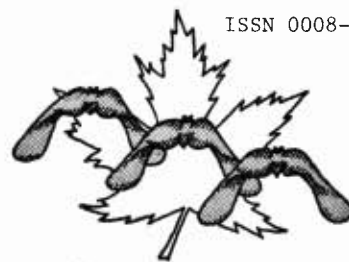


**BULLETIN**

L'ASSOCIATION BOTANIQUE DU CANADA

January 1977

Volume 10 Number 1

Waterloo

ANNUAL MEETING - 1977 - CONGRES ANNUAL  
'B.G.T. 1977' - Winnipeg, June 26 - 30 Juin

You are cordially invited to the University of Manitoba in this its centennial year for an annual meeting in association with the Genetics Society of Canada and the Canadian Tree Improvement Association. This is the first meeting of the C.B.A. in Winnipeg and we look forward to stimulating and enjoyable sessions. The University of Manitoba is located approximately 6 miles south of downtown Winnipeg and 8 miles from the international airport, close to the intersection of Highways 75 and 100 (TransCanada). All events at this meeting will be open to registered members of any participating society.

Schedule

Sunday, June 26:

- p.m. Arrival and registration
- eve. Informal reception

Monday, June 27:

- a.m. Registration, opening ceremonies  
Plenary session and lecture
- p.m. CBA Symposium
- eve. Business meetings, Informal reception

Tuesday, June 28:

- a.m. Full-day field trips  
(GSC contributed papers and special sessions)
- eve. Workshops on special topics

Wednesday, June 29:

- a.m. Contributed papers; GSC Symposium
- p.m. Contributed papers; CTIA Symposium
- eve. Joint banquet and river cruise

Thursday, June 30:

- a.m. Contributed papers  
CTIA field trip

Program

Dr. Peter H. Raven (Director, Missouri Botanic Garden) has accepted our invitation to address the plenary session and has chosen as his topic 'Plant hybridization in the field and experimental garden'. The major CBA Symposium will be entitled 'Prairie destiny - use, conservation, reclamation'. The panelists addressing various aspects, will be Dr. R.T. Coupland (University of Saskatchewan) - prairie ecology; Dr. J. Vallentyne (Environment Canada,

Il nous fait plaisir de vous inviter à l'Université du Manitoba durant son année centenaire, pour participer à une réunion annuelle associée à la Société Génétique du Canada et l'Association Canadienne pour l'Amélioration de l'Arbre. Ce sera la première réunion de l'A.B.C. à Winnipeg et nous envisageons des sessions stimulantes et agréables. L'Université du Manitoba est située environ 6 miles au sud du centre-ville Winnipeg et 8 miles de l'aéroport international, près du croisement des chemins 75 et 100 (Trans-Canada). Les événements de cette réunion seront accessibles à tous les membres inscrits, peu importe la société participante.

L'Horaire

dimanche, 26 juin:

- p.m. Arrivée et inscription
- soir Réception informelle

lundi, 27 juin:

- a.m. Inscriptions, cérémonies d'ouverture  
Session plénière et conférence
- p.m. Symposium A.B.C.
- soir Réunions d'affaires, réception informelle

mardi, 28 juin:

- a.m. journée d'excursions (S.G.C.  
compositions et sessions spéciales)
- soir Ateliers-thèmes spécifiques

mercredi, 29 juin:

- a.m. Compositions contribuées; symposium S.G.C.
- p.m. Compositions contribuées; symposium A.C.A.A.
- soir Banquet en commun et croisement de la rivière

jeudi, 30 juin:

- a.m. Compositions contribuées  
A.C.A.A. - Excursions

Programmes

Dr. Peter H. Raven (Administrateur, Jardin Botanique de Missouri) a accepté d'adresser la session plénière et il a choisi pour sujet 'l'hybridation des plantes dans les champs et dans le jardin expérimental'. Le symposium A.B.C. sera intitulé 'Le destin des prairies - l'usage, la protection, la réclamation'. Le jury discutant divers aspects sera: Dr. R.J.

Ottawa) - water resources and eutrophication; Dr. C. Gilson (University of Manitoba) - prairie economics; Dr. C. Person (University of British Columbia) - genetic resources. Other topics to be covered in special sessions or informal workshops include 'Development plans for the Canadian Institute of Biology (Dr. Dave Walden) and the Flora British Columbia Program (Dr. R.L. Taylor). The titles of GSC and CTIA Symposia will be 'Molecular evolution and developmental genetics' and 'The contribution of forest genetics to the environment'. In addition, the GSC has invited keynote speakers to address special sessions on Chromosome Banding, Plant Breeding, and Human Genetics.

Contributed papers from all three societies may be grouped together in joint thematic sessions if this is appropriate. There will also be a forum for contributed papers within the usual section framework of CBA.

THIS ANNOUNCEMENT CONSTITUTES THE FIRST CALL FOR PAPERS; all members are urged to participate by submitting abstracts. Students are reminded to identify their papers which will then be placed in competition for the prize awarded annually to the best presentation by a student. Contributors must use the official form for submission of abstracts and adhere strictly to the deadline for return. Full instructions are printed on the abstract form, additional copies of which will be mailed on request.

#### Excursions

Day-long field trips to natural and experimental areas in southern Manitoba are being planned for Tuesday, June 28th. CBA will visit; 1. Carberry prairie and sandhills area, Spruce Woods Provincial Forest, 2. Whiteshell Nuclear Research Establishment, Pinawa, 3. Delta Marsh (University Field Station). CTIA is arranging trips to the Agriculture Canada Arboretum and Field Station at Morden on Tuesday, June 28th and to Canadian Forestry Service provenance study plots in Sandilands Forest Reserve on Thursday, June 30th.

#### Accommodation and Meals

On campus. Delegates are urged to take advantage of the package plans offered in the University of Manitoba residences. Rates will be approximately as follows:

	Per Person			
	Regular Members		Student	
	Single Room	Twin Room	Single Room	Twin Room
*	\$78.00	\$70.00	\$45.00	\$40.00
**	\$21.00	\$19.00	\$12.50	\$11.25
***	\$15.00	\$12.50		

\* Package rate (will include full board from June 26 after dinner to June 30 after breakfast and free use of university athletic facilities)

\*\* Full Board - per day

\*\*\* Bed and breakfast only - per day

Regular rates will include general maid service and towel; Student rates will not.

Coupland (Université de la Saskatchewan) - écologie des prairies; Dr. J. Vallentyne (Environnement Canada, Ottawa) - ressources d'eau et eutrophication; Dr. C. Gilson (Université du Manitoba) - aspects financiers des prairies; Dr. C. Person (Université de la Colombie Britannique) - ressources génétiques. D'autres sujets à discuter en sessions spéciales ou en ateliers informels seront: Plans pour le développement de l'Institut Canadien de Biologie (Dr. Dave Walden) et le Programme Flora British Columbia (Dr. R.L. Taylor). Les titres des symposiums S.G.C. et A.C.A.A. seront: 'Evolution moléculaire et développement génétique' et 'La contribution de la généologie des forêts à l'environnement'. De plus, la S.G.C. a invité plusieurs interlocuteurs distingués de vous adresser aux sessions spéciales traitants des sujets suivants: la distinction chromosomique, la reproduction des plantes et la généologie humaine.

Si c'est approprié, les compositions contribuées seront groupées en thèmes pour discussions.

CETTE ANNONCE CONSTITUE LE PREMIER APPEL POUR COMPOSITIONS; tous les membres sont encouragés d'y participer en soumettant leurs résumés. Les étudiants sont rappelés d'identifier leurs compositions, car un prix sera décerné à celui qui aura écrit la meilleure présentation. Tous collaborateurs se serviront de la formule officielle pour soumettre leurs résumés et adhéreront strictement à la date limite du retour. Toutes les instructions sont imprimées sur la formule du résumé - des copies supplémentaires vous seront envoyées sur demande.

#### Excursions

Des excursions dans les régions naturelles et expérimentales au sud du Manitoba seront planifiées pour mardi, le 28 juin. A.B.C. visiteront; 1. les prairies et les dunes de sables dans la région de Carberry, la Forêt Provinciale de Spruce Woods, le Centre les Recherches Nucléaires au Whiteshell, Pinawa, le Marais Delta (base universitaire en campagne). A.C.A.A. planifie les excursions au Centre Arboricole de l'Agriculture Canada à Morden pour mardi le 28 juin, et, au Service Canadien Forestier, lots d'étude forestière à Sandilands pour jeudi le 30 juin.

#### Logement et Repas

Au campus. Les délégués sont encouragés de prendre avantage des services offerts aux résidences de l'Université. Les frais seront approximativement comme suit:

	Par Personne			
	Membres Reguliers		Etudiants	
	Chambre pour un	Chambre pour deux	Chambre pour un	Chambre pour deux
*	\$78.00	\$70.00	\$45.00	\$40.00
**	\$21.00	\$19.00	\$12.50	\$11.25
***	\$15.00	\$12.50		

\* Contrat global (ceci comprends le logement et la nourriture à partir du 26 juin après souper jusqu'au 30 juin après le petit déjeuner ainsi que l'usage gratuit de toutes installations athlétiques à l'université.)

\*\* Le logement et la nourriture - par jour

\*\*\* Lit et petit déjeuner seulement - par jour

No special arrangements or rates for children will be possible in residence accommodation. However, infants may occupy rooms with parents at no extra charge in cribs provided by parents. Names and addresses of babysitting agencies will be provided on request.

Lunch tickets will be available at the time of registration for the reduced rate of \$2.75. Snacks and light meals may be obtained for cash from university cafeterias.

Off campus. For those who may wish to stay off campus, there are hotels and motels within a convenient distance. Details of these and information regarding trailer parks and campsites will be included with registration forms.

#### Social Program

The joint banquet and river cruise aboard the 'Paddlewheel Queen' will take place on Wednesday evening, June 29th. One ticket will be provided to each registrant; additional tickets may be purchased at the time of registration for approximately \$11.00. Informal receptions are planned for the evenings of Sunday, June 26th and Monday, June 27th.

Day and half-day tours are being organized for associates to areas of scenic interest in the vicinity. There will be opportunity to become acquainted with Winnipeg's parks, museums and shopping facilities and to visit sites of historical significance such as the Hudson's Bay Company trading post at Lower Fort Garry.

#### Registration

Registration forms will be mailed at the end of February, 1977. The registration fee is likely to be in the neighbourhood of \$30.00 for regular members and \$20.00 for students.

Les frais réguliers y comprennent une servante et serviettes de bain; il n'y en a pas pour les étudiants.

Il n'est pas possible d'accommoder les enfants à la résidence. Cependant, les bébés pourront partager la chambre des parents, à condition que ceux-ci fournissent eux-mêmes le lit de bébé. Il y aura une liste de gardiennes et de garderies qui vous sera produite sur demande.

Il y aura des billets pour lunches disponibles lors de l'inscription, à un taux réduit de \$2.75. Des casse-croûte et repas légers pourront être obtenus au caféteria universitaire.

Hors campus. Pour ceux désireux de s'établir ailleurs qu'au campus, il y a plusieurs hôtels et motels très près de l'université. Ces détails ainsi que des renseignements en ce qui concerne le stationnement de roulotte et le camping vous seront envoyés avec les formules d'inscription.

#### Programme Social

Le banquet en commun et le croisement de la rivière à bord le "Paddlewheel Queen" aura lieu mercredi soir, le 29 juin. Un billet sera fourni à chacun des participants inscrits. Des billets supplémentaires pourront être achetés au temps de l'inscription pour à peu près \$11.00. Les réceptions informelles sont planifiées pour les soirs du dimanche 26 juin, et lundi, 27 juin.

Des tournées de une demie journée ou d'une pleine journée seront organisées pour vos associés à des sites d'intérêt dans la région. Donc, il y aura l'occasion de connaître les parcs de Winnipeg, les musées, les lieux d'achats, et de visiter les sites historiques tels que celui de la station de commerce de la Baie d'Hudson à Lower Fort Garry.

#### Inscription

Les formules d'inscription vous seront postées vers la fin de février 1977. Il est probable que les frais d'inscriptions seront d'environ \$30.00 pour un membre régulier et de \$20.00 pour un étudiant.

#### NOMINATIONS FOR LAWSON MEDALS

There is still time to submit nominations - see the October issue of the Bulletin (p. 41). Nominations should be sent to Dr. W.N. Stewart, Department of Botany, The University of Alberta, Edmonton, Alberta T6G 2E9. Closing date for nominations is mid February.

#### RESOLUTIONS

The attention of members is drawn to By-Law 13 of our constitution which, amongst other things, requires that resolutions be submitted to the Secretary at least 10 weeks prior to the Annual Business Meeting. The object of this by-law is to ensure adequate consideration and discussion of resolutions, and members are asked to comply with these requirements whenever possible.

#### PERSONALIA

Vladimir J. Krajina, Honorary Professor of Botany, University of British Columbia, was elected as a Fellow of the Canadian Institute of Forestry at the Annual C.I.F. Meetings, Thunder Bay, Ontario, for his outstanding contribution to Nationwide Forestry in Canada. The award recognizes his major scientific and educational contributions in forestry and botany since his arrival in Canada, 1949. Our congratulations to Dr. Krajina!

## In memory of Mary Elliott

Like most members of the CBA/ABC I knew Mary Elliott as the President of our organization and a person who had devoted much time to its welfare in many other ways. Just to know her this much and see her in action with the CBA was a thing of joy. Her warm personality, her questioning spirit and happy disposition have been experienced by everyone who has been in a meeting with her. Her concern for our organization was apparent in her conscientious attention to the duties of the various offices she held and the responsibilities they imposed. As past president she would have continued in service to our organization. Ours is a great and unfathomable loss.

W.N. Stewart, President, CBA/ABC



Mary Elliott's career at the Central Experimental Farm, Ottawa spanned 28 years. Here she was able to accomplish what can be exciting about a scientific career, accepting new challenges that renewed her curiosity about her discipline and filled her with a new resolve. As a new member of the Division of Botany and Plant Pathology, Mary provided a service function in seed-borne disease investigations; this work lasted 10 years. Her transfer to the mycology unit and the reclassification of the agency to the Plant Research Institute saw Mary expand her endeavours into studies of cereal diseases. About this time she started to gain expertise in the taxonomy and biology of the Sclerotineaceae and, along with Dr. J.W. Groves, published a series of articles describing new species of Stromatinia, Streptotinia and reporting the sexual behaviour of other genera in the Sclerotiniaceae. Early each spring she would make trips in the Ottawa area to collect the cup fungi for which she was

gaining wide recognition from mycologists.

Mary was also actively involved in the important community service of identifying fleshy fungi for the public during the autumn. She worked to maintain an informed public by contributing to and editing (1970-71) "Greenhouse-Garden-Grass", an Institute publication for the layman.

In 1975, Mary was appointed Curator of the National Mycological Herbarium, Biosystematics Research Institute. Also another name change had taken place within the Institute and Mary found herself a member of the Plant Disease Fungi Section, a designation with emphasis similar to the group she first joined in 1948. As curator, Mary worked to ensure that the storehouse of mycological information should aid staff mycologists and visiting scientists in their efforts to study the taxonomy, morphology, life history, distribution, and range of hosts or substrates. This task was well in hand at the time of her sudden death. A list of Mary's publications follows:

#### Research Publications

1. Groves, J.W., and M.E. Elliott. A new species of *Stromatinia* on *Sanguinaria*. Bull. Res. Council of Israel 10D: 150-156. 1961.
2. Groves, J.W., and M.E. Elliott. Self-fertility in the Sclerotiniaceae. Can. J. Bot. 39: 215-231. 1961.
3. Elliott, M.E. *Streptotinia caulophylli* n. sp. produced in culture. Can. J. Bot. 40: 1197-1201. 1962.
4. Hennebert, G.L. and M.E. Elliott. '*Botryotinia calthae*' in Hennebert and Groves. Can. J. Bot. 41: 341-370. 1963.
5. Elliott, M.E. *Sclerotinia arctica* n. sp. on *Carex* from Northern Canada. Can. J. Bot. 42: 1065-1070. 1964.
6. Elliott, M.E. Self-fertility in *Botryotinia porri*. Can. J. Bot. 42: 1393-1395. 1964.
7. Elliott, M.E. Some factors in apothecium production of *Ciboria acerina* in darkness and light. Can. J. Bot. 43: 641-645. 1965.
8. Elliott, M.E. *Rutstroemia cuniculi*, a coprophilous species of the Sclerotiniaceae. Can. J. Bot. 45: 521-524. 1967.
9. Groves, J.W., and M.E. Elliott. Notes on *Ciboria rufo-fusca* and *C. alni*. Friesia 9: 29-36. 1969.
10. Elliott, M.E. Self-sterility in *Streptotinia caulophylli*. Can. J. Bot. 47(12): 1895-1898. 1969.
11. Groves, J. Walton and Mary E. Elliott. Notes on fungi from Northern Canada VI. Additional records of Discomycetes. Rep. Kevo Subarctic Res. Stat. 8: 22-30. 1971.
12. Elliott, M.E., and Claude Richard. A New Species of *Martininia*, Mycologia, Vol. 63: 648-652. 1971.
13. Elliott, Mary E., and Michael Corlett. Light microscope and scanning electron microscope observations of *Ciboria acerina*. Can. J. Bot. 50: 2153-2156. 1972.
14. Elliott, M.E. *Ciboria betulicola*. Fungi canadensis No. 1. 1973.
15. Elliott, M.E. and M. Kaufert. *Peziza badia* and *Peziza badio-confusa*. Can. J. Bot. 52: 1974.
16. Elliott, M.E. *Monilinia fructicola* (Wint.) Honey. Fungi Canadenses No. 38. 1974.
17. Corlett, Michael and Mary E. Elliott. The ascus apex of *Ciboria acerina*. Can. J. Bot. 52: 1459-1463. 1974.
18. Parmelee, J.A. and Mary E. Elliott. *Pileolaria brevipes*. Fungi Canadenses No. 50. 1974.
19. Elliott, Mary E. and R. Cauchon. *Sclerotinia Kernerii* (Wett.) Sacc. Fungi Canadenses No. 90. 1976.
20. Elliott, Mary E. and M.P. Sharma. *Lambertella berberidis* n. sp. from India. 1976.
- Groves. Greenhouse-Garden-Grass 9(1): 24. 1970.
4. Elliott, Mary E. Editor. Greenhouse-Garden-Grass 9(2): 1-17. 1970.
5. Elliott, Mary E. Obituary. Frank Lisle Drayton. Greenhouse-Garden-Grass 9(2): 16. 1970.
6. Elliott, Mary E. and Richard, C. A Brown Spored Discomycete from the Parc des Laurentides, Québec. The Can. Bot. Assoc. 6th Ann. Meeting, Univ. Laval. p. 6. 1970.
7. Elliott, Mary E. and Margaret E. Corlett. Some poisonous and edible mushrooms collected near Ottawa, 1970. Greenhouse-Garden-Grass 9(3): 8-9. 1970 (1971).
8. Elliott, Mary E. Editor. Greenhouse-Garden-Grass 9(3): 1-13. 1970 (1971).
9. Elliott, Mary E. Editor. Greenhouse-Garden-Grass 9(4): 1-24. 1970 (1971).
10. Elliott, Mary E. Editor. Greenhouse-Garden-Grass 10(1): 1-21. 1971.
11. Elliott, Mary E. Editor. Greenhouse-Garden-Grass 10(2): 23-34. 1971.
12. Elliott, Mary E. Editor. Greenhouse-Garden-Grass 10(3): 35-64. 1971.
13. Elliott, Mary E. Editor. Greenhouse-Garden-Grass 10(4): 65-89. 1971 (1972).
14. Elliott, Mary E. Editor. Greenhouse-Garden-Grass Supplement. Trials of Garden Annuals in 1970. A. Buckley and W. Cavaye. 1-83 pp. 1972.
15. Elliott, Mary E. Review. Sclerotiniaceae II. Lambertella, by K.P. Dumont. Mem. N.Y. Bot. Garden 22: 1-178. 1971. Mycologia 64: 1363-1364. 1972.
16. Elliott, Mary E. Plant Research Institute. TABLEAU. May, 1973, p. 3. 1973.

#### BOTANICAL SOCIETY OF AMERICA - DARRAKER PRIZE IN PHYCOLOGY FOR 1977

The Committee on the Darbaker Prize of the Botanical Society of America will accept nominations for an award to be announced at the Annual Meeting of the Society at Michigan State University, East Lansing in August 1977. Under the terms of the bequest, the Award is to be made for meritorious work in the study of microscopical algae in all its facets. At present, the Award is limited to residents of North America, and only papers published in the English language will be considered. The value of the prize for 1977 is expected to be about \$425. The Committee will base its judgement on the papers published by the nominee during the last two full calendar years, i.e., papers dated 1975 and 1976. Nominations for the 1977 award, accompanied by a thorough statement of the merits of the case and by reprints of the publications for 1975 and 1976 supporting the candidate, must be received by April 1, 1977 by the Chairman of the Committee, Dr. Robert W. Hoshaw, Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, Arizona 85721. For further information write the Chairman or call him at (602)-884-2364 or 326-0239.

#### Miscellaneous Publications

1. Elliott, Mary E. Sclerotiniaceae. Greenhouse-Garden-Grass 5(2): 7-10. 1965.
2. Elliott, Mary E. Editor. Greenhouse-Garden-Grass 9(1): 1-24. 1970.
3. Elliott, Mary E. Obituary. James Walton

### La visite du Jardin botanique de Montréal

Les membres de l'ABC qui, au départ de Lennoxville n'ont pu accepter la chaleureuse invitation du personnel du Jardin botanique, ont manqué une journée des plus enrichissantes. Il ne pouvait y avoir d'endroit mieux choisi pour clôturer les séances d'étude et les discussions dans le thème du congrès "Les Refuges".

Ce n'est pas en une seule journée qu'un visiteur peut se rendre compte de toutes les ressources du Jardin et de l'Institut botaniques de Montréal. Mais pour les membres de l'ABC, le personnel dynamique et compétent a su concevoir et interpréter un programme qui n'a laissé aucun coin inexploré.

Dans la Salle Léon Provancher, le directeur M. André Champagne souhaitait aux invités une chaleureuse bienvenue. MM. André Bouchard et Michel Famelart donnaient à leur tour l'histoire du Jardin et de l'Institut botaniques. Deux grands noms reviennent toujours: celui bien connu du Frère Marie-Victorin, qui, en 1931, a fondé ce centre d'éducation et de recherche et Henry Teuscher, horticulteur et architecte paysagiste, responsable de la planification et l'organisation du Jardin.

Le Jardin a connu des années difficiles mais il a édifié une oeuvre d'avenir. Aujourd'hui le visiteur peut constater que le Jardin connaît actuellement une période de rapide expansion. Comme nous l'a présenté M. Bouchard, "c'est un outil à l'intérieur d'une grande métropole" qui permet aux citoyens de renouer leurs liens avec la nature. C'est pour répondre à une demande de plus en plus pressante de la part d'un public éveillé à l'amélioration et à la conservation de notre environnement et intéressé à la connaissance des plantes, que fut fondée la Société d'Animation du Jardin botanique (SAJIB) qui compte déjà 900 membres. L'administration, l'aménagement, la conservation et l'information au public relèvent de la Ville de Montréal.

L'Institut botanique, rattaché à l'Université de Montréal, responsable de l'enseignement universitaire et de la recherche assure la qualité des nombreuses activités scientifiques du Jardin. Quelques membres du personnel, MM. E. Rouleau et J. Vieth, nous ont donné un aperçu de leurs travaux avec ceux de leurs étudiants dont ils ont fait la présentation. L'Herbier Marie-Victorin connaît une renommée internationale et compte parmi un des plus importants du Canada. Les bibliothèques spécialisées conservent quelques unes des flores les plus rares. La graineterie du Jardin botanique constitue une des plus riches collections de graines les mieux cataloguées. Les échanges se font avec plus de 600 institutions.

Les édifices de l'administration ont un cachet particulier: le mobilier des bibliothèques, de l'herbier, des salles de conférence sont conservés tels que dans les débuts et donnent un sentiment de permanence qu'on ne retrouve pas dans les édifices modernes.

Même sous la pluie, la visite guidée des jardins n'a rien perdu de son charme. Il est peut-être superflu d'en entreprendre la description alors que MM. A. Bouchard et A. Champagne l'ont déjà fait si bien dans le

bulletin de la SAJIB (Oct. 1975, Vol. 1, No. 1). Une brochure illustrée en couleur "Jardin Botanique de Montréal" publiée par les parcs de Montréal décrit également les différentes sections des 30 jardins spécialisés et des 9 serres d'exposition. Qu'il suffise de dire que sur une étendue de 180 acres, 20,000 espèces de la flore du monde entier y sont représentées. Le Jardin botanique de Montréal allie la tradition aux concepts de l'écologie nouvelle et satisfait ainsi tous les groupes de visiteurs.

Il est impossible de passer sous silence le traitement royal que les amis du Jardin nous ont réservé. Abondance de vin, un buffet très bien présenté, un choix de mets pour satisfaire les fervents de la gastronomie.

Au nom des membres de l'ABC il me fait plaisir de remercier d'une façon spéciale le personnel du Jardin botanique, tous ceux qui ont contribué de près ou de loin au succès de cette journée. A tous, sincères félicitations.

Madeleine Dumais

### The Endangered Species Workshop

A workshop on endangered species was organized at the Lennoxville meetings. It was attended by over 50 participants and was an outstanding success in demonstrating the wide measure of interest in this topic and the concern of our members for the protection of our native plant. After the opening remarks by the Chairman, Dr. J.K. Morton, current work at the National Museums on producing lists of the provinces, and at the University of Waterloo on a National list, was described by Dr. George Argus and Mrs. Linda Kershaw respectively. A wide ranging discussion followed, dealing with the problems associated with producing lists of rare and endangered species, the purposes of the lists, the criteria to be used for including species in the lists, the needs peculiar to Canada, and ways of obtaining the necessary financial support to set up a truly national programme. The discussion and the recommendations which emerged from the workshop are outlined below.

Objectives: To ensure the continued survival of rare, threatened or endangered plants in their natural habitats. To identify and preserve natural areas where these plants occur. The importance of preserving natural habitats was stressed. It was noted that efforts in this direction should be correlated with similar ones for the protection of animals. The importance of gaining public interest and support was stressed and the need

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Des illustrations présentées à la page suivante  
du haut - Un traitement ROYAL "une orgie" de dire Dr. Shay  
au centre - Cependant à ses heures il est pris par le charme de la conversation  
du bas - Les étudiants sont de la fête et guident les invités



to keep government agencies informed. It was also observed that any programme for listing rare and endangered species, to be successful, must have the involvement, cooperation and support of many people.

Criteria for including plants on a list of rare or endangered species. Definitions of rare or endangered were discussed and it was noted that precise definitions are impossible to produce and apply. It was widely agreed that the IUCN definitions currently in use in many parts of the world are satisfactory and should be adopted. Dr. Argus observed that, for the purposes of the provincial lists he is preparing, he has defined rare as "known only from a few areas in a province -- occurring in only small numbers". Several speakers stressed that it was desirable to include all plants which are rare in Canada on our lists regardless of their occurrence in the U.S. The importance of preserving local populations, particularly ones at the limits of the range of a species, was stressed, though another point of view which received support was that we should "forget political boundaries" and that ethnic considerations are sometimes of importance. It was agreed that major disjunct populations should be included as well as the more important infra-specific taxa. Care should be taken to exclude noxious weeds from our lists.

The importance of protecting plants which are not currently rare but are threatened by being used as food etc. was stressed, but it was pointed out that this can probably best be done through Wild Flower Protection legislation. It was stressed that much can be done at the local level through such legislation, to protect plants which, though locally rare, do not appear on a national or provincial list.

#### Recommendations:

- 1) To establish a national data bank which will assemble and maintain information on plants whose continual survival in Canada is threatened or endangered for any region. The bank will maintain records of the occurrence and location of these species; provide a data base for environmental assessment purposes and for further research on these species. The data bank should be adequately funded and staffed.
- 2) Encourage and seek material assistance for current and new work relating to endangered species in Canada.
- 3) The C.B.A. should write to the Secretary General of the National Museums of Canada in an effort to gain further support for current work in endangered species being carried out at the museum (A copy of this letter and the reply are appended).
- 4) Existing legislation, both Federal and Provincial, should be examined to determine the extent to which it is, or can be made, effective in furthering our objectives.
- 5) The subcommittee on Rare and Endangered Species be asked to consider the above recommendations and assemble a working paper which should include statements on our objectives, on work in progress, on the strategies to be adopted and procedures to be followed in the future. A staged plan should be produced.
- 6) That Mr. Tom Beechey become a member of the Endangered Species Subcommittee.

Points which were made during the

discussions on the above included the following:-

Both National and Provincial repositories of information (data banks) will be needed and these must be adequately staffed and funded.

The IBP-CT was cited as an example of the type of organization we should aim for.

Members of the C.B.A. and the public should be encouraged to write to Government departments, ministers, the Director of the National Museums, and the media, asking about work on Endangered Species and expressing concern.

Care should be taken in formulating any initial position paper, which may be used as a basis for requesting funds, not to tie it into work being done at any particular department or institution, for by so doing we may exclude possible sources of funds.

The position paper should be aimed at organizations such as:- Environment Canada, National Museums of Canada, N.R.C., B.C.C., Royal Society, Science Council, Provincial Governments and their agencies.

Care must be taken to ascertain that our proposals do not overlap or conflict with other projects: e.g. B.C.C. proposals for inventories of our flora and fauna, proposals for a National Botanic Gardens system, proposals at the National Museums for inventories of our flora and fauna.

It was observed that the type of programme envisaged would go far beyond current work on endangered species, and would require sophisticated data processing with a computerized data base and mapping programme.

It was noted that if we are to be successful we shall need a wide measure of support from Government Departments and personnel, university personnel, provincial natural history societies, national botanical and scientific bodies and the botanical and natural history fraternity in general.

#### Letter sent to the Secretary General of the National Museums and the reply

Dear Mr. Ostry:

I am writing on behalf of the members of the Canadian Botanical Association/L'Association Botanique du Canada to commend the current work which is being carried out at the National Museums on documenting the rare and endangered species in the Canadian flora. We would like to suggest that high priority be given to this work in view of the increasing threats to our native flora and growing public concern on this matter. It is our opinion that the current work could provide a model and basis for a wider inventory of Canada's plants and animals.

Yours truly,  
Wilson N. Stewart,  
President, CBA/ABC.

Dear Mr. Stewart:

Thank you for your letter of June 22. We appreciate your support.

Although our efforts in documentation are just getting off the ground we are well aware of the importance of this work and it is our hope that in the future more of our resources will be channelled into this field. Dr. Lemieux, the Director of the National Museum of Natural Sciences assures me that both he and



his staff are anxious to expand this programme but like all other components of the National Museums of Canada, Natural Sciences is facing constraints on man-years and financial resources because of the government austerity programme. We will however continue our efforts in this direction with the hope of future expansion.

Thank you again.

Yours sincerely,  
Bernard Ostry.

#### Campbell Lake

As a result of the superb presentation at the June meetings of the CBA/ABC by Dr. Jim Ritchie on the Campbell Lake Site your executive was instructed to write to appropriate government officials seeking to delay or stop the destruction of this site (#48 of the Ecological Sites Committee) by industrial and public encroachment. Your President, with good help from Dr. Janet Dugle (Secretary of the CBA) presented documentation and letters to the Minister of Environment, Canada; Department of Indian Affairs; Office of the Commissioner of the Northwest Territories; and the Mayor of Inuvik. Substantive replies were obtained from Mr. Roméo Le Blanc, Minister of the Environment; Mr. S.M. Hodgson, Commissioner, Northwest Territories; and Mr. J.H. Robertson, Mayor of Inuvik. Resulting from our efforts, Mr. Le Blanc declared a moratorium on the use of the site until the people of Inuvik and local government officials considered the matter. This was done by the City Council of Inuvik with representations from the Department of Indian Affairs and the Canadian Wildlife Service. The matter was brought to the attention of CBC which reported on the action in a September program. Mr. Hodgson also reported an interest in taking an active part in protection of this unique and sensitive area in the N.W.T.

Your Executive has sent follow-up letters to the Departments of Indian Affairs and Environment without further response. This may be due to changes made in the Minister of the Department of Indian Affairs. Further inquiry will be made of the new minister and if any further action is taken it will be reported to you.

Wilson N. Stewart, President.

#### REPORTS FROM THE SECTIONS

##### The Systematics and Phytogeography Section

Twenty-five members attended the Annual Business meeting held at Lennoxville. The following were elected to the executive committee of the section:-

Dr. J.M. Gillett  
Mlle M.G. Dumais  
Dr. Pierre Richard  
Dr. P.J. Scott  
Dr. M. Barkworth

together with Dr. J.K. Morton the outgoing chairman.

At a meeting of the new committee held immediately following the annual business meeting Dr. Gillett was elected as chairman and Mlle Dumais as secretary of the section.

Report. As the section has been without

officers for 2 years, Dr. Morton, the last elected chairman, gave a report on the affairs of the section.

- i) Present membership in the section is 179 (now 194 - September 1976).
- ii) The following subcommittees were set up in previous years and it was suggested that one of the first tasks of the new executive should be to ascertain their status:

Lichen Checklist  
Bryophyte Checklist  
Review of Canadian Herbaria  
Bibliography of Local Floras  
Rare and Endangered Species in the Canadian Flora

The Vascular Plant Check List subcommittee was disbanded at the 1972 meetings but the executive committee was on that occasion commissioned to look into setting up a successor committee.

Possible themes for the 1977 meetings to be held in Winnipeg were discussed and the following were suggested:- The Vanishing Prairie, The Arctic, Genotypic Variation.

##### Report from the Lichen Checklist Subcommittee:-

The subcommittee has brought the task of preparing a computerized list of the lichens of Canada, Alaska, and Greenland to the point where working catalogues are available for the entire region covered as well as any part of that region (i.e., a single province). The catalogue is based on literature reports alone and includes records from 430 articles. About 100 articles still are to be added to the data base, but current articles are being added from time to time.

Besides the general catalogue, catalogues have been generated by the computer for B.C., Quebec, Newfoundland, Ontario and Alaska. Each catalogue lists all lichen names, as published, in alphabetical order, together with a list of all the articles having reference to that taxon, and the places (i.e., provinces or regions) from which the taxon is noted in that particular paper. The program then summarizes the localities at the end of the bibliographic citations.

As a by-product of the catalogue, a complete bibliography is produced for that particular catalogue with full bibliographic citation of each article.

About eight or ten partial or complete catalogues are now in use in Canada and elsewhere. General notice of the existence of the catalogue has not been made yet since the backlog of 100 papers to be input is regarded as a serious shortcoming. Persons wanting copies of the catalogue notify the chairman (I.M.B.) who orders the catalogue in its most up-dated form, from the contracted computer firm, Information Sciences Industries (ISI). The purchaser is charged cost and pays the firm, ISI, directly.

Coverage is not uniform throughout; areas such as Ontario and Alaska are well done, but Greenland has barely been started. Little inputting has been done in the past two years due to other duties of the chairman. One major task remaining is to develop a program for incorporating nomenclatural, and later, taxonomic synonymy into the catalogue so that the catalogue can be shortened.

I.M. Brodo, Chairman.

Report from the Bryophyte Checklist Subcommittee:-

Checklist of Canadian Mosses

The checklist, which was initiated in 1967, is finally nearing completion and hopefully it will be submitted for publication by the National Museums in April 1977. The list will comprise all the mosses in each province and territory and will be based primarily on verified herbarium specimens, as well as literature reports to fill in any gaps that seemingly exist. The other members of the committee who have contributed to the checklist are C.D. Bird (University of Calgary), G.R. Brassard (Memorial University of Newfoundland), W.B. Schofield (University of British Columbia), and D.H. Vitt (University of Alberta).

R.R. Ireland, Chairman.

PUBLICATIONS

PCB'S (Polychlorinated biphenyls)

An interesting account of their occurrence in the environment and their toxicity appears in Great Lakes Focus, Vol. 2, no. 1, Winter, 1976 - obtainable from the Editor, Great Lakes Focus, IJC Regional Office, 100 Ouellette Avenue, Windsor, Ontario N9A 6T3.

Department of the Environment Register of Research 1975 - Part IV - Environmental Research

This gives information on environmental pollution research projects in the U.K., listing organisation concerned, brief summary of the project, personnel and budget. Major categories covered are air pollution, noise, marine, freshwater, land, radioactivity, metallic elements and medical aspects. Available from: Librarian (Research), Headquarters Library, DOE, 2 Marsham Street, London SW1P 3EB. Other volumes are Part I - Building and Construction, Part II - Environmental Planning, Part III - Roads and Transport.

Some Gaseous Pollutants in the Environment

Report of a seminar held at The Royal Society, London 20th May, 1974. The pollutants considered are Carbon monoxide, oxides of nitrogen, peroxyacyl nitrates, ozone, ethylene and their photochemical derivatives. There is a summary of the papers presented with the discussion and also reprints of the papers which include Pollutants from Automotive Sized Engines, Analysis and Measurement of some Gaseous Air Pollutants, Effects of SO<sub>2</sub> and NO<sub>x</sub> on Plants, Biochemical and Toxicological Aspects of Endogenous Production of Carbon Monoxide, Smoking and Industrial Hazards. There is a useful section on background information on the pollutants including environmental concentrations and effects on plants and animals. NERC, Alhambra House, 27-33 Charing Cross Road, London WC2H 0AX.

Toxicity of Metals. Proceedings of a symposium held by the International Joint Commission for the Great Lakes held in October 1975 are available from the Regional Office, International Joint Commission, 100 Ouellette Avenue, 8th Floor, Windsor, Ontario N9A 6T3, Canada.

Man and the Boreal Forest

Published by the Swedish Natural Science Research Council as No. 21 in the series Ecological Bulletins, this volume contains the proceedings of the Man and the Biosphere regional meeting on Project 2 held in Stockholm in October 1975. Included are background papers prepared for the meeting, research proposals and recommendations for future action.

A Master Inventory of Plant Records has been prepared by the Plant Sciences Data Center, Mt. Vernon, Va. 22121. The Master Inventory is a computer listing of the plant records from 29 North American botanical gardens and arboreta and includes a total of 139,162 records of living plants cultivated in public gardens. It is available in microfiche for \$25.

CONFERENCES

Control of Cell Division. The third annual Symposium on the Scientific Basis of Medicine will be held May 25-27, 1977 at Dalhousie University. Seven invited speakers will discuss the regulation of cell division in lower eucaryotes, bacteria, and higher eucaryotes. Titles include: Control of growth, size, and macromolecular synthesis during the cell cycle; role of division in morphogenesis of the fission yeast cycle; growth and division of bacterial cells (a genetic viewpoint); role of actin in cell division. Participants may present research papers. For further information, contact: Dr. G. Johnston, Department of Microbiology, Faculty of Medicine, Dalhousie University, Halifax, Nova Scotia, Canada B3H 4H7.

Focus '77, the 47th Annual Meeting of the Biological Photographic Association, will be held at the Baltimore Hilton Hotel, Baltimore, Maryland, August 8-11, 1977. The theme is "A FOCUS on Education of the Biological Photographer (Bio Medical Photographer)". Focus '77 will offer workshops, seminars and self assessment programs in Medical Television, Medical Motion Pictures, Photomicrography, Clinical Patient Photography, Kirlian Photography, Audio-visual techniques, and Management. A Professional Exhibitions Awards competition will be sponsored together with numerous commercial exhibits. Abstracts of proposed papers are being accepted. Address all inquiries to: Focus '77, P.O. Box 269, Joppa, Maryland 21085.

Third Annual Ontario Ecological Colloquium

Monday and Tuesday, April 18, 19, 1977 to be held at the University of Western Ontario, London, Ontario. This is an excellent chance to find out what your fellow ecologists are doing and thinking! Tentative Session Titles: 1. Avian Ecology, 2. Mammalian Ecology, 3. Fresh water fish, reptiles and amphibians, 4. Physiological Plant Ecology, 5. Population Dynamics (plant, animal and microbial), 6. Pollution and Applied Ecology, 7. Invertebrate Ecology, 8. Community Ecology - plant and animal. Registration Fees: \$5.00 regular and \$3.00 student (in advance). Fees at the conference will be \$7.00 regular and \$5.00 student. Banquet: Monday night, April

18th. For any further information or to submit a paper contact: Dr. P.B. Cavers, Department of Plant Sciences, University of Western Ontario, London, Ontario N6A 5B7, Phone 519-679-3282.

#### WHY BOTHER?

Why should we go to the expense and trouble of preserving open spaces and providing parks? Because life depends upon it.

The scampering of a squirrel, the ploughing of a worm, the flight of a bird, the honey-gathering of a bee -- all these play their part in regulating the natural machinery of fertility and growth.

The protection of trees on our watersheds is essential to the collection, storage and distribution of water, without which we could not live.

We admire the wild flower for its beauty, painted by myriad artists, each with his own special skill, but the plant has a usefulness far more substantial than its aesthetic appeal. "When," said C.F. Kettering, Vice-President of General Motors, "a man comes to me and says, 'All of the major problems of science have been solved' -- I like to ask him the simple question, 'Why is grass green?'"

The green leaf is the fundamental link between life on earth and the energy of the sun. By means of their green stuff -- chlorophyll -- plants are able to manufacture their own food from raw materials they gather from the air and soil. Animals lack this ability and could not exist without the food-producing plants.

Everything that has life, from the bird song that wakes us at dawn to the philosophy that stirs our minds as we linger by moonlight on a beach or a hill-top, is built of the product of green plants.

How close is the affinity between human beings and the trees, grass, shrubs, and flowers we wish to preserve in our open spaces? It is closer than most people realize. We may, as Donald Culross Peattie put it in his book Flowering Earth, lay our hand upon the smooth flank of a beech and say: "We be of one blood, brother, thou and I." Because the one significant difference in the two structural formulas is this: the hub of every haemoglobin molecule in man is one atom of iron, while in chlorophyll, the green stuff of the plant leaves, it is one atom of magnesium.

In earth's long history one species after another of animal and plant has disappeared, and one culture after another has passed to oblivion, because of its inability to adjust to environmental change.

Today it is necessary for mankind to regulate his use of resources and to manage earth's remaining capital more creatively if he is to survive.

We can adapt ourselves understandingly if we go into our open places, to learn by personal experience in field and forest, on mountains and beside the streams, that mankind is dependent upon the living resources of the earth and must do his part to conserve them.

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#### POSITIONS AVAILABLE

There is an opening in the Biosystematics Research Institute, Canada Agriculture, Ottawa, Ontario, KIA 0C6 for a person to undertake taxonomic research on the genus Brassica and its close allies. The incumbent must be well versed in the principles of taxonomy and have some experience in the use of chemotaxonomic methods. The incumbent must be a Canadian citizen. Interested persons should register with the Civil Service Commission of Canada and write to Dr. D. Hardwick at the above address.

Applications are invited for the post of Assistant Professor in the Department of Botany, University of Toronto. Preference will be given to candidates with a research record in soil microbial ecology, although other experimental and quantitative aspects will be considered. A doctoral degree will be required, with commensurate research and teaching experience. The appointment will be made on an annual contractual basis, commencing July 1st, 1977. Starting salary will be from \$15,000, with higher salaries dependent upon experience. Further particulars can be obtained from Professor T.C. Hutchinson, Chairman, Department of Botany, University of Toronto, Toronto M5S 1A1, Canada, to whom applications and the names and addresses of three referees should be sent before February 10, 1977.

University of Ottawa - Department of Biology. Applications are invited for a senior position in the section of Ecology and Systematics. Exceptional applications at the assistant professor level will be also considered. The successful candidate shall establish a strong independent research program and take an active part in the undergraduate (preferably botany) and graduate teaching activities of this Department. Ability to teach in French or willingness to learn within a definite period is considered essential. Rank and salary commensurate with experience. Please submit curriculum vitae, selection of representative reprints and have three letters of reference sent to: Chairman, Search Committee, Department of Biology, University of Ottawa, Ottawa, Ontario K1N 6N5. Deadline for receipt of applications is March 10, 1977.

Université d'Ottawa - Département de Biologie. Nous avons un poste vacant au niveau de professeur agrégé ou titulaire dans la section d'Ecologie et Systématique. Les candidatures exceptionnelles au niveau de professeur adjoint seront également sérieusement examinées. Le candidat sélectionné devra établir un programme de recherche solide et indépendant, et jouer un rôle actif d'enseignant au niveau sous-gradué (de préférence en botanique) et au niveau gradué. La compréhension de la langue anglaise est considérée comme un atout. Rang et salaire seront déterminés en fonction de l'expérience. Veuillez adresser un curriculum vitae, une sélection représentative de vos tirés-à-part, et faites parvenir trois lettres de recommandation au: Directeur, Comité de Sélection, Département de Biologie, Université d'Ottawa, Ottawa, Ontario K1N 6N5. Les candidatures devront être reçues avant le 10 mars 1977.

'STOP PRESS

Granting Councils

The following telex message was received from Dr. Mettrick, President of the Biological Council of Canada as their Bulletin was going to press.

FEDERAL GOVT DEC 2 TABLED NEW ACT CREATING NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL HAVING 21 MEMBERS PLUS PRESIDENT. 28 PERCENT OF ALL PRESENT NRC UNIVERSITY GRANTS AWARDED TO BIOLOGISTS. THESE WILL BE TRANSFERRED TO NEW COUNCIL. IN SPITE OF MAJOR FUNDING FROM NRC GOING TO BIOLOGY CURRENTLY ONLY ONE SENIOR BIOLOGIST MEMBER OF NRC. VITAL THAT COMPOSITION OF NEW COUNCIL RECOGNIZES THE IMPORTANCE AND DOMINANCE OF BIOLOGY IN CANADIAN SCIENCE. CANADIAN BIOLOGISTS SHOULD DEMAND AND EXPECT THAT THE NEW COUNCIL CONTAIN AT LEAST SIX SENIOR BIOLOGISTS INCLUDING THE VICE PRESIDENT. THIS IS NOW OR NEVER SITUATION FOR CANADIAN BIOLOGY. PLEASE USE YOUR MAXIMUM INFLUENCE TO GET ALL BIOLOGISTS TO WRITE OR PHONE PRIME MINISTER CABINET MINISTERS AND MEMBERS OF PARLT TO EXPRES SUPPORT FOR THE NEW COUNCIL BUT THAT IT MUST REPEAT MUST HAVE INCREASED BIOLOGICAL MEMBERSHIP. SUGGEST THAT YOUR RESPONSE BE GEARED TO THE STAGES OF THE BILL THROUGH PARLIAMENT AND PREPARATION OF SUBSEQUENT REGULATIONS.

Our President is writing, on behalf of the CBA/ABC to the Prime Minister. All our members are urged to do likewise.

*The Bulletin of the Canadian Botanical Assoc.  
Editor:- Dr. J.K. Morton  
Department of Biology  
University of Waterloo  
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*Issued quarterly in January, April, July & October, and sent to all members of the Association. Non members can receive it at a price of \$6.00p.a. (\$1.50 per issue) post free, made payable to "The Canadian Botanical Association" and addressed to the editor. Material for inclusion in the Bulletin should reach the editor at least one month prior to the date of publication of that issue.*

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

Enquiries about membership of the CBA/ABC should be addressed to the secretary of the association:- Dr. Janet R. Dugle, Environmental Research, Whiteshell Nuclear Research Institute, Pinawa, Manitoba ROE 1L0.