

BULLETIN

L'ASSOCIATION BOTANIQUE DU CANADA



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Waterloo

THE LONDON ANNUAL MEETING

A select and enthusiastic group of about 170 of our members gathered at the University of Western Ontario in London for our annual meeting held between June 3rd and 7th. The University campus is a very beautiful area and formed an ideal setting for the meeting. Our thanks are due to our hard working local committee, through whose good offices we were provided with excellent facilities and accommodation, which contributed in no small measure to the success of the meeting. The theme of the main symposium was Man's Impact on the Canadian Flora. The various speakers traced this from pre-historic times to the present, whilst a panel discussion which followed considered some of the present and future problems which beset us in our efforts to preserve our environment and its component organisms against the onslaught of modern man. Efforts are being made to publish the symposium and discussion, and a further announcement on this will probably appear in a forthcoming issue of The Bulletin. The fresh water biologists also held a symposium dealing with their own particular work and problems, whilst an additional session was devoted to the Marion Lake, B.C. project. The sections held their own meetings with contributed papers from their members, whilst the usual series of annual business meetings looked after the affairs of the Association and its sections. A series of well organized and well attended field trips introduced participants to the local flora and vegetation, as well as to the Royal Botanic Gardens at Hamilton and to the Canadian Centre for Inland Waters at Burlington. An excellent banquet in the Great Hall of the University rounded off the proceedings and were the occasion for the President's address by Dr. Taylor A. Steeves and the presentation of Lawson medals, reports on which follow in the current Bulletin.

PRESIDENTIAL ADDRESS--ANNUAL BANQUET

London, Ontario, June 5, 1973.

Au début de mon discours ce soir, je veux dire un grand merci à tous les membres de l'Association Botanique du Canada, ceux qui sont absents aussi bien que ceux qui sont présents, pour m'avoir élu votre président cette année. Quand je me rappelle l'importance de notre Association en Canada, et surtout quand je regard la liste de mes prédécesseurs à ce poste, je suis conscient de l'honneur que vous m'avez octroyé, et j'en suis très reconnaissant. Merci beaucoup!

It has been, on the whole I believe, a good year; and this has been very largely if not entirely due to the dedication of a fine executive

committee and especially to the Secretary, the Treasurer and the Editor of the *Bulletin*. Add to this the efficient and imaginative Local Committee here at London, and you will understand why I consider myself fortunate to have been allowed to "preside" (whatever that may mean) over this smoothly running organization. I have directed my talents largely to the task of keeping out of the way and when you live in the middle of Saskatchewan that doesn't take much talent. If you are labouring under the mistaken idea that in our Association great executive power is concentrated in the hands of the President, let me disabuse of that notion once and for all. If that were the case, I would not be giving a presidential address tonight. That was a decision of the Executive Committee, and although there was one contrary vote, the Secretary wouldn't record it.

Faced then, as I was, with circumstances entirely beyond my control, I tried to decide what I could say tonight that would be either edifying or inspiring or both, to this distinguished audience. Since that approach quickly landed me in black despair, I frantically began to grasp for anything which could get me by. My thoughts drifted back to our meeting at Ottawa U., I believe in 1967, when Dr. Ernest Rouleau treated us to his reminiscences of plant collecting in Newfoundland and of the customs and sayings of the people he met. I recalled that when we went to Saskatchewan in 1959, jaded from the rat race of an eastern, American metropolis, my wife and I had been deeply touched and often greatly amused by the idiosyncrasies of prairie people, and I thought that I had my answer. However, when I started to collect these amusing little peculiarities, I discovered that I have been in Saskatchewan so long that they aren't funny any more. In fact I now find the rest of the world rather laughable, and I am sure that you wouldn't be amused to hear about that.

It next occurred to me that I might try to make a stirring proclamation about the importance of plants to mankind and our solemn obligation as Canadian botanists to strive in every way to protect and preserve our floristic riches for future generations to enjoy. However, after a full day devoted to man's impact on the Canadian flora by experts on the subject, anything I could say would certainly be anticlimatic if not rather naive or even inaccurate.

Why not, I thought, sing the praises of Canadian botany, perhaps singling out some of the great moments in our past as well as our current bright spots and pay homage to some of our botanical heroes. But I knew that I would have just finished presenting Lawson Medals to two first magnitude

stars in our botanical galaxy; and that alone ought to be enough for one evening to call attention to our grand botanical tradition and to our present strength.

With mounting desperation, I resolved to speak with enthusiasm about my own particular branch of plant science, plant morphology and development, pointing out the great advances which have been made and emphasizing the many unsolved problems before us and the important developments which may be anticipated in the next few years. This kind of propaganda, I thought, might foster the growth of this field in Canada, or at least might turn up some jobs for unemployed graduate students. Fortunately, however, my better judgement prevailed in time; and I realized that, coming at the end of an abundant repast lubricated by ample libations, there was nothing more likely to be less beneficial to the development of plant morphology in Canada than a technical lecture to a captive audience.

In the end (by that I mean a very few days ago) I was forced to take the easy way out (for me that is, not necessarily for you) and simply present a few of my own reflections on the botanical scene in Canada today, particularly as they relate to the role of C.B.A. These will be very personal observations and they may encounter considerable hostility, but since I am not a candidate for re-election, I do have the advantage of considerable freedom in what I choose to say. There is also one very great advantage to you in my decision to give you my own reflections. Since I am not by nature a reflective person, this will be very brief.

In the early 1960's things were happening fast on the botanical front in Canada as in all of the sciences. Universities were expanding with breathtaking rapidity, research institutes were growing, new botanists were appearing on all sides. In this climate of excitement enthusiasm (and I might add free spending) the need was felt to get the botanists of Canada organized so that they might have some means of getting to know one another and, collectively, of exerting an influence upon what seemed like an unlimited future of expansion and development. It was clearly not enough that some botanists already belonged to societies with specialized interests in Canada and certainly not helpful that many were members of professional societies in other countries. We needed our own organization, and the Royal Society of Canada took the lead in instigating discussions to this end. Dr. Ludwig, who became our first president, travelled coast to coast preaching the gospel of a "Botanical fraternity"; and after two organizational sessions, the Canadian Botanical Association was officially launched at its first annual meeting at Carleton University in May, 1965.

The idea caught on quickly, suggesting that the need had indeed been a real one. Membership grew, sections representing special interests within the botanical field were organized; and our own distinctive style of annual meeting, in which field trips played an important role, soon emerged. C.B.A. also met from time to time with other societies such as the plant physiologists and the phytopathologists and even fostered a broader kind of interaction in hosting a meeting of A.I.B.S. at Edmonton two years ago. Our association began to express itself on important issues through resolutions from its annual meeting, and it participated with other biological societies in the Biological Council of Canada. Some of its sections undertook surveys and

inventories which have contributed to the strengthening of particular areas of Botany in Canada. All of this, of course, you know very well; and you undoubtedly find it satisfying and a source of pride in what has been accomplished. This is entirely justified and is as it should be; and I am consequently more than a little hesitant to introduce my next remark which may surprise you, may even anger you; but will, I hope, challenge you to think about it.

I may be all wrong about this, but over the past few months I have been troubled increasingly by the feeling that we are somehow running out of steam, or, to use another analogy, that the fuel in our tank is getting a little low. It is not a question of losing too many members. Our membership at the present time equals last year's total and probably will exceed it before 1973 is over. It is certainly not that we are facing impending bankruptcy. On the contrary, our efficient, if somewhat puritanical, treasurer has kept us well in the black; and our financial position is one of solvency and then some. No---it is rather that I *sense* something of a vagueness in our purpose and a general slackening of enthusiasm. This could be just a function of age--we aren't such a young society any more and perhaps some decline in vigour is inevitable. But some of our sections which were once full of fire and brimstone seem to have subsided to a warm if rather comfortable glow. Other which spread their wings with great promise never seemed to get off the ground. Every year our members, or at least some of them, get together for a fine reunion made possible by the heroic efforts of a local committee; but then after a few days which are both instructive and enjoyable, we subside until the next one.

I know that this all sounds rather vague and general and it may be that I am just flagging a little myself, and see my own loss of excitement reflected from the broader scene. Certainly there are no very concrete signs of impending disaster. But on the other hand, if we are running a bit low on fuel, we certainly ought not to wait until the gauge reads empty before we take stock of our situation. This is why I am raising the issue now, even at the risk of being completely wrong in my appraisal.

There are, of course, a number of excellent reasons why botanists in Canada (and elsewhere for that matter) may be feeling somewhat dispirited in general and perhaps preoccupied with more immediate concerns than the national organization which they joined with such enthusiasm in the salad days of the sixties. All around us we see evidence of reduced support for research or at least tighter restrictions and closer scrutiny of research spending and we are warned that this trend is not about to be reversed. Some of us may have felt the pinch already. Suggestions are flying about from high-level sources that research activity, or at least the support for it, will be reorganized in the near future. If there are to be "centres of excellence" where support will be concentrated and if the emphasis is to be increasingly on "mission-oriented" research, are not many of us justified in fearing that we may be left out of the picture. I cannot imagine, even in my wildest dreams, that the University of Saskatchewan will become a center of excellence in plant morphology; and except for a few people like myself, I doubt that anyone in Canada would evince much zeal for a "mission" in plant morphology. Then too, the universities where many of us have made our careers are fraught with problems of

which the financial difficulties which are so much in evidence are only a part. We are faced with declining numbers of graduate students and those which we do have seem to have little prospect of finding positions commensurate with the training we have given them. Some of us may even be worried about the security of our own jobs. I was somewhat jolted recently when our Faculty Association felt constrained to outline rather elaborate procedures to be followed in dismissing tenured faculty who are no longer needed. Who would have thought even five years ago that we should ever come to this? It is only natural in times such as these that botanists should feel somewhat discouraged, wondering if it is all really worthwhile, and that they should have little time or energy left over from their daily struggles to devote to our national botanical organization.

But if the situation is viewed from a somewhat broader perspective, was there ever a time when we had greater need for a strong and effective botanical fraternity? If we felt the need to be organized in times of affluence, how much greater is our need in these days of poverty? I note that I have once again fallen back on Dr. Ludwig's term "fraternity"; and I recognize only too well that in the present climate such male, chauvinistic terminology is not acceptable and certainly will do our association no good. Since I am not about to refer to us as a "sorority", and since there isn't an equivalent term without the sex connotation, I suggest that we think seriously about our "botanical community" and what this ought to do for us in the circumstances in which we now find ourselves.

What is the role of the Canadian Botanical Association? Part of the problem which I referred to earlier, if in fact there is a problem, may lie in this very question. I am not at all certain that we are really very clear about what our role is or ought to be. Certainly our main role is not to publish a scientific journal-- that job is done for us; and although our advice is received graciously, I don't think that many of us feel that the Canadian Botanical Association has a great deal of influence upon that operation. Some people undoubtedly feel that the main function of our association is to provide an annual meeting or congress in which botanists from across Canada can assemble to exchange information and ideas both formally and informally. These meetings, with their symposia, their field trips and their sessions of contributed papers have been most successful and it is important that C.B.A. continue to sponsor them, although I do sometimes wonder if there needs to be one every year. However, if these meetings are the true *raison d'être* of our association, I believe that we are in grave difficulties. We live in a country in which vast distances are a way of life; travel costs are a real drain on financial resources both individual and institutional; and it is evident that subsidies for travel are becoming increasingly difficult to obtain. Many botanists discover that in any one year there are several meetings which they feel they ought to attend while travel allowances and time usually permit only one. Thus some of our members, and numerous potential members, cannot be expected to appear at our annual meetings very often. Some never come. With disturbing frequency I have heard the protest voiced: "Why should I become (or remain) a member of C.B.A.? I can never get to the meetings." I am afraid that if we see our main role in the annual meeting we severely limit

the inclusiveness of our botanical community. One very obvious and important role of C.B.A. is, of course, to represent the botanists of Canada in questions of national policy in matters in which they have expertise or even strong opinions. In the past our association has sent forward strong resolutions on many issues, although of late the number has been very wisely reduced by the application of more stringent regulations on the introduction of such resolutions. The task of representing the botanists of Canada is an important one, and perhaps one which we have not pursued actively enough; but it seems to me that it is a secondary one, or at least one which derives from what ought to be the Association's major or primary role, namely to knit the botanists of this country together into a real community, a community which can sustain, support and encourage the individual wherever he may be, a community which can collectively decide where it stands on important issues and thus speak, when it does speak, with a voice of authority.

Perhaps you will agree that this is a noble idea; but certainly you are asking yourself "How can it be accomplished?". Well, so am I; and I don't have an answer. But I do have a few ideas which I will toss out as suggestions to be mulled over in the months ahead.

In the first place, I believe that we should make a determined effort to broaden our base, to increase the inclusiveness of our community, that is, in practical terms, to enlarge our membership. In this I am encouraged by reports that a membership drive by the Botanical Society of American last year netted 1600 new members bringing the total to approximately 5000. Obviously figures of this magnitude are out of our range by several orders, but perhaps we could equal this feat on a proportional basis. To do this we would need to win over botanists who are already members of more specialized societies to the idea that they could benefit from being members of C.B.A. as well. We may need to organize one or more new sections in order to do this, and we certainly will have to watch the level at which we set our membership fees; but I believe it can be done. We already have some such members. I think also, and I may be criticized for this, that we ought to do more to encourage nonprofessionals to join us (amateur is a naughty word I am told), as long as they have a scientific interest in plants as our Constitution specifies. After all, you don't have to be paid to be a botanist in order to be one, and the history of our science is replete with evidence for that statement. I am sure, for example, that there are many school teachers who would benefit greatly from a connection with our association; and I am equally sure that public interest in botany would expand greatly as a result of the encouragement we could give them; and that would not do any harm at all.

If we are to have any hope of such an augmentation of our membership rolls there are probably many things which we shall have to do to change our "image", a little at least. For one thing, to revert to an earlier theme, we shall have to get away from the idea that the annual meeting is our major function and do more for our members throughout the year, that is between meetings. There may be many steps which could be taken in this direction, such, for example, as small regional or local meetings from time to time which would not require expensive travel; but we already have one functioning vehicle which, with proper support, can do a great deal. This is the *Bulletin*; and at this point I want to pay a

special tribute to John Morton and his Editorial Committee for the excellent progress they have made during the past year in making the Bulletin a real forum for the exchange of ideas and transmitting news of importance to botanists to them. Reporters have been designated across the country whose task it is to gather news items and send them to the Editor. But the real success of this venture will depend upon the active support of all members of the Association. We have had a succession of very hard working but very lonely editors, and it is high time we got behind them and worked ourselves.

I believe that the Association can do a great deal, through the collective efforts of its members, to aid and encourage botanists in their teaching and public relations roles. I am sure that many of you will recall, as I do very vividly, Dr. Ritchie's address at Edmonton in which he reprimanded us for decrying the seeming ignorance of engineers, business men and politicians in regard to environmental problems, while forgetting who it was that allowed them to pass through our universities in such innocence. We botanists who teach have a real job to do in this respect, and it involves a rather awesome change from our traditional concepts of presenting our subject. The experience of those who have it should be at the disposal of those who are trying to make the change. I think that our annual meetings, and perhaps smaller local conferences, should devote more attention to this pressing need; and of course the pages of the *Bulletin* are available.

Since its foundation, the Canadian Botanical Association has been concerned with the research of botanists; and in particular its annual meetings have stressed the reporting of current investigations and the exchange of ideas and information on research topics. But our association has not heretofore attempted to offer much in the way of guidance, direction or even assistance to botanists in their research, although some sections have moved in this direction. It is probably true that this has not been necessary in the golden age of expansion through which we have just passed; and it might have been resented if tried. But in the uncertainties of today, and those which we shall probably face in the future, our association may be able to provide valuable service to the botanical community in this way. It can make it its business to see that its members are kept abreast of the changing pattern of research support, it can interpret and evaluate national policies which affect botanical research and it can identify those areas in which support is likely to be forthcoming. Equally important, perhaps more important, it can provide encouragement to those who, either by necessity or by choice, are left on one side, by calling attention to the almost limitless botanical problems which can be tackled on a shoestring budget. Every time I walk across the prairie, enter a woodland, or even weed my garden I am overwhelmed by the profundity of our ignorance of plant life and I become increasingly convinced that no botanist need ever remain idle for want of a refrigerated centrifuge, a grant for extended travel or even, dare I say it, a computer. We might be very pleasantly surprised with the results if some of us were obliged to tackle so-called simple problems close to home in lieu of the expensive research which we have tended to feel is commensurate with our talents.

Having begun to explore ways in which our association can become a more meaningful botanical

community, I know that there is much more which could be suggested; but I also know that if I talk any longer I shall probably alienate even those of you who tend to agree with me. Before concluding, however, I must address myself to the question which is certainly now forming itself in your minds. "If you think that you have such bright ideas about the role of CBA, why didn't you use your year as president to do something about it?" My response to that question can be only an embarrassed blush as I proceed to my conclusion.

The early 1960's were a time of rapid growth, free spending and youthful vigour in which the real need to get the botanists of Canada organized was expressed in the formation of our association. The 1970's do not look so golden, the future is uncertain and uneasiness and insecurity afflict us. Now more than ever we need our spirit of community so that we can present a strong front on important issues, yes, but more important to make certain that we are strong within lest that front be perceived to be no more than a facade. Let us indeed be active campaigners on important issues, but let us first of all be enthusiastic botanists and proud of it. Soyons bien sûr des militants pour les causes importantes; mais soyons d'abord et surtout de Botanists enthousiastes et fiers de notre profession.

PRESENTATION OF LAWSON MEDALS BY THE PRESIDENT OF THE CBA/ABC

In 1968, the Canadian Botanical Association established the *George Lawson Medal in Botany* as means of providing "—a collective, formal expression of the admiration and respect of botanists in Canada for the excellence of the contribution of an individual to Canadian Botany". La première médaille a été présentée en 1969 au Dr. Jacques Rousseau, et chaque année depuis ce temps, une ou deux ont été accordées. Parmi les récipiendaires, se trouvent des botanistes très bien connus et acclamés. Mais pour d'autres la Médaille Lawson était une reconnaissance tardive de leurs travaux et de leurs services qui n'étaient pas très en vue. I am sure that you will agree that C.B.A. has brought honour to itself and to Canadian Botany in honouring them.

Incidentally, for those who may have forgotten the origin and significance of the name of this medal, let me say a few words about George Lawson himself, for he was one of our most distinguished predecessors and he has also tended to become a forgotten man in Canadian Botany in spite of the importance of his contribution.

George Lawson was a Scotsman who, when he accepted a professorship at Queens in 1858 became the first professional botanist appointed in Canada. For thirty-seven years, first at Queens and subsequently at Dalhousie, he served our science in Canada and was also active in the agricultural field, a combination which remains highly characteristic of botany in this country. He founded a botanic garden, and he participated in the establishment of two unfortunately abortive botanical societies, as well as the less abortive Royal Society of Canada of which he was also president. He published nearly 100 botanical papers, we well as others in Chemistry and Zoology, and made many other contributions of an editorial and public service nature.

From the beginning, there have been two categories of distinction for which the Lawson Medal is awarded. The first is an outstanding contribution to the knowledge of botany — a book, a monograph, a series of research papers, or even a

single paper if it is of great significance. In this we recognize scholarly work in Canada which has significantly contributed to the knowledge of plants in general and has brought wide-spread acclaim to our science in Canada. The second category of distinction is an outstanding career in teaching, research, administration or public service, or a combination of all of these, which has significantly influenced and advanced Canadian Botany. In this we accord recognition to the cumulative contributions of one who has served long and effectively in the development of our science in Canada.

Tonight we are going to award a Lawson Medal in each of these categories, a procedure which is in accordance with the original terms of reference; and the Awards Committee, whose work I want now to acknowledge with appreciation, has chosen two outstanding botanists whose selection will, I know, receive universal approval. It is entirely fitting that we should honor them in this way because they, by their outstanding work and dedicated service, have brought reflected glory upon all of us.



RECIPIENTS OF LAWSON MEDALS FOR 1973

Left: Mr. W.J. Cody who received the medal on behalf of Dr. Frankton. *Right:* Dr. M.W. Bannan.

MARVIN WILLIAM BANNAN

A George Lawson Medal in Botany for a distinguished contribution to the knowledge of Botany, pour une contribution de premiere valeur à la connaissance de la botanique, is awarded to Dr. Marvin William Bannan.

Dr. Bannan's professional career was intimately associated with the University of Toronto where he completed both his undergraduate and graduate studies, where he began to teach in 1933 as a demonstrator and from which he retired in 1970 as Professor and Associate Chairman. Dr. Bannan's special field is plant anatomy, both classical and developmental, and he was the dedicated and successful teacher of many generations of students who profitted greatly from the breadth and the depth of his knowledge as well as from his conviction of the value of knowing how plants are constructed and how they are interrelated. To quote from one of a number of letters received from outside Canada in support of his nomination for the Lawson Medal, "—I believe I can safely say the Dr. Bannan is Canada's best known and most distinguished plant anatomist". No one, I am sure, will dispute that judgement.

For some years in the early part of his scientific career, Dr. Bannan devoted himself to the study of wood anatomy in coniferous trees, and a number of important publications resulted. The particular contributions for which this honor is bestowed, however, began in 1950 when Dr. Bannan, to the great benefit of plant science, turned his attention to that narrow zone of dividing cells upon which so much of our national wealth depends, the vascular cambium of the conifers. Over the next twenty years until his retirement, a steady flow of highly significant papers emerged from his laboratory in which were described and documented the complex and often baffling division patterns, the changes, both seasonal and ontogenetic which occur under different conditions, and above all the dynamic state of his remarkable meristem. Following upon the earlier studies of I.W. Bailey of Harvard University, Dr. Bannan, during that long span of time made most of the substantial contributions in North America to our understanding of the complexities of the vascular cambium. So important was this work that, to quote from another letter "—it is impossible to discuss cambial development without referring to the investigations of Dr. Bannan" and from another "—Dr. Bannan's studies are referred to in every recent textbook of botany I have seen, either indirectly at the elementary level or directly in more advanced works". Moreover, to quote yet again "His papers are classic examples of careful, precise interpretations, based upon a thorough knowledge of the complexities of lateral meristems."

Without any doubt, this is the kind of contribution, internationally acclaimed yet perhaps not fully appreciated in our own country, which the Lawson Medal was intended to recognize. Thus it is with great pleasure and satisfaction that I present this medal to Dr. Bannan and say to him on behalf of the Canadian Botanical Association and of all Canadian Botanists "Congratulations on a job well done".

CLARENCE FRANKTON

A George Lawson Medal in Botany for notable contribution to the advancement of Canadian Botany, pour avoir contribué avec distinction au rayonnement de la botanique Canadienne, is awarded to Dr. Clarence Frankton.

After completing both his undergraduate and graduate studies at McGill University in 1940, Dr. Frankton worked in the field of pasture research at Macdonald College until 1946. At that time he joined the Plant Research Institute of the Canada Department of Agriculture in Ottawa where, during the next 24 years until his retirement in 1970, he established a reputation as one of Canada's most respected botanical figures. In addition to his role as research scientist which he performed with great distinction, Dr. Frankton held a number of administrative positions in the Plant Research Institute, including that of Chief of the Weed Investigation Section, Chief of the Taxonomy and Economic Botany Section, Associate Director of the Institute, and Acting Director for a two-year period, all of which he filled with keen perception, sound judgement and gentle humour which won for him affectionate respect from all of his colleagues.

Dr. Frankton is a plant taxonomist with a special interest in ecology and plant physiology and he has brought his considerable talents to bear largely on the field of weed biology. His numerous publications attest not only to the magnitude of his research efforts, but also to the high quality and the significance of his work. To quote from a letter supporting his nomination "Dr. Frankton has shown the unique quality of blending pure research with research that is of great importance to the economic wealth of the nation". I would be remiss if I did not make special reference to his classic manual "Weeds of Canada" which is a standard reference for specialists and non-specialists alike.

All of this is certainly ample justification for the award of high honor to Dr. Frankton; but it only touches the surface of his real influence upon Canadian Botany. This influence is succinctly summarized in one of the letters sent in support of his nomination; and I cannot improve upon it: "I would like to emphasize Dr. Frankton's unselfish devotion of time and effort to provide direction and stimulus for the research projects of all who made contact with him, whether students, colleagues or other professional botanists. The value of his contribution to Canadian Botany is only matched by his self-effacement in avoiding any public acknowledgement of his work". Many of you here tonight who have been aided and encouraged by Dr. Frankton will agree that it is high time such acknowledgement was made.

Finally, and as a further example of his tireless and selfless service, mention must be made of his role as Secretary-General of the IXth International Botanical Congress in Montreal in 1959. His "towering strength" as one colleague put it, and his long hours of toil before, during and long after the Congress, had much to do with the success of that venture and with the international acclaim which came to Canada as a result.

Unfortunately, Dr. Frankton was unable to be here this evening to receive his medal personally. With characteristic modesty he has written "I very much appreciate the award and am honored that the Association considers me to have made a useful contribution to Canadian Botany." I know that all of you will want to convey to Dr. Frankton your warm and affectionate congratulations.

CBA/ABC - TREASURER'S REPORT

Our receipts during the last year were \$6,284.33 and our expenditures \$5,939.82, an increase in assets of \$344.51. Our net assets now total \$4,502.89. Since we have already paid many bills that would normally be paid after the annual audit, we have had an unusually successful year financially. This is due in large part to reduced expenditures for executive travel. We have actually increased our support to other activities.

1973 membership has increased over 1972. At the time of the June 5, 1972 audit, we had 329 regular members and 67 student members. On May 23, 1973 our regular membership had increased to 345. Our student membership has unfortunately followed the trend of recent years, decreasing from 67 to 57.
Gerald A. Mulligan, Treasurer,
May 23, 1973.

STATEMENT OF FINANCIAL STANDING - 23 MAY 1973

Assets

Balance: Savings acct.	2,619.43
Chequing acct.	1,883.46
	<u>4,502.89</u>

Receipts

Memberships	
Regular	3,351.75
Student	287.00
Arrears	52.00
Advance	41.00
	<u>3,731.75</u>
CJB subscriptions	1,416.00
Bank interest	102.77
Royalties (ECF)	17.81
Bank credit	16.00
NRC Grant for London Symposium	1,000.00
Total income	<u>6,284.33</u>

Liabilities

Expenditures

Bulletin	641.25
Postage & stationery	227.66
NRC grant for London Symposium	1,000.00
CBA grant for London meetings	500.00
Lawson Medals (1972)	445.40
Lawson Medals (1973)	273.00
CJB subscriptions	1,380.00
BCC	973.40
Executive travel	480.00
Bank charges	19.11
Total expenditure	<u>5,939.82</u>

SUMMARY

Balance last audit (5 June 1972)	4,158.38	Balance (23 May 1973)	4,502.89
Receipts (5 June 1972-73 May 1973)	6,284.33	Expenditures (5 June 1972 - 23 May 1973)	5,939.82
	<u>10,442.71</u>		<u>10,442.71</u>

INTERNATIONAL CONFERENCE ON LAND FOR WASTE MANAGEMENT

The Canadian Society of Soil Science is organizing an "International Conference on Land for Waste Management" to be held in Ottawa, Canada during October 1-3, 1973.

The purpose of the conference is to collect and disseminate information on waste disposal and waste utilization in soils, to evaluate systems of waste management on lands, and to identify the problem areas requiring research and development.

The programme will feature keynote speakers and will include volunteered papers, discussion and printed proceedings. The conference will take place in the Ottawa Conference Centre and will include simultaneous translations in English and French.

Requests for further information and instructions for submitting papers should be addressed to:-

Mr. M. K. Ward, Executive Secretary
International Conference on Land for Waste Management
National Research Council
Ottawa, Ontario K1A 0R6
from SCITEC Bulletin.

SECOND INTERNATIONAL ESTUARINE RESEARCH CONFERENCE

15 - 18 October 1973.

Cosponsored by the American Society of Limnology and Oceanography and the Estuarine Research Federation. Theme: "Recent Advances in Estuarine Research." To be held: Ocean Forest Hotel, Myrtle Beach, South Carolina, U.S.A. For pre-registration information, contact: William B. Cronin, Chesapeake Bay Institute, RFD 7, Box 354, Annapolis, Maryland 21403, U.S.A., or Austin B. Williams, Systematics Lab, National Marine Fisheries Services, U.S. National Museum, 10th and Constitution Avenue, N.W., Washington, D.C. 20560 U.S.A.

THE FOWLER HERBARIUM

An exhibition showing the history of the Fowler Herbarium was on view at Queen's University, May 29-June 10, during the visit of the learned societies to Kingston. The herbarium was begun by Lawson in 1860, and contains large collections made by Macoun and Fowler. The exhibit was put together by A. E. Garwood and Adèle Crowder.

POLLEN ET MICROSCOPIE ELECTRONIQUE A TRANSMISSION

Dans le but d'établir des contacts plus étroits entre les chercheurs au niveau international, nous tentons d'établir une liste des chercheurs canadiens oeuvrant sur le pollen (morphologie, développement des tétrades) au moyen du microscope électronique à transmission. Cette liste sera transmise à Madame Van Campo, Laboratoire de Palynologie, Paris et Montpellier, France. Veuillez faire parvenir vos nom et adresse à Pierre Richard, Module de Biologie, Université du Québec à Chicoutimi, Chicoutimi, Québec, Canada.

POLLEN AND TRANSMISSION ELECTRON MICROSCOPY

We are making a list of the scientists working on pollen grains with the help of the transmission electron microscope (morphology, development of the tetrads), in order to improve collaboration between scientists at an international level. This list will be forwarded to Mrs. Van Campo, Laboratoire de Palynologie, Paris and Montpellier, France. Please send your name and address to Pierre Richard, Module de Biologie, Université du Québec à Chicoutimi, Québec, Canada.

MAN AND BIOSPHERE PROGRAMME

The Canadian contribution to this programme has been considerably clarified by the publication of a prospectus by the Canadian Committee for MAB (obtainable from Dr. Patricia Roberts-Pichette, Executive Secretary, Canadian MAB programme, Department of the Environment, Ottawa).

The general objectives and characteristics of the programme are clearly stated. The committee has identified the following major themes as of significance to Canada:

- (a) social and environmental causes and consequences of current trends in energy supply and demand;
- (b) social and environmental causes and consequences of alternate land-use practices related to the supply of forest products, food and recreational opportunity;
- (c) human perception of environmental change, including its relation to education, the availability of information and other aspects of the social environment.

The following sub-programmes were considered most appropriate:

1. how to achieve a desirable pattern of human settlement, land use and environmental quality in the circumstances of increasing population, urbanization and industrialization, particularly in the Great Lakes-St. Lawrence lowlands;
2. how to achieve maximum benefits and avoid adverse effects on human social structures, wildlife, soil and water quality, in an age of increasingly intensive agricultural and forestry management practices (including fertilizer and pesticide use and waste disposal) - the regional focus to be on areas of the most significant productivity;
3. how to achieve maximum benefits and avoid adverse effects on human social structures, biological productivity, recreational opportunity and economic returns in the management of coastal ecosystems, particularly the Gulf of St. Lawrence and the Strait of Georgia;
4. how to achieve maximum benefits and avoid adverse effects on social and cultural patterns, environmental quality and wildlife productivity, in the circumstances of technological change and industrial development in the Arctic, sub-Arctic and other isolated regions.

To enable operations to begin the following steps will be taken: first, definition of the scope and location of projects in the four proposed sub-programmes; second, identification of on-going activities related to the sub-programmes and definition of new activities that should be undertaken; and, third, determining participants and selecting proposals from universities, government agencies and other bodies.

Guidelines to the expected strategy, organization and approach to the sub-programmes are given in the prospectus. Individuals or groups with research proposals which seem to be appropriate should get in touch with Dr. Roberts-Pichette.

H. C. Duthie

NATIONAL RESEARCH COUNCIL OF CANADA GRANT SELECTION COMMITTEES

The National Research Council of Canada, through the office of Grants and Scholarships, provided nearly 80 million dollars in grants for extramural research programs in 1972-73. The evaluation and subsequent recommendation for funding of grant proposals is performed by a number of Grant Selection Committees. Five committees presently constituted are directly concerned with the review and funding of biological grant proposals.

N.R.C. has indicated to the Biological Council of Canada that it would be receptive to nominations for these selection committees, and B.C.C. has asked member organizations, including the CBA/ABC to suggest nominations. The Executive Committee has decided to seek recommendations from the sections for suitable nominees and letters to this effect are being sent to sectional Chairmen.

In preparing nominees for Grant Selection Committees, a number of criteria will be kept in mind:

1. A committee member should be an active member of the scientific community in Canada whose decisions regarding research programs are respected.
 2. The individual Grant Selection Committee should show representation of the various sub-disciplines represented in that particular committee's area of responsibility.
 3. A committee member will be responsible for both a major and minor field of study within the biological area of that Grant Selection Committee.
 4. The committee membership should reflect the following criteria:
 - a. geographical representation
 - b. the industrial sector
 - c. francophone and anglophone linguistic components
 5. The committee membership should not have more than one member from the same department of an institution and care should be taken in selection of nominees that there is not an undue duplication from any one institution.
 6. The committee membership should emphasize the importance of interdisciplinary orientation.
- A brief curriculum vita should accompany each nomination. In addition to this data, reasons should be given why the person has been nominated for a particular committee.

PERSONALIA

Dr. William F. Grant, Genetics Laboratory, Macdonald Campus of McGill University, has been invited from Canada to participate in a Nobel Symposium, "Chemistry in Botanical Classification" to be held in August in Stockholm. Nobel Symposia are limited to 30 invited participants from outside Sweden.