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Editor / Rédaction:
J. F. (Joe) Gerrath
Guelph

PATRON

His Excellency the Right Honourable / Son Excellence le Très Honorable
Ramon John Hnatyshyn P.C., C.C., C.M.M., C.D., Q.C.
Governor General of Canada / Gouverneur Général du Canada

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FUTURE ANNUAL MEETINGS RÉUNIONS ANNUELLES

1993 - Iowa State University, Ames, IA
with AIBS (Aug. 1-5 août)
1994 - Calgary, Alberta

EDITOR'S COMMENTS COMMENTAIRE DU RÉDACTEUR

When I agreed to take over as the editor of our Bulletin nobody told me that it would be dangerous to my health! Some of you may have already heard through the grapevine that, as soon as I had delivered the last issue of the Bulletin to the printers, it retaliated by blowing up my appendix. What exquisite timing! It was a close call, but I have to thank my foresight in gardening and Hippocrates, who is supposed to have said, "How can a man die who has sage in his garden?" I am more or less back to normal now, although I will look a bit strange at the beach (my scar looks like one of Zorro's failed attempts at a "Z"). I thank those members who expressed their sympathy by writing or who spoke to me at Truro.

The Truro annual meeting ... what a gem! I am certain that all who attended will remember the beautiful campus at N.S.A.C. and the well organized meeting (as well as The Engine Room, the tidal bore and beautiful downtown Truro). The local committee led by Randy Olsen is to be congratulated for a meeting where everything seemed to work perfectly (at least to everyone except the organizers). You can put away the Maalox now, Randy.

This issue of the Bulletin contains many items related to the annual meeting. More items will be presented in the October Bulletin.

(Continued)

My thanks to those who volunteered to review publications for the Bulletin. We managed to move several of the books listed in the April issue into the review process. In this issue (see other column, this page) I have listed more publications which have been received for review. Volunteers, please write to the editor. The list contains some choice items.

I will be going to the 1992 AIBS meeting in Hawaii during August and I hope to obtain more information on the 1993 meeting of AIBS in Ames, Iowa. CBA/ABC will participate in a joint meeting with the Botanical Society of America at Ames. The dates for this meeting have been shifted by AIBS to August 1-5, 1993 which should eliminate any conflict with the Tokyo Botanical Congress.

Keep sending your contributions for the bulletin. I know that we are now in the summer doldrums but the bulletin always needs news items.

Joe Gerrath, Editor / Rédacteur

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MORE PUBLICATIONS AVAILABLE FOR REVIEW

Auld, B.A., K.M. Menz & C.A. Tisdell - **Weed Control Economics**. - Academic Press (1987).

Dale, Adam & J.J. Luby - **The Strawberry into the 21st Century** [Proc. 3rd North American Strawberry Conference]. Timber Press (1991)

Govindjee, J. Ames & D.C. Fork - **Light Emission by Plants and Bacteria**. Academic Press (1986).

Hart, James W. - **Plant Tropisms and other Growth Movements**. Unwin Hyman Ltd. (1990).

Lörcher, Hermann - **Achsenverdickungen und Sprossanatomie bei Valerianaceae**. Franz Steiner Verlag (1990) [Tropische und subtropische Pflanzenwelt, No. 74]. (nur mit englischer Zusammenfassung)

Maksymowych, Roman - **Analysis of Growth and Development of Xanthium**. Cambridge U.P. (1990).

Mozingo, Hugh N. - **Shrubs of the Great Basin. A Natural History**. Univ. Nevada Press (1987).

Raven, P.H., R.F. Evert & S.E. Eichhorn - **Biology of Plants. 5th Edition**. Worth Publishers (1992).

Russell, G., B. Marshall & P.G. Jarvis - **Plant Canopies: Their Growth, Form and Function**. Cambridge Univ. Press. (1989).

Shorthouse, Joseph D. & Odette Rohfritsch - **Biology of Insect-Induced Galls**. Oxford Univ. Press (1992).

Stanwood, P.C. & M.B. McDonald (eds) - **Seed Moisture**. Crop Sci. Soc. Amer. Publ. 14 (1989).

Stoutjesdijk, F. & J.J. Barkman - **Microclimate, Vegetation and Fauna**. Opulus Press (1992).

Zweig, Gunter & Joseph Sherma - **Modern Analytical Techniques. Vol. 14. Pesticides and Plant Growth Regulators**. Academic Press (1986).



REPORTS FROM THE ANNUAL MEETING - TRURO

NOMINATING COMMITTEE REPORT

Having received single nominations for President-elect and Secretary, and no nominations for Directors from the membership, the Nominating Committee, acting in accordance with By-Law 41, produced the following slate of capable members to serve in the offices indicated:

President-elect (1992-1994) - by acclamation

Keith Winterhalder
Department of Biology
Laurentian University, Sudbury, ON

Secretary (1992-1994) - by acclamation

Jean M. Gerrath
Department of Horticultural Science
University of Guelph, Guelph, ON

Directors (1992-1994)

Shannon Berch
Department of Soil Science
University of B.C., Vancouver, BC

Christian A. Lacroix
Department of Biology
University of P.E.I., Charlottetown, PEI

James A. Traquair
Research Station, Agriculture Canada
Harrow, ON

Note: During 1992-1993 our Treasurer, Tim Dickinson, will be on sabbatical leave. During this period the Treasurer will be:

Nancy A. Dengler
Department of Botany
University of Toronto, Toronto, ON

Irwin M. Brodo, Past President & Committee Chair
Sylvia Taylor, Returning Officer

See Board of Directors list on page 48 of this Bulletin. A complete list of the 1992-1993 Board of Directors, including full mailing address, telephone number, FAX number and E-mail address will be presented in the October issue of the Bulletin. - Editor.

CONSERVATION COMMITTEE ANNUAL REPORT 1991-1992

1. Great Lakes/Ontario Conservation Center

We have advocated the establishment of this center and, in response to a request for advice, have recommended candidates for consideration as Natural Heritage Consultants.

2. Cardinal Divide, Canadian Rockies

We sent a letter to the Ministry of Forestry, Lands and Wildlife of Alberta advocating protection from vehicular traffic which was causing severe erosion. A 'reserve' has been placed on the area, protection is now possible and the government was congratulated for recognizing the problem.

3. Wood Buffalo National Park, Alberta

We attempted to discern the level of impact of logging from an ecologist who has done inventory work in the park, but his response was not received.

4. Oak Hammock Marsh, Manitoba

Letters were written to the Ministry of Natural Resources and the Premier of Manitoba, as well as to Ducks Unlimited, abhorring the placement of an office complex in the marsh. The unanimous result of a resolution passed by CBA/ABC Board of Directors was conveyed to a group fighting for the maintenance of the marsh.

5. Natural Heritage League

The Board of Directors of CBA/ABC recommended that the funding base for the Conservation Data Center be broadened and this was presented by CBA/ABC as a resolution at the annual meeting of the League. It passed and funding now seems to be on the way.

6. Botanical/Conservation Research at RBG

We have stressed the importance of the research function in botany at the Royal Botanical Gardens, Hamilton, and advocated that this be maintained.

7. Endangered Spaces Program, Ontario

After many years of advocating protection of representative and rare ecosystems in the province, we were pleased at the announcement that the parks system

Continued on next page

(continued)

is slated for completion by the year 2000, with at least 5 new designations in time for the 1993 parks centennial celebration. Congratulations sent.

8. Conservation Land Tax Reduction Program

The CBA/ABC and other member organizations of the Natural Heritage League protested to the Treasurer of Ontario regarding plans to roll back the Conservation Land Tax Reduction Program which was instated only a year ago.

9. Wildlife strategy of Ontario

CBA/ABC worked as one of the member organizations on planning new guidelines for wildlife policy in Ontario.

10. Carolinian Canada Program (Ontario)

The CBA/ABC advocated that new funding be dedicated to the Carolinian Canada Program since the initial resources are now depleted.

11. Temagami Old Growth Forest (Ontario)

We have continued to protest the planned logging, as well as mining, and have a representative on a provincial committee considering the management of old growth forests generally.

12. Toronto Island Development

The committee has appealed to the Minister of Municipal Affairs of Ontario to request that further habitat destruction be avoided on the islands and development be allowed to proceed no further.

13. Class Environmental Assessment for Flood and Erosion Control Projects, Ontario

The committee stand has stressed the importance of natural vegetation cover on watersheds, and control of flooding through maintenance of cover rather than engineering devices.

14. Timber Management Class Environmental Assessment, Ontario

We presented a series of recommendations related to sustainable forestry practice, including vegetational research and preservation of areas of representative forest types.

15. Commission on Planning and Development Reform, Ontario

The committee has provided recommendations on land use planning which highlight the need to protect representative ecosystems, as well as agricultural lands, from urban expansion.

16. "Forest Health"

An ecosystem-oriented definition of forest health was generated in response to a request from the Ministry of Natural Resources of Ontario.

17. Byron Bog, London, Ontario

We participated in public discussion on housing development near this southern relic bog.

18. Upland Forest at University of Western Ontario

Quantitative stand data was obtained for this hardwood forest which is under pressure from vehicular and pedestrian usage.

19. Kilally Black Maple Forest, London, Ontario

Quantitative stand data was obtained to provide ammunition against development in this lowland stand with the highest importance values for black maple in the province.

20. Ministry of Culture and Recreation

A letter was written disapproving of the unnecessary paper bulk involved in mailings of this ministry.

21. Conservation Position Papers

All three have now been published in both French and English in the Bulletin and sent to various agencies via CBA/ABC regional contact persons in different parts of the country.

22. Scientific Basis for Systematic Identification and Establishment of Protected Areas.

This is an area which we have been asked to consider and, in connection with it, the committee will probably have a representative attend an upcoming conference on standards for Natural Areas.

23. Inventory of Ecologically Significant Natural Areas

This series, still in its infancy, has been recommended and we are encouraged to carry on with it.

24. Federal Bill C42

Ottawa members are attempting to have input into this questionable piece of legislation which relates to CITES.

25. Numerous bulletins, studies, communiqués and requests for input have been received:

- ☐ Teme-Augama Anishnabi negotiations
- ☐ Ongoing initiative of the Nature Conservancy of Canada
- ☐ Pilot "thematic" study of specialized ecosystems in southern Ontario

- ☐ Algonquin Park (Ontario) Master Plan
- ☐ Dedication of Shampers Bluff Conservation Education Area, New Brunswick
- ☐ Large acreage of Ninesing Swamp acquired (Ontario)
- ☐ Prescribed burn in Turkey Point Provincial Park, Ontario
- ☐ Management planning for Larden River Provincial Park, Ontario
- ☐ Polar Bear Park Management Plan Review
- ☐ Quetico Park (Ontario) Revised Park Policy Paper
- ☐ Niagara Escarpment (Ontario) Grants Program
- ☐ Ecological Survey of the Rouge Valley, Ontario
- ☐ Inventory and Evaluation of Mono Cliffs Provincial Park, Ontario

Due to lack of time and resources we have not been able to respond to a number of the requests we received, nor to send our representatives to meetings such as the Canadian Council of Ecological Areas Annual Meeting which is in Newfoundland this year.

*Dianne Fahselt, Chair
CBA/ABC Conservation Committee*

CANADIAN JOURNAL OF BOTANY EDITOR'S REPORT - JULY 1992

The Canadian Journal of Botany has had a busy year during which:

- ☐ manuscript acceptance time fell (173 days in 1989 to 154 days in 1991 and 157 days so far in 1992)
- ☐ publication time fell (382 days in 1989 down to 347 days in 1991)
- ☐ another subject index was published
- ☐ we started a programme of invited research papers
- ☐ we started a commentary section
- ☐ we changed printers
- ☐ we carried out a performance review for 1989-91
- ☐ we continued to conduct publishing workshops
- ☐ we survived an office move and a strike
- ☐ we have published two symposia (May 91, April 92)

As always, improvements are the result of the combined efforts of the Vancouver and Ottawa staff and the Associate Editors. Please join me in recognizing the work of the Associate Editors, whose heroic efforts

Continued on next page

Table 1. Canadian Journal of Botany - Manuscript Processing - 1989-1992

	1989	1990	1991	1992 (so far)
Papers Received	542	625	555	202
No decision yet	0	1	12	121
Decision complete	585	589	579	251
Accepted - Number	367	326	309	147
Accepted - Percent	62.7%	55.3%	45%	58.6%
Rejected	191	237	256	101
Withdrawn	27	26	14	3

Table 2. CJB Acceptance Rates by Subject Area - 1989-1992 [Listed as No. Accepted/Total No. (%)]

	1989	1990	1991	1992 (so far)
Cell Biology	5/8 (63%)	3/9 (33%)	1/3 (33%)	0
Ecology	66/125 (53%)	46/93 (49%)	54/111 (49%)	24/59 (41%)
Molec. Biol.	0	0/4	7/8 (88%)	5/7 (71%)
Mycology	124/179 (69%)	99/194 (51%)	97/165 (59%)	44/66 (67%)
Phycology	14/15 (93%)	7/11 (64%)	3/8 (38%)	2/4 (50%)
Physiology	48/101 (48%)	46/103 (45%)	73/130 (56%) *	23/46 (50%)
Structure	80/117 (68%)	61/98 (62%)	44/94 (47%)	31/46 (67%) ■
Systematics	29/39 (74%)	62/74 (84%) ♦	29/57 (51%)	18/23 (78%)

♦ 1990 publications included 6 symposium papers

* 1991 publications included 31 symposium papers

■ 1992 publications included 5 symposium papers

(continued)

to complete evaluations and revisions quickly has cut one month from the average 'decision time'. I know that they aspire to greater heights and my 'dream' of 100-day decisions may soon become reality.

It is always sad to see the retirements of Associate Editors. Some stay longer than others, but all give dedicated service to their colleagues. Rolf Mathewes, Claude Richard and Jean-Pierre Simon have retired since last year. The community owes them all a great big "thank-you". I am pleased to welcome Judy Canne-Hilliker (Systematics), Daniel Gagnon (Ecology), Tony Glass (Physiology) and Dick Hamilton (Viruses) to the Editorial Board. I know that you can look forward to their excellent contributions to the CJB.

The key question is, "how well does CJB serve your needs?". Only you can answer that question, but we have just completed a comprehensive review of our performance during the first 3 years of my term as Editor. The evidence is that we are showing improvement. We continue to work towards faster publication and increasing quality, but we depend on the community to tell us when things are looking good or going badly. We have a page limit of 2400 pages for 1992, which means that we are still the largest of the NRC Research Journals but have less space than in 1991, when we published 2808 pages. We are not consciously trying to reject more papers but we do discourage both 'baloney slicing' and bulk submissions from doctoral theses.

I will be happy to hear your comments on the subject indexes which appeared in the December issues for 1990 and 1991. I am responsible for all flaws and will be happy to hear of any glitches or ideas for improvement.

A summary of the performance review will be submitted to the Bulletins of both CBA/ABC and CSPP/SCPV. Please write to me in Vancouver if you would like a copy of the full report.

The time taken to print your papers is still too long. We have returned to the printer who served us well in the past, but publication month still rarely corresponds to month on the cover. We hope to resolve this problem soon. Completion of personnel changes in the Ottawa office will ensure further improvements, including the use of dikettes for submission of final revision, copy editing and typesetting.

I plan to offer workshops in collaboration with the Editor of the American Journal of Botany and hope that

there will be similar opportunities at the International Botanical Congress. CJB has agreed to publish the papers arising from symposium contributions at the 5th International Mycological Congress, to be held in Vancouver in 1994. This will not affect regular publishing schedules.

Iain E.P. Taylor, Editor



CBA/ABC AWARDS AT TRURO

Médailles George Lawson Medals

Category A: [outstanding single contribution]

Paul A. Keddy, University of Ottawa [for his book, *Competition*, published by Chapman & Hall in 1989 and reviewed in the April 1991 issue of the Bulletin]

Category B: [lifetime achievement]

Jack McLachlan, NRC Atlantic Regional Laboratories, Halifax [for his many significant contributions in the field of marine phycology].

Prix Luella K. Weresub Award

Pamela Scales, University of B.C. The winning paper, "*Pinus banksiana-Wilcoxina ectendomycorrhizae*", is based on her M.Sc. research at the University of Guelph in the laboratory of Larry Peterson.

Bourse John Macoun Bursary

Isabelle Goulet, Université de Montréal et Jardin Botanique de la Ville de Montréal.

Prix Lionel Cinq-Mars Award

Winner: Stephen M. Bradbury, Department of Botany, University of Guelph. His paper was entitled, "*VA mycorrhizal fungi produce morphologically different appressoria of myc+ and myc- alfalfa genotypes*". [co-author: R.L. Peterson]

Mention Honorable à Isabelle Goulet, Université de Montréal et Jardin Botanique de la Ville de Montréal, pour sa contribution [la seule en français à cette compétition], «*L'inflorescence des Begoniaceae: architecture et biologie de la reproduction*». [avec la collaboration de Luc Brouillet et Denis Barabé]

Note: There was no **Mary E. Elliott Service Award** presented this year.

(Citations and photographs will be in the October issue of the Bulletin - Editor)

TREASURER'S REPORT

Interim Report - 4 July 1992

1990/91 Surplus 36,649.35

1990/91 Net Surplus 5,718.18

1991/92 Net Income:

Memberships	12,257.20
Bulletin Income	467.35
Interest	580.63 (+)
Char. Donations	12,180.27
Other	8.00
Edmonton AGM	nil (+)
Total:	14,518.45

1991/92 Net Expenses:

Awards	3,205.33
Bulletin	3,042.91
Conserv. Comm.	179.99 (+)
Secretary	526.43 (+)
Treasurer	1,222.54 (+)
Other Executive	315.62
Bank Charges	265.75
Truro Advance	500.00
CFBS (1992)	8,089.27
To Endowed Funds	30.00
Total:	18,458.04

1991/92 Net Surplus(Deficit): (3,939.59)

Note 1: (+) signifies items which are expected to increase before the final Treasurer's Report.

Note 2: Membership income is based on:
239 members paid for 1991/92 and
one member prepaid for 1992/93.

Approximately 140 members are in arrears, including:
90 who have paid for 1990/91 and
50 who last paid in 1989/90 (and will now be
dropped from the membership list).

Please check your mailing label. If the number on it is "91", you have not yet paid your dues for the current year. Contact the Treasurer (see back page of this Bulletin) to maintain your membership in CBA/ABC.

Note 3: The final tally from the Edmonton AGM has not been received. It is hoped that a profit will be reported which would offset part of the deficit for this year.

Proposed Budget - 1992-1993

Income:

Memberships	12,700.00
Bulletin Income	500.00
Interest	2,000.00
Total	15,200.00

Expenses:

Awards	2,150.00
Bulletin	3,000.00
Conserv. Comm.	600.00
Secretary	2,000.00
Treasurer	1,000.00
Other Executive	200.00
CFBS	9,900.00
Total	18,850.00

Net Surplus (Deficit): (3,650.00)

Note: Membership income is based on the following estimate:

150 regular members with Ph.D.
30 regular members without Ph.D.
40 student members
30 retired members

(Our 2 life members provide no income for the year)

Tim Dickinson, Treasurer



MEMBERSHIP COMMITTEE REPORT

A personal letter was sent to 50 people whose names were gleaned from participants at the Plant Development Workshops, authors of papers in the Canadian Journal of Botany, a list of plant biologists at the University of Guelph and from discussions with colleagues. The Treasurer reports a success rate of about 20%. A similar letter will go to other potential members as names are acquired. Members are encouraged to send names to the committee chair.

A revised CBA/ABC brochure with input from Jean Gerrath will be completed soon. Erich Haber has agreed to have his name printed on the brochure as the continuing "official address" for the CBA/ABC. He will forward any brochures received to the current person in charge of the Membership Committee.

*R.L. Peterson, Chair
CBA/ABC Membership Committee*

DEVELOPMENT COMMITTEE REPORT

At last year's Annual Meeting it was decided to strike a Development Committee. Current members are Jean Gerrath (Chair), Dave Cass, Larry Peterson (Chair of Membership Committee) and executive members Usher Posluszny, Paul Catling and Tim Dickinson. We have solicited and received a number of fund-raising ideas from members. However, before we proceeded too far it seemed important to lay ground rules and clarify our mandate. Two items which were discussed during the Executive conference call in the winter were whether or not to solicit funds from commercial companies, and whether all fund-raising should be done in the name of the Association, or could be pursued by individual sections and committees. It was clarified that, in either case, our tax-free donation status means that money raised must go into a trust fund, and only the interest can be used.

Several recommendations for fund-raising from internal sources (members) and external sources (commercial companies) were presented at the Truro AGM. General support was given to raising funds at the Annual Meeting by:

i) offering for sale such items as T-shirts, recyclable mugs, coasters or one (or more) items of local interest.

ii) organizing an auction of donated items during the mixer or pre-banquet period of the AGM [books, papers, memorabilia, artwork, etc.]. A good auctioneer is needed, and Randy Olson was suggested as a prime candidate.

With respect to external fundraising:

i) Individual sections/committees should be allowed to solicit funds from external sources. All money raised must go to the Treasurer for placement in an endowment fund. Interest from the fund would be divided proportional to the amount raised by each section/committee. Solicitations must be coordinated to prevent multiple appeals to the same company. To this end, section chairs should be *ex officio* members of the Development Committee so that the Committee can be kept informed of all CBA/ABC fundraising activities.

ii) Companies may be approached to sponsor symposia at the annual meeting (to which their name could be associated) or to contribute funds to current endowments (e.g. for the Macoun student travel bursary).

iii) Every care should be exercised to avoid conflict of interest between CBA/ABC aims/objectives and company practices.

*Jean M. Gerrath, Chair
CBA/ABC Development Committee*

BULLETIN EDITOR'S REPORT

EDITOR'S REPORT - JULY-DEC. 1991

This year marked the end of our term as editors. We learned a great deal about the Association and its members and enjoyed our stint very much. We wish to thank those members who fed us with material, thus making our job interesting, and relatively easy.

The transition to the new Editor, Joe Gerrath, was a smooth one. The only problem we encountered was that in the past we had published the application regulations for the Macoun Travel Awards as a separate Bulletin insert. In the transition they were omitted this year. We recommend that in the future they be included in the package with the Abstract Forms, so that students can apply for the Award at the same time they submit their abstracts.

Usher Posluszny and Jean Gerrath

EDITOR'S REPORT - JAN.-MAY 1992

Transfer of the design and preparation of the Bulletin to a new desktop publishing system [AMIGA 2000 computer, Professional Page 2.0 DTP software, TI Microlaser Plus Postscript laser printer] has been accomplished with a minimum of problems. The new page layout and the content of the first two issues of 1992 seem to have been well received by members.

The publication of contributions in French has been greatly improved by the appointment of a Rédacteur adjoint - Section Francophone [currently Christian Lacroix of UPEI]. Using E-mail and FAX Christian can usually provide translations or editorial advice within hours or, at most, a few days. Obtaining contributions from members [whether they be in French or in English] continues to be a problem, as it has been for previous editors of the Bulletin.

The Bulletin continues to be printed at M&T Instaprint in Guelph using paper made of 100% recycled fibers. The cost of printing averages about \$0.25 per 11x17" sheet [4 printed pages of the Bulletin] or approximately \$1.00 per 16 page Bulletin [for a run of 400 copies]. To this must be added the cost of envelopes and of postage, which is about \$250 per mailing. The inclusion of the Truro package in the January mailing doubled the postage cost. The use of the Ontario IUTS transport system continues to save CBA/ABC a considerable amount on postage.

Joe Gerrath, Editor/Rédacteur

SCIENCE FAIR WINNER

Each year CBA/ABC presents a Special Award for the outstanding plant science exhibit at the Canada-Wide Science Fair. This year the Science Fair was held in Sudbury and our judge, Keith Winterhalder, presented the CBA/ABC Special Award (which includes \$250) to **Aly Remtulla**, a Grade 11 student at Western Canada High School in Calgary. The photograph shows Mr. Remtulla in front of his presentation.

Mr. Remtulla's project was called, "Short and Sweet". It involved experiments designed to study the effect of GR-X (a gibberellin biosynthesis inhibitor) on the development and germination of *Brassica napus* 'Westar' (canola).

The results indicate that GR-X treatment produces plants which are shorter than the control plants and which have earlier flower initiation than the control. The germination experiments showed an effect on the duration of germination. The two lowest concentrations of GR-X tested produced the shortest germination times.

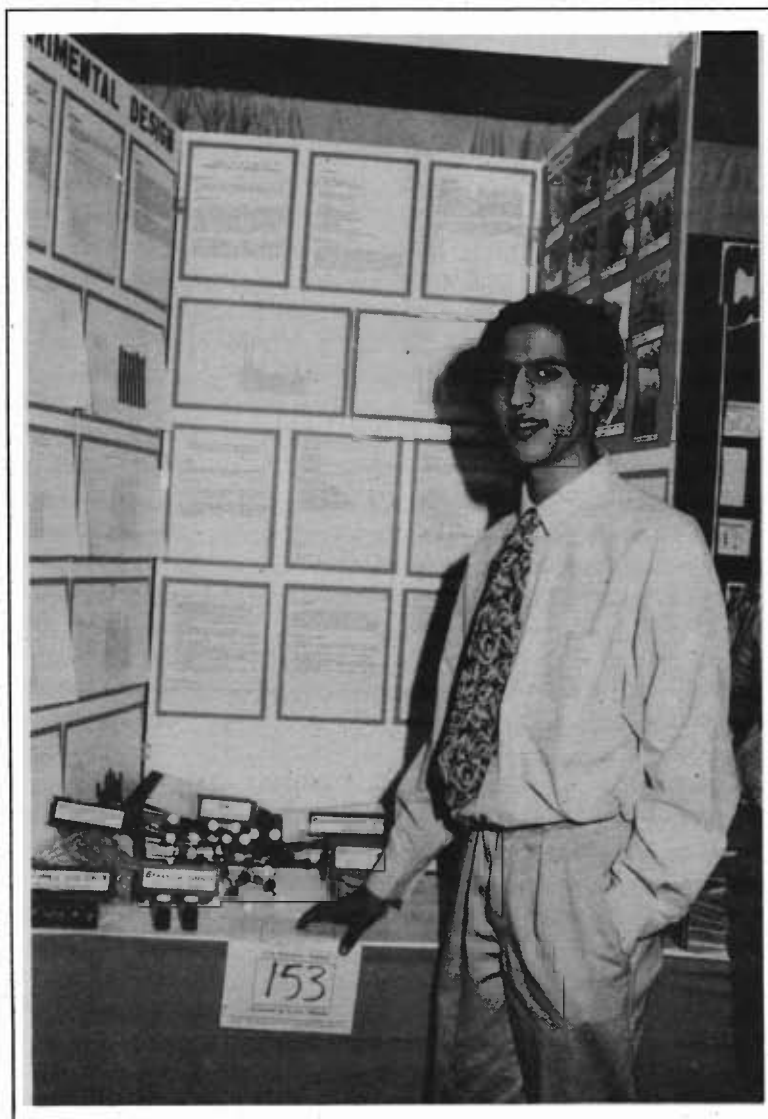
Our Treasurer received the following letter soon after the Science Fair:

Dear Mr. Dickinson,

I have just returned from the Canada-Wide Science Fair where I won the Canadian Botanical Association Award. In addition I won a Gold Medallion, the Agricultural Institute of Canada Award and the Natural Sciences and Engineering Research Council summer employment for 4 months after my first year of university.

I commend your organization for its recognition of the importance of science and technology to the future of Canada. Your sponsorship has touched many young scientists, who are eternally grateful for your contribution. Thank you once again for your support.

*Yours truly,
Aly Remtulla*



CBA/ABC Special Award Winner - ALY REMTULLA
Canada-Wide Science Fair 1992 - Sudbury, Ontario

NEWS ABOUT MEMBERS

Line Rochfort writes that she has completed her Ph.D. studies at the Botany Department of Cambridge University, U.K. Her thesis title: "Atmospheric CO₂ and environmental determinants of plant growth: a model with *Sinapis alba* L.". She is now **Professeure-adjointe** in the Département de Phytologie de l'Université Laval. Congratulations.

Doug Larsen, University of Guelph, is in the newspapers and on the radio again. This time his research team, which is studying the cliff environments of the Niagara escarpment, has discovered algae in almost all the rocks which they have examined. There are several reports of cryptoendolithic algae in other parts of the world, but this is the first time they have been found inside Canadian rocks.

CBA/ABC TO WITHDRAW FROM CFBS

At the Truro Annual Meeting there was discussion concerning CFBS (Canadian Federation of Biological Sciences) and the benefits CBA/ABC has received for its payments. After a lengthy discussion at the Annual General Meeting, the following resolution was unanimously approved:

WHEREAS the Canadian Federation of Biological Societies (CFBS) costs have become prohibitive, and

WHEREAS the Canadian Botanical Association/ L'association botanique du Canada (CBA/ABC) membership is dissatisfied with the services provided by CFBS,

BE IT RESOLVED that CBA/ABC hereby withdraw from CFBS.

[Moved: S. Taylor / Seconded: T. Dickinson (quorum present at meeting)]

The President of CBA/ABC, Usher Posluszny, has communicated this resolution to the President of CFBS.

ABC/CBA SE RETIRE DE LA FCSB

À la rencontre annuelle à Truro, une discussion concernant les bénéfices que l'ABC/CBA a reçu pour son adhésion à la FCSB (Fédération canadienne des sociétés de biologie) a été entamée. Après un débat prolongé à la réunion générale annuelle, la résolution suivante a reçu un support unanime:

CONSIDÉRANT QUE les coûts d'adhésion à la fédération canadienne des sociétés de biologie sont devenus inabordables,

CONSIDÉRANT QUE les membres de l'association botanique du Canada / Canadian Botanical Association sont insatisfaits des services fournis par la FCSB

L'ABC/CBA déclare par le présent acte qu'elle se retire de la FCSB.

[proposé par: S. Taylor / appuyé par: T. Dickinson (l'assemblée constituait un quorum)]

Le président de l'ABC/CBA, Usher Posluszny, a communiqué cette résolution au président de la FCSB.

[Traduction: Christian Lacroix]

27th PLANT DEVELOPMENT WORKSHOP - April 11, 1992

The 27th Plant Development Workshop at the Botanical Garden in Montreal will long be remembered as the "great snowstorm" workshop. A total of 17 cm of snow fell in Montreal, a record for that date. It's not often that you find yourself in Montreal when a record snowfall is set.

While it snowed outside, a well-organized, enthusiastic and bilingual workshop went off without a hitch in the cozy environment of the Administration Building of the Jardin botanique de Montréal. An intrepid group of over 30 showed up for the workshop, representing three provinces (Ontario, Québec and New Brunswick). The Oral Presentations were excellent, mostly presented by students, with topics ranging from "*Cambial response to IAA*" (E. Mellerowicz, R.T. Riding and C.H.A. Little, UNB) to "*Bud growth in Veronica longifolia*" (C.M. Kampny, T.A. Dickinson and N.G. Dengler, U. of T.). Rolf Sattler of the Biology Department, McGill University, presented the keynote address on the topic, "*What is a leaf? Reflections on the conceptual basis of comparative developmental morphology*".

We all had to scramble across a snowy road to get to lunch at the Garden's small cafeteria. It was quite obvious as we walked through ankle-deep snow that we had not brought the right clothing or shoes for the day. We settled in for a pleasant lunch, sharing the cafeteria with a local group of Girl Guides. It was good to see that the adventurous spirit of the Girl Guides was not dampened by a bit of snow. After lunch we were treated to an excellent tour of the glass houses - certainly one of the finest botanical displays in North America, including the world-famous Bonsai and Penjing exhibits. We also had a bit of time to view the poster exhibit set up outside the lecture hall.

A very special thanks (merci beaucoup) goes out to Dr. Luc Brouillet and Mr. Denis Barabé for the superb effort that they put into organizing this first "out-of-Ontario" workshop. We hope that this initiative to encourage scientific interaction across all existing boundaries (provincial, cultural & linguistic) will continue.

Usher Posluszny
Department of Botany
University of Guelph

**CALL FOR SYMPOSIA TITLES
1993 ANNUAL MEETING - BSA/CBA
AMES, IOWA, AUGUST 1-5, 1993**

CBA/ABC and the Botanical Society of America will hold a joint meeting at the Annual Meeting of AIBS next year. Any suggestions for Symposia should be received by the Program Director for the Meeting, Carol. C. Baskin before the deadline, 1 October 1992. Send to:

**Carol C. Baskin
School of Biological Sciences
University of Kentucky
Lexington, KY 405060-0225
FAX: (606) 257-1717**

Please include the following information:

Title of Symposium
Full details of Organizer
Length desired (half day/full day)
Sponsor (CBA section)

BSA has a small fund to help support symposia at the annual meeting. To be considered for support, submit a one-page proposal describing the focus of the symposium and the anticipated list of speakers and their topics. Also include a description indicating why the topic is of interest and timely. The deadline is December 1, 1992. Send the proposal to:

**Gregory J. Anderson
Ecology & Evolutionary Biology U-43
University of Connecticut
Storrs, CT 06269-3043
FAX: (203) 486-6364**

BOOK REVIEW / ÉVALUATION

A novum 'Novum Organum'?

A Review of 'HOME PLACE' by J.S. Rowe

It is very difficult to summarize in a few words the value and importance of the soul-nurturing book that Stan Rowe has written in *Home Place - Essays on Ecology*. This difficulty arises from the fact that each reader will need its message in a qualitatively different fashion. For me, as a field ecologist, the text expresses, in flowing prose, the kind of feelings and urges that motivate all of the research that I do. For laboratory-confined plant physiologists, the text probably represents the context within which they hope their results apply. For molecular biologists and biochemists, I fear that the text will remind them (and most of humanity) of what they have ignored. So let me quote Stan Rowe himself to solve this problem. On page 88 of the chapter entitled *Beauty and the botanist*, Rowe argues that:

"Professional biologists make no concessions to beauty. By a conscious effort they exclude from both subject matter and personal attitude all considerations of beauty and such soft-hearted affective values."

The subsequent eight pages then explain this world-view in more detail. By the end of the chapter, the text convinces the reader that scientists should consider such things on a regular basis because the future of the planet may depend on it. There is also the point to be made that considerations of subjective values makes the research (and the researchers life) more interesting and exciting.

Books like *Home Place* are not written very often because collections of essays rarely have an obvious unifying theme. The present text is an example of this; it advertises a series of 'Essays on Ecology' but the book really contains a series of essays that deal with subjects as diverse as Canada's trade policy (*Restricted Trade*) and the basis for the Canadian legal system (*Crimes against the Ecosphere*). This is not a weakness, however, because this structure forces the reader to try to find the natural links among these issues. Francis Bacon, in writing the *Novum Organum* (1620), presented a lengthy list of arguments dealing with (among other subjects) human nature and the scientific method. While it is very difficult to read the *Novum Organum* as an organized account of how people should proceed with science in a complex universe, it leaves the reader nonetheless with a sense of what to do, what to feel, and what dangers to be aware of. To a very real extent, *Home Place* does the same thing in a modern-day format. It does not preach to the reader in a way that is offensive or arrogant. Rather, it tells stories about the way the world was, about the way it is now, and about where it is going. It does this from the very personal perspective of someone who has been making these observations for a long period of time. It entices the reader with a sense of tenderness that I'm sure was never present when Stan reviewed papers for *Ecology* or *Canadian Journal of Botany*.

For individuals who enjoy books with lots of "stuff", this volume will be disappointing. For those who enjoy the experience of sharing the passion and love for the planet that is experienced by someone else who has studied it intimately, this volume will be cherished. My biggest disappointment will be that the individuals who need *Home Place* the most are the ones least likely to pick it up. So it was with the last *Novum Organum*.

*D.W. Larson
Department of Botany, University of Guelph*

The Plant Press / La Presse Botanique

These pages are intended as a chronicle of news items about plants (or about CBA/ABC members) appearing in newspapers or in the popular science magazines. Contributions from your local newspapers are invited. Send the editor a clipping, photocopy or simply a note about the item and don't forget to indicate the source and date.

Ces pages sont consacrées aux nouvelles concernant les plantes (ou certains membres de l'ABC/CBA) qui paraissent dans les journaux. Les contributions en français sont également encouragées. Faites parvenir vos soumissions au rédacteur en chef ou au rédacteur adjoint, section francophone, et n'oubliez pas d'indiquer la source de l'article et la date de publication.



UV-B Effects

There is a constant stream of newspaper articles that report the dangers of the thinning ozone layer, including various effects on plants in natural and agricultural ecosystems. A drop in annual productivity of antarctic phytoplankton of 2% to 4% [reported as 6% to 12% in another article] is blamed on the increased UV-B irradiation. However, according to Barbara Prezelin, University of California, this drop is much smaller than historical records of annual fluctuations (up to 50%) in productivity, so it is not clear how much of the drop in production can be attributed to the increased UV-B. UV-B irradiation may also be important in competition between crop plants and weeds. Paul Barnes of Southwest Texas State University found that wild oats, a weed in wheat fields, grew more slowly than wheat under increased UV-B. He warns, however, that there may be other situations where a weed is favoured by increased UV-B. In a study of 300 crop plants, Alan Teramura of the University of Maryland reported that about half are sensitive to UV and that the others have protective compounds analogous to animal melanin. He found one strain of soybeans which grew better under increased UV irradiation equivalent to a 25% depletion of the ozone layer.

[Compiled from : *Toronto Star*, Feb. 15, *K-W Record*, Feb. 21, and *Globe and Mail*, March 7, 1992]



End of the Elms ?

A citizens' group in Winnipeg fears that the many American elms in the city will be doomed if federal and provincial funding cutbacks for a disease-control

program are allowed to stand. Since the arrival of the fungus in 1975 the number of elms has been reduced from 274,000 to 170,000. It is predicted that, with the cutbacks, the rate of elm death will double.

[*Kitchener-Waterloo Record*, Feb. 27, 1992]



Neolithic Wheat DNA

Molecular biologists from the University of Manchester and archaeologists from Cambridge University have collaborated to isolate fragments of DNA from wheat seeds that are up to 2000 years old. The group analyzed waterlogged seeds from a medieval Oxford cesspit, partially fossilized seeds from ancient Palestine and charred seeds from an Iron Age hill fort in Hampshire. Why? -- you might ask. Well, if the group can sequence the DNA and "fingerprint" wheat from different regions and times, then the research group hopes that this "biomolecular archaeology" approach will yield information to trace how wheat as an agricultural crop was spread throughout the ancient neolithic world.

[*Mick Hurrell*, *The Times of London*, March 3, 1992]



Environment Prize - Winners

Yuri Izrael of the Russian Federation and Qu Geping of China shared the 1992 **Sasakawa Environmental Prize** of the United Nations Environmental Program (worth \$200,000) for outstanding contributions to the environment. Izrael, chair of the Committee for Hydrometeorology of the former Soviet Union, has devoted many years to the cause of environmental protection in Russia. Qu, administrator of China's National Environmental Protection Agency, has presided over the writing of environmental standards and the carrying out of impact studies which have helped to slow environmental degradation in China.

China Daily, May 20, 1992



Super Trees

Toyota, Japan's largest car maker (4.9 million to be produced this year), is supporting research to produce genetically engineered trees that will absorb more CO₂ than ordinary trees. The company has already planted over 2500 fast growing seedlings of poplar and tulip tree near its engine test centre west of Tokyo. The auto company, of course, wants to be seen to be environmentally friendly. It has produced an "Earth Charter", which sets guidelines for minimizing the

environmental impact at all stages of car manufacturing processes. A spokesperson for Toyota optimistically forecast that the tree project could be completed within four or five years.

*Celia Weston, Guardian News Service
Toronto Star, May 30, 1992*



Research Pays Off

A team of six wheat breeders in southern China's Hunan Province have struck it rich after their successes in breeding more productive wheat cultivars. The provincial government has offered them a new 1500 square meter research building, a vehicle, 4 sets of advanced research equipment, about \$100,000 to expand their operation and about \$100,000 in individual bonuses. Wow! ... NSERC, please take note.

China Daily, May 23, 1992



More on Taxol

The scramble to study yew trees and taxol continues to be reported in the press and on TV. Neil Towers, emeritus professor at U.B.C., was interviewed about the use of tissue culture for taxol production. The Vancouver Sun reporter writes that Towers "stands in awe of nature" and quotes him as saying, "**When you look at the plant kingdom, you are looking at a big drugstore.**". Wouldn't that statement be a good addition to an introductory botany lecture?

CBC's Journal devoted an entire program to taxol. CBA/ABC member Patrick Von Aderkas, University of Victoria, explained tissue culture experiments aimed at producing trees with higher yields of taxol. The program also noted that Bristol-Myers, which has already sunk more than \$100 million into taxol research, has the rights to all research on taxol at the U.S. National Cancer Institute, and will have a 7-year monopoly on the sale of taxol when it comes on the market. Do you want to place any bets that you will be able to afford to buy taxol for treatment? Finally, the program described some of the drawbacks (i.e. side effects) of taxol treatment. These include hair loss, a lowering of white cell count, a lowering of heart rate and, in some persons, an allergic reaction.

*Rebecca Wigod, Vancouver Sun, May 8, 1992
The Journal, CBC Television, June 15, 1992*



Super Tomato

Another "super" plant from the genetic engineers! These tomatoes, produced by Calgene Inc., have had a gene added which inhibits the normal softening process

(which is initiated by a "softening gene"). The messenger RNA of the inhibitor gene binds with the RNA of the softening gene and prevents it from carrying out normal biosynthetic processes. It is expected that growers of these tomatoes can let them ripen on the plant. They should remain firm and fresh for a long period after picking.

Toronto Star, May 31, 1992



Failure Gets Results

An experiment which was "a miserable failure" has led to a process for easy production of a variety of products for the food, fuel and pharmaceutical industries. The process, licensed to Mohawk Oil, uses a new type of oats developed by Vernon Burrows of Agriculture Canada, Saskatoon. Mohawk will produce ethanol and use it to extract top-quality white oat flour and other products. According to Burrows, Mohawk can convert 50,000 tonnes of oats (worth about \$3.4 million) into \$62 million worth of products for marketing. The failed experiment? ... It was an attempt to steep oat grains to see if the treatment would allow planting in the fall, but would delay germination until the spring. Instead, the experiment liquified the endosperm and produced an easy method for separating the endosperm from the rest of the oat grain. The newspaper headline writer was obviously in "failure mode", too. The howler headline reads, "*Researcher still sewing his oats*" (spelled "sowing" in the text of the article, however).

Kitchener-Waterloo Record, July 15, 1992



3rd World Gene Bank

Third world countries are trying to get together to preserve what is left of potentially valuable medicinal plants that are threatened with extinction by the destruction of rainforests and other environments. The so-called "G-15" (Group of 15) countries - made up mainly of countries from the tropical regions of Asia, Africa and South America - met in New Delhi to plan a gene bank. According to the article, nearly one half of the world's plant species occur in 3rd world countries and, it is estimated, about one quarter of these could be lost over the next 20 years if the current estimated rate of extinction (1000 spp. per year) continues. Roughly 35,000 plant species are known to have medicinal value, according to WHO, and 75% of the world's people rely on medicinal plants for primary health care. More than 700 medicinal compounds in the modern pharmacopeia are derived from plants, representing a retail value of about \$50 billion. The countries present at the meeting

Continued on next page

(continued)

expressed concern that major drug companies are increasing their control over 3rd world plant drug resources through patent and other property rights. In the past plant genetic resources of 3rd world countries have been freely appropriated by advanced industrial nations, but the developing countries feel that it is now time to claim their share. Hence the move by the "G-15" to discuss the establishment of a gene bank to preserve and control some of these genetic resources.

China Daily, June 3, 1992



China Plants Trees

China's Ministry of Forestry has huge reforestation projects in various parts of the country. In a 12-year project in the upper and middle reaches of the Yangtze River, more than 2.66 million hectares have already been covered with tree seedlings. This year alone, seedlings are being planted on more than 1.67 million hectares of barren hills in the region.

Tree planting around Beijing has also been successful. The city used to have around 20 days per year with a heavy load of dust in the air, but now has only about 10 dusty days per year. The decline in dirt particles is attributed to the mass tree plantings in the region. Another positive result of the reforestation projects is the improvement of water quality in Beijing's reservoirs. The dirt content of the large Miyun Reservoir is said to be 60% lower than it was 15 years ago. More than 33,000 hectares of trees have been planted around the reservoir. The article notes that the current forest cover in China is 13.4% and claims that annual forest consumption is approximately equal to the annual new forest growth. China has the largest area of forest plantations in the world.

China Daily, June 3 & 4, 1992



RECENT GRADUATES

University of Guelph - Department of Horticultural Science

M.Sc. (1991)

Frank Borsa. "Interaction between *Leucaena* and maize during the establishment phase of an alley cropping agro-forestry system on coral ray soils in Zanzibar." Advisor: Vince Souza Machado.

José Ernesto Equiza. "Effectiveness of composted sewage sludge as a turf fertilizer." Advisor: Jack L. Eggins.

Ph.D. (1991)

Nicholas Bate. "Molecular basis of photosynthetic decline in senescing leaves." Advisor: John E. Thompson.

Richard Coté. "Gas exchange and photoassimilate partitioning in tendrils, leaflets and stipules of *Pisum sativum*." Advisor: Bernie Grodzinski.

Jean Pierre Privé. "Climatic effects of vegetative and reproductive development and photo-assimilate partitioning of three primocane fruiting raspberries." Advisor: J. Alan Sullivan.

Ido Schechter. "Fruiting, carbon assimilation and allocation in field-grown apple trees." Advisor: John T.A. Proctor.

James Todd. "Catabolism of membrane lipids in tomato fruit (*Lycopersicon esculentum*)". Advisor: John E. Thompson.

Kening Yao. "Isolation and characterization of nonsedimentable microvesicles from cotyledons of *Phaseolus vulgaris*." Advisor: John E. Thompson.

Contributor: Jean M. Gerrath

Dalhousie University - Biology Dept.

Laurence McCook (Ph.D.). "Species interactions and community structure during succession following massive ice-scour of a rocky intertidal seashore."

Grant Mitman (Ph.D.) "Meiosis, blade development and sex-determination in *Porphyrumbilicalis* (L.) J. Agardh from Avonport, Nova Scotia, Canada."

*Contributor: Martin Willison
[via Christian Lacroix]*



MEETINGS - CONGRÈS

Plant-Microbe Interactions

A meeting dealing with the **Molecular Genetics of Plant-Microbe Interactions** is to be held in East Brunswick, NJ, **April 21-25, 1993**. For information, contact: **Michael Wilson, AgBiotech Center, Rutgers University, Box 231, New Brunswick, NJ 08903-0231. FAX: (908) 932-3726.**

Orchid Conference

The **14th World Orchid Conference and Show** will be held at the Scottish Exhibition and Conference Center in Glasgow, Scotland, from **April 24 to May 2, 1993**. A variety of events are being arranged for orchid lovers, including a large competitive display of orchids, a display of orchids in natural-looking surroundings, a competition for floral arrangements featuring orchids, an exhibition - *Orchids in Art*, various tours to botanic gardens and stately homes, and a shopping area where you can buy almost everything you could ever think of putting orchids on (e.g. stamps, paintings, engraved glass items, embroidery, badges, pins).

There will, of course be the more serious side to the Conference, with Plenary Lectures and parallel session of papers on orchids. One session will be on horticultural aspects of orchid growing and breeding. The other session deals with more basic science aspects of orchid research, covering, among other topics, evolution, molecular techniques, systematics, ecology and conservation studies.

Anyone wishing to obtain brochures or details regarding the 14th WOC is asked to contact: **The Secretariat, CEP Consultants Ltd., 26-28 Albany Street, Edinburgh, EH1 3QH, U.K. Telephone: 031-557-2478; FAX: 031-557-5749.**

Barley Conference

A **North American Barley Worker's Conference** is being organized for June or July of 1993 at the University of Guelph. Anyone interested in barley, who has not been contacted already with respect to this conference, is asked to communicate your desire to participate to: **Duane Falk, Department of Crop Science, University of Guelph, Guelph, ON N1G 2W1. Telephone: (519)-824-1628 or FAX: (519) 763-8933.**

Plant Pathology

The **6th International Congress of Plant Pathology** will be held in Montréal, PQ, **July 28-August 6, 1993**. Those interested in participating should contact: **Secretariat, 6th ICPP, National Research Council of Canada, Ottawa, ON K1A 0R6.**

Plant Nutrition

The **12th International Plant Nutrition Colloquium** will be in Perth, Australia, **September 21-26, 1993**. For information, contact: **Plant Nutrition Secretariat, Conference Management UWA Extension, University of Western Australia, Nedlands, WA 6009, Australia.**

Have we missed listing your favorite society's meeting? If so, you are partly to blame. Send information to the editor of the Bulletin regarding any meetings which you consider would be of interest to CBA/ABC members.

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Advertisements for **Positions Open** and **Classified** categories may be placed at a cost of Can\$10.00 per published column centimeter. Individual members of the Association may place free advertisements of **Positions Wanted** and **Post-doctoral Opportunities**.

Copy for the October Bulletin must be received before the deadline: 30 Sept.

Les soumissions pour le bulletin d'octobre doivent arriver au plus tard le 30 septembre 1992.

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