THE CANADIAN BOTANICAL ASSOCIATION

EDITOR: USHER POSLUSZNY
ASSOC. EDITOR: JEAN M. GERRATH

BULLETIN

L'ASSOCIATION BOTANIQUE DU CANADA

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PATRON
His Excellency the Right Honourable Ramon John Hnatyshyn P.C., C.C., C.M.M., C.D., Q.C.
Governor General of Canada

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FUTURE MEETINGS:

1992-Truro, N.S. (July 5-9)

1993-Ames, Iowa, with AIBS (Aug.23-Sept.3)

1994-Calgary, Alberta

1995-Saskatoon, Saskatchewan

1996-Charlottetown, P. E. I.

EDITORS' FORUM:

After three years, I have come to the end of my tenure as Editor of the Bulletin. Joe Gerrath takes over in January and I wish him all the best as Editor and hope that he gets the full support and help of the membership and executive as I have.

It has been a facinating, enlightening and at times a frustrating experience. I now realize how vital a focal point the Bulletin is within the Association. It keeps the channels of communication open and that was very evident in the CFSB debate. We must encourage and strengthen this interaction because we face many more crucial decisions in the coming years.

Looking back over the past three years, there have been many changes to the Bulletin. We changed the format and introduced the wonders of computer Desk Top Publishing. We also changed to recycled paper in order to reflect our concern for the environment. As well, several new features were introduced, such as Graduate Student News and the CBA/ABC Directors were turned into regional reporters.

A final word of thanks to those of you who sent in news items, book reports and letters. Newsletters have voracious appetites and need to be fed constantly. Thank you for your help and support. And a very special thanks to my Associate Editor, Jean Gerrath. I could not have done it without her help. She typed, proofed, translated, organized book reviewers and subscribers; but most importantly she provided intellectual and moral support. Many of the best ideas for the Bulletin came from Jean. Thank you very much Jean for all your help.

That's it for me..... it's all yours Joe.

Printed on paper made of 100% recycled fibers

ANNUAL GENERAL MEETING-EDMONTON

The following is a precis of the 1991 Annual General Meeting

The Annual General Meeting was held at the University of Alberta, Edmonton, on Wednesday, June 26, 1991. The President, Dr. P.M. Catling, was in the Chair, and 57 other members attended.

1. **Election of Officers and Directors**: The results of the election were as follows:

Treasurer: Tim Dickinson
Directors: Randy Bayer
Daniel Gagnon
Roy Turkington

2. **Moved** by I. Brodo and seconded by J. Shay "that the association thank Randy Currah, the University of Alberta, the Dean of Science, and the Local Committee for all the work done in planning and organising this meeting."**Approved**.

3. **Conservation Committee**

Motion: That the CBA/ABC accept the Gardening with Wild Plants (see Bulletin, this issue, p. 51) statement as a CBA/ABC policy statement, with the requirement that it be translated into French. Moved by T. Dickinson, seconded by G. Argus. **Approved**.

Motion: That the CBA/ABC accept the Planting to Complement Natural Area Protection (see Bulletin, this issue, p. 52) as a CBA/ABC policy statement, with the requirement that it be translated into French. Moved by R. Counts, seconded by T. Dickinson. **Approved**.

It was suggested that the Gardening with Wild plants policy be published in the journal Wildflower.

4. **Science Policy Committee**

Motion: That, contingent upon sufficient funds being available, CBA/ABC agrees to commit $1000 to the CFBS Subcommittee on Public Awareness of Science for use in relation to their application to Science Culture Canada for their high school and elementary school program proposal. Moved by I. Brodo, seconded by I. Taylor. Approved.

Motion: That CBA/ABC issue a vote of thanks to André Fortin for his service as representative to the National Consortium of Scientific Societies lobby in Ottawa. Moved by I. Taylor, seconded by I. Brodo. **Approved**.

5. **CFBS Report** (S. Taylor, P. M. Catling)

The Secretary explained that CBA/ABC was expected to nominate two names to be put on the ballot for election of 3 Members-at-Large to CFBS and asked for volunteers to contact her. CFBS has established an Equity Subcommittee and requests one member from each society. The societies have to bear all costs for their representative. The Executive had discussed the matter in light of the financial situation and proposed the following motion.

Motion: That CBA/ABC nominate a representative to the Equity Committee of CFBS providing that there are sufficient fincances to support travel and accommodation costs, failing which a local representative will be appointed to attend the meeting in question. Moved by S. Taylor, seconded by T. Dickinson. **Approved**.

The nomination of a representative was referred back to the Executive.

The President attended the CFBS meeting in Kingston where it was agreed that CFBS dues should be increased by $10, coupled with an in-depth financial study to produce a long-term budget and probable/possible fee increase next year. Paul and most of the other "new" societies had voted against the motion, but with no effect. New societies feel that CFBS has not yet "proved" itself, and most increased their fees only last year.

After much discussion, it was **moved**: Whereas CBA/ABC has already more than doubled its membership fees in order to pay for the services of CFBS, with the result that the Association has lost over one quarter of its members, and whereas the members of CBA/ABC have yet to perceive the benefits of CFBS services, the Annual General Meeting of CBA/ABC recommends that the Association does not increase its payment for CFBS services. Moved by T. Dickinson, seconded by P. Maycock, amended by T. Steeves. **Approved** unanimously.

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Motion: That the Treasurer and Secretary of CBA/ABC be authorised to conduct a mail ballot of the membership regarding a fee increase. Moved by S. Taylor, seconded by T. Dickinson. **Defeated.**

The President will notify CFBS of the decision not to pay the $10 increase, and of the fact that the defeat of the second motion means that no further move can be made until the Annual General Meeting in 1992.

6. **Other Business**

Motion: That all student awards be increased to include one year's membership in CBA/ABC and that the requirement to be a member of the Association in order to be eligible for an Award be dropped. Moved by T. Dickinson, seconded by I. Brodo. **Approved.**

Motion: That CBA/ABC establish a Development Committee to assist the Executive in increasing membership in the Association and in raising funds for the purpose of the Association. Moved by T. Dickinson, seconded by D. Cass. **Approved.**

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BOARD OF DIRECTORS CBA/ABC EDMONTON 1991

The Meeting of the incoming Board of Directors of CBA/ABC was held at 7:55 a.m., Thursday, June 27, 1991, at the University of Alberta, Edmonton. The following is a precis of the meeting.

1. The Treasurer, **Tim Dickinson**, will be on sabbatical leave from July, 1992. **Nancy Dengler** has agreed to take over during that year.

2. The Editorship of the *Bulletin* will be taken over by **Joe Gerrath**, for a three year term, starting Jan. 1992.

3. The Board established a Development Committee to assist the CBA/ABC Executive in increasing membership and in fund raising for the purposes of the Association. The appointed chair is **Jean Gerrath**, and the Committee Members are Usher Posluszny, David Cass, Tim Dickinson (as Treasurer, CBA/ABC) and Paul Catling (*ex officio*). One or two Directors may also be co-opted.

4. The Membership Committee was reactivated, to help increase membership, and **Larry Peterson** was appointed as Chair.

5. The Association will not allow the Weresub Award to be presented at the Mycological Society of America meetings.

6. Sections:

a. **Ecology**: Chair: Norm Kenkel
Secretary: Stephen McCanny
Director (new) Matthew Fairbairn
- a Network of Plant Ecologists is proceeding, but in slightly different form.
- an Ecology Prize is being considered.
- the possibility of a symposium in Truro on Agro-Ecology is being investigated.
- it has been requested by Jennifer Shay that advance notice be given if field trips are cancelled.

b. **General:** Chair and Secretary: Joanne MacDonald
- hope to sponsor a presentation at Truro for graduate students on writing for a dissertation thesis vs. a journal article.
- would like to sponsor a joint CBA/ABC:CSPP/SCPV field trip from one meeting to the other (Truro-St. John's)

c. **Mycology**: Chair: Jim Traquair
- about 60 people attended the Weresub Lecture in Edmonton
- next year's lecturer will be Christopher Lucarotti from Mt. St. Vincent University, Halifax.

d. **Phycology**: the temporary Section Chair is Joe Gerrath.

e. **Structure and Development**: Chair: Christian Lacroix
Secretary: Jean Gerrath
- Larry Peterson will organize a symposium for Truro; tentatively the title will relate Agriculture and Structure.

f. **Systematics and Phytogeography**: Chair: Randy Bayer
Secretary: Rebecca Counts
- Paul Catling will investigate the possibility of a symposium or lecture in Truro on Systematics of Crop Plants.
- much discussion was held on fund-raising for the Porsild Award

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Call for Nomination of President-Elect, Secretary and Directors for CBA/ABC

A call for nomination for the following members of the Board of Directors is made:

President-elect (1992-1994)
Secretary (1992-1994)
3 Directors (1992-1994).

One of the Directors must reside east of the Ontario-Manitoba Provincial boundary, one west of the boundary, and one at-large.

Nominations must be signed by not less than three (3) members in good standing. All nominations must be accompanied by the consent of the nominee. All nominations must be delivered in writing no later than January 31, 1992 to the Secretary of the Association:

Mrs. Sylvia Taylor
Botanical Gardens, UBC
6804 SW Marine Drive
Vancouver, BC V6T 1Z4

Propositions de canditats pour les postes de directeurs

président-désigné (1992-1994)
secrétaire (1992-1994)
3 directeurs. La durée du term, de 1992 à 1994.

Un des directeurs doit habiter à l'est de la frontière provinciale du Manitoba et de l'Ontario, un à l'ouest de cette frontière, et l'autre n'importe où.

Les nominations doivent porter la signature d'au moin trois membres. Chaque nomination doit être reçues avant le 31 janvier 1992, par la secrétaire de l'association:

Mrs. Sylvia Taylor
Botanical Garden, UBC
6804 SW Marine Drive
Vancouver, BC. V6T 1Z4

Call for Nominations - Awards 1991

George Lawson Medal

The purpose of this award is to provide a collective and formal expression of the admiration and respect of botanists in Canada for the excellence of the contribution by an individual to Canadian botany. Any botanist working permanently in Canada or having spent the greater part of his/her career here is eligible.

In any year, a maximum of two (2) awards may be made, one in each of the two categories outlined below, although a single award, or no award, may be made as the Awards Committee judges appropriate. The two categories are:

a. Recognition of the cumulative, distinguished contributions of a senior investigator and/or teacher and/or administrator who has worked in Canada for the greater part of his/her career, and whose influence has contributed notably to the advancement of Canadian botany.

b. A single contribution to botanical knowledge of outstanding distinction. Commonly this would take the form of a published paper, a series of papers, a monograph, or a book by a botanist at any stage of his/her professional career. The contribution should be of singular significance to the discipline at large.

In order that the Awards Committee may learn of botanists who are eligible for these awards, all members of CBA/ABC are invited to submit nominations, and to consult with their colleagues for suggestions. Nominations should be accompanied by a curriculum vitae, a clear statement of the nominee's contribution to botany in Canada, and as much documentation as possible. Letters by others supporting the nomination would also help the Awards Committee in reaching its decision.

Mary E. Elliott Service Award

This award was established in 1978 for meritorious service to CBA/ABC. The award may be made from time to time as the Awards Committee may recommend at its discretion.

Members of CBA/ABC are invited to submit nominations for this award to the Awards Committee, together with a curriculum vitae. A citation of approximately 100 words should accompany the nomination.

Nominations for both of the above awards are kept on file for three years after submission, but nominators are requested to provide updated information for the second and third years. Nominations for the above awards should be submitted to the Chairman of the CBA/ABC

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Awards Committee before January 31, 1992, with all the necessary documentation to:

Dr. Paul M. Catling
Agriculture Canada
Biosystematics Research Centre
Saunders Bldg., CEF
Ottawa, Ont. K1A 0C6

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Porsild Award:

The CBA/ABC is now accepting contributions to the Alf Erling Porsild Award for the best paper in systematics and/or phytogeography of plants and/or fungi published by a student (as senior author) during the previous year.

This award will contribute to the recognition of excellence in the fields of systematics and phytogeography, and will assist promising students. It will also contribute to the profile of the CBA/ABC. We greatly appreciate the help of Canadian botanists in establishing this award. Contributions should be sent to the Treasurer:
Dr. Timothy Dickinson
Botany Department
Royal Ontario Museum
100 Queen's Park Circle
Toronto, Ontario M5S 2C6

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FUTURE MEETINGS:

Disturbance Dynamics in the Boreal Forest

There is great interest in forest dynamics in the boreal region. Together with Swedish colleagues, we plan to organize a workshop called "Disturbance dynamics in the boreal forest" to take place August 10-14, 1992 in northern Sweden, at the University of Umeå. If successful, the workshop could be held alternately (every third year) between North America and Northern Europe. The workshop is organized cojointly with the IAVS, the International Association for Vegetation Science.

The workshop will focus on natural disturbance. Contributions dealing with how the effects of human activities may change natural disturbance regimes will also be welcomed. Our intention is to publish all Abstracts in a specific Abstract-volume, and selected papers in a special volume of a journal.

If you are interested in participating in this workshop please contact: Dr. Yves Bergeron
Group de recherche en écologie forestière,
UQAM, C. P. 8888, Succ. A
Montréal, Québec, Canada H3C 3P8.
Phone: (514) 987-4872
FAX: (514) 987-4648.

Aerobiology 1992 June 9-11, 1992:

A Symposium of the Pan-American Aerobiology Association will be held June 9-11, 1992 at Scarborough College, University of Toronto. As aerobiology is a multi-disciplinary field, there will be a wide variety of topics covered. The main focus is the distribution, production, dispersal, and deposition of airborne biological particles, and the implication of these processes to ecology, allergy, and plant pathology among other areas. All relevant interests will be accommodated. Oral and poster sessions are proposed on the following topics.
General Aerobiology: Biometeorology, dispersal, modelling, forecasting, methodology
Ecology and Evolution: sources, distribution, production, phenology, plant pathology
Indoor Air Quality. qualitative and quantitative assessments and related health problems.
Allergy: aeroallergens both indoor and outdoor, epidemiology, immunology

Two workshops are also proposed:

1. Identification of Unknown Aeroallergens - Please bring Kodachromes of unknowns.
2. Standardization of Sampling Protocol for Aerobiological Monitoring

Abstract Deadline: February 15, 1992

For information contact:

Christine Rogers, Conference Organizer
Life Sciences, Scarborough College
University of Toronto
1265 Military Trail
Scarborough, Ontario, Canada M1C 1A4
Phone: (416) 287-7421
FAX: (416) 287-7642.
E-mail: rogers@lake.scar.utoronto.ca

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CBA/ABC Meeting in Truro, N.S.

Next summer come and experience the many facets of Nova Scotia! You are cordially invited to sample our many cultural flavours including those of the Micmacs, Acadians, and the Scots. The Nova Scotia Agricultural College is hosting the 1992 annual meeting of the CBA/ABC from July 5-9 in Truro, Nova Scotia. Maritime favorites will be featured at the annual banquet on July 8th and will be followed by a traditional Ceilidh. In keeping with the theme, **Botany in Agriculture**, Dr. Taylor Steeves from the University of Saskatchewan and Dr. Michael Shaw from the University of British Columbia will be presenting all-conference lectures. In addition to contributed papers and posters, two symposia are being organized by the Structure and Development section and the Systematics and Phytogeography section. Dr. Chris Lucarotti from the Maritimes Forest Research Centre will deliver the Weresub Lecture focussing on fungal-insect interactions that should be of interest to the general public.

"Botanizing" in Atlantic Canada is exceptionally rewarding during July. Thanks to the superb planning of Alex Wilson, Curator of Botany at the Nova Scotia Museum, conference participants and their spouses will be offered a three day preconference tour (July 3-5) along the scenic Annapolis Valley before continuing on through Southwestern Nova Scotia. In addition, beautiful Cape Breton Island will be featured during a three day postconference tour (July 10-12). During the conference week, Tuesday afternoon (July 7) has been reserved for taking in one of several day-tours ranging from local horticultural exhibits to exploring the saltmarshes and seacliffs of the Parrsboro Shore or the Northumberland Strait.

If you are also a member of the CSPP, you have another reason to pack up and head "down east". The physiologists will be conducting their meeting in St. John's Newfoundland. Please remember that all "Botanists From Away" and their spouses are welcome in Atlantic Canada!

-Randy Olson, Department of Biology, Nova Scotia Agricultural College, Truro, Nova Scotia. B2N 5B2. phone-(902) 893-6613; FAX- (902) 895-4547.

CONSERVATION ISSUES:

We have a large country with many environmental problems and the Conservation Committee sensu stricto, or even sensu lato, is not aware of all of them. Also, the committee is hard pressed to deal with the issues it has perceived, so it needs help!

Members, especially those in the east, west and north, are reminded to inform the committee (c/o D. Fahselt, Dept. of Plant Sciences, Univ. of Western Ontario, London, Ontario N6A 5B7) of trouble spots which might benefit from a statement of support from the CBA/ABC. A summary of the mechanism for bringing cases forward follows:

1. Members should send information to the Chair of the Conservation Committee (DF), including a description of the area, the problem at hand, the perceived impact, or possible impact on natural areas or native species. Members should suggest an appropriate response for the CBA/ABC to make and indicate responsible person(s) to whom representation should be made.

2. The Chair may consult other CBA/ABC resource persons in the region where the problem exists.

3. All information and proposed solutions are reviewed by members of the Conservation Committee, and a consensus is developed.

4. The consensus is expressed in letters addressed to responsible persons involved in each issue. Such letters are transmitted to the President of CBA/ABC who signs and sends them.

Input is badly needed from the regions as the committee cannot possibly keep abreast of everything that is happening. In these difficult economic times the environment is really under fire.

CBA/ABC policy papers

The Conservation Committee has drafted three policy papers, which deal with environmental horticulture. They are important policies to have on hand, and members may wish to make copies of these for distribution to and consultation by colleagues. The three statements are:
1. Transplantation as a method of preservation.

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2. Gardening with wild plants.

3. Reintroduction to increase vegetational cover and native plants.

We have received two of these statements, and publish them in English, below. We are awaiting receipt of the third statement, and the French translations, which will be published in the Bulletin as soon as they are received.

GARDENING WITH WILD PLANTS

The primary concern of the CBA is that remaining natural ecosystems, due to their scarcity and diminishing size, be disturbed as little as possible. Therefore, planting of wildflowers or native shrubs and trees must be done in such a way that it poses **no threat to the integrity of natural communities**. Nothing extraneous should be planted into natural communities and very close limits should be placed on what is taken out. Exotic genotypes of native plants should not be grown nearby because if they interbreed, locally adapted gene complexes might break down.

Propagules grown under culture are the preferred source of native plants for gardening. Commercial producers of seeds may take the pressure from natural areas as a source of stock for horticulture. Initially, seeds or cuttings (preferably not roots or rhizomes) must come from natural or semi-natural populations, but afterward should be generated in fields or gardens. A wild species which cannot be propagated in sufficient quantities this way should probably not be grown extensively in private gardens or offered for sale commercially.

Unfortunately, some nurseries offer mature plants which may have been taken directly from their natural habitats. This seems to be the case with certain orchids, known to require 8-9 years from seed to flowering, as some companies selling them are unable or unwilling to discuss source. Nurseries should provide information on the origin of their stocks, and customers must satisfy themselves that wild plants being sold were not removed from natural areas. If claims of being "nursery grown" are suspected to be false, companies should be challenged.

Exchanging cuttings, seeds or roots of wild plants among gardeners who have propagated them is a harmless way to stock a wildflower garden. Local genotypes, adapted to local climatic conditions are generally most successful, especially if sited according to known ecological requirements. While it may be reasonable for an individual to collect a limited number of seeds from a natural area, it must be remembered that each enthusiastic gardener could well be only one of several doing the same thing. A few collectors could remove most of the seed crop of a species for a given year. Taking plants and propagules from a natural area which definitely will be destroyed is a possibility, but wildflowers would benefit far more from **active intervention** at an earlier stage to ensure that destruction never happens. Long-term survival of native species is best in their natural habitat.

So that rare or endangered plants are not punished needlessly, amateurs should usually grow the more common and easily identifiable wild plant species. In a private garden, attractive but vigorous and easily propagated wild plants such as Helianthus (sunflowers), Rudbeckia (black-eyed susans), Rhus (sumac) and Symphoricarpos (snowberry) can be utilized very effectively. Species chosen depend, of course, on the region.

RE-INTRODUCTION TO EXTEND VEGETATION AND INCREASE NATIVE SPECIES

Vegetation uses atmospheric CO_2 and gives off O_2, prevents erosion, humifies soil, enhances replenishment of ground water reserves and provides wildlife habitat. Plantings of native species, while lacking many important features of natural communities, confer some of the same benefits and could extend total vegetation cover as well as provide connections between scattered remnant natural areas. This would allow native species to expand their presently limited habitat and would partially compensate for the extensive conversion of natural vegetation to agriculture, industry and urbanization.

The Canadian Botanical Association advocates that only **native species** should be used for rec-

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lamation, and the following are its recommendations concerning the process.

1. Protection of remaining natural areas

Existing natural areas should be saved as examples of functioning ecosystems. They are irreplaceable as objects of scientific interest and a fundamental part of our natural heritage. They may also be a source of disseminules for natural recolonization of adjacent areas and for artificial revegetation.

Reserves should be protected from disturbances such as genetic contamination. Exotic species or inappropriate provenances should be controlled in adjacent areas since close proximity might permit hybridization and generate non-adaptive gene complexes. If aliens or their derivatives are successful and invasive, they could out-compete native species.

2. Reconnection of natural remnants

Spontaneous extensions may occur if "zones of opportunity" are established around existing natural areas. For example, unproductive or superfluous agricultural fields should be permitted to undergo succession, based on native species in the soil seed bank as well as adjacent natural communities, and to ultimately return to natural communities. In some cases, management techniques such as alteration of grazing regimes might facilitate revegetation. Removal of aliens or the use of controlled burns also may be effective.

Deliberate plantings could also be made to connect remnants and extend possibilities for populations which are presently isolated. These plantings could consist of extensive acreages, wide corridors or even narrow hedgerows, but ideally would form a continuous network of green areas. Local provenances should be used because particular physiological races may have evolved which are predisposed to existing local conditions, e.g. exposure, soil, or moisture availability.
To broaden genetic representation of each reintroduced species, seeds or other propagules should be collected from several different plants, and only a small percentage of those produced in any one season should be taken. If massive plantings are planned, seeds should be propagated in gardens rather than removed from a natural area. To increase diversity, several native species should be interplanted, as monocultures promote spread of disease and limit the range of available niches.

Initial planting of native trees, rather than only herbs or shrubs, may hasten the successional process. In this case, common pioneer tree species which grow in similar situations should be used. Inclusion of shrubs will not only diversify the habitat, but may provide cover for establishing trees. The art of revegetation is still poorly developed, however, and there are no established methods for producing even a close compositional facsimile of most kinds of natural communities.

To minimize confusion in future generations of botanists, the procedures followed and results achieved should be fully documented and a report deposited with a responsible person such as a regional ecologist or public institution such as a museum.

3. Enhancing survival of rare species

The greatest advantage to rare plants can be provided by protecting their natural habitat. However, inclusion of some species in plantings might be beneficial, at least in the short term.

If stands including rare species are clearly under immediate threat of destruction and no remedy is possible, plants could be transferred to botanical gardens or areas being revegetated. However, the most effective way to establish them elsewhere is probably by seed. Experienced botanists are generally better equipped to assume responsibility for rare plants than amateurs, but the success rate may be very low, nevertheless.

In no case should recovered **plants** be introduced into other natural areas. Besides the fact that particular microhabitat requirements or interactions with other species are poorly understood, there are many problems regarding the mechanics of transplantation. Introduction is itself a form of disturbance, and as a result communities could be altered composition-

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ally and structurally. Component species could be atypical both physiologically and with respect to the degree of variation in each, frustrating investigations which attempt to understand the functioning of natural ecosystems. Therefore, introduction is best done into peripheral plantings from which a species may gradually find its own way into adjacent stands, if this is appropriate.

Disseminules of rare plants, such as **seeds**, might be taken for propagation from intact natural areas only if limited numbers are collected and only if it is clear that these are not required to maintain existing populations. No introductions, even by seeding, should be made into natural areas.

Records of stock source, storage and planting procedures as well as exact location of outplantings should be maintained, and a copy placed with a reliable public agency.

4. Co-ordination of regional efforts

Communications are essential among all land management agencies in order to achieve maximum effectiveness.

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Atlantic News

Ecologie forestière/forêts boréales et subarctiques

Le Dr. Luc Sirois du département de Biologie à l'université du Québec à Rimouski est disposé à rencontrer des personnes intéressées à faire une thèse sur l'evaluation de l'effort reproductif de *Picea mariana* le long d'un gradient Sud-Nord.

adresse: Dr. Luc Sirois
Biologie -UQAR
300 Allée des Ursulines
Rimouski, Québec
G5L 3A1

Recent Graduates

Dalhousie University

Juan A. Correa has successfully defended his Ph.D. thesis entitled "Pigmented Algal Endophytes of *Chondrus crispus* Stackhouse: Host Specificity, Fine Structure, and Effects on Host Performance in Infections by *Acrochaete operculata* Correa & Nielson and *A. heteroclada* Correa & Neilsen." His supervisor was Dr. J. H. M. Willison.

University of New Brunswick Forestry

M.Sc.

D'Allain, P. L. " Block Harvest Scheduling Module for Spatial Management Planning" Supervisor: S. E. Clements

Hughes, R. N. "Effects of Simulated Acid Fog on Reproduction in *Betula papyrifera* and *Betula cordifolia* (Betulaceae)". Supervisor: R. B. B. Dickison and R. M. Cox.

McCurdy, W. D. "The Mating System of *Picea mariana* (Mill.) B. S. P. Populations on the Cape Breton Highlands". Supervisor: E. K. Morgenstern

Mellerowicz, K. T. "Elemental Contents (Al, Fe, Ca, Mg, K. Mn, P) and Field Response of Two New Brunswick Forest Soils and of Black Spruce to Simulated Acid Precipitation: Supervisor: P. A. Arp.

Morgan, M. G. "Modelling Growth and Competition in Balsam Fir." Supervisor: G. L. Baskerville.

Shinaraine, C. "Within Stem Variation in Bending Strength and Stiffness of Lumber from Plantation Grown White Spruce" Supervisor: I. Smith.

Ph.D.

Erdle, T. A. "Concept and Practise of Integrated Harvest and Protection Design in the Management of Eastern Spruce-Fir Forests". Supervisor: G. L. Baskerville.

Mullin, T. J. "Genetic Parameters for Clonal Selection of Black Spruce and Implications for Breeding". Supervisor: E. K. Mortgenstern.

Robichaud, E. "Black Spruce Longevity and Site Quality". Supervisor: I. R. Methven.

Prince Edward Island Loses Miscouche Bog to Peat Mining Operation

Following the recommendations of an environ-

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mental assessment panel, the PEI government has decided to allow the extraction of peat from the Miscouche Bog which had been identified as a significant natural area in 1974 under the International Biological Program (IBP). The extraction of peat from this site will alter the flora and fauna to the extent that it will no longer qualify as an IBP site. Three smaller bogs across the Island will be offered to the Island Nature Trust, a non-profit organization devoted to the protection and management of natural areas, on a long term lease. These bogs will then be protected under the Natural Areas Protection Act.

Prior to the draining of the Miscouche Bog, several plants were transplanted from that site to other bogs across the island. They include species like *Betula pumila* (Bog Birch), *Calopogon tuberosus* (Swamp-pink), *Rubus chamaemorus* (Cloudberry) which are relatively rare, and more common species like *Drosera rotundifolia* (Sundew) and *Sarracenia purpurea* (Pitcher-plant).

-Christian Lacroix, Department of Biology, University of PEI.

NEWS AND NOTICES:

This year the Royal Agricultural Winter Fair (Nov. 5 - 16) in Toronto had, as part of its exhibit, the first ever Winter Garden Show. This show was inspired by the Chelsea Garden Show in Britain, and designed by Canadian landscape architect, Tom Sparling. Plans call for twenty-three exhibits, covering 15,000 square feet of the Coliseum in the Exhibition Grounds. Although this is not a botanical exhibit, we hope that it signals a resurgence of interest in plants at the Royal.

Announcement

IAPT Draft lists of names in Current Use

The Canadian Museum of Nature is one of 28 institutions, worldwide, that has received draft lists of names in current use being proposed for nomenclatural protection by the IAPT Special Committee on Names in Current Use. These lists have been made available to various botanical institutions to facilitate access by interested specialists who are encourage to comment on the lists.

The draft list of names is being issued in parts, each corresponding to one of the major, traditional, plant groups: vascular plants, bryophytes, algae, fungi and lichens, and fossils. Each part is accompanied by an alphabetical index, and a cumulative generic index is planned. Provisional draft lists for generic and family names, together with "A call for cooperation and comment: and the text of a lecture by W. Greuter: "Merxmüller's legacy --" are now available for:

- generic names of Pteridophyta
- names in Pinaceae, Lemnaceae and Eriocau laceae
- family names of vascular plants and bryo phytes
- generic names of Spermatophytes by family, with and index to families and an index cross-referencing genera to families
- generic names of plant fossils
- generic names of algae (and all flagellates)

I can provide photocopies of portions of these lists for specialists wishing to review and comment on names of specific groups of particular interest. The lists for spermatophytes and fossils are particularly voluminous. Only small portions will be reproduced on request. The remainder of the lists are more manageable and can be reproduced in full, as long as there are not too many requests. The IAPT Secretariate in Berlin will also supply copies of portions of lists required by reviewers.

As explained in accompanying documentation with the lists, "The report of the Committee on Names in Current Use, with the full set of nomenclatural proposals submitted to the XV International Botanical Congress in Tokyo in 1993, will be published in the journal "Taxon" in due course". A deadline for replies to the IAPT Special Committee on Names in Current use is 31 March 1992.

You can contact me by mail, phone or fax.

Erich Haber
Research and Collections Branch
Canadian Museum of Nature
P. O. Box 3443 Station D
Ottawa, Ontario Canada K1P 6P4
Phone: (613) 990-6452
FAX: (613) 990-6451

ONTARIO'S CHANGING PLANTSCAPE:

T.A. Dickinson
Associate Curator-in-Charge
Department of Botany, ROM

"Ontario's changing plantscape" is the title of the renovated Interim Botany Gallery at the Royal Ontario Museum in Toronto. In this small space (approx. 350 sq. ft.), vegetation change at the scale of millennia, centuries, and decades is depicted along two walls and on a free-standing interactive display. The first wall depicts the revegetation of Ontario following deglaciation, while the second describes the impact of European settlement on the deciduous and mixed forest regions of Ontario. The third component illustrates examples of plants and vegetation types that have been put at risk by human activity within the past few decades. CBA/ABC members who missed the previous exhibit, "Plantscapes of North America", will be able to see it displayed at the Ontario Natural Heritage Information Centre; the pollen grain models that were also part of that exhibit can be seen in the Botany Department of the ROM.

This renovation highlights activities of the ROM Department of Botany such as the Quaternary paleoecological studies in Ontario of Dr. J.H. McAndrews, curator, and the role of the Vascular Plant Herbarium (TRT) in documenting the flora of the province. The vegetation maps used to depict the postglacial revegetation of Ontario are based on those published by McAndrews and co-workers in the Historical Atlas of Canada (Harris and Matthews 1987). The gallery also highlights the work of other Canadian botanists, as a result of their generosity in sharing with the ROM photographic and other research results. For example, the explanation of the palynological evidence used in reconstructing past vegetation employs SEM images of pollen grains taken from An Atlas of Pollen of the Trees and Shrubs of Eastern Canada and the Adjacent United States, by R.J. Adams and J.K. Morton (1972). Distribution maps of Carolinian species are taken from the Atlas of Rare Vascular Plants of Ontario (Argus et al. 1982-1987). Description of the effects of human disturbance include examples taken from studies of the Atlantic coastal plain flora of Ontario by Paul Keddy, Irene Wisheu, Mirek Sharp, and others. Other components of the gallery derive from the work of numerous amateur and professional botanists across Canada, too numerous to mention here, but who are acknowledged in the gallery credits.

The Botany Department of the ROM is happy to have been able to complete this renovation despite increasing budget constraints. Although these limited the scope of the renovation, they did not prevent us from portraying some of our collections and research activities, while at the same time presenting a broad perspective on environmental change. Our success in doing so is largely due to the skills and efforts of ROM designers Mary Mark and David Ng, and interpretive planner Paul Martinovich.

References

Adams, R.J. & J.K. Morton. 1972. An Atlas of Pollen of the Trees and Shrubs of Eastern Canada and the Adjacent United States, Part I. Gymnospermae to Fagaceae. University of Waterloo Biology Series, Number Eight.

Argus, G.W., K.M. Pryer, D.J. White, & C.J. Keddy. 1982-1987. Atlas of Rare Vascular Plants of Ontario. Four parts. National Museum of Natural Sciences, Ottawa.

Harris, R.C. & G.J. Matthews. 1987. Historical Atlas of Canada, Vol. I. From the Beginning to 1800. University of Toronto Press, Toronto.

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MILKWEED PODS WANTED!

Dr. Diane Benoit from Agriculture Canada and Dr. Diane Mather from McGill University are setting a project on the genetic variability of the fibers obtained from the pappus of common milkweed (Asclepias syriaca L.). This project aims at describing and improving the fiber quality of milkweed for the textile industry. We would greatly appreciate if botanists throughout eastern United States would collect 5 large well-developed green but unopened pods (one pod per stem) in their locality. Each pod should be sealed in a brown paper bag with such information as the name of the collection site, date of

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collection or other pertinent information. Samples may be sent in a padded envelope by post to:

Dr. Diane L. Benoit
Agriculture Canada
Research Station
430 boulevard Gouin
Saint-Jean-sur-Richelieu, Québec
J3B 3E6 (Canada)

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NEWS OF MEMBERS:

Henry Allan Gleason Award

The selection committee of the Botanical Society of America unanimously selected Paul Keddy to receive the 1991 Gleason Award of the New York Botanical Garden. The award is presented annually for an outstanding recent publication in the field of plant taxonomy, plant ecology, or plant geography. The book, Competion, was recently reviewed in the CBA/ABC Bulletin by Doug Larson (1991). In the book, Keddy uses the phenomenon of competition as an example of the need to re-orient studies in ecology from detailed case studies of selected species and habitats towards the study of general relationships among traits and environments. The award was presented in August at the AIBS meeting in San Antonio, Texas. Owing to Keddy's continued illness, the award was accepted for him by co-worker Irene Wisheu.
Larson, D. W. 1991. The Canadian Botanical Association Bulletin. **24**:25.

NEW BOOKS:

An annotated list of the published names in Mycosphaerella and Sphaerella by Michael Corlet published as Mycologia Memoir #18 by J. Cramer, Berlin/Stuttgart., 1991. 328 pp. The list includes over 1800 names; data provided includes author(s), references(s), measurements, distribution, anamorph and synonym or current name. Price $85 (US). Available from Lubrecht and Cramer Ltd., RD1, Box 244, Forestburgh, NY 12777, USA.

THE NEW YORK BOTANICAL GARDEN
SCIENTIFIC PUBLICATIONS DEPARTMENT

TITLE: Manual of Vascular Plants of Northeastern United States and Adjacent Canada (Second Edition) AUTHORS: Henry A. Gleason and Arthur Cronquist. ISBN: 0-89327-365-1
PUBLICATION DATE: 23 September 1991
PRICE (Includes all fees):US Orders: $74.60
Non-US Orders: $76.90

This long-needed Second Edition of the **Manual** has been completely revised by Cronquist, the taxa re-arranged according to his phylogenetic system, and the nomenclature updated. The general keys -- long known for their ease of use, have been revised, new synoptic keys added, the glossary expanded, and ample place for notes provided.

The Second Edition of the **Manual** reflects an effort to incorporate into a single comprehensive volume the results of modern taxonomic research on the flora of the area covered, with due regard to all past accounts, all in the light of Cronquist's critical evaluation. The aim is to make it possible for the user to come up with the correct name of a plant with only a hand lens, or sometimes a dissecting microscope, as accessory equipment.

Telephone: (212) 220-8721Bronx, New York 19458-5125 U.S.A.FAX: (212)220-6504

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SCIENCE POLICY:

The Science Policy Officer for CFBS, Clément Gauthier, has sent a copy of the Science Policy Quarterly Report for June-Sept. 1991 to the Bulletin Editors. It is a weighty volume, and cannot really be summarized in any meaningful way in the Bulletin for members, except to say that the Science Policy Committee of CFBS is very active, and that their main concerns this past quarter seem to have been Research and University Funding, Industrial Research and Development, the Environment, Public Awareness of Science, and Animal Experiments. The next report will be received in December. Interested CBA/ABC members may wish to contact members of our Science Policy Committee for further details.

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SCIENCE FAIR WINNER:

This year's winner of the CBA/ABC Science Fair prize at the Canada Wide Science Fair, held in Vancouver, B. C. in May, was **Shannon Golletz**. Shannon was a Grade 8 student at Plattsville District Public School, in Plattsville, Ont. The title of her project was "Natural Insecticides". The purpose of her project was to see if she could control the population of some insects by using natural insecticides. There were two aspects to her project: first, she sprayed plants in her garden with rhubarb spine insecticide, and compared the insect damage with that of comparable unsprayed plants; second, she placed grapefruit rinds filled with honey next to a row of beans, and assessed insect damage. In both instances, the treatments appeared to reduce insect damage, and Shannon was able to conclude that this form of natural insect control does work. The judge and presenter was Iain Taylor.

POSITIONS:

A position as **Assistant Extension Vegetable Specialist and Assistant Plant Physiologist or Geneticist in the Department of Botany and Plant Sciences, University of California, Riverside** is available July 1, 1992.

Qualifications: Ph.D. degree in horticulture, plant physiology, genetics, or other closely related discipline. The position requires knowledge of crop production principles and practices, and a basic knowledge of biotechnology. Additional experience in one or more of the following is desirable: pest and disease management, irrigation, plant nutrition and desert crops. Skills in oral, written and visual communication are essential.

Responsibilities: The successful applicant is expected to exert strong leadership and support in Cooperative Extension activities related to vegetable production, particularly in desert systems. Extension activities include: 1) planning and establishing statewide programs addressing major vegetable production concerns, including water management, and pest and disease control; 2) disseminating information about the possible benefits of biotechnology to the vegetable industry. These goals will be achieved through program leadership, technical assistance, and in-service training for farm advisors and for industry and consumer clients by planning and producing meetings, publications, software, newsletters, and consultations. Research will emphasize the vegetable management methods that are needed to improve water and pest management, particularly in desert vegetable crops. Biotechnology responsibilities could include collaborative research to develop and test genetically-engineered vegetable germplasm. Target areas may include pest or virus tolerance. Responsible for initiating and coordinating collaborative research with departmental faculty (Botany and Plant Sciences, Plant Pathology and Entomology), specialists, and farm advisors.

Appointment: Eleven-month, academic career-track appointment (75% extension, 25% research) as Assistant Extension Specialist and Assistant Plant Physiologist or Geneticist.

Send letter of application, curriculum vitae, statement of research interest, and transcripts, and arrange to have at least three confidential letters of reference sent to:

Dr. R. T. Leonard, Chairman
Department of Botany and Plant Sciences
University of California
Riverside, CA 92521-0124
Phone: (714) 787-4413

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FAX: (714) 787-4437
Deadline: Jan 22, 1992. The University of California, Riverside, is an Affirmative Action/ Equal Opportunity Employer. Minorities and women are encouraged to apply.

Brandon University, Department of Botany

Applications are invited for a three year term appointment in a line position at the Assistant Professor level in the Department of Botany. The filling of this position is subject to administrative approval. Applicants should possess a Ph.D. in Botany/Biology/Plant Science. Teaching and plant ecology research experience is desirable. Duties include undergraduate instruction in the areas of plant ecology, plant taxonomy, survey of the plant kingdom, and general biology. The teaching load would be 4-5 half courses per academic year. The successful candidate will be encouraged to carry on an active research program. Research interests in Plant Ecology relating to agroecology, forestry or environmental assessment would be a valuable asset to the department. The starting date is August 1, 1992. Deadline for applications is November 15, 1991. Applicants should submit a copy of their curriculum vitae, including a summary of their current and future teaching and research interests, copies of relevant research publications, and should arrange for at least three letters of reference to be sent to:

Dr. W. H. N. Paton, Chairman
Department of Botany
Brandon University
Brandon, Manitoba, Canada. R7A 6A9
Phone: (204) 727-9623 or 727-9783
FAX: (204) 726-4573
E-mail: BUTTERFIELD@BRANDONU.CA

Department of Botany, University of British Columbia

The Department of Botany at the University of British Columbia is seeking applications to fill a tenure track position. Preference will be given to Bryologists, Phycologists or Mycologists whose research interests emphasize biodiversity, systematics, evolution, or evolutionary ecology.

Candidates for this position must have a Ph.D. degree and published evidence of research ability. The successful candidate will be expected to develop a rigorous research program and should be an enthusiastic and competent teacher. The successful candidate will be expected to contribute to teaching introductory and upper level botany courses.

The expected date of appointment is January 1, 1993 (or as negotiated). Application deadline is February 29, 1992, or until such time as suitable candidates are identified. Applicants should send a curriculum vitae, selected reprints, a statement of research interests and have at least three letters of reference sent to:

Dr. David H. Turpin, Head,
Department of Botany
University of British Columbia
#3529 - 6270 University Blvd.
Vancouver, B.C. , Canada V6T 1Z4

Department of Botany, University of British Columbia

The Department of Botany at the University of British Columbia is seeking applications to fill a tenure track position in the area of Developmental Botany. Preference will be given to individuals employing a variety of approaches (molecular, genetic, cytological) to fundamental problems in plant development.

Candidates for this position must have a Ph.D. degree and published evidence of research ability. The successful candidate will be expected to develop a rigorous research program and should be an enthusiastic and competent teacher. The successful candidate will be expected to contribute to teaching introductory and upper level botany courses.

The expected date of appointment is July 1, 1992 (or as negotiated). Application deadline is February 29, 1992 or until such time as suitable candidates are identified. Applicants should send a curriculum vitae, selected reprints, a statement of research interests and have at least three letters of reference sent to:

Dr. David H. Turpin, Head,
Department of Botany
University of British Columbia
#3529 -6270 University Blvd.
Vancouver, B.C., Canada V6T 1Z4

In accordance with the Canadian Immigration requirements, this advertisement is directed to Canadian Citizens and permanent residents of Canada. UBC encourages qualified women and minority applicants. The position is subject to final budgetary approval.

Département de Sciences Biologiques, Université de Montréal
Anatomie et Développement végétal

Le Département de sciences biologiques de la Faculté des arts et des sciences cherche un professeur ou une professeure d'anatomie et déve-

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loppement végétal.

Fonctions:

Recherche fondamentale sur le développement des plants supérieures au sein de l'équipe multidisciplinaire de l'Institut de recherche en biologie végétale (localisé au Jardin botanique de Montréal); enseignement au 1er cycle en ultrastructure, anatomie at morphogénèse végétale; enseignement aux 2 e et 3e cycles dans sa spécialité; direction d'étudiants de M.Sc. et Ph.D. L'enseignement se fait en français.

Exigences:

Ph.D. et expérience en biologie du développement végétal et en microscopie électronique; la capacité d'utiliser des approches moléculaires est un atout; avoir effectué au moins une année de stage postdoctoral; aptitude à mettre sur pied un programme de recherche autonome et à obtenir les subventions nécessaires.

Traitement:

Selon la convention collective.

Entrée en fonction:

Le 1er juin 1992.

Les personnes intéressées doivent faire parvenir leur curriculum vitae, une liste détaillée de leurs publications ainsi que trois lettres de recommandation, le tout avant le 31 mars 1992 à:

Dr Raymond McNeil, directeur
Département de sciences biologiques
Université de Montréal
C.P. 6128, succursale A
Montréal (Québec), H3C 3J7

Plant anatomy/Development

Applications are invited for a tenure-track position in plant anatomy and development, at the Institut de recherche en biologie végétale, Université de Montréal, a new multidisciplinary plant biology research unit. A Ph.D. degree, postdoctoral experience, and a strong research background in electron microscopy and plant developmental biology are necessary. A capacity to use the tools of molecular biology is desirable. The position (available in June 1992) involves developing an independent research program, supervising graduate students, and undergraduate and graduate teaching in French. Candidates must accordingly have, or be willing to acquire, a good knowledge of French. Before March 31, 1992, forward curriculum vitae and statement of research interests, and arrange for three letters of reference to be sent to: Dr. Raymond McNeil, directeur

Département de sciences biologiques
Université de Montréal
C.P. 6128, succursale A
Montréal (Québec) H3C 3J7

M.Sc. Studentship at the University of Guelph. Pollen Liberation and Gene-flow of Jack Pine in Northern Ontario

The project started Fall 1991 under the supervision of Prof. P.G. Kevan, Dr. F. Di-Giovanni, Prof. S. C. Stewart and Dr. R. H. Ho.

The forestry industry is using more genetically improved seed for its replantation program. This genetically improved seed is grown in seed orchards. These seed orchards are often surrounded by the native trees which emit pollen that flows into the seed orchard. This "contaminating" pollen fertilizes the orchard trees and brings "uncontrolled" genes into the seeds produced. These uncontrolled genes reduce the "genetic gain" sought for by the forestry industry. A large, multi-organization project has begun which investigates these pollen dispersal mechanisms in a physical manner. The project uses a physical (micrometeorological), as well as a biological (flower phenology and isozyme), approach to study this problem.

Funding has been approved for a Master's project to study part of the problem. The student will study pollen liberation and gene-flow. As an independent project, the student will be looking at the relationship between pollen production inside and outside a seed orchard, relating this to airborne pollen concentration within the orchard plus effective pollination within the orchard.

Students with a biological or physical background are welcome to apply. Interested applicants should send a C.V. plus a covering letter as soon as possible to:

Dr. F. Di-Giovanni
Dept. of Environmental Biology
University of Guelph
Guelph, ON N1G 2W1

Post-Doctoral Fellow: Plant Molecular Biology, University of Calgary, Department of Biological Science.

Applications are invited for a post-doctoral research associateship in the laboratory of Dr. Maurice Moloney at the University of Calgary. The project on which the successful applicant will work involves the analysis of factors which regulate the expression of embryo-

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specific genes in Canola (*Brassica napus*) and *Arabidopsis*. The research associate will be part of a team also comprising a graduate student and a technician involved in the study of oil-body proteins in higher plants and their regulation.

The applicant should have a Ph.D. in Plant Biochemistry, Physiology or Molecular Biology and must be familiar with all standard techniques in molecular biology, in particular DNA and RNA manipulations, DNA sequencing and library screening. Preference will be given to applicants with experience in the area of DNA fingerprinting or analytical techniques for the detection of trans-acting factors such as gel retardation methods. Experience in the analysis of hormone regulated gene expression or hormonal signal transduction will also be advantageous for this position.

The position is available for two years in the first instance with possibilities for renewal. Salary will be in the range $24,000-$27,000 according to experience. Please send applications to:

Dr. Maurice M. Moloney
Department of Biological Sciences
University of Calgary
2500, University Dr., NW
Calgary, AB T2N 1N4

In accordance with Government of Canada regulations preference will be given to Canadian Citizens or Landed Immigrants.

POSTDOCTORAL POSITION

CONTROL OF PHASE CHANGE IN NEW ZEALAND'S NATIVE TREES

A postdoctoral research position is available for two years, beginning February 1992, to study the development, ecophysiology and hormonal control of phase change in *Elaeocarpus hookerianus*. This plant is profoundly heteroblastic. The juvenile form persists for many years as a small-leaved, anisophyllous, divaricating shrub. The adult form grows as a tree, up to 12 m tall, bearing large crenate leaves.

The work will involve transmission and scanning electron microscopy of juvenile and adult shoot apices, computer modelling of branching patterns, and cost-benefit analyses of the different forms with respect to light interception and heat dissipation. Some time will be spent at the University of Otago, Dunedin to examine the endogenous complement of gibberellins in the two forms. The successful applicant will preferably have experience in physiological adaptations to light and temperature, and/or fine developmental work. Salary is NZ$35,000 per annum, plus travel assistance.

Auckland, the largest city in New Zealand, enjoys a mild sub-tropical climate. The Department of Botany is housed on the main campus, close to the central city area. The Department employs 14 academic staff, and offers excellent research facilities in areas of developmental and economic botany, plant pathology, plant physiology, ecology, genetics and systematics.

Applicants should send a curriculum vitae, reprints, and names and telephone numbers of three referees to:

Dr. K.S. Gould,
Department of Botany,
University of Auckland, Private Bag,
Auckland, New Zealand.

Tel: (09) 737 999 ext. 7298 Fax: 64-9-357-0954

MEMBERSHIP RENEWAL

Members should all have received their 1992 dues notice. Please check your mailing label on this issue of the Bulletin. The number at the top right of the label indicates the year for which you have paid. When you renew your membership, remember to include a donation to our endowment funds; the Weresub, Macoun and Porsild.

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Mycology:	Dr. Randy Currah Devonian Botanic Garden Department of Botany University of Alberta Edmonton, AB T6G 2E9	(403) 492-7010 or (403) 987-3054

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Phycology: (temporary)	Dr. J. F. (Joe) Gerrath Department of Botany University of Guelph Guelph, ON N1G 2W1	(519) 824-4120 ext. 3277
Structure and Development:	Dr. Christian A. Lacroix Department of Biology University of Prince Edward Island Charlottetown, PEI C1A 4P3	(902) 566-0974 FAX (902) 566-0740
Systematics and Phytogeography:	Dr. R. J. (Randy) Bayer Department of Botany University of Alberta Edmonton, AB T6G 2E9 E-MAIL: RBAY@ULATAMTS	w (403) 492-7567 FAX (403) 492-7088
Conservation Committee: Chair:	Dr. Dianne Fahselt Department of Plant Sciences University of Wester Ontario London, ON N6A 5B7	(519) 679-2111 ext. 6480 FAX (519) 661-3292
Science Policy Committee: Chair:	Dr. I. M. (Ernie) Brodo Canadian Museum of Nature Botany Division P.O. Box 3443 Station D Ottawa, ON K1P 6P4	(613) 990-6446 FAX (613) 990-6451
Development Committee: Chair:	Dr. Jean M. Gerrath Department of Horticultural Science Guelph, ON N1G 2W1 E-MAIL:BOTJEAN@VM.UOGUELPH.CA	(519) 824-4120 ext. 8912 FAX (519) 767-0755
Membership Committee: Chair:	Dr. R. L. (Larry) Peterson Department of Botany University of Guelph Guelph, ON N1G 2W1	(519) 824-4120 ext. 3278

CANADIAN BOTANICAL ASSOCIATION/ASSOCIATION BOTANIQUE DU CANADA
1991 LAWSON MEDALS

George Argus receiving the Lawson Award for outstanding achievement in a single area from President Paul M. Catling

Category A: Outstanding scientific achievement in a single area.

George W. Argus, Ph D

Dr. Argus received the Lawson Medal category A (outstanding scientific achievement in one area), in recognition of his outstanding achievement with respect to the Rare and Endangered Plant Program at the Canadian Museum of Nature.

Dr. Argus was born in Brooklyn, U.S.A. He received his M.S degree in botany from the University of Wyoming in 1957. His thesis topic was "The willows of Wyoming". In 1961 he received his Ph. D. degree from Harvard University where his topic was "The taxonomy of of the Salix glauca L. complex in North America". George continued to do excellent taxonomic work, and in 1988 he received the Gleason Award for his monograph on the genus Salix in the southeastern United States.

It was in June 1973 that the subcommittee on rare and endangered species in the Canadian flora was formed by the Systematics and Phytogeography section of the Canadian Botanical Association, and it was earlier the same year that the National Museum, under the direction of George Argus, began to compile information on rare Canadian plants. This was the beginning of a commitment on the part of Canadian botanists, led by George Argus, to contribute to the preservation of significant botanical resources in Canada.

By the late 1970s and early 1980s a great deal of accurate information on rare Canadian plants had been published through the Rare and Endangered Plants Program organized by Dr. Argus, and with the publication in 1991 of "Rare vascular plants of Canada", as well as the availability of an authoritative annotated list for each province and territory (and other publications), we have assumed a front position internationally in terms of good documentation on rare plants. In 1983 Dr. Argus, with David White, received the Federation of Ontario Naturalists Conservation Award given

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to "individuals within the public service in recognition of a valuable contribution to and support for environmental issues'.

Dr. Argus was not only the force behind the Rare and Endangered Plants Project, and an organizer and critical reviewer of all publications, but he was also an author on many of the publications. Dr. Argus gave his skill as a taxonomist, his enthusiasm for conservation and his ability to bring together the botanical information and the publication capability of the museum. Over the course of the program he benefitted from the assistance of three very talented botanists. These were in chronological order David White, Cathy Keddy, and Kathleen Pryer.

To adequately understand the contribution that Dr. Argus has made, it is necessary to consider four aspects. Firstly to produce authoritative listings of rare plants has required a great deal of research and scientific expertise. At the outset some groups were in a near hopeless taxonomic muddle and the status of many Canadian plants was very poorly understood. The Rare and Endangered Plant Program gradually made accurate information on the rare plants of Canada widely available to researchers. Furthermore it highlighted areas of taxonomic complexity and thereby increased justification for, and gave profile to, systematic and floristic studies of rare plants. The program has contributed substantially to our knowledge of the Canadian flora both directly and indirectly. Over the past 15 years, at least partially as a consequence of the program, an extensive literature on rare plants has emerged concerning their significance, occurrence in provincial and national parks, management, systematics, reproductive biology and ecology.

Secondly and with regard to planning, the authoritative rare plant listings and maps have been extensively used in botanical survey reports, environmental impact statements and other planning documents. This in turn has facilitated and greatly promoted the use of scientific botanical information in planning. Prior to the Rare and Endangered Program, information on rare plants was largely inaccessible, but now with wide availability, many people other than scientists, are able to be involved in the generation and consideration of botanical viewpoints.

Thirdly, over the approximately 15 year period since it began, the program has involved botanical specialists across Canada and outside Canada. The program publications feature more than 100 authors. The high level of involvement has greatly increased the attention given to rare plants throughout Canada.

Finally Dr. Argus' work in the Rare and Endangered Plants Program reflects the committment to conservation on the part of Canadian botanists that is now widely acknowledged, but the program contributed much to this recognition. Canadian botanists currently have an excellent reputation for contributing their expertise to the preservation of significant botanical resources, and they have been given increasing consideration and respect by governments, industries, planners and consultants. The practical and conservation-oriented aspects of Dr. Argus' contribution have found a very large audience, but the botanical community will remain a primary benefactor.

Donald M. Britton receiving the Lawson Award for outstanding scientific achievement over the period of a career

Category B: Outstanding scientific achievement over the period of a career involving many separate contributions.

D. M. Britton, Ph D

Dr. Britton was born in Toronto. He graduated from the University of Toronto with first class honours in science and biology, then took a scholarship in Virginia where he received his Ph.D. from the University of Virginia, Charlottesville, in 1950. His thesis was entitled "Cytogenetic studies on the Boraginaceae". Dr. Britton spent one year in the Dept. Plant Sciences at the University of Alberta and then 5 years as Assistant Professor of Horticulture at the University of Maryland where he specialized in the cytogenetics of Rubus. He settled at the University of Guelph in 1958 and became a Professor in the Botany and Genetics Department there in 1971. He continued his association with the University of Guelph after his retirement and up to the present.

Dr. Britton published his first paper on ferns in 1953. This group was to become his specialty, and his work on it made him an internationally recognized expert. He was one of the pioneers in the use of cytogenetic techniques to reveal relationships, the use of the scanning electron microscope in systematics and the use of cytological data in the systematics of ferns. Whenever evolution of pteridophytes is discussed, his name will be mentioned. Dr. Britton was also a rather early biosystematist in that he integrated micromorphology, morphology, cytology, chemistry and phytogeography in his work.

Dr. Britton soon became recognized as an expert because he studied some of the most intractable groups of ferns including Dryopteris, Woodsia and Isoetes, and also because he was always able and willing to provide an authoritative view on any aspect of fern taxonomy. As a matter of interest, George Lawson, in whose honour the medal is named, was himself very interested in ferns and in 1889, he published a "Fern flora of Canada". Other Canadian botanists have also made significant contributions to our knowledge of Canadian pteridophytes, but none has contributed in this area to the extent that Dr. Britton has. Among the graduate students he directed were S. J. Rigby (Pellaea), L. Kott (Polypodium, Isoetes), R. E. Newell (Lycopodium) and K. M. Pryer (Gymnocarpium). Dr. Britton has acted as chairman of the Pteridology Section of the Botanical Society of America and has been a leader in the New England Fern Conference since 1970. He is described by his friends, scientists and students, as a "pro" and "a friendly person, a little quiet but with a sly sense of hu-

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mour". His approach to research has been careful and thorough, and it is widely acknowledged that he has contributed to the development of botany in Canada.

In addition to numerous publications on ferns in various journals, Dr. Britton has co-authored "The Ferns of Canada" with W. J. Cody and has nearly completed a manuscript on the ferns of Ontario. Dr. Britton has chosen to publish rather than perish in retirement. He is still publishing at a remarkable rate, mostly in the Canadian Journal of Botany. His recent publications on Isoetes represent a major contribution to our understanding of that group, and are the kind of publications that can only come from a highly skilled taxonomist with a very deep understanding of the organisms he studies. He is the regional reviewer for pteridophytes of eastern Canada for the Flora North America Project and a co-author for the treatment of Isoetes. Isoetes x brittonii (Amer. Fern J. 83(3): 85. 1990.) was recently named in his honour. Don, as he prefers to be called, was an active member of the Guelph Field-Naturalists Club, serving as Conservation Chairman for many years. He is an outstanding field botanist and has lead a great many field trips. His collection numbers exceed 13,000 and the specimens are deposited mainly at OAC, TRT, DAO, CAN, GH, H and BM.

-Paul M. Catling, President

Keith Winterhalder receiving the Mary E. Elliott Award

MARY E. ELLIOTT AWARD 1991 -- Keith Winterhalder

With an automatic reflex action that we have come to greatly appreciate, one member of the CBA/ABC raises his hand within seconds of hearing the word "volunteer". Keith Winterhalder joined CBA/ABC in 1968. He has helped the association continuously since that time, and he is known to everyone as a cheerful person with an ever present smile, who is always willing to help at short notice. Keith served CBA/ABC with two terms as chairman of the ecology section, two terms as treasurer, and also as vice president and chief organizer for the very successful meetings in Sudbury in 1986. After receiving the Elliott Award at the banquet in Edmonton, Keith drove the rest of the night to Kamloops where he received the Noranda Award on the following day. This was given to him in recognition of his outstanding contributions to land reclamation. Congratulations Keith and thanks again!

-P. M. Catling , President

THE LAST WORD: (Jean M. Gerrath)
This is my last issue of the Bulletin, too. I've enjoyed working with Usher, and learning about the activities of CBA/ABC. Since it is Joe who is taking over the Editorship, I'm sure I'll still be involved, although in a minor way. I plan to concentrate for the next period on helping to place the Development Committee on a firm footing, so members will continue to hear from me, both in the Bulletin, and in Truro.

NOTE: The deadline for the January issue is January 15.

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