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BULLETIN

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PATRON

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

PATRON

SON EXCELLENCE LA TRÈS HONORABLE JEANNE SAUVÉ, C.P., C.C., C.M.M., C.D., GOUVERNEUR GÉNÉRAL DU CANADA

CANADIAN CONGRESS OF BIOLOGY, JUNE 23 - 28, 1985

THE 1985 ANNUAL MEETING OF CBA/ABC WILL BE HELD UNDER THE UMBRELLA OF THE BIOLOGICAL COUNCIL OF CANADA AT THE CANADIAN CONGRESS OF BIOLOGY TO BE HELD FROM JUNE 23 TO 28 AT THE UNIVERSITY OF WESTERN ONTARIO, LONDON.

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

DON'T DELAY — THE REGISTRATION FEE IS \$100 (STUDENTS \$50) IF PAID BEFORE APRIL 30, BUT INCREASES TO \$140 (\$70) AFTER THAT.

REQUESTS FOR ACCOMMODATION IN UNIVERSITY DORMITORIES MUST BE SUBMITTED AND PAID FOR BEFORE MAY 23, 1985.

HAVE YOU NOT RECEIVED ANY INFORMATION? CONTACT:- CONGRESS CANADA, SUITE 603, 250 UNIVERSITY AVENUE, TORONTO, ONT M5H 3E5. TELEPHONE: (416) 591 - 1498.

WE ARE LOOKING FORWARD TO SEEING YOU THERE!

OFFICERS OF CBA/ABC 1984-1985

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NEWS FROM THE SECTIONS

Ecology Section

Chairman: Bruce A. Roberts, Canadian Forestry
Serv., P.O. Box 6028, St. John's,
Nfld A1C 5X8

General Section

Chairman: Joanne E. MacDonald, Dept. of Forest
Resources, Univ. of New Brunswick,
Bag Service #44555, Fredericton,
N.B. E3B 6C2

Mycology Section

Chairman: James A. Traquair, Harrow Research
Station, Harrow, Ont NOR 1G0

Phycology Section

Chairman: Gordon G.C. Robinson, Dept. of
Botany, Univ. of Manitoba, Winnipeg,
Man R3T 2N2

Structure & Development Section

Chairman: Richard I. Greyson, Dept. of Plant
Sciences, Univ. of Western Ontario,
London, Ont N6A 5B7

Systematics & Phytogeography Section

Chairman: Keith E. Denford, Dept. of Botany,
Univ. of Alberta, Edmonton, Alta
T6G 2E9

CBA/ABC REPRESENTATIVES TO BCC

Executive G.A. Mulligan

Council I.E.P. Taylor
I. Brodo

CALL FOR "EMERGENCY RESOLUTIONS"

Members are reminded that, in accordance with By-law 76, "Emergency resolutions" may be submitted to the Board of Directors at any time prior to their meeting immediately before the annual meeting. The Board of Directors will then declare whether they conform to the general guideline for resolutions".

Resolutions submitted under By-law 76 must be received by the Secretary 10 days before the annual meeting (NO LATER THAN JUNE 14, 1985). "Emergency resolutions" can only be admitted if they deal with an emergency situation that leaves no time for preparation of a normal resolution.

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

J.M. NAYLOR MEMORIAL FUND

In memory of Dr. J.M. Naylor, the University of Saskatchewan is establishing the J.M. Naylor Memorial Fund. The Fund will be used to provide two scholarships for graduate and/or undergraduate students.

Information on the Fund can be obtained by contacting Frank Lovell, Director of Development, University of Saskatchewan, Saskatoon, SK S7N 0W0

A tax-deductible contribution can be made by making out a cheque to the J.M. Naylor Memorial Fund and sending it to Frank Lovell at the above address.

G.H. Rank, Chairman
J.M. Naylor Memorial Fund

HERBARIUM RENOVATIONS, B.R.I.

During the installation of compactors, 15 April 1985 to about 31 March 1986, the Mycological and Vascular Plant Herbaria of the Biosystematics Research Institute, Agriculture Canada (DAO, DAOM) specimens will be moved into storage and will not be available for consultation.

For further information contact either:
J.A. Parmelee, Curator, Mycological Herbarium,
or W.J. Cody, Curator, Vascular Plant Herbarium,
Biosystematics Research Institute, Central
Experimental Farm, Ottawa, Ont K1A 0C6

W.J. Cody

PEST CONTROL

Chinese scientists are reported to have trained gray magpies to kill infestations of pine caterpillars in the forests of Rizhao County, Shandong Province. The birds obey whistles blown by trainers, responding by swooping down and eating the caterpillars. The county now has 1,667.5 ha of forest under control.

CONTINUING CENSUS OF THE FURBISH LOUSEWORT,
Pedicularis furbishiae, IN NEW BRUNSWICK

The Lousewort, or Wood Betony, has captured the interest of North American botanists since its rediscovery in the upper St. John River valley in 1976. This wildflower is endangered in both the United States and Canada and it is part of a very exclusive group of species which are censused each year as part of a continuing monitoring program.

Stirrett (1977, 1980) made the first population estimates in Canada followed by intensive surveys by Day (1983) in 1981 and Don Brown* in 1982, 1983 and 1984. The census data for the past three years appears in internal reports of the Fish and Wildlife Branch of the N.B. Department of Natural Resources, and thus has not been widely available. Census data since 1977 is presented in Table 1. The population at site 2 declined in 1983. This has been attributed to severe flooding and erosion during the spring of that year (Brown 1983). The site 1 population is not subject to flooding and numbers have increased substantially. This increase has been attributed to cutting and clearing of trees and shrubs by railway crews which apparently reduces competition and favours the Lousewort. Site 3 has a relatively stable population. Plants at this location are along the shoreline of a dammed part of the St. John River with a certain degree of water level control. These plants seem to be threatened by increasing competition from an overgrowth of shrubs along the river bank.

Continued observations will document the Lousewort's adaptability in naturally flooded, not flooded, and flood-controlled site with little shore erosion.

* Under supervision of Mel Fitton, Fish & Wildlife Office, Fredericton, N.B.

1980 U.S. populations totalled approximately 5,000 (Day 1983). For current and future census data in the United States contact: Richard W. Dyer, U.S. Fish and Wildlife Service, U.S. Dept. of the Interior, One Gateway Center, Suite 700, Newton Corner, MA 02158, or Susan C. Gawler, Univ. of Wisconsin-Madison, 430 Lincoln Drive, Madison, WI 53706.

Dr. Stirrett^o has been lobbying for the creation of an international wildflower park at site 2. The CBA/ABC should add its collective voice in support of this project.

References

- Brown, D. 1982. Report to the Environmental Council of New Brunswick. Summer study of potential ecological reserves (Furbish Lousewort Sites, Shea Lake, Miscou Island). Dept. of Natural Resources, Fish & Wildlife Branch, Fredericton, N.B.
- . 1983. Summer study of potential ecological reserves - Peter's River, Jolicure Boglands, Wilson Brook, Furbish Lousewort Sites. Dept. of Natural Resources, Fish & Wildlife Branch, Fredericton, N.B.
- Day, R.T. 1983. Survey and Census of the Endangered Furbish Lousewort, *Pedicularis furbishiae*, in New Brunswick. Can. Field-Nat. 97:325-327.
- Stirrett, G.M. 1977. Report on investigations of the flora of northern Maine and northern New Brunswick with particular reference to *Pedicularis furbishiae* and other rare plants. Rep. on contract DACW 33-77-M-0885. U.S. Dept. of Army Corps of Engineers. Waltham, MA
- . 1980. The Status of Furbish's Lousewort, *Pedicularis furbishiae* S. Wats., in Canada and the United States. Committee on the Status of Endangered Wildlife in Canada. Wildlife Service, Ottawa, Ont K1A 0E7

^oDied this past winter.

Table 1. Canadian Lousewort Populations, Upper St. John River Valley, New Brunswick

Site	CENSUS YEAR							
	1977	1978	1979	1980	1981	1982	1983	1984
1. Confluence of St. John and Aroostook Rivers	-	≈33	-	-	80	125	231	234
2. Little River outlet	≈70+	-	115	-	212	213	175	225
3. Grand Falls - U.S. border	254+	-	-	-	102	117	125	-*
Totals					394	455	531	-
Percent Increase since 1981					-	15.5	16.7	-

* Area inaccessible due to very high water and over-growth of shrubs.

Robin Day
Dept. of Biology
Univ. of Ottawa
and Don Brown
Natural Resources
Fredericton, N.B.

The Commonwealth Mycological Institute (CMI) and the Biosystematics Research Institute (BRI) of Agriculture Canada (Ottawa) are very pleased to announce that an agreement has been reached in principle to start to provide a World Identification Service for cultures of Hymenomycetes. The Service will be based in Ottawa, which has one of the world's largest Culture Collections of these fungi (5000 strains), and will involve existing staff at BRI and an additional scientist and technicians to be recruited by CMI.

The Service will deal with both mycorrhizal and wood-rotting fungi. Isolates of these fungi are often almost impossible to identify by current methods, and it is envisaged that the Unit will gradually develop and improve existing techniques for the recognition of these fungi in culture. The Unit would also be very pleased to receive isolates derived from authoritatively named sporocarps for inclusion in its reference collection; isolates from the tropics will be particularly welcome.

It is envisaged that the Service will be available free of charge for all non-commercial bodies within the member countries of CAB, and at a fee for material submitted from the government countries.

The need for such a service has long been recognized and BRI and CMI welcome this initiative which will be of particular importance to foresters and those with wood-decay problems in the tropics. No similar service is available elsewhere in the world.

Staff are currently being recruited. For further details of the scientific post and service, please contact either Professor D.L. Hawksworth, Director, Commonwealth Mycological Institute, Ferry Lane, Kew, Surrey, TW9 3AF, England, OR Mr. G.A. Mulligan, Director, Biosystematics Research Institute, Agriculture Canada, Ottawa, Ontario, K1A 0C6, Canada.

Michael Corlett
BRI, Ottawa

DID YOU KNOW?

Researchers with the U.S. Department of Agriculture estimate that the canopy of a single mature tree can remove about 27 kg of sulphur dioxide from the atmosphere during one growing season. This is one of the main sources of acid rain. However, not every tree enjoys the experience, and some show stunting, bleaching of leaves or changes in the growth pattern. The suggestion has been made that planting more trees could be one solution to the problem of acid rain.

Scientists at NASA working on ecological life support systems have found that the Spider Plant can absorb formaldehyde from the air. It is not certain how the plant does this, but the researchers recommend having one plant for every 2.5 m² of room in homes and offices.

A group called the Friends of the Canadian Wildlife Service has contacted CBA/ABC suggesting that members of the Association write to their local MPs and the Minister of the Environment (Mme Suzanne Blais-Grenier), with copies to the Prime Minister, to demonstrate public opposition to the cuts in the federal environment programs. There are fears that there will be further cuts in the Spring budget. The group's information is that many hundreds of protest letters, may be as many as 35,000, have already been received — although this is a closely guarded secret of the Ministry. No-one appears to have received a reply. It is suggested that future letters should include a comment on this apparent disregard for public opinion.

The information that CBA/ABC has on the wildlife centres is as follows. The Creston Wildlife Centre in B.C. will be taken over by the Creston Valley Wildlife Management Authority, an independent agency founded by the federal and provincial governments to manage the Creston Valley Wildlife Area. The two governments will increase their operating grants to the Authority by \$25,000 to provide an annual contribution of \$100,000 each. The Creston Valley Interpretation Centre will remain open to visitors, at least during the peak season. Contributions are being sought from other government and non-government agencies towards the management of the Centre and possible extension of the operating season.

The wildlife centres in Quebec may be taken over by local and provincial interests. There does not appear to be any such life-saving measures for the centres in Ontario and Saskatchewan.

FORTHCOMING MEETINGS

25th Annual Meeting of the Phytochemical Society of North America, June 12-16, 1985, Asilomar Conference Center, Pacific Grove, CA 93950.

This Silver Anniversary Meeting will include a symposium program "Shikimate Pathway: Recent Developments", considering aromatic amino acid, hydroxybenzoic acid, lignan, quinone, coumarin, etc. biochemistry and chemistry, as well as a forum on biotechnology and phytochemistry. There will also be contributed papers and posters. For further information, contact: Bock G. Chan, Plant Protection Phytochemistry, WRRRC, ARS, USDA, 800 Buchanan St., Berkeley, CA 94701

MEMBERSHIP RENEWAL

Unfortunately, the members to whom this notice is addressed will not see it!

Membership renewals were due on January 1, 1985, and the computer listing was cleared of all unpaid memberships at the beginning of March.

If you know of anyone who has not renewed his/her membership, will you please remind them? We would love to retrieve them from the limbo into which the Secretary has put them!

Western Australian Plant Names and Their Meanings. A Glossary, by F.A. Sharr. 1978. University of Western Australia Press, Nedlands, W.A. xxxvi + 228 pp. \$24.95 US from International Scholarly Book Services, Inc., P.O. Box 555, Forest Grove, OR 97116.

Here is another book for those of us who love to know the meaning and/or derivation of plant names. Many of the plants are Australian, but many more are found also in other parts of the world, especially the genera. Therefore, the potential use of this book is not as limited as it first appears. The most unusual aspect of the book is the arrangement of the glossary in two parts — Genera and Species — rather than having one combined list. This is somewhat disconcerting to someone used to consulting a glossary such as A Gardener's Dictionary of Plant Names by A.W. Smith. However, I found that I soon became accustomed to the arrangement.

The first 36 pages of the book basically form an introduction, including: Botanical Language, involving such facets as Ancient Latin, Botanical Latin and Priority of Publication; Elucidation of Plant Names, including biographical notes for a few botanists whose names occur repeatedly in the glossary section; and a brief (ca. 5 pages) Chronology of Botanical Collecting in Western Australia to 1850. (The first plants were collected in 1699 by William Dampier, commemorated in the genus *Dampiera* and species in 3 genera called *dampieri*.) There is also a short (4 pp.) listing of botanical terms used in the glossary.

Presenting me with a glossary is almost as bad as showing me an encyclopaedia — I will sit and browse for hours, looking for that unknown/unusual/unexpected word, fact or explanation. This book proved a goldmine, particularly in the species listing! For example:-

zacchaeus — not stated by author. Zacchaeus, the biblical character, was of lowly stature and from Jericho: 1 the plant is of lowly stature, c. 10 cm high; 2 Jericho was a slang expression for a distant or out-of-the-way place — the plant was found near Bullabulling; 3 Jericho was a term used by railway construction workers for their camps — the railway to Kalgoorlie was in course of construction when the plant was found nearby in 1895: *Helipterum*

murrayanus(i) — species in 5 genera are named after 3 apparently unrelated gentlemen(?) named Murray — one of whom later became a "blackbirder" (one who kidnapped South Sea Islanders for use or sale as labourers)!

murrayi — species in 3 more genera named after 2 other Murrays

And, finally, my favourite pieces of accessory information:-

Goodenia: Samuel Goodenough (1743-1827), Bishop of Carlisle, first treasurer of the Linnean Society. He deplored 'the gross prurience of Linnaeus' mind' as shown in his sexual system of plant classification.

Galinsoga: Mariano Martinez Galinsoga, director of the Madrid botanical gardens towards the end of the 18th

century 'whose botanical accomplishments match the smallness of the flowers' [W.T. Stearn].

The research for the book has been thorough and the author is not afraid to admit that information was unavailable or impossible to trace.

One of the most useful aspects of the species listing is the inclusion of the genus or genera in which a particular name has been given to a species for all commemorative names. There are also cross-references to species names that may be connected in some way, and to genera named after the same person.

I found the book most interesting, and would recommend it for the bookshelf of anyone interested in the meanings of generic and specific names.

Sylvia Taylor
Botanical Garden
Univ. of British Columbia

TREE PROTECTION

The following two items have just come to my attention. They illustrate the different attitudes towards tree protection and preservation in England and in one part of Canada.

A Surrey, England, man has been fined £1000 plus £200 costs for bulldozing a 7.6 m tall ash tree that was protected by a preservation order. His claim that the tree was half uprooted and dangerous was dismissed as without grounds.

Tree preservation orders in England can be applied to trees on private ground (gardens, estates, etc.), public land such as parks, roadsides or woods, and on city properties. Developers have been sued for chopping down trees on estates bought for housing development because preservation orders had been obtained prior to sale. It seems that it is even possible for a local council to be sued for destroying a tree that is under a preservation order.

A Vancouver, B.C., man has recently been fined \$25 for cutting back a cherry tree so severely that it has probably died. The tree was on the boulevard outside his house, and was city property. Vancouver Parks Board, who are responsible for all street trees in the city, have recently decided to enforce a by-law that prohibits house owners from damaging, cutting or killing street trees. They do not appear to intend to prosecute the home-owners in one whole city block who all went out and killed the trees in their street. The by-law provides for a fine plus cost of a replacement tree, although the city arborist promises that the replacement trees will not be planted outside the houses of successfully prosecuted individuals — assuming that the judge decides to order that replacement cost be paid.

"CANADA WAS FIRST" TRIVIA

Jacques Cartier planted a garden on the river bank at Montreal in 1541. Spanish soldiers planted gardens at St. Augustine, Florida, in 1565. Followers of Samuel de Champlain planted a garden on a small island in the St. Croix river in 1605.

BOOKS OF INTEREST

A Report in Some Rare, Threatened, or Endangered Forest-Related Vascular Plants of the South.

Vol. I: Isoetaceae through Euphorbiaceae. Vol. II: Aquifoliaceae through Asteraceae, by Robert Kral. 1983. USDA Forest Service, Atlanta. 1305 pp. Copies available from: USDA Forest Service, Southern Region, 1720 Peachtree Road NW, Atlanta, GA 30367.

Endangered and Threatened Plants of Ohio, by Tom S. Cooperrider, Editor. 1982. Coll. Biol. Sci., Ohio State Univ., Columbus, OH. 92 pp. \$12 US. Copies available from: Ohio Biological Survey, 484 West 12th St., Columbus, OH 43210.

PERSONALIA

Dr. Robert F. Seagel resigned as Head of the Department of Botany at the University of British Columbia on December 31, 1984. He is now on a well-earned sabbatical, but returns to teaching duties on January 1, 1986.

Dr. Iain E.P. Taylor of the Department of Botany, University of British Columbia and President-Elect of CBA/ABC, has been appointed a member of the Canadian National Committee for the International Union of Biological Sciences (CNC-IUBS). He joins *Dr. John McNeill*, University of Ottawa and also a CBA/ABC member, as the two representatives for botany on CNC.

Address Changes

Dorothy Fabijan, 55 Armstrong Crescent, Leduc, Alta T9E 3G6

Dr. Marguerite Flinn-Ruiz, 1102 - 1445 W. 14th Ave., Vancouver, B.C. V6H 1R5

Hélène Gilbert, 460 Dolbeau, Québec, Qué G1S 2R5

Dr. Peter A. Thomas, Dept. of Biological Sci., Univ. of Exeter, Prince of Wales Rd., Exeter, EX4 4PS, England

MEETING ANNOUNCEMENT

First Annual Canadian Pacific Symposium: Applications of Biotechnology to Western Canadian Agriculture and Forestry, September 26 and 27, 1985, University of Alberta, Edmonton, Alta.

The symposium will consist of four sessions, each featuring three speakers. Various aspects of biotechnology as applied to plants, animals, and microbial systems for the benefit of agriculture will be discussed.

For further information and details of registration, please contact:- Dr. J. Hoddinott, Botany Department, University of Alberta, Edmonton, Alta T6G 2E9

TAKING IT TOO FAR?

A California lady watered her garden continuously for 18 months. Her neighbours eventually obtained a court injunction forcing her to turn off the lawn sprinkler -- they were angry about the damage caused by all the mud flowing into their gardens.

POSITION OPEN

Queen's University, Kingston, Ontario

Assistant Professor, Department of Biology — The Department of Biology invites applications for a tenure-track position in Whole Plant Physiology preferably with research interests in the area of nitrogen metabolism. The successful candidate should be prepared to develop a vigorous research program and to teach in the undergraduate and graduate programs and supervise graduate students. Qualifications include a Ph.D. degree and published evidence of excellent research ability. Candidates of either sex are equally encouraged to apply.

The appointment will be effective July 1, 1986 and is expected to be at the rank of Assistant Professor with salary commensurate with qualifications (floor - \$25,500). This advertisement is directed to Canadian citizens or landed immigrants.

Application deadline is May 1, 1985 or until a suitable candidate is selected. Send applications, which should include a curriculum vitae, statement of future research interests and names and addresses of three referees to: Professor D.T. Dennis, Head, Biology Department, Queen's University, Kingston, Ontario K7L 3N6

The Bulletin of the Canadian Botanical Assoc.

Editor:- Mrs. Sylvia Taylor
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Issued quarterly in January, April, July and October, and sent to all members of the Association. Non-members may subscribe at a price of \$20.00 p.a. (\$5.00 per issue) post-free. Cheques or money orders (in Canadian funds ONLY) should be made payable to "The Canadian Botanical Association" and addressed to the Editor.

Advertisements for Positions Open and Classified categories may be placed at a cost of \$10.00 Can per published column inch. Advertisements by individual members for post-doctoral opportunities and Positions Wanted are carried free.

Material for inclusion in the Bulletin should reach the Editor at least one month prior to the date of publication of that issue.

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

Inquiries about membership in the CBA/ABC should be addressed to the Secretary of the Association:- Dr. Paul G. Harrison, Department of Botany, University of British Columbia, Vancouver, B.C. V6T 2B1