

January 1976

Volume 9 Number 1

Waterloo

ANNUAL MEETING 1976 - CONGRES ANNUEL.

June 6 juin - June 10 juin, Bishop's University, Lennoxville, Quebec.

Schedule/Horaire

Sun 6 dim - Registration and reception/Inscription et réception générale.

Mon 7 lun - 9:00- Registration, opening ceremonies, plenary session
Inscription, cérémonie d'ouverture, plénière.

13.30- Contributed papers/Communications

19.30- Annual business meeting/Assemblée générale

Tue 8 mar - 9:00- Plenary session/Réunion plénière

13.30- Contributed papers/Communications

18.00- Banquet

Wed 9 mer - All day field trips/Excursions

Evening - A choice of activities, to be announced
Soirée - Activités diverses à préciser.

Thu 10 jeu- 9.00 - Plenary session/Réunion plénière

13.30 - Contributed papers/Communications

Programme (a) Plenary sessions/Réunions plénières
Theme, "Natural Areas"/Thème: "les Refuges".

L'exécutif de l'Association a cru qu'il était opportun de considérer les divers aspects du problème des "Refuges", et plus spécialement au Canada. Nous savons que ce problème intéresse, en plus des membres de l'ABC, beaucoup de gens. C'est pourquoi nous désirons inviter à participer à ce congrès, tous ceux que le sujet peut intéresser: gouvernement, naturalistes de parcs, industrie, urbanistes, aménagistes, forestiers, et spécialistes de la conservation. Six conférenciers de marque, ayant déjà apporté une contribution importante au domaine des "Refuges", vont présenter chacune des sessions plénières (à raison de deux par avant-midi) dans l'ordre précisé ci-après.

Your Executive decided that it would be very timely to focus on the various facets of the "Natural Areas" problem, particularly in relation to Canada. We recognize that concern regarding this topic involves far more than the membership of the C.B.A. Accordingly, invitations are being extended to government (including Parks people), industry, town planners, conservationists, foresters and others to attend and participate in the meetings. Six keynote speakers who have made important contributions in the "Natural Areas" field will introduce the plenary sessions, two per morning, in the following order:

Dr. J.S. Rowe, University of Saskatchewan
"The significance of Natural Areas"

Professor John A. Livingston, York University
Title to be announced

Dr. Michel Maldague, Université Laval
"The importance of environmental education in relation to ecological reserves"

Dr. Everette B. Peterson, University of Calgary
"Regulatory aspects of ecological reserves in Canada"

Dr. A.D. Bradshaw, University of Liverpool
"Disturbed lands; their reclamation and development as nature reserves".

Dr. Gilles Lemieux, Université Laval
"Some practical problems in the establishment and management of ecological Reserves"

Contributed papers on topics related to the conference theme, chiefly as judged by the above titles, are invited for each plenary session. If a sufficient number is available some plenary sessions may continue into the afternoon. Section officers are particularly asked to explore the possibilities of organizing sectional meetings related to the main conference theme.

Nous vous invitons à soumettre des communications, reliées au thème du congrès et à l'un des sujets mentionnés plus haut, qui seront présentées au cours des sessions plénières. Si le nombre de communications est suffisamment important, les plénières pourront se poursuivre dans l'après-midi. Nous invitons aussi les responsables de section à étudier les possibilités d'organiser des réunions de section reliées au thème général.

(b) Sectional meetings/Réunions de section.

The presentation of contributed papers bearing no relationship to the conference theme will be organized by the sectional officers. The deadline for paper submission will be March 15, 1976.

Chaque responsable de section organisera la présentation des communications qui n'ont pas de lien direct avec le thème général. La date limite pour l'inscription d'une communication sera le 15 mars 1976.

Field Trips/Excursions

All-day field trips will run concurrently on Wednesday,

1. to local peat bogs,
2. to Slack Brothers mushroom establishment in Waterloo and to the slopes of Mt. Orford,
3. (if possible) to serpentine areas near Lakes Montjoie and Sunday.

Each of these trips will also give an opportunity to see some of the attractive physiographic features of the Eastern Townships.

It is hoped that there will be no numerical prerequisite for the offering of these trips. The distances are relatively short and it is very likely that transportation by car can be arranged where necessary.

Mercredi le 9 juin, il y aura aussi des excursions (durant toute la journée)

1. à des tourbières de la région,
2. aux installations de culture de champignons Slack Brothers et sur les pentes du Mont Orford,
3. (si possible) à des affleurements de serpentine aux lacs Montjoie et Sunday.

Ces excursions permettront à chacun de voir certaines des caractéristiques physiographiques typiques de la région des Cantons de l'Est.

Un nombre minimum de participants à ces excursions ne sera vraisemblablement pas nécessaire pour qu'elles aient lieu. Les distances sont relativement courtes et il est probable que le transport en automobile pourrait être organisé.

Accommodation/Logement

Le campus est relativement petit et par conséquent très pratique (moins de cinq minutes de marche d'un endroit à un autre): nous espérons donc que la majorité des participants au congrès voudront demeurer dans les résidences universitaires. L'Université offre un plan commode et peu dispendieux comprenant le coucher pour les nuits du 6 au 9 inclusivement, et les repas à partir du déjeuner, le 7 juin, jusqu'au dîner le 10 juin (à l'exclusion du banquet). Chambres et repas seront aussi disponibles, sur une base unitaire pour ceux qui désirent arriver plus tôt ou partir plus tard. Ce sont toutes des chambres implex, deux chambres étant adjacentes à une chambre de bain. Les enfants auront donc des chambres simples plutôt qu'un lit pliant. Les taux (taxes incluses) sont les suivants: adultes - \$70.00; jeunes de 12-18 ans \$47.00; enfants ayant moins de 12 ans - \$25.00.

Les participants qui désirent demeurer à l'extérieur du campus devront faire leurs propres réservations à l'un ou l'autre des motels précisé, ci-après et dont les taux sont établis pour juin 1976.

The compactness and convenience of the University campus are so great that it is hoped and expected that nearly all delegates will choose to stay in University residences (less than 5 min. walk between any two points). The University has provided a generous package plan, covering lodging for the nights of June 6-9, inclusive, meals from breakfast of June 7 to lunch of June 10 (except banquet). Rooms will be and meals may be available on a unit basis for those who wish to come early or stay late.

All rooms are single but in pairs with adjoining bathroom. Thus children will be accommodated in single rooms rather than by the addition of cots. The rates are: Adults - \$70.00; young people 12-18 - \$47.00; children under 12 - \$25.00, including tax.

Any participants wishing to stay off campus should make their own arrangements, e.g. with one of the following, whose prices are for June 1976:

	Chambre avec:		1 lit double		2 lits doubles		Couchettes	
	rooms with:		1 double bed		2 double beds		Cots	
nombre de personnes:			1	2	2	3	4	
persons:								
Lennoxville Motel Court, 94 Queen St.	\$16	\$18	\$21	\$24	\$27			
Motel la Paysanne, 42 Queen St.	19	19	24	27	30	3.00		
Motel La Marquise, 350 Queen St.,	16	18	21	24	27	3.50		
Motel Le Kébékais, Stanstead Highway.	10	12	12 (in 2 singles	/lits jumeaux)				

Campgrounds / Terrains de Camping:

The best appointed, with all services, beautifully located on Lake Stukely, 22 miles from Lennoxville, is Parc Provincial du Mont Orford, P.O. Box 146, Magog, Quebec, where the charges are \$4.00 per campsite per day. There are other sites much closer to the University.

Le magnifique terrain du parc provincial du Mont Orford (Boîte Postale 146, Magog, Québec) est joliment situé sur les bords du Lac Stukely, à 22 milles de Lennoxville. Le taux est de \$4.00 par jour. Il y a aussi d'autres terrains qui sont plus près du campus.

Programme des Dames/Women's Programme

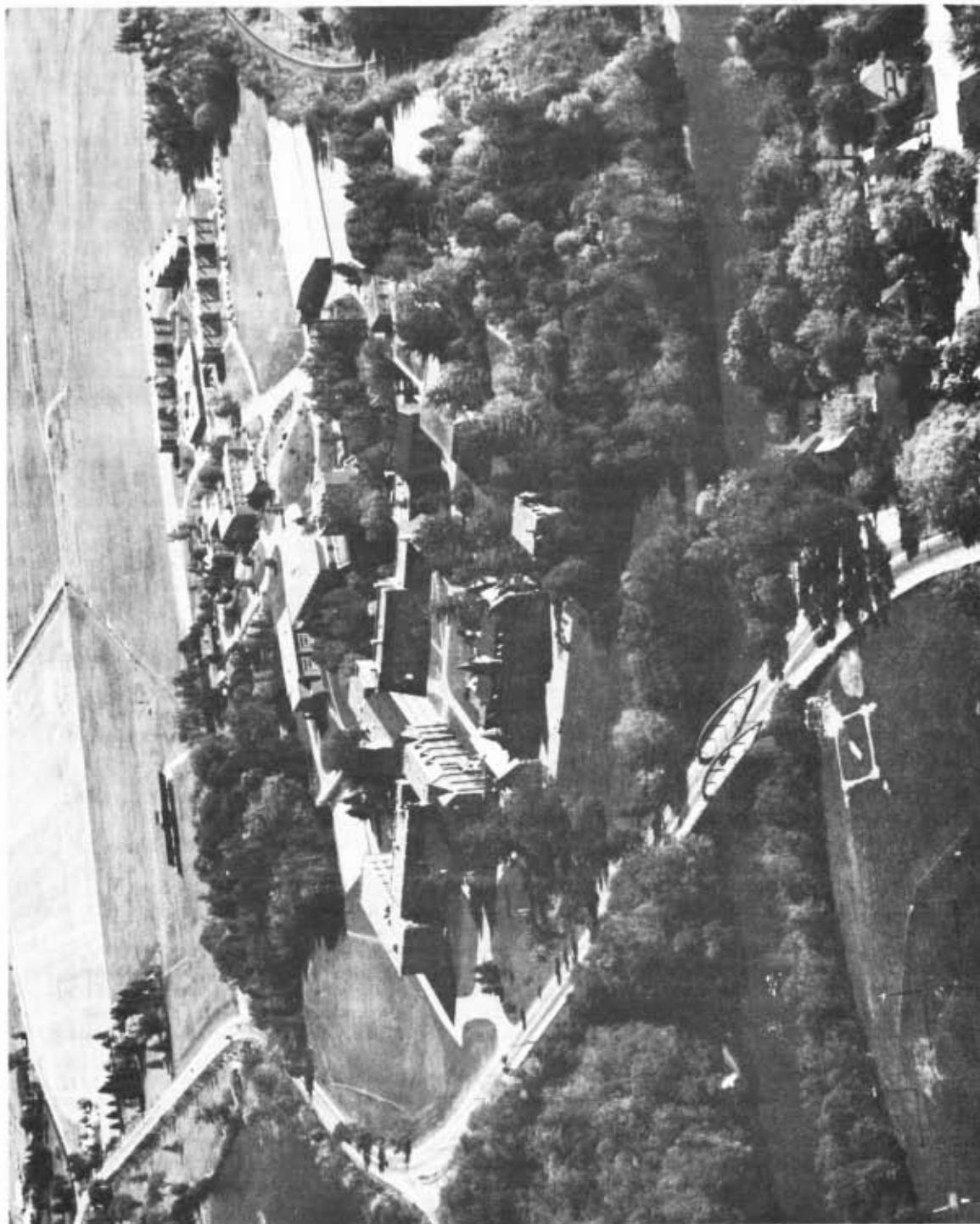
Des visites des endroits les plus beaux seront organisées pour les dames: Mont Orford (avec montée jusqu'au sommet); Lac Memphremagog, Lac Massawipi, l'Abbaye de St Benoit du Lac et le fameux site d'observation et la chapelle de Beauvoir. Celles qui aiment les randonnées à pied pourront en faire. Chacune aura aussi la chance de voir et d'acheter chez l'artisan lui-même, des objets d'art, de potterie ou d'artisanat.

Day tours are being planned for the ladies, to include some of our most beautiful scenic areas: Mt. Orford (including a ride to the summit), Lake Memphremagog, Lake Massawippi, the European-style Monastery of St. Benoit du Lac, and the famous chapel and lookout at Beauvoir. Hiking may be available for those who wish it. The ladies will have a chance to see and buy local art, pottery and other handicrafts at the source, as well as to observe the two cultures of our area in action.

Participants choice/Activités au choix

One evening, very likely Wednesday, will be available for any ad hoc gatherings, formal or informal or for a variety of interesting activities, including use of the newly opened and well appointed Sports and Recreation Centre, on campus, within the 5 minute radius from accommodation and providing swimming, fine tennis and squash courts and a variety of other activities. The Centre will also be open to participants each day of the conference.

Une des soirées, probablement celle du mercredi, sera libre pour organiser soit des rencontres ou des activités variées, incluant activités sportives (natation, tennis, squash) au centre récréatif et sportif. Le Centre sera aussi ouvert pour les participants durant le congrès.



Bishops University, Lennoxville. An aerial view.



Above - Presentation of a Lawson Medal to Dr. R.F. Cain (right)
by our President at the last annual meeting in Saskatoon.
Below - the medal and inscription.



NOMINATION OF OFFICERS FOR THE CBA/ABC, 1976-77

This is a formal call for nominations to the Executive Committee for 1976-77.

By-law 2A of the constitution says, in part:

"Nominations must be signed by not less than six regular members in good standing, and must be returned to the secretary at least twelve weeks prior to the Annual Business Meeting. The proposed office for each nominee shall be clearly indicated."

"Chaque mise en nomination doit porter la signature d'au moins six membres réguliers et en règle, et être retournée au secrétaire au moins douze semaines avant l'assemblée générale annuelle. Chaque soumission doit stipuler clairement pour quelle fonction le candidat est proposé."

By-law 2C says:

"All nominations must be accompanied by the written consent of the nominees, who shall be regular members in good standing."

"Toute nomination doit être accompagnée du consentement écrit de la personne nommée, laquelle doit être membre régulier et en règle."

Positions to be filled this year:

1. President-elect
2. Vice-President
3. Secretary
4. 3 Directors (Continuing Directors are J. Dainty, J.R. Dugle and P. Roberts-Pichette)

Will you please return your nominations by March 14, 1976 to

Carolyn J. Bird
Secretary, CBA/ABC
Atlantic Regional Laboratory, NRCC
1411 Oxford Street
Halifax, N.S.
B3H 3Z1

NOMINATIONS FOR THE GEORGE LAWSON MEDAL

Each year the C.B.A./A.B.C. invites its entire membership to make nominations for the George Lawson Medal. The purpose of the award is "To provide a collective and formal expression of the admiration and respect of botanists in Canada for the excellence of the contribution of an individual to Canadian Botany". Any botanist working permanently in Canada or having spent the greater part of his career here is eligible.

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

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

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

In order that the Awards Committee may learn of botanists who are eligible for these awards, all members of the Canadian Botanical Association are invited to submit nominations and to consult with their colleagues for

suggestions. Nominations should be accompanied by a clear statement of the nominee's contribution and appropriate documentation including biographical information, list of publications and letters by others who support the nomination. Nominations should be sent to the Chairman of the Awards Committee - Miss Mary Elliott, Biosystematics Research Institute, Central Experimental Farm, Ottawa, Ontario K1A 0C6 as soon as possible.

A NEW SECTION?

The purpose of this message is to recommend the erection of a new section in the CBA/ABC.

Name: Structural Section

Membership: Open to anyone in the CBA who is interested in plant structure (anatomy, morphology, development) and who has a desire to discuss such.

Executive: Restricted to a section organizer who shall arrange appropriate papers when the Structural Section meets with the CBA and who shall also appoint his successor. The first section organizer shall be a volunteer. When meeting with the Botanical Society of America, individuals will submit papers to appropriate organizer from that organization.

Meetings: To meet alternate years with the CBA and Botanical Society of America. There will be no formal business meetings.

Comments: This section is based on interest in a certain botanical discipline. It will remain viable as long as the interest, as demonstrated by participation at meetings, lives. When the interest dies, the section shall also die and be laid to rest, after an appropriate wake.

Anyone who feels the desire to comment, please do so to:

Jack Maze,
Department of Botany,
University of British Columbia,
Vancouver, B.C.
V6T 1W5.

LETTERS TO THE EDITOR

Dear Sir:

During the CBA business meeting held this past summer at Saskatoon, it was implied that the CBA needs assistance with representation, at the national level from the Biological Council of Canada and at the international level from the Royal Society of Canada. However, I feel it is preferable that the CBA represent itself at all levels and I am sure that the talent necessary for self-representation is to be found within the CBA. To solicit aid in representation implies, to me, that Canadian botanists lack courage of their convictions and self-confidence in their discipline. If this is true, then one wonders about the justification for the existence of the CBA.

Jack Maze, Botany, UBC.

MAN AND THE BIOSPHERE (MAB) - Report on Project 8: Conservation of Natural Areas and of the Genetic Material They Contain

This document is the report of the panel of experts which met to consider MAB Project 8, entitled "Conservation of natural areas and of the genetic material they contain".

Project 8 provides the focus for action on conservation problems within the MAB Programme. This report provides recommendations on the scientific content of the project, and on the ways and means for its implementation, including the use of protected areas for baseline and other scientific studies, for serving as benchmarks for monitoring of changes in the structure and functioning of ecosystems, for the promotion of environmental education, for maintaining ecological stability, and for aesthetic and cultural reasons. The recommendations include the following:

Adequate conservation should be provided for examples of all the biomes of the world, through the promotion of a world-wide network of representative significant ecosystems, or biosphere reserves. To provide an up-to-date assessment of those areas which are protected according to an accepted international standard a comprehensive inventory of world biomes and representative ecosystems is urgently needed. A classification should be prepared as soon as possible.

National Committees should be asked to prepare an inventory of the biomes, and important subdivisions of them, occurring in their countries, and to indicate for each the extent to which they are afforded protection. Assistance should be given, if requested, to any country participating in the programme, on the ways in which they might carry out such a survey.

Where significant gaps in international coverage are identified, countries in which such biomes occur are encouraged to take protective measures. It is also recommended that every country which has not already done so should prepare lists of rare and endangered plant and animal species within its boundaries and should take immediate steps to establish reserves or take other appropriate measures for their adequate conservation. Some guidelines for the selection and protection of these reserves are suggested.

For the conservation of genetic diversity, two categories of organisms included in Part B of Project 8 (as defined in MAB Report Series 1) are excluded from consideration: domesticated plants and animals, which are the subject of planning and activity under the auspices of FAO; and micro-organisms of direct application to science, technology, agriculture or medicine, since they are contained in many general or specialized culture collections which are expertly maintained, generally accessible, and catalogued on a world-wide scale.

Proposals on conservation measures (including survey, inventory, and reserve management) for wild species are based on a classification of these species and a "time scale of concern". The importance of the latter becomes evident when the purposes of conservation of higher plants and animals are considered in terms of the genetic material they represent. Species of no apparent or

immediate economic usefulness should be conserved as a part of ecosystems, rather than receiving species-by-species attention. (Exceptions would include species of special public or scientific concern and certain migratory species). Ecosystem conservation with a long-term time scale is durable only if population structure and diversity of the species involved make it possible that adaptation to environmental change may continue.

The thrust of this MAB Project is threefold. It is of management or action nature; it includes ecosystem classifications and survey; and there is also an important research function. Information on the relations of population size, diversity, and survival is needed. Relevant studies indicate that suggestive information can be obtained using present-day methods of measurement of genetic variation. Thus studies which critically describe and investigate the dynamics of populations and communities occupying a natural environment over a long time period should be actively encouraged and supported. Such studies should be conducted in (but not restricted to) the proposed biosphere reserves as an important part of baseline studies. In addition to fundamental biological information, such studies will help in the development of an ecological predictive capability and will provide information directly relevant to the choice and management of reserved areas.

The need for increasing public awareness and support for conservation activities is emphasized. Recommendations are made concerning the use of protected areas for environmental education and for communicating MAB objectives.

It is recognized that further planning is necessary for several aspects of Project 8. While there is already much national and international experience to draw on, it is recommended that special groups be convened to accomplish the following:

1. Preparation of criteria and guidelines for the choice and establishment of biosphere reserves, embodying ecological and genetic principles of nature conservation.
2. Identification of those biomes, and subdivisions of them, for which representative samples are not already adequately protected.
3. Determination of criteria for selecting and establishing a network of baseline and monitoring stations in representative undisturbed biome areas, to serve as benchmarks or standards for assessing change.
4. Preparation of a general framework for various types of questionnaires which may be needed by National Committees to suit the specific circumstances and situations in their own countries.
5. Development of plans for using existing protected sites and associated programmes for environmental education and to promote public awareness of MAB and its objectives.
6. Elaboration of research proposals on population structures in reserved areas and on the possible use of genetic change as an indicator of environmental change in baseline studies.

XIIth INTERNATIONAL BOTANICAL CONGRESS,
LENINGRAD SUMMARY REPORT OF NOMENCLATURE
SECTION PROCEEDINGS

30th June - 4th July 1975

The dominant mood of the Nomenclature Section at Leningrad was conservative with very few proposals to change the Code being accepted. This reflected the sentiments of the President of the Section, I.A. Linchevskii, in his opening address. The most important issue before the Section was probably that of the stabilization of specific epithets either through conservation or rejection. The proposal for nomina specifica conservanda was defeated on a card vote by 186 to 150, probably the closest ever on this issue. The negative vote reflected strong institutional opposition particularly from the U.S.A., because the individuals present in Leningrad seemed by their speeches and votes to be overwhelmingly in favour of the proposal.

The main positive decision of the Section also related to stability of specific names in that the Special Committee's proposals on Art. 69 were accepted. This permits a name which "has been widely and persistently used for a taxon not including its type" to be formally rejected. A list of such rejected names will be maintained after proposals for inclusion have been accepted in a similar way to that currently used for nomina generica conservanda.

In addition to orthography, upon which some Soviet taxonomists had strong feelings (notably against compulsory decapitilization of specific epithets honouring persons), there were three matters upon which the Section was so divided as to make it seem desirable to have detailed re-examination prior to the next Congress. These are "Conservation or rejection of specific names"; Autonyms (Art. 19); and typification of names above the rank of species (Art. 10). Special ad hoc Committees will be established by the General Committee to review each of these three areas.

The membership of the General Committee and the various standing Special Committees for the next six years (until the next Congress in Sydney, Australia in August 1981) appears in the attached report of the Nominations Committee (as annotated). Canadian participation in the committees of the section is that of Dr. Weresub as Chairman of the Committee for Fungi and Lichens, and Dr. McNeill as a member of the Committee for Spermatophyta.

The General Assembly of IAPT was held on July 2nd. The major concern of the meeting was the financing of Taxon and Regnum Vegetabile. The latter series will now be published by Oosthoek at their risk which will mean the discontinuance of special prices for members etc. The present policy of seeking page charges for papers in Taxon will continue, reviewing will be more stringent, and although nomenclatural proposals will continue to be published therein, as required, only brief arguments will be accepted and any fuller discussion must either be published elsewhere or, if in Taxon, as a regular reviewed paper.

The new Officers and Council of IAPT are as follows: President: A. Takhtajan (USSR); Vice-president: R.S. Cowan (USA); Administrator of Finances: S.W. Greene (UK); Secretary: F.A. Stafleu (Netherlands); Treasurer: P.A. Florschütz (Netherlands). Council members: T.W. Bocher (Denmark), J.P.M.

Brenan (UK), A. Cronquist (USA), K. Faegri (Norway), W. Greuter (Switzerland), H. Hara (Japan), H. Merxmüller (BRD), B. Peterson (Sweden), R.E.G. Pichi-Sermolli (Italy), R.C. Rollins (USA).

J. McNeill.

XIIth INTERNATIONAL BOTANICAL CONGRESS -
RESOLUTIONS

The following resolutions were adopted at the closing plenary session on 10 July 1975.
1. We, the members of the XIIth International Botanical Congress meeting in Leningrad, call upon all nations and their governments to give the highest priority to the production of food and its effective distribution and storage, consistent with the principles of conservation and the need to preserve the genetic diversity of the earth's flora and fauna, to the end that the world's people may be adequately supplied with food now and in the future; and we, the members of the Congress, pledge our individual cooperation in the scientific aspects of this endeavour.

2. This Congress recognizing that all food for man is derived directly or indirectly from the plant world,

- that the available food resources of the earth are insufficient to provide adequate nourishment for its rapidly expanding population,

- that prudent land use must be based on rational ecological studies, which require adequate knowledge of the local flora,

- that the flora of many countries is still imperfectly known, that taxonomic handbooks are often lacking, and that competent taxonomic botanists are too few to cope with the tasks and material facing them,

- that a large number of plant species, some of which are yet undescribed or insufficiently known, are threatened by extinction through intensive land use and rapid technological change, and that many of these may be potentially useful for man, urges all governments, particularly those giving technical assistance to developing countries, to strengthen the training of taxonomic botanists and research in taxonomic botany, so that as much as possible of the richness of our plant world can be explored, saved from extinction where threatened, and utilized for improvements in agriculture, forestry, and rational land use in general.

3. This Congress, recognizing that in many parts of the world man's activities have caused:

1. a substantial decrease in productive natural ecosystems, with an associated loss of non-renewable plant resources;

2. the extinction or severe reduction in the numbers of many plant species; and

3. an increase in the area of man-made wastelands,

bearing in mind that as long as the world's population grows and life-styles change, these trends will continue, resulting in progressive degradation of the vegetational cover of the earth which could lead to instability in the biosphere and ultimately affect adversely man's capacity to produce food and other commodities essential for his existence,

recommends that research be expanded throughout the world:

1. on natural ecosystems and the changes

brought about in them by the impact of man;

2. on methods of protecting ecosystems from further degradation by man;

3. on the problems of rehabilitating ecosystems that have already suffered damage where this is desirable in the interests of man's well-being.

4. This Congress, emphasizing the ultimate dependence of man on the plant world, noting the increasing speed with which species and ecosystems are still being destroyed by man, urges governments of all countries, particularly those situated in the tropics, to act rapidly and effectively:

1. to conserve wild plants in every way possible by the establishment and maintenance of ecosystem reserves and national parks, by the development of botanic gardens and other plant resource centers and,

2. to instigate and encourage the exploration of and research on the plant resources of the world, upon which future beneficial developments in agriculture, forestry, and other plant usage depend.

5. This Congress, recognizing that only relatively few plant species are used by mankind, calls to the attention of all governments the importance of supporting new or expanded research that would enable man to exploit the productivity of additional plant species from all environments, for example desert and marine plants of potential economic importance which have hitherto been largely ignored.

6. This Congress, aware of the serious threat to the continued survival of many plant species arising from more intensive land use and the expansion and development of agriculture and forestry in all continents, yet deeply conscious of the need to preserve as much as possible the genetic diversity of the plant kingdom for the future economic, cultural and aesthetic benefit of mankind, welcomes the setting up by the International Union for Conservation of Nature and Natural Resources of an International Threatened Plants Committee and pledges support for its work throughout the world.

7. This Congress, mindful of the general lack of understanding on the part of the public of the natural laws governing our biosphere, urges those concerned with curriculum development in schools and universities throughout the world to extend and encourage the study of ecological principles and nature conservation.

8. This Congress resolves that the decisions of the Nomenclature Section with respect to the International Code of Botanical Nomenclature as well as the appointments of the officers of the Nomenclature Committees made by that Section in its plenary meeting of July 4th, 1975 be accepted.

9. This Congress, recognizing the possibility that there may be plants with constituents capable of inhibiting the growth of some kinds of cancer, and knowing that laboratories over the world are conducting a search for such plants, proposes the creation of an international committee to:

1. coordinate the search for anticancer plants so as to prevent duplication of effort;

2. encourage development of standard sampling and testing methods;

3. develop a systematic inventory of plants tested and the resulting data; and

4. promote the exchange of information

concerning clinical testing and/or chemical screening.

10. This Congress, recognizing the world wide growth of interest in and research on plant anatomy would welcome the establishment by the International Union of Biological Sciences of an International Association of Plant Anatomists.

11. This Congress, noting the increasing use and need of electronic data processing in storing and retrieving information contained in the plant taxonomic collections of the world, aware of the importance of this information to many disciplines of biology, knowing the complexity of the technology involved, yet anxious that this stored information should be readily available internationally, recommends the setting up of a standing international commission to advise on, coordinate and monitor progress in the introduction and application of electronic data processing in plant taxonomic collections.

12. This Congress urges botanists to make every effort to find and to improve plant species that will be helpful in protecting soils from erosion.

13. This Congress, recognizing that the wild relatives of cultivated plants are an important source of genetic diversity for the continuing improvement of agricultural crops, and that they should be carefully preserved for the future, endorses the steps already taken, or now proposed, to ensure the protection of wild species that are potential donors to the gene pools of plants useful to man, and urges governments to acknowledge the importance of this work and give it every possible support throughout the world.

14. This Congress recommends the setting up of a working group within the framework of the International Union of Biological Sciences to coordinate the methods of phenological research in the different countries of the world, and to promote the exchange of such information among scientists interested in the seasonal rhythms of plants.

15. This Congress, drawing attention to the importance of the history of botany to a comprehensive understanding of our science, suggests to administrators of botanical institutions and organizers of future congresses that due emphasis be placed on this subject.

16. This Congress, recognizing the growth of research on remote sensing of vegetation, and noting the need to coordinate the work in this field, recommends the setting up within the framework of the International Union of Biological Sciences of a working group on remote sensing, the objectives of which would be to promote the exchange of information, to compile reviews of current research, and to discuss problems of the analysis and application of remote-sensing data.

17. This Congress, considering that the production of a comprehensive pan-arctic vascular plant flora is an urgent need recommends the setting up of an international Committee to examine the feasibility.

18. This Congress, appreciating the admirable organization of the meetings and having enjoyed the great hospitality extended to its members, warmly thanks the Academy of Sciences of the USSR, the City of Leningrad, the botanists of the USSR and the Organizing Committee for having made this Congress possible and for

having so graciously and conspicuously served botany by bringing together so large a number of the botanists of the world to discuss so many aspects of their science in this beautiful city.

As a diplomatic rebuke to the USSR for failing to provide visas to the nationals of at least one country (Republic of South Africa) these "resolutions" are recommendations to the IUBS and will be endorsed (or otherwise) by the Executive Council of that body.

A specific resolution of particular Canadian interest is number 17. This stems from John Packer's initiative. The resolution gives Dr. Packer the support he wanted and reflects the general feeling of that meeting. However I could see no likelihood of active Soviet involvement (certainly in the directing of such a project) while Arkticheskaya Flora SSSR was still incomplete, although Yurtsev and others warmly welcomed the idea (Tolmachev is a sick man apparently). Presumably the setting-up of the "international committee" is largely up to John Packer.

The XIIIth International Botanical Congress is scheduled for Sydney, Australia in August 1981.

John McNeill.

PUBLICATIONS

Brittonia

THE NEW YORK BOTANICAL GARDEN is pleased to announce that beginning with the January-March issue 1976, BRITTONIA will again become a publication of the Garden, having served as the journal of the American Society of Plant Taxonomists for 18 years. Continuing with much the same format, it will include publications of the staff of the New York Botanical Garden and outside contributors. Papers will be concerned with systematic botany in a broad sense, including such fields as chemotaxonomy, numerical taxonomy, morphology, anatomy, cytology, palynology, ecology, geography, and paleobotany insofar as they have a systematic bent. All groups of plants will be treated.

Manuscripts are being considered now for the first issue under NYBG editorship. Potential contributors should request instructions from the Editor, John T. Mickel. Papers are to be of short to medium length as in the past. Publication costs of \$30 per printed page will be charged. One goal is for relatively rapid publication, 4-6 months after final acceptance.

You are invited to subscribe to BRITTONIA at a special individual rate of \$10 per year; institutional subscriptions are \$25.

Systematic Botany - A New Journal

The American Society of Plant Taxonomists announces the formation of a new journal, called SYSTEMATIC BOTANY, which will begin publication in 1976. It is intended that a minimum of 400 pages per yearly volume will be published, the issues to appear quarterly. The editor will be Dr. William Louis Culberson, Department of Botany, Duke University, Durham, NC 27706. Membership in the ASPT is welcomed from all persons interested in biological systematics, reproductive and evolutionary biology, biogeography, chemotaxonomy, numerical taxonomy, or paleontology. Members of the Society will receive a subscription to the new

journal and have the privilege of submitting papers for publication. Any person who would like to join the ASPT should write to the Society's Treasurer, Dr. L.C. Anderson, Department of Biological Sciences, Florida State University, Tallahassee, FL 32306, and include payment of the yearly dues--\$16.00 for a regular membership, \$20.00 for a family membership (one copy of the journal), or \$8.00 for a student membership. Instructions for the preparation of manuscripts can be obtained from Dr. Culberson. The purpose of SYSTEMATIC BOTANY is to publish both original research reports and interpretive and review articles on all aspects of the systematics of cryptogamic and phanerogamic plants.

BISHOP'S UNIVERSITY has announced that it will offer "The Jenckes Foundation Program in Field Biology" for the third consecutive summer. The dates are July 5 - August 13. The course carries 9 university credits. Registration is limited to 30 students. Tuition is \$195.00. Bursaries are available to well-qualified and highly recommended applicants. Participants will study a wide range of distinctive habitats. Living organisms will also be brought to the laboratory for further study. The program will be intensive and full-time, requiring five full days per week. This program is useful to ecologically oriented biology undergraduates and graduates who wish to extend their familiarity with organisms in the field. High School teachers of biology have also profited from the course. The instructors will include Dr. Donald F. J. Hilton (host-parasite-vector specialist), Dr. James Hull (plant ecology-allelopathy) and Dr. Arthur N. Langford (plant ecology and general botany) as well as visiting specialists. Correspondence and requests for application forms should be directed to:

Dr. Douglas F. Brown, Chairman,
Department of Biological Sciences,
Bishop's University,
Lennoxville, Quebec
J1M 1Z7.

BRITAIN REVIEWS TAXONOMY

A Review Group has been established under the auspices of the Advisory Board for the Research Councils of the United Kingdom to carry out a wide review of all aspects of taxonomy. The 15 member group, under the chairmanship of Dr. J.E. Smith, represents government organizations, learned societies and universities. Concurrently the role of taxonomy in ecological research is being examined by a working party of the Natural Environmental Research Council. The Review Group is surveying the people and institutions undertaking taxonomic research and identification services in the UK, and the user needs for taxonomic research and services both in the UK and in overseas countries. All aspects of the training of taxonomists are being studied, together with the staffing problems of curation and of the indexing and retrieval of taxonomic information. The Review Group is also examining problems of preparing and publishing manuals, handbooks and research monographs. The Review Group was to report by the end of 1975.

THE ARTHUR J. EAMES COLLECTIONS

During tenure of a sabbatical leave, the late Professor A.J. Eames of Cornell University made a very valued collection of Antipodean plants (mostly from mainland Australia) and generously donated them to the then-infant Carleton College. His beautifully selected and conserved specimens demanded a permanent herbarium in which they might be deposited; this was the foundation collection of Herbarium Carleton College Ottawa (CCO in the Index) under the curatorship of Capt. E.A.O. Turnau. He was succeeded as curator by ourselves in 1960.

As a lasting memorial to the generous spirit of our friend, Dr. Eames, and as a service to Canadian botanists who may wish to consult the collection, the species represented are listed; all were collected by Dr. Eames during 1953 unless otherwise stated. The month of collection is given as a Roman Numeral, followed by locality and State; the families of flowering plants are numbered according to their occurrence in the Englerian filing sequence in C.C.O. to facilitate reference.

I.L. Bayly and W.I. Illman,
Curators,
C.C.O., E.L.B.A.,
Carleton University,
Ottawa, Ontario
K1S 5B6.

Name	Month	Site	State
<u>FERNS</u>			
<u>Marattia salicina</u>	2.IV	Auckland Univ.	N.Z.
<u>Todea barbata</u>	IX	Sublime Pt., Bulli	N.S.W.
<u>Schizaea dichotoma</u>	VII	Warrah	N.S.W.
" <u>pusilla</u>	VIII	Warrah	N.S.W.
<u>Gleichenia circinata</u>	VII	Warrah	N.S.W.
" <u>flabellaris</u>	VII	Warrah	N.S.W.
<u>Lindsaea microphylla</u>	X	Springwood	N.S.W.
<u>Adiantum formosum</u>	VI	Binna Burra	Q'ld.
<u>CONIFERS</u>			
<u>PODOCARPACEAE</u>			
<u>Microcachrys tetragona</u> (D. Martin)	XI 1937	National Pk.	Tasm.
<u>Podocarpus spinulosa</u>	30.IX	Cremorne Pt.	N.S.W.
" <u>spinulosa</u>	30.IX	Cremorne Pt.	N.S.W.
<u>CUPRESSACEAE</u>			
<u>Actinostrobus pyramidalis</u>	VIII	Carrington Swamp	W.A.

ANGIOSPERMS

1. CASUARINACEAE

<u>Casuarina cunninghamiana</u>	V	Cremorne Pt.	N.S.W.
" <u>cunninghamiana</u>	VI	Barron Rr.	Q'ld. Karanda
" <u>distyla</u>	VI	Sydney Harbour	N.S.W.
" <u>glauca</u>	VIII	Fremantle	W.A.
" <u>litoralis</u>	VI	Mona Mona Missions	Q'ld.
" <u>nana</u> (fr.)	V	Blue Mts.	N.S.W.
" <u>torulosa</u>	IV	Hawkesbury	N.S.W.

15. FAGACEAE

<u>Nothofagus moorii</u>	VI	Lamington Nat. Pk.	Q'ld.
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19. PROTEACEAE

<u>Adenanthos obovatus</u>	VIII	Westdale	W.A.
" <u>barbigera</u>	VIII	Westdale	W.A.
" <u>meissneri</u>	IX	nr. Busselton	W.A.
<u>Banksia ericifolia</u>	V	National Pk.	N.S.W.
" <u>grandis</u>	IX	with A.T. Hotchkiss	W.A.
" <u>integrifolia</u>	IV	Cremorne Pt.	N.S.W.
" <u>serrata</u>	IX	Cremorne Pt.	N.S.W.
" <u>spinulosa</u>	V	National Pk.	N.S.W.
<u>Conospermum caeruleum</u>	IX	Perth	W.A.
" <u>caeruleum</u>	IX	nr. Dwellingup	W.A.
" <u>ericifolium</u> (H.S. McKee)	XI	Chatswood	N.S.W.
" <u>flexuosum</u>	IX	Collie	W.A.
" <u>flexuosum</u>	IX	nr. Busselton	W.A.
" <u>longifolium</u>	X	Springwood	N.S.W.
" <u>taxifolium</u>	IX	National Pk.	N.S.W.
" <u>tenuifolium</u>	XI	National Pk.	N.S.W.
<u>Dryandra foliata</u>	IX	Darling Range	W.A.
" <u>nivea</u>	IX	Darling Range	W.A.

" <u>serra</u>	VIIIDarling Range	W.A.	<u>Telopea speciosissima</u> (A.T. Hotchkiss)	X	Springwood	N.S.W.
<u>Grevillea buxifolia</u>	VII Warrah	N.S.W.	<u>Xylomelum pyriforme</u> (fl.) (A.T.H.)	X	Newport	N.S.W.
" <u>diversifolia</u>	IX Araluen	W.A.	" <u>salicinum</u> (fr.)	IX	Cult.	W.A.
" <u>endlicheriana</u>	IX Darling Range	W.A.	21.SANTALACEAE			
" <u>glabrata</u>	IX Araluen	W.A.	<u>Exocarpus spartea</u>	IX	Fremantle	W.A.
" <u>ilicifolia</u>	VIIIDarling Range	W.A.	26.LORANTHACEAE			
" <u>pilulifera</u>	VIIICannington Weir	W.A.	<u>Loranthus vitellinus</u> (on Angophora, H.S. McKee)	XI	North Bridge	N.S.W.
" <u>mucronulata</u>	V Blue Mts.	N.S.W.	54.EUPOMATIACEAE			
" <u>synapheae</u>	VIII Westdale	W.A.	<u>Eupomatia laurina</u> (fr.)	V	Nightcap Range	N.S.W.
" <u>synapheae</u>	VIII Westdale	W.A.	" <u>laurina</u> (lf.)	IX	Bulli	N.S.W.
" <u>wilsonii</u>	IX Cannington Dam	W.A.	68.DROSERACEAE			
<u>Hakea cyclocarpa</u>	IX Darling Range	W.A.	<u>Drosera gigantea</u> (juv.)	VIIICannington Dam	W.A.	
" <u>propinqua</u> (H.S. McKee)	XI Galston	N.S.W.	" <u>gigantea</u>	VIIIDarling Range	W.A.	
" <u>trifurcata</u>	VIIIDarling Range	W.A.	" <u>huegelii</u>	IX Coolup	W.A.	
" <u>undulata</u>	IX Darling Range	W.A.	" <u>macrantha</u>	VIIICannington Swamp	W.A.	
<u>Hicksbeachia pinnatifolia</u>	VI Night Cap Q'ld.		" <u>menziesii</u>	IX Collie	W.A.	
<u>Isopogon petiolaris</u>	X Springwood	N.S.W.	" <u>pallida</u>	IX Dwellingup	W.A.	
<u>Lambertia formosa</u>	V Blue Mts.	N.S.W.	" <u>stolonifera</u>	IX Coolup	W.A.	
" <u>multiflora</u>	IX Keysbrook	W.A.	85.LEGUMINOSAE			
<u>Lomatia silaifolia</u>	V Blue Mts.	N.S.W.	<u>Acacia alata</u>	VIIICannington Dam	W.A.	
<u>Persoonia longifolia</u>	VIII Westdale	W.A.	" <u>armata</u>	VIIInr. Melbourne	Vict.	
<u>Petrophila heterophylla</u>	IX nr. Busselton	W.A.	" <u>baileyana</u>			
" <u>squamata</u>	IX Darling Range	W.A.	" <u>cuneata</u>	VIIIFremantle	W.A.	
<u>Protea sp.</u>	VIIIMelbourne Bot. Gdn.	Vict.	" <u>drummondii</u>	VIIIDarling Range	W.A.	
<u>Sterlingia latifolia</u>	VIII Perth	W.A.	" <u>drummondii</u>	VIIIDarling Range	W.A.	
<u>Synaphea flava</u>	VIIIDarling Range	W.A.	" <u>extensa</u>	VIIII Westdale, D. Range	W.A.	
" <u>petiolaris</u>	IX Dwellingup	W.A.	" <u>extensa</u>	VIIIDarling Range	W.A.	
" <u>preissii</u>	IX nr. Busselton	W.A.	" <u>incurva</u>	IX Darling Range	W.A.	
" <u>reticulata</u> lfs. lobed	IX nr. Busselton	W.A.	" <u>melanoxydon</u>	VIIInr. Melbourne	Vict.	
" <u>reticulata</u> lfs. entire	IX nr. Busselton	W.A.	" <u>myrtifolia</u>	IX Nannup	W.A.	

" <u>oxycedrus</u>	VII	Warrah	N.S.W.	" <u>rubida</u>	VIII	Canberra, Nat. Capital Area
" <u>pulchella</u>	VIII	Fremantle	W.A.	" <u>virgata</u>	XI	Chatswood N.S.W.
" <u>suaveolens</u>	V	National Pk.	N.S.W.	<u>Hypocalymma angustifolium</u>	VIII	Cannington W.A. Swamp
<u>Eutaxia virgata</u>	IX	Darling Range	W.A.	<u>Syncarpia laurifolia</u>	V	Blue Mts. N.S.W.
<u>Gompholobium hügelii</u>	XI	Springwood	N.S.W.	189. APIACEAE		
<u>Hovea elliptica</u> = <u>H. trisperma</u>	XI	Pemberton	W.A.	<u>Actinotus helianthi</u> (fl.)	XI	National N.S.W. Pk.
<u>Kennedyia coccinea</u>	IX	Dwellingup	W.A.	" <u>minor</u> (fl.)	XI	National N.S.W. Pk.
95. RUTACEAE				<u>Xanthosia pilosa</u>	X	Springwood N.S.W.
<u>Boronia ledifolia</u> (fl.)	VII	Warrah	N.S.W.	" <u>pilosa</u> (McKee)	XI	North- N.S.W. bridge
" <u>metastigma</u> (fl.)	IX	Darling Range	W.A.	" <u>tridentata</u>	XI	North- N.S.W. bridge
<u>Crowea dentata</u> (fl.)	IX	Pemberton	W.A.	196. EPACRIDACEAE		
<u>Eriostemon crowei</u> (fl.)	VI	nr. Sydney	N.S.W.	<u>Andersonia coerulea</u> (fl.)	IX	Dwellingup W.A.
" <u>hispidulus</u> (fl.) (foliage short)	IX	Springwood	N.S.W. Blue Mts.	" <u>sprengelioides</u>		Cannington W.A. Dam
" <u>hispidulus</u> (fl.)	X	Springwood	N.S.W. Blue Mts.	<u>Epacris longiflora</u> (fl.)	VII	Warrah N.S.W.
102. TREMANDRACEAE				" <u>longiflora</u>	IX	National N.S.W. Pk.
<u>Platytheca verticillata</u> (fl.)	IX	nr. Busselton	W.A.	" <u>microphylla</u> (fl.)	IX	National N.S.W. Pk.
<u>Tetratheca viminea</u> (fl.)	VIII	Darling Range	W.A.	<u>Woolsia pungens</u> (fl.)	VII	Warrah N.S.W.
105. EUPHORBIACEAE				214. VERBENACEAE		
<u>Amperae spartioides</u> (fl.)	X	Springwood	N.S.W.	<u>Clerodendron tomentosum</u> (H.S. McKee)	XI	North- N.S.W. bridge
138. DILLENIACEAE				238. GOODENIACEAE		
<u>Hibbertia dentata</u>	IX	Sublime Pt. Bulli	N.S.W.	<u>Dampiera linearis</u>	IX	Darling W.A. Range
155. VIOLACEAE				<u>Leschenaultia biloba</u>	IX	Glen Eagle W.A.
<u>Hybanthus calycinus</u>	IX	Coolup	W.A.	240. STYLIDIACEAE		
171. THYMELAEACEAE				<u>Stylidium lineare</u>	XI	National N.S.W. Pk.
<u>Pimelea linifolia</u> (fl.)	IX	National Pk.	N.S.W.	249. JUNCAGINACEAE		
" <u>spectabilis</u> (fl.)	VIII	Cannington Dam	W.A.	<u>Triglochin procera</u>	VI	s. of Q'ld. Southport
182. MYRTACEAE				255. CYPERACEAE		
<u>Darwinia citriodora</u>	IX	Darling Range	W.A.	<u>Caustis flexuosa</u> (fr.)	X	Springwood N.S.W.
<u>Eucalyptus globulus</u>	IX	Cultivated	W.A.	261. RESTONIACEAE		
" <u>marginata</u>	IX	Pemberton	W.A.	<u>Anarthia prolifera</u>	IX	nr. W.A. Bunbury
" <u>piperata</u>	X	Dandenong Range	Vict.			
" <u>redunca</u>	VIII	Darling Range	W.A.			

Loxocaria fasciculata (fr.) IX Dwellingup W.A.

275. LILIACEAE

Johnsonia pubescens VIII Cannington W.A.

275b. XANTHORRHOACEAE

Lomandra filiformis X Springwood N.S.W.

" flexuosa X Springwood N.S.W.

" longifolia 9.IX Cremorne N.S.W.
Pt.

" longifolia 24.IX Cremorne N.S.W.
Pt.

" multiflora X Springwood N.S.W.

Xanthorrhoea hastilis V National N.S.W.
Pk.

276. HAEMODORACEAE

Anigosanthus manglesii IX Perth W.A.

N.R.C. ASSOCIATE COMMITTEE ON ECOLOGICAL RESERVES

This recently formed committee met at the University of Manitoba in Winnipeg on November 14th, 1975. The first priority of the Committee is to establish a permanent 'home' for the Canadian System of Ecological Reserves so that the system can be expanded and maintained. The hope is, that each province and region will secure government sponsorship both provincial and federal for Ecological Reserves and encourage public education on their importance through meetings and workshops. The members of the N.R.C. Associate Committee on Ecological Reserves (from whom information can be obtained), are:

- Region 1 British Columbia - Dr. V.J. Krajina,
University of B.C.
- 2 Alberta - Dr. G.H. La Roi,
University of Alberta
- 3 Saskatchewan - Dr. J.S. Rowe,
University of
Saskatchewan
- 4 Manitoba - Dr. J.M. Walker-Shay,
University of
Manitoba
- 5 Ontario - Dr. J.B. Falls,
University of Toronto
- 6 Quebec - Dr. G. Lemieux,
Laval University
- 7 Nova Scotia
New Brunswick - Dr. I. MacQuarrie,
University of P.E.I.,
P.E.I. Charlottetown
- 8 Newfoundland
Labrador - Dr. D.H. Steele,
Memorial University,
St. Johns
- 9 Arctic - Tundra - Dr. J. Lambert,
Carleton University
- 10 Arctic - Taiga - Dr. V. Geist,
University of Calgary

Chairman: Dr. W. Fuller, University of
Alberta.

POSITIONS AVAILABLE

The Department of Biology, McGill University, invites applications for a Plant Ecologist. An appointment at the Assistant Professor level, to begin on or before September 1, 1976. Duties to include undergraduate teaching, graduate teaching, and a strong research program. The candidate will be chosen on the basis of demonstrated and potential research abilities and the capacity for graduate and undergraduate teaching. Ph.D. required. A curriculum vitae, a statement of research interests, and three letters of reference should be sent to: Ms. E. Mader, Department of Biology, McGill University, P.O. Box 6070, Station A, Montreal, Quebec, Canada H3C 3G1.

COMING SHORTLY!

Starting with the April issue of the Bulletin we plan to publish, in serial form, Dr. Bernard Boivin's Bibliography of the Flora of Canada. This will be an invaluable work to anyone interested in the Canadian flora. It represents the culmination of many years of painstaking work by Dr. Boivin in searching the literature and studying the Canadian flora. It will contain entries relating to: a) the Canadian flora as a whole, including relevant works from outside of Canada but important to Canadian workers, b) each Province including county, regional and local lists, c) maps showing the distribution of individual species, d) herbaria both in Canada and other countries where these are important in the Canadian context. The work will be published as a series of supplementary and consecutively numbered loose pages which members can assemble and ultimately bind into a complete work.

Enquiries about membership of the CBA/ABC should be addressed to the Secretary of the Association:- Miss Carolyn Bird, National Research Council, Atlantic Regional Laboratories, 1411 Oxford Street, Halifax, Nova Scotia B3H 3Z1.

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

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