THE CANADIAN BOTANICAL ASSOCIATION

BULLETIN



L'ASSOCIATION BOTANIQUE DU CANADA

APRIL 1986

VOLUME 19

NUMBER 2

VANCOUVER

PATRON

HER EXCELLENCY THE RIGHT HONOURABLE JEANNE SAUVÉ, P.C., C.C., C.M.M., C.D., GOVERNOR GENERAL OF CANADA

PATRON

SON EXCELLENCE LA TRÈS HONORABLE JEANNE SAUVÉ, C.P., C.C., C.M.M., C.D., GOVERNEUR GENERALE DU CANADA

CBA/ABC ANNUAL MEETING, JUNE 22 - 25, 1986

THE 1986 ANNUAL MEETING OF CBA/ABC WILL BE HELD FROM JUNE 22 TO 25 AT THE LAURENTIAN UNIVERSITY, SUDBURY.

IT IS NOW TOO LATE TO SUBMIT AN ABSTRACT FOR PRESENTATION AT THE MEETING, BUT IT IS NOT TOO LATE TO REGISTER FOR ATTENDANCE.

DON'T DELAY - REGISTRATION WILL ALLOW YOU TO ATTEND A VARIED SERIES OF SYMPOSIA AND PARTICIPATE IN THE DISCUSSION OF THE "POSITION PAPER ON TRANSPLANTATION AS A MEANS OF PRESERVATION".

DO YOU REQUIRE FURTHER INFORMATION? CONTACT:

PROFESSOR KEITH WINTERHALDER,
DEPARTMENT OF BIOLOGY,
LAURENTIAN UNIVERSITY,
SUDBURY, ONTARIO
P3E 2C6
TELEPHONE: (705) 675-1151

WE ARE LOOKING FORWARD TO SEEING YOU THERE!

OFFICERS OF CBA/ABC 1985-1986

President: Dr. Ian E.P. Taylor

Univ. British Columbia

Past-President: Mr. Gerry A. Mulligan

Biosyst. Res. Inst.

Vice-President: Prof. K. Winterhalder

Laurentian University

President-Elect: Dr. Luc Brouillet

Universite de Montreal

Dr. Paul G. Harrison Secretary:

Univ. British Columbia

Treasurer: Prof. K. Winterhalder

Laurentian University

Directors: M. Denis Barabe

Jard. Botan., Montreal

Dr. C. C. Chinnappa Univ. of Calgary

Dr. Eric E. Haber Nat. Mus. Nat. Sci.

Dr. Richard Hebda B.C. Prov. Museum

Dr. R. L. Peterson Univ. Of Guelph

Dr. A. A. Reznicek Univ. of Michigan

Editor Bulletin: Dr. Luis Oliveira

(ex off.) Univ. Br. Columbia

Archivist: Dr. W. I. Illman

Carleton Univ.

NEWS FROM THE SECTIONS

Ecology Section

Chairman: Bruce A. Roberts, Can.

Forestry Serv., P.O. Box 6028, St. John's,

Nfld AlC 5X8

General Section

Chairman: J. E. MacDonald, Dept. Forest Resources, Univ. New Brunswick Bag Serv. #44555, Fredericton,

N. B. E3B 6C2

Mycology Section

Chairman: J. E. Traquair, Harrow Res.

Station, Harrow, Ont. NOR 1G0

Phycology Section

Chairman: G.G.C. Robinson, Dept. Bot.,

Univ. Manitoba, Winnipeg,

Manitoba R3T 2N2

Structure & Development Section

Chairman: N. G. Dengler, Dept. Botany,

Univ. Toronto, Toronto,

Ont. M5S 1A1

Systematics & Phytogeography Section Chairman: K. E. Denford, Dept. Botany, University of Alberta, Edmonton,

Alberta T6G 2E9

CBA/ABC REPRESENTATIVES TO BCC

Member: I.E.P. Taylor Executive

L. Brouillet Council

I. Brodo

CALL FOR "EMERGENCY RESOLUTIONS"

Members are reminded that, in accordance with By-law 76, " "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 declare whether they conform to the general guideline for resolutions . . .

Resolutions submitted under the By-law 76 must be received by the Secretary 10 days before the annual meeting (NO LATER THAN JUNE 12, 1986). "Emergency resolutions" can only be admitted if they deal with an emergency situation that leaves no time for preparation of a normal resolution.

Send "emergency resolutions" plus all relevant material to the Secretary: Dr. Paul G. Harrison, Secretary, CBA/ABC, Dept. of Botany, Univ. of British Columbia, Vancouver, B.C. V6T 2B1.

WOOD SECTIONS AVAILABLE FOR RESEARCH

The Gardner Northern Collection, located at Laurentian University, contains 4,460 wood sections (disks) from the Canadian subarctic. It includes 4,000 discs of various tree and shrub species from northern Quebec and Labrador, as well as 460 wood disks from the Mattagami, La Grande district, Southern James Bay, Quebec, collected in 1978 at intervals of approximately 1 degree of latitude.

These disks are available on loan to anyone interested in carrying out dendrochronological or dendroclimatic research.

Please contact: Keith Winterhalder

Dept. of Biology Laurentian Univ. SUDBURY, Ontario

P3E 2C6

<u>Position Paper on Transplantation as a</u> Means of Preservation

"The following position paper on Transplantation as a means of Preservation will be presented to the Annual General Meeting at Sudbury as a Policy Resolution. If it is passed by the AGM it will be adopted as CBA/ABC policy on the matter. Please read it carefully. It has already been through many revisions. It is very important that CBA/ABC has clear positions, such as this, in areas of importance where our membership is in fact the major body of expert knowledge in Canada."

Natural vegetation is being increasingly threatened by land development; such development is often opposed by conservationists because of the potential destruction of native species as well as habitat. Suggestions have been made that transplanting rare species from proposed development sites to other locations would eliminate conflict and, thus, tend to satisfy both developer and conservationist.

The Canadian Botanical Association is strongly opposed to the idea that transplanting is a reliable method of conserving rare species. Ecosystem preservation is the only viable means of maintaining a full range of genetic diversity and thus removal of some elements from natural communities to other locations is not a desirable conservation alternative. Not only may transplantation fail to perpetuate species, but degradation of natural areas may be accelerated in the process.

policy is based on the following rationale. A rare native species cannot be considered in isolation from its habitat. It is not simply the presence of rare plants that makes a site significant. Rather, rare species indicate that the habitat and, thus, the entire ecosystem is significant. Rare species may signify sites of phytogeographical importance, or unusual soil, microclimatic or other ecological conditions. In some cases, their presence may indicate the lack of disturbance. In all instances, the habitat is as important to scientific knowledge and or cultural heritage as the rare species itself. Thus, the transfer of rare species to a garden or habitat where they did not occur naturally does not constitute a reasonable conservation alternative because the native habitat has been lost. Further, the extensive literature on ecological information needed to transplant rare species, methods of ascertaining whether transplanting has been successful, and schemes for expediting transplanting are largely

Position envers la transplantation comme moyen de conservation

La végétation naturelle se trouve de plus en plus menacée par le développement des terres; les conservationnistes s'opposent souvent à de tels développements à cause de la destruction possible d'espèces indigènes en plus de celle des habitats. Certains ont suggéré que la transplantation d'espèces rares depuis les sites proposés pour un développement dans d'autres localités éliminerait ce conflit et ainsi, satisferait à la fois le développeur et le conservationniste.

L'Association Botanique du Canada s'objecte à l'idée que la transplantation est une méthode sûre pour conserver les espèces rares. La sauvegarde des écosystèmes est le seul moyen viable de maintenir la gamme complète de la diversité génétique. Il s'ensuit que le déplacement vers des nouveaux sites de certains éléments des communautés naturelles ne représente pas une solution de remplacement désirable en conservation. Non seulement pourrait-on échouer à perpétuer les espèces par la transplantation, mais la dégradation des aires naturelles pourrait s'accélérer au cours de ce processus.

La politique de l'Association se fonde sur le raisonnement suivant. On ne peut considérer une espèce indigène rare indépendamment de son habitat. Et ce n'est pas la seule présence des espèces rares qui rend un site significatif. Celles-ci indiqueraient plutôt que ce milieu, et des lors l'écosystème entier, l'est. De telles espèces peuvent identifier des sites d'importance phytogéographique ou présentant des conditions édaphiques, microclimatiques ou autres inusitées. Dans certains cas, elles indiqueraient une absence de perturbations. Mais toujours, 1'habitat s'avère tout aussi important que l'espèce rare elle-même pour la connaissance scientifique et notre héritage culturel. Donc le transfert d'une espèce rare au jardin ou dans un milieu où elle ne poussait pas naturellement ne constitue pas une solution raisonnable de conservation puisque l'habitat originel est perdu. De plus, la vaste littérature sur l'information écologique nécessaire à leur transplantation, les méthodes pour en évaluer le succès et les plans pour accélérer celle-ci s'avèrent pertinents car la transplantation ne préserve pas l'habitat d'origine.

Puisque toute espèce retirée de son milieu originel n'interagit plus avec les facteurs ambiants naturels, biotiques et physiques, on perd les irrelevant because transplanting does not preserve the native habitat.

Since any species taken from its native habitat no longer interacts with its natural suite of biological and physical environmental factors, the answers to many important questions dealing with its biology are lost along with the native habitat. For example, if plants are introduced to non-native sites, it may be difficult if not impossible to discover how natural factors determined the native range of species or even what the original native range was. It will be impossible to probe physiological adaptations which have fitted plants to grow under specific natural conditions.

In parts of the world where the entire landscape has already been heavily altered by man, and no other conservation alternatives exist, transplantation has been used to permit some genotypes to persist at least for some period of time. However, the success of a transplant cannot be predicted and the permanence of the protection available in cultivation is similarly uncertain — further reasons why transplantation is not a desirable alternative.

The propagation of rare plants in gardens may be aesthetically pleasing and indeed can be an important tool for scientific research. However, many desirable natural ecosystems could be destroyed or impoverished by collecting rare or uncommon plants for purposes of cultivation, and certainly, neither the plant community nor a reasonable range of genetic variability of a species will be preserved in most gardens.

Perhaps the most serious problem of all is the possibility that extensive, transplanting might become viewed as a standard way of resolving the preservation vs development conflict. If transplanting is condoned as a standard conservation method, then uninformed decision-makers will feel no compunction about approving developments in any natural area.

Attempts have been made to "recreate" natural ecosystems through transplantation and seeding. This has been generally undertaken in environments which were known to have formerly supported a similar community. Despite considerable expense, development of sophisticated techniques, and passage of time which might have allowed for establishment, such attempts can only be judged as partially successful. The best results have generally been obtained with simple grassland communities but even the most successful examples of these are not similar to natural communities. Attempts to re-create forest communities have only partly reestablished the natural forest canopy and the understorey in

résponses à plusieurs questions importantes concernant sa biologie. Par exemple, si des plantes sont introduites dans des sites où elles n'étaient pas indigènes, il devient difficile, voire impossible, de découvrir comment les facteurs naturels contrôlaient l'aire de l'espèce ou même quelle était celle-ci à l'origine, et de déterminer les adaptations physiologiques de la plante aux conditions particulières dans lesquelles elle poussait.

Dans certaines régions du globe où des paysages entiers ont déjà été fortement modifiés par l'homme et où n'existe aucune autre solution pour la conservation, la transplantation a été utilisée pour permettre la persistance de quelques génotypes pendant encore un certain temps. Cependant, le succès d'une telle opération ne peut être prédit et la permanence de la protection disponible en culture paraît incertaine. Ce sont là des raisons supplémentaires pour s'opposer à une telle approche.

La propagation de plantes rares en jardin peut sembler plaisante d'un point de vue esthétique et peut même s'avérer un outil important de recherche scientifique. Cependant, de nombreux écosystèmes naturels désirables pourraient être détruits ou appauvris par la récolte de plantes rares ou peu communes dans le but de les cultiver, et évidemment, ni la communauté végétale, ni une proportion raisonnable de la variabilité génétique de l'espèce ne pourront être préservées dans la plupart des jardins.

Le problème le plus sérieux de tous est peut-être la possibilité qu'on vienne à considérer des transplantations systématiques comme la façon standard de résoudre le conflit entre préservation et développement. Si l'on adopte une telle pratique comme méthode usuelle de conservation, les gestionnaires mal informés n'auront plus aucune réticence à approuver des projets de développement dans toute aire naturelle.

On a fait des tentatives pour "recréer" des écosystèmes naturels à l'aide de transplantations et de semis. Ces actions ont généralement été entreprises dans des milieux qui étaient connus pour avoir supporté autrefois des communautés semblables. En dépit de dépenses considérables du développement de techniques sophistiquées et du passage du temps qui devrait avoir permis l'établissement, on ne peut juger que partiel le succès de ces essais. Les meilleurs résultats ont été obtenus avec des communautés prairéales simples, mais même les exemples les plus réussis ne ressemblent pas aux communautés naturelles. Les tentatives pour re-créer des communautés forestières n'ont réussi à rétablir qu'une partie de la couronne forestière originelle et le sous-bois était décidement hors-caractère. Alors même que la réintroduction des espèces

these cases is decidedly out of character. While attempts to reestablish a few of the commonest, least environmentally challenging elements such as trees, are fraught with difficulty, establishment of understorey and rare species is even more problematical. It is quite a different matter simply to produce green vegetational cover over an eroding or unstable site; it is a worthwhile undertaking but not remotely equivalent to reconstituting a natural ecosystem —floristically, structurally or compositionally.

THE 20TH ANNUAL INTERNATIONAL CONFERENCE ON NUMBERICAL TAXONOMY

The 20th Annual International Conference on Numerical Taxonomy will be held October 24-26 1986 at the State University of New York at Stony Brook. There will be three symposia: (1) Phylogenetic Inferences from Molecular Data (Organizer: Walter Fitch), (2) Numerical Taxonomy: Progress and Prospects, together with a round table discussion on phenetics and cladistics (Organizer: Robert Sokal), (3) Contrasting approaches to morphometric analysis (Organizer: F. James Rohlf). There will be one contributed paper session and a poster session.

On October 24, 1986 preceding the conference there will be a computing workshop with two sessions: (1) Numerical taxonomy on the IBM PC (F. James Rohlf), and (2) Spatial analysis (Dan Wartenberg).

For further information contact Dr. Robert R. Sokal, Department of Ecology and Evolution, State University of New York at Stony Brook, Stony Brook, New York, 11794.

FOREIGN STUDENTS SEEK EXPERTISE IN CANADIAN UNIVERSITIES

Prof. J.K. Morton (Univ. of Waterloo) receives every year requests from foreign students seeking temporary (summer) training in Canadian laboratories. He is unable to accommodate them in his laboratory and hence he wonders if any of the CBA members has the ability to accept these students.

There are currently two french students seeking summer positions, with emphasis on plant tissue culture. For further information contact the editor of the CBA/ABC Bulletin.

les plus communes et les moins exigeantes au niveau écologique, tels les arbres, est semée d'embûches, l'établissement d'espèces rares et de sous-bois paraît encore plus problématique. Créer un couvert végétal sur un site érodé ou instable est un problème bien différent; c'est certes un effort louable, mais cela n'équivaut en aucun cas à reconstituer un écosystème naturel, dans sa composition floristique et écologique et avec sa structure.

LETTER TO THE EDITOR

In some places, scientists who are in disfavour are subjected to a sort of scientific strangulation. They may be blocked from contact with colleagues at home and abroad; they may be barred from libraries and laboratories; scientific articles mailed to them may be intercepted.

Professor Julien Heicklen of the Department of Chemistry, Pennsylvania State University, University Park, PA 16802, on behalf of the American Physical Society (and with cooperation of the New York Academy of Science and the Committee of Concerned Scientists, Inc.) has organized a tremendous effort to help such scientists. He calls for volunteers to correspond with them. Such correspondence may help to save a colleague from demoralisation and despair.

If you are willing to help, write to Professor Heicklen or to me and say what are your scientific interests. You will be given the name and address of an oppressed colleague of similar interests and you will receive guidance on how to conduct correspondence.

Israel Halperin
Department of Mathematics
University of Toronto
Toronto, Ontario, M5S lal

JANUARY ISSUE DELIVERY PROBLEMS

Some members expressed concern regarding the delay in receiving the January issue of the bulletin. The delay was not the result of editorial or printing problems during the production of the bulletin. The issue was received from the printers on January 21st and mailed (1st class postage) on January 22nd.

BIOLOGICAL COUNCIL OF CANADA - PROGRAM OF PARLIAMENTARY SCIENCE ASSOCIATESHIPS

The Biological Council of Canada intends to initiate discussions with the Federal Government and Members of Parliament in the feasibility of establishing a program of Science Associates, based on the successful Parliamentary Internships sponsored by Canadian Political Science Association and the Program of Science Attaches to the U.S. Congress, sponsored by the American Association for the Advancement of Science. The BCC seeks your comments and support. Without doubt, a proposal for such a program will be much stronger and have far greater chance of approval if there is widespread support for it among the scientists of Canada. The nature of the proposal is outlined below.

Science Associates

A program to provide assistance in matters of science and technology to Members of Parliament.

Purpose

As with the Parliamentary Internships sponsored by the Canadian Political Science Association, the proposed program of Science Associates has a threefold purpose.

- 1. It will provide Members of Parliament with the opportunity to have assistants trained in science, whose knowledge of the attitudes, resources, methods and results of science and technology will aid the members in initiating, evaluating and participating in discussion and legislation of matters pertaining to the growth and application of science and technology in Canada.
- 2. It will give an opportunity to young people trained in science to take part in parliamentary activities that comprise our government. It will expose them to the relationship between politics and science, show them how to make a linkage between the two, and give them the opportunity to have some influence on the activities of our representatives.
- 3. Graduates of the program may be able better to contribute to the $\ensuremath{\mbox{\sc the}}$ development of science policy in Canada, to develop bridging careers as science counsellors abroad and in industry, or in other ways to improve the significance of their contribution to Canadian public life.

<u>Participants</u>

Science Associates will be chosen from among applicants recently graduated in science or applied science or in or recently through post-graduate study.

Participants would be chosen by a Selection Committee, to be defined. The Associateship would be tenable for one year, with an appropriate stipend and travel expenses.

Operation of the Program

Preliminary discussions will establish what organizations are will establish what organizations are interested in supporting the program as sponsors. It is expected that the administration of the program will devolve upon a Director, who will maintain the regular operation of the program, keep the records and act in liaison with sponsors. Sponsoring organizations will be represented in a Board, which will advise and support the Director. The development of operating details will be the responsibility of the Board.

Support of the Program

Financial support will be sought from individuals, corporations and foundations with which its aims are compatible. It is intended that the program be privately supported. The Director and Board will have the responsability for maintaining and enlarging the financial foundation of the program.

Benefits of the Program
The chief benefit of the program will be to make accessible to Members Parliament the knowledge, resourcefulness and enthusiasm of young knowledge, people trained in science. Such Science Associates could bring to the MPs a deeper level of understanding of scientifically technical matters, a critical analysis of the significance of scientific results, a quicker entry to the literature of scientific discussion, than they would otherwise possess if not trained in science themselves. It would provide the MPs with an ability and incentive to participate meaningfully in discussions of matters involving the application of science and technology. Among such matters would be technology transfer, participation by government labs in research, the importance of the granting councils in the support and growth of science in Canada, the role of education, etc. . One can imagine a kind contagious improvement of participation in debate in matters of science and technology as specialized help end new insights are made available. Moreover, in light of the suggestion of the Lamontagne Special Committee of the Senate on Science Policy (vol. 4, 1977, p. 59) and the recommendation of the McGrath Special Committee on Reform of the House of Commons (Third Report, 1985, p. 17) that there be established a Standing Committee on Research, Science and Technology, it is to be hoped that MPs will soon be directly involved in consideration of matters of science. Never has the time been more opportune for the establishement of a program of Science Associates.

The purpose of this letter is to let you know of the BCC initiative and to invite you to comment on the proposal and to participate in its development and operation. A functional program will take some time to devise. Parliamentary

officers will have to respond favourably and Members of Parliament will have to be encouraged to express interest. A major task will be to seek financial support from private interests. Initial statements of the proposal have gone forward to all parties concerned with an invitation to comment on it.

I look forward to receiving many responses for the BCC, collating them and advancing toward fruition of the idea if it proves to be of interest. Please let me know your reaction. I shall let you know what progress occurs.

J. R. Nursall President BCC

SPECIMENS NOW AVAILABLE

Mycological and vascular plant specimens of the Biosystematics Research Institute (DAOM, DAO) Ottawa, Canada earlier noted as being unavailable during major renovations, have been returned from their 6 month storage incarceration and are now accessible. In the same floor area, or less, specimens are housed in compactor facilities that provide more than double the specimen capacity of the former standard metal cabinets. We are back in business and visitors are welcome.

J. A. Parmelee, Curator, National Mycological Herbarium

W.J. Cody, Curator, Vascular Plant Herbarium

MEMBERSHIP RENEWAL

Membership renewals were due on January 1, 1986. This then your last chance to renew your membership or no more issues of the bulletin will be forthcoming to you.

PIMLOTT AWARD

At the CNF Conference held in Ottawa July 3 - 6, George F. Ledingham was named recipient of the federation's most prestigious award, The Pimlott Award.

The award was in recognition of his dedication and perseverance to establish the Grasslands National Park, Saskatchewan.

POSITION OPEN

Oueen's University, Kingston, Ontario

The Department of Biology invites applications for a tenure-track position in PLANT BIOLOGY, preferably in the CELL, MOLECULAR or DEVELOPMENTAL area. The successful candidate should be prepared to develop a vigorous research program and to teach in the undergraduate and graduate programs and supervise graduate students. There is the potential to interact with an established biotechnology group. Qualifications include a Ph.D. degree and published evidence of excellent research ability. Candidates of either sex are equally encouraged to apply. The appointment will be effective July 1, 1986 (or as negotiated) and is expected to be at the rank of Assistant Professor with salary commensurate with qualifications (present floor \$26,850).

In accordance with Canadian immigration requirements, this advertisement is particularly directed to canadian citizens and permanent residents. Application dealine is May 1, 1986 or until a suitable candidate is selected. Send applications, which should included a curriculum vitae, statement of future research interests and names and addresses of three referees to: Dr. D. T. Dennis, Head, Biology Department, Queen's University, Kingston, Ontario, Canada K7L 3N6.

PERSONALIA

Congratulations to Dr. Timothy Johns, currently in the Department of Entomology, University of California at Berkeley who won the 1985 CGS/UMI Distinguished Dissertation Award for his thesis entitled "Chemical Ecology of the Aymara of Western Bolivia: Selection for glycoalkaloids in the Solanum ajanhuiri domestication complex". Tim graduated from the University of Michigan.

POSSIBLE EXPANSION OF THE BIOLOGICAL SURVEY OF CANADA

Most of you should have received, in February, an information package and questionnaire dealing with the subject of the present structure of the BSC and its possible expansion through the establishment of additional modules. At present, there is only a single module, that or the terrestrial arthropods. Its operations are directed by a one man secretariat, Dr. Hugh Danks, who is on staff with the Natural Museum of Natural Sciences, and a scientific advisory committee, drawn from the Entomological Society of Canada.

association, and Our other biological societies, have been asked to consider whether there is sufficient interest and expertise available to make possible the formation of additional modules. The word "survey" in the title of the BSC should not be interpreted only in the traditional sense of floristic and faunistic surveys. The projects that could be undertaken by a module, judging from the example of the terrestrial arthropods, cover a wide range. All deal in some way with the compilation of information and the production of original research and surveys on groups of organisms and topics that are in particular need of study.

Dr. Alan Emery, the director of the National Museum of Natural Sciences, has indicated that he would be willing to prepare a cabinet submission for funds and person years if there is enough interest and commitment from the societies to proceed with establishing additional modules. On its own, without supplementary funding and person years, the museum could not support additional modules. The terrestrial arthropod module is not even up to full strength, considering that the preferred secretariat would consist of two individuals.

Considerable commitment would be required from society members for us to proceed. I presume that new modules would have to be organized to the point of having at least a tentative committee

in place for each module before a cabinet proposal could be prepared. If such a proposal was to be accepted, a candidate(s) could probably be found to fill the secretariat position(s), if not from the pool of established professionals, then certainly from recent graduates with suitable qualifications.

I hope this additional commentary on the subject of the BSC will serve to remind any members who may have comments to make but have as yet not done so, to return the questionnaire to me, even though the deadline for official receipt is now past. This is an important topic that affects not only systematists and ecologists, but probably individuals in other specialities as well. A report summarizing the information presented in the questionnaire will be completed this spring in ample time for presentation at the annual general meeting.

Erich Haber Botany Division National Museum of Natural Sciences Ottawa, KIA 0M8

THE BIOLOGICAL COUNCIL OF CANADA 1985

As in previous years, a steady interaction between the BCC, representing its member societies, and ministries, granting agencies and other institutions has been maintained.

The first formal activities took place in February, when the BCC, represented by Ralph Nursall, John McNeill, Brock Fenton and Grey Merriam took part in the lobby of the National Consortium of Scientific and Educational Societies to government MP's. Several days of intensive meetings in Ottawa by teams of Consortium members with P.C. MP's provided an effective means of argument for Established Program Financing and the establishment of a House Standing Committee in Research, Science and Technology, as well as general discussion of the role and importance of science to Canada. Although EPF policy is not yet fixed, The Consortium can take credit for positive steps made towards the Standing Committee. These efforts were reinforced in May by specific recommendations made by the BCC to the McGrath Committee on Reform of the House of Commons. The Third Report of the McGrath Committee recommends the establishment of such a Committee. Currently, the government is actively involved in implementing McGrath Committee recommendations.

This period was also used to strengthen the personal contact has had for years with NSERC, NRC and Science Council, as well as to make ourselves known at MOSST and to develop stronger relations with AASC, CFBS and PIPS,

among others in the alphabet of professional organizations. We continue to work with all these organizations with a sense of cooperative activity towards common goals, essentially a betterment of the role and support of science in Canada - for which, believe me, it is necessary to work assiduously all the time. We correspond as well with interested MP's of opposition parties, so that our opinions are available for wide discussion.

The spring was dominated by final preparations for the First Canadian Congress of Biology, held at the University of Western Ontario, 23-28 June, 1985. It is difficult to praise too highly the efforts of the Organizing Committee, especially its Chairman, David Walden, for the work put into the Congress. Plans now proceed for a Second Canadian Congress in 1990. From what we learnt this year, we shall make the next Congress an event of wide interest and great importance.

Throughout the year a torrent of correspondence was maintained with the federal government, particularly, but not exclusively with MOSST. Your representatives to BCC have more detail of these matters, or if you wish specific information, please do not hesitate to ask me for it. Correspondence has to do with support of the Youth Science Foundation, maintenance of the integrity and operating role of Science Council, criticism of operating fund cuts to NSERC and strong support for its Second Five-Year Plan, as well as those of MRC and SSHRC, request for participation in a proposed forum on policy in Canadian Science and Technology, support for the action of the Minister of the Environment to protect the forest lands of South Moresby and neighbouring islands, wide dissemination of the proposal to establish a program of Science Associates as short-term parliamentary assistants to MPs with interests in science, and three nominations for NSERC, reflecting the strengths of BCC,...

The BCC commentary on forest science has been published and widely distributed. Anyone wishing a copy can get it from Tom Moon, Secretary, BCC, Department of Biology, University of Ottawa, KlN 6N5. Societies will be asked for further input to this, through a questionnaire being developed.

We also keep our interests before the Advisory Committee on Life Sciences of NSERC, which is expected to develop a role of importance in policy for biology at NSERC. BCC was informed at its fall meeting that its promotion of ACLS was instrumental in the formation of the committee.

New activities, just getting under way, and for which help will be sought from member societies, include the possibilities of workshops on ecosystem health, with the possibility of establishing criteria and methods to maintain environmental standards, in cooperation with the Office of the Science Adviser, Environment Canada, and on climatic change, in cooperation with the Canadian Climate Planning Board and the Atmospheric Environment Service. BCC has also been asked to participate in public hearings in Ottawa, 22-31 May, 1986, to be held by the World Commission on Environment and Development (UN). Your Society executive will be asked to submit ideas and names of people for submission to the hearings. Details will come from your Executive.

We hope that the Society representatives keep societies informed of BCC efforts; sometimes that is not the case. Don't hesitate to ask them for information!

There are lots of things underway. We shall keep busy in 1986.

J. R. Nursall President

POSITION WANTED

Botanist / wood anatomist, Ph.D. (McGill) 1973, seeks teaching/research position.

Taught botany, biology, wood technology and museology at major universities.

Extensive research experience in developmental plant anatomy, taxonomy and wood anatomy. Worked on the Upper Cretaceous petrified woods and established a Mesozoic plant display in Tyrrel Museum, Alberta. Established the 'Plant Life Hall' permanent gallery at the National Museum, Ottawa. Over 9 years of museum experience.

Interested to work in the field of wood anatomy in relation to plant physiology and ecology; comparative anatomy in relation to taxonomy and phylogeny.

Contact: Dr. A. Fazal Muhammad P.O. Box 503, Drumheller Alberta TOJ 0Y0 Tel.: (403) 823-8536 The bulletin of the Canadian Botanical Assoc.

Editor:- Dr. Luis Oliveira
Department of Botany
The University of British Columbia
3529-6270 University Blvd
VANCOUVER, B.C., V6T 2Bl

Issued quartely 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 CNLY) 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 \$10.00 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. Paul G. Harrison, Department of Botany, The University of British Columbia, 3529 - 6270 University Blvd, Vancouver, B.C., V6T 2Bl.