dissolution of the Association any assets remaining after the payment and satisfaction of the debts and liabilities shall be transferred to an organization or organizations having cognate or similar objects which carry on their work solely in Canada.

#### INTERPRETATION

88. In these by-laws and in all other by-laws of the Association hereafter passed unless the context otherwise requires, words importing the singular number or the masculine gender shall include the plural number or the feminine gender, as the case may be, and vice versa, and references to persons shall include firms and corporations.

*The Bulletin of the Canadian Botanical Assoc.*  
Editor:- Dr. J.K. Morton  
Department of Biology  
University of Waterloo  
WATERLOO, Ontario N2L 3G1

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

Enquiries about membership of the CBA/ABC should be addressed to the Secretary of the Association  
Dr. Janet R. Dugle, Environmental Research,  
Whiteshell Nuclear Research Establishment,  
Pinawa, Manitoba ROE 1L0.