Dr. hullen

AGRICULTURE CANADA RESEARCH STATION SUMMERLAND, B.C. VOH 1ZO

ENTOMOLOGICAL SOCIETY OF CANADA

Bulletin



ISSUE NUMBER ONE



THIS ISSUE

Officers of the Entomological Society	of Canada, 1968-1969	2
President's Address, 1967	F.O. Morrison	5
President's Report, 1968	W. J. MocB. Comeron	10
Membership List of the Entomological S	ociety of Canado, 1969	
Insect Taxonomy — Is It Dying in Canad	da? W.R.M. Mason	15
Peter and the Walf (or Walves)	D.K. McE. Kevan	17
Common Names of Insects	D.C. Eidt	18
Committee on Common Names of Insect	S	18
Officers, Regional Societies		20

D. P. Pielou Editor
Margaret R. McBride Assistant Editor
Cover Design: M.A. Sydor, bio-Graphic Unit

Published irregularly by the Entomological Society of Canada K.W. Neotby Building Ottawa

Our First Issue —

For some time now, there has been a desire among members of our Society that the Editorial Office produce a "bulletin" or "newsletter". This issue is the first number of the Bulletin of the Entomological Society of Canada which, we hope, will meet these needs. This publication is not intended as a medium for the publication of the results of scientific research. That will continue ta be the function of the Canadian Entomologist. The Bulletin will be concerned not so much with the problems of entomology as with the problems of entamologists. It will be a forum for the discussion of controversial matters that offect entomologists personally — for instance, the sort of things that are often argued about, sometimes heatedly, at coffee breaks, but are rarely put in print. At the same time, the bulletin will provide a permanent record of many of the decisions, reports, and minutes concerning the organization and activities of our Society. At the moment, most of this is on record only in the files of the secretary. Same of the notices, and similar matter, that appeared in the Canadian Entomologist will now appear in the bulletin. There are no publication charges.

Editor

Entomological Society of Canada

1968-1969

PRESIDENT

A.S. West

PRESIDENT-ELECT

E. J. LeRoux

PAST-PRESIDENT

J.W.M. Centeron

SECRETARY

D.G. Peterson

TREASURER

E.C. Becker

EDITOR

D. P. Pielou

BOARD OF DIRECTORS

(Directors-at-large

1967-1969, 1968-1970†)

(Regional Directors 1967-1969,‡ 1968-1970¶)

- A. S. West, Department of Biology, Queen's University, Kingston, Ont., Chairman
- * C.E. Atwood, Department of Zoology, University of Toranto, Taranta 5, Ont.
 - E.C. Becker, Entomology Research Institute, Canada Agriculture
 K.W. Neatby Bldg., Ottowa 3, ex-afficio
- \$ J.R. Blais, Fores: Research Laboratory, Canada Fisheries and Forestry, PO Box 35 Sillery, Quebec, Que.
- # H.R. Boyce, Research Station, Conado Agriculture, PO Box 370, Harrow, Ont.
 - J.W.M. Cameron, Insect Pathology Research Institute
 Conada Fisheries and Forestry, PO Box 490, Soult Ste. Morie, Ont., ex afficio
 - J.A. Chopman, Forest Research Laboratory, Canada Fisheries and Forestry 506 W. Burnside Rd., Victoria, B.C.
 - † D.M. Davies, Department of Biology, McMaster University, Hamilton, Ont.
 - † D.C. Eidt, Forest Research Laboratory, Canado Fisheries and Forestry Fredericton, N.B.
- † R.H. Gooding, Deportment of Entamology, University of Alberta, Edmonton, Alta.
 - 1 A.F. Hedlin, Forest Research Laboratory, Canado Fisheries and Farestry 506 W. Burnside Rd., Victoria, B.C.

BOARD OF DIRECTORS (Continued)

- E. J. LeRoux, Research Branch, Canada Agriculture, Ottowa 3
- \$ 5.R. Loschiava, Research Station, Canada Agriculture, 25 Dofae Rd. Winnipeg 19, Man.
 - † J.F. McAlpine, Entomology Research Institute, Conodo Agriculture K.W. Neatby Bldg., Ottowa 3
- Ray F. Morris, Research Station, Canada Agriculture, Box 2068W, St. John's, Nfld.
 - ¶ N.A. Potterson, Nova Scotia Agriculture and Morketing, Kentville, N.S.
 - D.G. Peterson, Entomological Society of Canada, K.W. Neatby Bldg.
 Central Experimental Form, Ottowa 3, ex officia
 - D.P. Pielou, Entomology Research Institute, Canado Agriculture K.W. Nearby Bldg., Ortowo 3, ex officio
- 1. G. Rempel, Department of Biology, University of Saskatchewan, Soskotoari, Sosk.

EXECUTIVE COMMITTEE

A.S. West, Ovoirman
C.E. Atwood and E.J. LeRoux

ARCHIVIST

1.C. O'Neil, Dept. de Biologie, Uni versité de Sherbrooke, Sherbrooke, Qué.

AUDITORS

D.G. Hareourt and L.A.O. Roadhouse, Ottowo

EDITORIAL BOARD

D.P. Pielov, Ottawa	Chairman
E. J. Leflaux, Ottowo	Member, 1965-1969
D.A. Chant, Toronto	Member, 1966-1970
H. F. Madsen, Summerland	Member, 1967-1971
W.C. McGuffin, Ottawa	Member, 1968-1972

REPRESENTATIVES

Biological Council of Canado

Delagotes:		Alternates;	
E.J. LeRoux, Ottowo	1966-1969	B. N. Smallman, Kingston	1966-1969
A.W.A. Brown, Genevo	1966-1970	E.C. Becker, Ottowo	1966-1970
B.N. Smallmon, Kingston	1969-1972	J.A. Chapmon, Victoria	1969-1972

E.S.O.-E.S.C. Committee on Exchanges

J.R. Vockeroth, Ottowo

COMMITTEES

Achievement Award

E.J. Lelloux, Ottowo, Chairman

Common Names of Insects

D.C. Eidt, Fredericton, Chairman

Finance

E.G. Munroe, Ottawa, Chairman

Honorary Membership

(to be appointed)

Membership

L.A.O. Roadhouse, Ottawa, Chairman

Nominating

H.A.U. Manro, Landon, Chairman

Resolutions

(to be appointed)

WORKING PARTIES

Brief to B.C.C. (App. 4, VI.68)

C.E. Alwood, Toronto

H. Hurtig, Ottowo

E. J. LeRoux, Ottowa

F.O. Marrison, Ste. Anne de Bellevue W.G. Welfington, Toronto

Bylow Revision (App. 31, VIII.65)

E.C. Becker, Ottowa, Chairman D.B. Waddell, Ottowa

Student Encouragement (App. 21, VIII. 67)

F.O. Moirison, Ste. Anno de Bellevue, Chairman

ENTOMOLOGICAL SOCIETY OF CANADA SOCIETE ENTOMOLOGIQUE DU CANADA

Macdonald College of McGill University
College Macdonald d'Université McGill

ANNUAL MEETING / REUNION ANNUELLE September 1967 Septembre

Frank O. Morrison

Les directeurs de notre société ant, par leurs expériences, demandé un retour à la protique d'avair un discours du président à la réunion annuelle. Ce qui suit est pour répondre à cette demande. Toutefols, je dois dire que cela permet au président de la société de s'époncher, ce qui ne lui est pas accordé dans so lanction de président de la session.

La Société Entomologique du Canada a le drait d'être un peu fière pendant cette année du centennoire, ayant célébré son propre centennaire il y a quat mans. Vous vous rapellerez qu'à cette occasion le Docteur Holland, le président de natre aomité executif du centennoire, a référré à notre société comme étant la société scientifique la plus ancienne de notre pays. Il est très regretable que la maladie empâche le Docteur Halland d'être parmi nous aujourd'hui, et je suis assuré que nous tous lui sauhaitons un prompt retour à la santé. Nous espérons qu'il sere dispos l'an prochain quand nous cé lébrerons le centennaire de notre revue, le Canadian Entomologist, et en 1973 quand nous célébrerons le centennaire de la Société Entomologique du Québec.

The directors of our society have, in their wisdom, requested the revival of the practice of hoving a presidential address at the annual meeting. On that request must fall any blaine for this item on your program. I must say, however, though it may be liaid on you, it does offer the president a chance to unburden his mind, an appartunity not accorded to him in his role of chairman.

The Entomological Society of Canada is entitled to leel a little smug during Canada's Centennial year, having celebrated its own centennial four years ago. On that occasion, you will remember that George Halland, Chairman of our Centennial Executive Committee, referred to the E.S.C. as the senior scientific group in this country. It is most unfortunate that illness keeps George from being with us today and I'm sure we all join in wishing him a

speedy and complete recovery. We hope he will be fine and fit next year when we celebrate the centennial of the Canadian Entomologist and in 1973 when we will celebrate the centennial of the Entomological Society of Quebec.

We are meeting this year in the Province of Quebec, near Montreal, to assist in that calassal centennial project of the City of Montreal, the Province of Quebec and of Canada, Expo 67. When you visit this magnificent show tomorrow you will, I'm sure, find yourself everywhere conscious of the theme "Man and His World". The very site of Expo, and every pavillon, pays tribute to mon's mostery of his environment, to his increasing understanding of science and technology, to his constant striving for knowledge useful in improving the lat of man. In the Man and Life Povilion,

you will walk into a huge model of a living cell where sejective lighting helps to explain the multitudinous ports and their functions. By means of films on Mon and His Health, in Labyrinth, in the Conadian Pocific - Cominco, in the Canadian Pavilian, in the Canadian Notional and in other pavilions one follows man from birth, through childhood to old age. It is a birthday celebrotion, a story of success and happiness with only here and there a sombre note suggesting failure or near failure. Man the Provider, the Agricultural Pavilian, overowes the visitor with the machinery of food production today, but throughout this symphony of go-go activity is a deep note of concern for mankind's future, while the Christian, Cubon and Conadian Indian povilions suggest a need for more effort at present as well as in the future.

The Agricultural Institute of Conada a so met at Macdonald College this year. Dr. Fred Bentley, Dean, Faculty of Agriculture, University of Alberta. delivered the centennial lecture at these meetings. He chose as his tapic "Food for All - Can Agriculture Provide?". I commend this oddress to your reading. Dr. Bentley painted a soberling picture of our frantic struggle to keep up our present world standard of nutrition. which is appolitingly bod, let oione supply enough nutritional food for all. He cancluded that we have the means, if we can but find (and I quote) "the openmindedness, the courage, the ingenuity, the boldness and the stick-toit-for-decodes determination needed to make 'Food for All' a reality for the whole of mankind before Canada's secand Centennial". To this end, he unconditionally recommended "the balancing of birth and death rates on a world basis and the giving to Ogriculture of the support and recognition it merits".

The agricultural "Man the Pravider" pavilion at Expo might better have been

called "Mon the Manager" or "Mon the Moster of His Environment". One con ask the time-honored question, "What is in a name?" or "in a slogan?" or "in a thame?" for that matter. blanket is large enough it can cover the needed area. Nevertheless, I widt we might choose many names that are extant today. As biologists we give new species names to mutants that prave their adoptation to changed environments by reproducing enough of their kind that the resulting body of reproducing individuals can be said not to overlap other slightly different groups. In the process, we often recognize the demise of groups previously meriting specific names. Possibly "farmer", "agriculturist" and even "forester" may some day be designated as varieties of "Environment Monager" or "Population Manager" and possibly the sooner this comes about the easier it will be to make clear to the non-initiated the true place of such "managers" in the ultimate "ecology of man".

To come back more specifically to Entamalagy and the Entomological Society of Canada, oll the evidence presented at our Society's Centennial and summarized in the Centennial number of the Canadian Entomologist (Vol. 96(1,2), 1964) and further substantiated by the reports you will hear at these meetings, four years later, is evidence of growth and progress. Membership in the society has increased steadily. The Canadian Entomologist has expanded beyond belief, especially if we include the growing list of supplements. The noture of the work reported and the excellence of the presentation and aditing has kept pace with the growth in volume. Our able editor is already giving woming that we may within five years have to launch a second journal. The necessity for the resignation of our secretary, Ion Lindsoy (a necessity which we must all deeply regret especially those of us who have come, over the years, to rely an him entirely), points up another possible need in the near future: the need for a full time secretary-general and for a utianal office to keep up with our growth.

As biologists we must expect that growth and success in a changing environment will lood to evolution, through the selection by the environment of environment-fovored mutants. This is happening. Our ranks now include close-knit interest groups; insect physiologists, insect geneticists, insect taxicalogists, etc., who demand their own place in the san. The biologists of our day took on the name of the aroup of organisms which they studied. An entomologist studied insects, on ornithalogist studied birds. The organism was the centre of interest. But biologists today have switched their interest from "the granism" to "the process". The organism is only a tool in the resporch of the geneticist, nutritionist and neuralogist, the population ecologist or population manager. Even the opplied biologist with practical problems to solve is nolonger "organisar" but rother "problem-oriented" and achieves his end by using the efforts of a team of discipline-oriented specialists.

Change in our environment is further evidenced by the reorganization in 1954-55 of the United States Deportment of Agriculture. The old Bureau of Entomology and Plant Quarantine was replaced by an Agricultural Research Service. In 1959 the Canadian Department of Agriculture followed suit. The Division of Entomology was amalgamated into a Research Service with a problem-ariented team approach.

These changes may in part account for the fact that the number of students registering for the B.Sc. in entomology has fallen off drastically and shows only slight recovery now. Dr. Beckel discussed "Entomology in the University

Curriculum" during our Centennial (1963). He emphasized the trend at the undergraduate level away from purely entomological courses to courses in the supporting sciences. In a survey of opinions, he found much support for his belief that training should be in the biological disciplines rather than based on specific organisms, "even" he soid. if it means the ultimate extinction of the term Entomologist as applied to university hained people". In keeping with these ideas, universities have amalgamated departments of Entomology with other departments. The University of California has come to offer entomology as such at the graduate level only and rumblings of similar changes ore heard in other institutions. result is an interest in a discipline (genetics? physiology?) for the furtherance of which insects are simply convegient test animals. There is no value in a student learning to recognize even common insects or to appreciate peculiorities of life histories if what he will spend his life at is determining what enzymes are involved in the changes that occur in certain organic phosphorous compounds when they are introduced into that seething chemical furnoce which we call a living cell.

The definition of an entomologist has never been easy to formalize, but our new emphosis on processes and disciplines as opposed to organism, the new biology as it is now called, has compounded the problem. Our counterpart Society to the south, the Entomological Society of Americo, set up some years ogo a Committee on Professional Itai ing, Standards and Status which reported this past Spring in Partland, Oregon, on a plan ta establish a "Professional Registry" of what might be called accredited entomologists. The proposed constitutional amendment to make the Registry possible failed to get the required 60% vote. Disagreement on the training which makes a man on entomologist and on the qualifying examination which might be required weighed heavily on the riegative when the matter came to a vote.

Whan Conada came into being one hundred years ago, 75% of the labor force was employed in form work. A majority of the people of the world were close to living organisms, other than man and pet dogs. Today, 7.6 per cent of our work-force are engaged in farm work. Those of us who teach biology at the First Year University level encounter every day students who do not know that pototo tubers grow underground and have never heard of potato eyes. The noise of modern living has drowned out that of the spring peepers, the katydids and the cicadas. But a fair percentage of our freshmen know in a general way of strange giant molecules, twisted like pretzels, colled DNA and held responsible for much of the phenomenon of life. It isn't stronge then that the popular values should set the study of genetics and biochemistry for above the rather crackpot study of insects. But it is those very important "popular values" which determine the money spent on teaching and research and, more important still, determine which students will elect this or that study orea.

Though form work involves an everstrinking percentage of the labor force, food production under the name of agriculture, or some newer namenclature, must irrevitably become the world's most important profession. The frightening rate of population increase makes this cartoin. Food is a key factor. Competition between mon and insects for the surplus production of the rest of rhe biosphere involves entomologists in this important industry of food production and conservation. Are we doing anything to make the world sit up and take notice of this fact?

We can look forward in this society to increased prosperity and membership. Within another fifty years we can expectour store of knowledge on weather, population dynomics, etc., to make computer analyses of past situations simple and prognases and recommended management measures effective. this will be so only if we can keep ottracting the best minds to our field. I suggest now that prosperity may be blinding us, and post problems of financing the society moking us over-nonservative. Our society has been giving us on excellent medium for publication: it has been affering us opportunities such as we have here this week to comsider with our fellow workers progress in our awn area of investigation. I suggest that it must do more. It must consider the problem I have proposed concerning the image our name has for the public. Has mutation, separation and isolation within the spacies "entomologist" proceeded to a point where the name is obsolete? We must consider the riecessity of "selling" to the 82,4% of our population no larger engaged in primary food production our role in the offairs of life. An obsolete name may be a liability.

Committees of our Society have turned down from time to time suggestions that we offer scholarships, sponsor travel, etc., for budding entomologists. They have felt that we hadn't the means; that others with whom we would compete outclossed us beyond reason and, of course, if you can't tell who is an entomologist, how ear you distinguish a "budding one"?

I recommend to the Society and to the new board of directors some further investigation of the Society's rale in encouraging the study of insects and insect problems and on how we can explain what we are and whal we are doing, to the rest of the world. I suggest that we

should be prepared to jeopardize the solid financial position we have built up to serve our future needs. It is comforting to say that in a world of deficit budgeting we have maintained an annual surplus, but, a surplus will not hold us together if the divisive forces I fear are real.

In summary, we are here to calebrate with Canado, at Expo, in our case over one hundred years of scientific and material progress. We recognize our importance in man's greatest future problem, that of providing food for all. Our Society has grown with Canado.

Growth and changing environment have promoted evalution and change. The emphasis has switched in biology from organism-oriented to discipline-oriented in motters of education and research. An entomologist grows horder and harder to define and less understood by a population only 7.6 per cent of which Is directly involved in growing food plants and animals. We can maintain a healthy science and society only by convincing people of our importance. We should consider our name, and our reputation and be prepared to gamble some of the comfortable financial security of our organization to improve our public image and assure future support.



MEMOIRS OF THE ENTOMOLOGICAL SOCIETY OF CANADA PUBLISHED RECENTLY

Memoir No. 59 (mailed 26 February 1969): The life histories, distribution, and immature forms of the North American sawflies of the genus Cephalcia (Hymenoptera: Pamphiliidae) — D.C. Eidt

Memoir No. 60 (moiled 19 February 1969); Review of Holarctic tarsonemid mites (Acarino: Prostigmato) parasitizing eggs of Ipina bark beetles — Evert E. Lindquist

ANNUAL MEETING - 1969

The joint annual meeting of the Entanalogical Society of Canada and the Entanalogical Society of Ontaria will be held at the University of Guelph, Guelph, Ontaria, 26-29 August 1969.

ENTOMOLOGICAL SOCIETY OF CANADA Soskotoon, Saskatchewan

ANNUAL MEETING 27 August 1968

REPORT OF THE PRESIDENT, J.W. MacBAIN CAMERON

Two meetings of the full Board of Directors were held, the first on 24 August 1967 and the second on 26 August 1968. In addition, two meetings of the Executive Committee were held in Ottowa, on 16 January 1968 and on 4 June 1968.

BOARD MEMBERSHIP

Because of the election of Dr. A.S. West as President-elect of the Society at the 1967 elections, it become necessary to appoint a replacement for him as Directorat-large for the balance of his term 1966-1968. Dr. R.O. Paradis was appointed by the Board.

Mr. D.G. Paterson was nominated and elected for Director-at-large for the term 1967-1969, but after the mail ballot was completed he was appointed Secretary, succeeding Mr. 1.5. Lindsay who had resigned. Although constitutionally it was not necessary (a Director may be appointed as Secretary), Mr. Peterson resigned as a Director, and the Board appointed Dr. C.E. Alwood to replace him for the 1967-1969 term.

JOINT MEETING, 1972

There was considerable correspondence in connection with the Jaint Meeting of the Entomological Society of America, the Entomological Society of Canada, and the Entomological Society of Quebec, which will be held in Montreal in 1972. Because of the relative sizes of the societies, it is inevitable that the program arrangements will be to a large extent dominated by the E.S.A. However, the Canadian Society has already appointed a Co-chairman for each of the six sections into which the meetings will be divided, and the Entomological Society of Quebec has appointed a member to each of the same six section committees. These nominations have been accepted by the Executive of the Entomological Society of America, and it is expected that the committees will became fully active following the Annual Meeting of that Society in 1969, when they will be appainting their committee chairmen. In addition, a local arrangements committee will be set up to look after all details for the meeting and accommodation. The Queen Elizabeth Hotel has already been booked as the headquarters, and blocks of rooms for the accommodation of members have been reserved in other nearby hatels.

HONOURS

The Executive was requested to nominate three persons to receive the Centennial Medal. After consultation, the names of Dr. A.W. Boker, Dr. L. Daviault, and Dr. A.D. Pickett were submitted. Unfortunately, the Secretary of State does not advise whether or not medals are actually awarded, so it has not been possible for us officially to extend our congratulations. We can only hape that our nominations were accepted, and that the medals were indeed awarded to these three outstanding members of our profession.

QUESTIONNAIRES

Most of you will have received the questionnaire circulated by the Biological Cauncil of Caixdo. This is an attempt to analyze the research in the field of biology now in progress in Canada, and to try to project into the future and to suggest a program that will return the best value for the limited amount of resources—manetary and human—available. We can expect a report, and presumably recommendations, from the Council in due course.

In addition, there was a questionnaire from the Executive Secretary of the Royal Society of Canada concerning the possible formation of some kind of Association of Learned Societies for the regulation of annual meetings so as to promote efficiency and avoid conflict. There was not sufficient time to consult the Board and still meet the deadline set for replies, so an answer was prepared by the President, emphasizing that it was one person's opinion and not accessorily reflecting the stand of the Society, indicating that although there would be an advantage in having a clearing-house for information about meetings, any attempt to regulate except by the membership of each Society would be unwise. The concern seemed to be mostly with those societies that hald their meetings in June, and since this Society as a rule meets with one or other of the Regional Societies in the late summer or fall, it seemed to be of relatively little importance to us.

CONSTITUTION

The major project undertaken by the Directors during the year was consideration of the draft of a revised constitution prepared by a committee under the chairmanship of Dr. E.C. Becker. The first draft was presented to the Board at the meeting last August, with a request that comments by returned to the Committee by early November. I am alraid the response was rather disheartening. It may indicate a lock of interest in the subject, but I would point out that this is a very important document since it is the legal basis for the Society which now does a business approaching one hundred thousand dollars a year and has investments of over thirty thousand dollars. Our present constitution has been in effect since the founding of the Society in 1956, and undoubtedly it requires some changes. Whether or not the changes need be as drastic and for-reaching as proposed by your committee is a matter that requires very serious consideration by all merebers. Much time was devoted to this question at the two meetings of the Executive, and the committee was asked to take another look and try to come up with a new draft that would permit an easier assessment of the changes being proposed. This new draft will be available to you shortly, and I urge each of you to study it carefully. Obviously something must be done soon, and you will be asked to vate in some way - probably either as an all-py-name proposition, or clause by clause — in the near future.

FINANCE

The audited financial statement for the 1967 fiscal year, together with a statement for the first seven months of this year, have been given to you. These reflect the Society's sound financial status, considering our present program and commitments. You will have an apportunity to discuss details in these statements when my report is open for discussion. I shall return later in this report to comment on the future of our financial commitments.

PUBLICATIONS

The Editor has reported to the Board that the submission of manuscripts for publication in The Canadian Entomologist increased by 6% during the past twelve months. Five memoirs were published in the same period, ten more are in press and at least six are in preparation. The Board appointed a working party, with the Editor as Chairman, to study the need for a second journal. This party has not submitted its final report but has already indicated that there appears to be a need for a journal for applied entomology, possibly combined into one on crap, forest, and livestock protection. Your Boardwill be pursuing this matter. Finally, in regard to publications you will have read in the June issue of The Canadian Entomologist that material is now being requested for the first issue of the Bulletin, the Society's newsletter. The Board has requested that the first issue be published this autumn. You need not be reminded that the success of this new publication will depend on the full support of all the members and you are urged to submit appropriate news items or short articles on timely subjects.

STUDENT ENCOURAGEMENT

Dr. F.O. Mortison was asked to chair a working party charged with a study of the ways and means by which the Society might encourage students to enter our professian. A possible expenditure of \$1,000 in each of the next three years was suggested as a working basis for this study. The Porty is discussing several possibilities and expects to make a final report to the Board in the near future.

BIOLOGICAL COUNCIL OF CANADA

The third bulletin of the Biological Council of Canada, of which the Society is a member, was sent to all members recently. You will have noted that the Council has been active during the past year and, in the opinion of the Board, worthy of our cantinued support.

Drs. LeRoux and Atwood were appointed to prepare a brief to be submitted to the Biological Council of Canada, with discussion of the present state of biological science in Canada, the direction it should take in the future if it is to reach national goals and objectives for the immediate future, with a full estimate of costs. This brief will be discussed later in this meeting, and further action recommended to you.

ACHIEVEMENT AWARD

The Board was pleased to be infarmed by the Achievement Award Committee that a most worthy recipient had been nominated for the Award again this year. The Board, like yourselves, only learned the identity of the recipient at luncheon today.

ARCHIVES

The Board was informed by the Archives Committee that the Society's archives, which mainly were gothered together for the Centennial Meeting in 1963, have been placed at the University of Sherbrooks, the place selected by the Board, acting on the advice of the Committee. The Board appointed Dr. L.C. O'Neil, Secretary, Faculty of Science, University of Sherbrooke, to be the Society's Archivist. Dr. O'Neil has informed the Board of his plans for the storage and display of the archives and the incoming Board will be giving this activity its atten-

tion. All members are asked to note that any historical material concerning the Society or Entomology in Canada now may be sent to Dr. O'Neil.

MEMBERSHIP

The Membership Committee did not undertake a promotional drive lost year, the membership being maintained at a high level. Current membership as of July 30 is 846 regular and 162 students.

We are recommending to the ineaming Board that their Committee review the situation, possibly contacting heads of university department; research institutes, and stations to ensure that all entomologists are made aware of the aims of and benefits to be derived from the Society. It is also possible that another approach to potential sustaining members might be fruitful.

COMMON NAMES

The Common Names Committee has been holding discussions with its apposite number in the E.S.A. to improve the procedure for the consideration and adaption of common names. It is expected that the Committee will have definite proposals for your consideration at the next general meeting.

HONORARY MEMBERSHIPS

The Board established a working party to consider the improvement of the procedures for the nomination and election of honorary members. You will be asked, later in this meeting, to approve changes in our rules based on recommendations of this Working Party.

RULES AND REGULATIONS

in accordance with our By-laws, the Board may prescribe rules and regulations for the management of the Society's affairs. If these are approved by the members of a general meeting, they become standing rules. The Board has reviewed our present rules and regulations and will be seeking your approval for certain revisions that will make these rules more effective and up-to-date.

PERSONAL REFLECTIONS

This completes my summary of the activities of your Directors during the past year, and I trust you will find that our stewardship has been acceptable. I should now like to take a few minutes to express some personal opinions on the future of the Society as I see it.

One point that came up repeatedly during the year, and one that is the very near future will require attention by the Directors and the membership at large, is that of the financing and general operation of the Society. As mentioned earlier, the business turnover is approaching one hundred thousand dollars per year. It seems to me too much to expect that this can be handled on a part-time, almost voluntary basis, regardless of the unquestioned competence and good will of the individuals concerned. Cansideration will have to be given soon to the appointment of an executive officer, on a full-time salary, who will be responsible for the business operations. In the beginning he might possibly combine the executive functions of all

three present officers — secretary, treasurer and editor — with such advice and guidance as might be provided by the appointment of lowerary afficers and an editorial board. At the very least, I feel that there should be an executive secretary-treasurer emplayed and paid as such, and I recommend that the incoming Directors be charged with making a study of this matter and reporting at the next annual meeting.

Also, the business of the Society requires the attention of the Directors more than ance a year. Provision should be made to pay the expenses of Directors to the Annual Meeting as a matter of course, so they will not have to depend on getting support from their emplayer in order to attend. They should also be given expenses to altend at least one Directors' meeting during the year, and members of the executive should be able to attend three or four meetings if necessary. These things can be done only if the Society provides the funds. And this means, of course, increased membership dues. But if we are going to claim that we are the national professional society, and wish to aperate as such a society should aperate, we must be prepared to pay for it. Our fees have not increased very much since the charter was first obtained in 1956 — I think it was six datlers per year than. But expenses have, and so have our salaries. Yet we are still depending largely on handouts for expenses so that our Directors can look after our business.

Three weeks ago I was in Moscow at the XIIIth International Congress of Entanalogy. I did not attend as the President of the Entanalogical Society of Canada, but as an officer of the Department of Forestry and Rural Development. When I asked, I was tald that it has not been the custom of the Society to send a representative to the Congress. How can we claim to be a national professional society and still not be prepared to have an official representative at the International Congress? I hape that when the next Congress is held in 1972, the President or some other delegate will be the official representative; not because he is going in some other capacity but because he is afficially appointed to represent us. Again I say — if we are going to claim to be the national organization representing the profession of entanalogy in Canada, we must begin thinking and acting like a society of professional people, and be prepared to pay the mosts of membership in it.

In closing, I would like to express my appreciation to our appointed afficers who have so ably carried an our business. Our secretary especially had a difficult job because he was unable to attend the meeting last year, and later he was involved for a time in the total immersion course in French. During the period, with the help of our former secretary, Mr. Lindsoy, and of the Treasurer and the Editor, Society affairssvere looked after, I think, very weil. I wish to acknowledge the support I was given by these afficers, and at this time to thank them for it.



Kazumi Kabayashi, a Japanese Forest Entomologist, will be in Conada for one year on a transfer of work from Jopan. He is particularly interested in cone and seed insect studies and will work with A.F. Hedlin at the Forest Research Laboratory, Victoria, B.C. Hewill return to Tokya in February 1970.

Insect Taxonomy—Is it Dying in Canada?

In recent years, I have been trying to recruit afficers to work in Taxonomy at the Entornalogy Research Institute in Ottawa. The results have revealed a situation that is disturbing and is unrelieved by a happy outlook for at least the near future. The supply of Canadian university students interested in specializing in taxonomy is drying up. It is becaming increasingly difficult to find Canadian students graduating with a speciality in taxonomy. Although Canadian citizens, of course, have a priority for Public Service jobs, foreignersmay be recruited for specialized positions when no suitable Canadian candidates appear. A short look at nationalities of people hired by the Taxonomy Section of the Entomology Research Institute (and by the same organization by whotspever name it was known in previous years) is most revealing. In the years before 1947, the Taxonomy Unit recruited nine officers, two of whom were foreign-born; in 1948-1957, sixteen Canadians and five foreigners were recruited; in 1958-1967, only three Conadians but seven fareigners were recruited. The proportion of foreign-born entomologists for these three periods is 22 per cent, 24 per cent, and 70 per cent respectively. The figures for active taxonomists resident in Canada since World War II but never employed by the Taxonomy Unit are similar; out of a total of 30 the proportions are 18 per cent. 21 per cent, and 60 per cent respectively. Thus it appears that this situation is caused by Carpadian universities, not by the hiring policies of the Entomology Research Institute.

Before 1 om accused of being biased, please let me hosten to point out that the foreign antomalogists on staff here are likeable and useful productive workers in no way inferior to the Canadian product. The Taxonomy Section has always recruited some of its officers from abroad. This brain drain in reverse has undoubtedly benefited the country and there is no teason why it should not continue. These people are the finest type of immigrants and a young country, such as Canada, can well use their services. The aspect that I find so distressing is that during a period when university enrolment has multiplied many times, the number of students in entomotogy selecting for taxonomy has decreased. Thus the relative number of students choosing it as an option for graduate work has, in fact, suffered a callapse that can only be described as catastrophic.

During the early 50ts, Conado sow the retirement of withdrawal from active association with university students of live of the greatest all-round entomology teachers the country has known; namely, G.J. Spencer, E.H. Strickland, J.G. Rempel, A.W. Baker, E.M. Walker. Most of the officers now working in the Taxanomy Section owe their initial inspiration during undergraduate years to at least one of theseinen.

Times change and so do fashions, and we are now living in the age of the molegular biologist. Taxonomy may appear old-fashioned to the modern student but it is not so. Taxonomy is still just as interesting as ever and, in my opinion, even more interesting than formerly. Since the days of World War II, the new systematics has arisen and so has the so-called school of numerical taxonomy, both of which have revolutionized taxonomy in much the same way that the electron microscope and microanalytical techniques have revolutionized physiology and cytology. It seems

that the professors currently teaching students in Canadian universities fail to appreciate the new life and excitament that presides in the study of taxonomy or, if they do appreciate this, they are singularly ineffective in communicating this interest to their students. I can only eanclude that the wave of molecular biologists now teaching in Canadian universities or a move impiring and exciting group.

The really disturbing part of this is that the demand for taxonomists is increasing. After all, there are many times more entomologists in the world today than there were a generation ago. Even though many of them have no need for the identification services of a taxonomist, there are still many who do, and their number is increasing. Canada is leading the world in the development of ecological studies of a precise and predicted nature. I need only cite the pioneering studies of R. F. Morris, E. J. LeRoux, and their associates. Another approach to the problems of entomology called integrated past control by its chief Canadian advocates, B. P. Beirne and D. A. Chant, is being actively promoted in Canada. If the policies advocated by the supporters of integrated past control are ever implemented, it seems not at all unreasonable that a taxonomist or two will be required for each team. Of course, this is about the same thing as saying that an engineer will be needed to help plan a trip to the moon; so many specialities are involved that no one man can possibly be expected to do the job; many taxonomists will be needed.

The reasons I have mentioned above are those of identification service anly. There is just as great a need for Eaxonomic research itself in order to supply background information from which to make these identifications. The study of the toxonomy of Canadian insects is as far from complete as is the study of the chromosome. Perhaps half the insects of Canada have been named, but I doubt it. Naming, of course, is far from the whole story, much more than names is needed to make the knowledge of any species useful. The average managraph of a Canadian group of insects will reveal the following rather shocking facts: the group has either never before been revised or has not been revised for half a century or thereabouts; many of the species are newly reported from Canada, North America, or are new to science, life history, habits, and immoture stages unknown; and a large number of the species will be represented by less than a dozen specimens in the museums of the world. The day when the insects of Canada are well known as the birds of Canada are known, must be centuries away.

So, therefore, may I urge the professors in Canadian universities at least not to discourage students who have an interest in insect taxonomy. These youngsters need to be encouraged during their undergraduote years. By the time they have made a choice and become interested in a field of graduate studies, it is generally too late to go back to an earlier interest in taxonomy. Another thing is not to let students develop a mentally rigid attitude too early in life. Ossification at the brain will develop soon enough. It is most distressing to see a young man in his twenties insist that he will spend his whole life studying some small family or subfamily of insects merely because he has spent two or three years during his university career studying that group and has become interested. Many of the greatest taxonomists have studied quite different families or even orders of insects during different periods of their lives and some have even studied other classes if animals. It has been my experience, and that of my colleagues, that virtually any group becomes interesting once one studies it enough to "get the feel of it".

I do not wish to include all, but I have the impression that many professors in Conadian universities believe either from ignorance or from their own lack of interest that taxonomy is old-fashioned and a branch of science that is dying. You who give credence to this belief, try to trace the beginnings of this attitude in yourself, I suggest that it may have been passed on by teachers who probably formed their authors on taxonomy a generation before the neo-Daivinian revival. In those days, such an attitude may well have been justified but not taday. Taxonomy is as vital and modern as any other branch of entamplagy. Don't allow the supply of students tadry up. We need your help.

W.R.M. Moson Entomology Research Institute Canada Agriculture, Ottowo

Peter and the Wolf.

(or Wolves)



Toward the end of an entomological sojourn in northern Ellewhete Island, August, 1968, my number-one son, Peter Kevan, of the University of Alberta, despatched, or caused to be despatched to me, two packages containing valuable soil samples (from which to extract Arctic microarthropods), together with even more valuable notes. As is not entirely unknown in Arctic communications, something went away, and by the end of Navember, the parcels still had not reached their dastination at Mocdonald Colloge; this in spite of frenzied correspondence with everyone we could think of from Resolute Boy to Montreal and Edmonton. Everybody tried to be most helpful, but to no ovoil! The parcels had vanished into the farified Arctic Eventually, in December, however, it was discovered that samehow, nobody knows why, two packages, fitting the descriptions of those lost, had some to rest on a wharf at Anchorage, Alasko, where walves had earen the labels! Nabady knows the reason for that either, but it does prove that adequate labelling is necessary in all entomological pursuits! Boreal entomologists are hereby warned to ensure that all package labels henceforth are walf-proof, in case their parcels should fall to the fearful large of feracious, foraging, foreign, illiterate walves, unable to read labels or to respect the scientific value of the contents. Another precaution would be to desist from using the superior quality Conadian glue that walves seem to find it esistable. We wish to thank all those who have helped in the recovery of the pockages and so avaided yet another international incident.

D.K. McE. Kevon

COMMON NAMES OF INSECTS

Few entomologists would disagree that consistency in the use of common nomes is highly desirable. It is, therefore, somewhat discouraging to see careless usage in the entomological journals. A surprisingly large proportion of unrecognized names are used when approved ones are available. As withany editarial question, the primary responsibility lies with the authors to produce the most accurate manuscripts possible.

The common nomes recognized by the Entomological Society of Conada are those published in "Common Nomes of Insects Approved by the Entomological Society of America". The latest edition, doted December 1965, was published in Bull. Ent. Soc. Am. 11(4): 287-320 and a supplement appeared in Bill. Ent. Soc. Am. 13(2): 114. The list is revised every five years. The Entomological Society of Canada has not provided copies for its members but perhaps it will in 1970. Pour les noons français, la Société Entomologique du Conndo a reconny officiellament la publication "Noms Frongais des insectes du Conada" publiée par la Société de Protection des Plantes du Québec. Both

lists also include many group names. These names are preferred in the publications of this Society and their use by members is recommended.

The use of well-established names is not discouraged although both lists may ship away from them: for example, "fruit fly" or "mouche à vinaigre" listed by most dictionaries for Drosophila melanogoster. There is a distinction between the bagworm (lhyridopteryx ephemeraeformis) and a bagworm (any species of Psychidoe) which is made clear by the use of the definite article. It is frequently overlooked that to be systematically correct, names of true flies, bugs, lice, etc., have the group name separate from its adjective, hence house fly, bed bug, and human louse; others are written as one word, hence sowflies, mealybugs, and booklice.

The existence of approved lists has brought considerable stability in usage and mode communication easier. Hapefully, in preparing and editing sheir manuscripts, authors will not averlook proper common names usage. The overworked, underpaid editors will be grateful for it.

D.C. Eidt, for Committee on Common Names of Insects Entomological Society of Cowada



COMMITTEE ON COMMON NAMES OF INSECTS

G.E. Boll	F.J.H. Fredeen	D.D. Pond
A.A. Beaulieu	J.E.H. Martin	G.B. Wiggins
D.C. Eidt	L.H. McMullen	H.R. Wong

Persons wishing to propose new names or requiring advice regarding usage should contact one of the above-named committee members.

Les questions pouvant survenir au sujet des noms françiois devront être soumies à la Société de Protection des Plantes du Québec.

PROPOSED INTERNATIONAL SYMPOSIUM ON STATISTICAL ECOLOGY

An International Symposium on Statistical Ecology is scheduled to be held 24-30 August 1969 at Yale University and U.S. Forest Service Research Laboratory, New Haven, Conn., U.S.A., with support from Ford Foundation, Yale University, Pennsylvania State University and the U.S. Forest Service.

The primary objective of the proposed symposium is to provide apportunity for an exchange of ideas and information between ecologists and mathematicians — statisticians — systems analysts, with particular emphasis on approaches and techniques applicable to the solution of man-environment problems or significant components there d. Ample time viauld be available for interested students and researchers to meet and discourse with the professional scientists and specialists as well as to attend the formal sessions. In all sessions, suitable time will be allowed for discussion. Invited and selected presentations, together with preplanned and spontaneous discussions, are expected to appear in the published Proceedings of the Symposium.

With an international organizing committee consisting of E. Batschelet, D.R. Cax, J. Gani, D.W. Goodall, J. Gulland, H. Klamp, V. Labeyrie, B. Matem, C.R. Roo, V. Schultz, J.G. Skellam, L.R. Taylor, E.J. Williams with G.P. Patil, E.C. Pielau and W.E. Waters as co-chairmen, the symposium is expected to cover the subject areas such as: Growth and regulation of populations, interacting populations, systems analysis and ecological prediction, productivity and the energy relations of ecosystems, population diffusion and migration, classification and ordination of communities and discrimination problems, compiling and interpreting ecological maps, distribution and obundance of species and species diversity, spotial patterns, homogeneity in vegetation, model making in ecology, distributions in ecology, sampling biological populations: fundamentals and principles, and aggregation: meaning and measurement.

Further information may be available from any member of the organizing committee, including Professor G.P. Patil, Department of Statistics, 302 McAllister Building, Pennsylvania State University, University Park, Po., 16802, U.S.A.

Officers — Regional Societies

The following afficers were elected to the Executive of the Entomological Society of Soskatchewan for 1969:

President	N. S. Church
Vice-President	R.L. Randell
Past-President	J. F. Doane
Secretary-Treasurer	C. Gillott
Regional Director	J.G. Rempel

The following officers were elected to the Executive of the Entomological Society of Alberta for 1969:

President				_ J.A. Shemonchu	ζ
Vice-President				J.B. Gurb	0
Secretary				W.A. Nelso	n
Treosurer				P.E. Blokele:	y
Editor				C. E. Lilly	,
Directors	_Ruby 1.	Larson,	A.G.	Raske, D.A. Crai	
Regional Director to E.S.C				W.O. Hauf	