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# ENTOMOLOGICAL SOCIETY OF CANADA

# Bulletin



# SOCIÉTÉ ENTOMOLOGIQUE DU CANADA

Vol. 19

June-juin 1987

No. 2



# Entomological Society of Canada Société des Entomologistes du Canada

# Bulletin

Vol. 19 June-juin 1987 No. 2

R. B. Aiken: Bulletin Editor

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# **CALL FOR NOMINATIONS**

# Achievement Awards Committee: Gold Medal for Outstanding Achievement in Canadian Entomology and

The C. Gordon Hewitt Award

Members of the Society are invited to nominate individuals whom they regard as eligible for these awards. Nominations should be sent in an envelope marked "Confidential" to the following address:

Achievement Awards Committee Entomological Society of Canada 1320 Carling Avenue Ottawa, Ontario K1Z 7K9

and should comprise: (1) the name and address of the nominee(s); (2) a statement of relevant achievements; and (3) the name of the nominator and at least one seconder. To be considered by the Achievement Awards Committee nominations must bear a postmark no later than November 30, 1987.

The following conditions govern these awards:

- 1. Outstanding contributions should be judged on the basis of
  - superior research accomplishment either as a single contribution or as a series of associated endeavours and which may be either in entomology or a related field where the results obtained are of great consequence;
  - (b) dedicated and fruitful service in the fields of Society affairs, research administration,
- or education.

  2. No more than one of each award shall be granted per year but, where circumstances warrant, more than one individual may be mentioned in a single award.
- Recipients need not be members of the Society providing their contribution is judged to have a major impact on entomology in Canada.
- The award may be granted on different occasions to the same recipient but for different contributions to entomology in Canada.
- Nominees for the C. Gordon Hewitt Award must be less than 40 years of age throughout the calendar year in which the award is both announced and awarded.

# Comité des décorations

# Médaille d'Or pour Contribution Exceptionnelle à l'Entomologie Canadienne et Prix C. Gordon Hewitt

La Société invite les membres à lui faire parvenir les noms des personnes qu'ils considèrent éligibles à ces deux prix. Veuillez envoyer vos nominations au:

> Comité des décorations, Société Entomologique du Canada, 1320 av. Carling, Ottawa, Ontario K1Z 7K9

dans une enveloppe portant la mention "Confidentiel". La nomination doit contenir: (1) le nom ainsi que l'adresse du (ou des) candidat(s) désigné(s); (2) un compte rendu des réalisa-

tions pertinentes; et (3) le nom du parrain et celui d'au moins une deuxième personne appuyant la mise en nomination. Pour être acceptées par le Comité les nominations devront porter un sceau postal d'au plus tard le 30 novembre 1987.

Les conditions suivantes régissent le choix des récipiendaires de ces prix:

- 1. Les contributions exceptionnelles devraient être jugées dans le contexte
  - (a) d'un accomplissement hors pair en recherche, soit comme résultat d'une seule contribution ou d'une série d'efforts reliés, réalisés dans le secteur entomologique ou tout autre domaine connexe et ayant abouti à des résultats de grande valeur;

OU

- (b) de service dévoué et fructueux au profit de la Société, de l'administration de la recherche, ou de l'éducation.
- 2. Chaque prix ne sera décerné qu'une seule fois annuellement, quoique, les circonstances le justifiant, plus d'une personne pourront collectivement devenir récipiendaires d'un prix.
- Les récipiendaires ne doivent pas nécessairement être membres de la Société en autant que l'on juge que leur contribution a exercé un impact majeur sur l'entomologie au Canada.
- Chaque prix peut être décerné à différentes occasions au même récipiendaire mais pour différentes contributions à l'entomologie au Canada.
- 5. Le candidat désigné pour le prix C. Gordon Hewitt doit être âgé de moins de 40 ans pour toute la durée de l'année au cours de laquelle le prix est annoncé et décerné.

# REPORT OF THE LANGUAGE ADVISORY COMMITTEE

# Use of Languages in the ESC

#### Introduction

Because of the history of development of the Entomological Society of Canada, it has in the past used the English language almost exclusively, and many of its products have appeared in English only. However, the Society exists to encourage entomology nationally, and to facilitate contacts among all of its members.

At the 1986 Annual Meeting of the Society, some anglophone members suggested that steps be taken to allow for a fuller use of the two official languages of Canada in the ESC in a way that was appropriate for a truly national society. This initiative was strongly supported by the Governing Board, and an ad hoc Language Advisory Committee was appointed to prepare appropriate recommendations. The Committee has consulted with other entomologists of both language groups, and its recommendations are outlined below.

The intention of the Committee and of the Governing Board is to establish an atmosphere within the Society that encourages full participation by both language groups in the country, allowing for fuller contacts, for example, that will benefit both groups. A major step in this direction can be made by the following changes. These changes will not lead to any problems in running the Society, nor do they involve major costs, but they establish the national orientation and goodwill of the Society. They also provide a setting for further discussion of any other actions that may be deemed necessary from time to time.

#### Recommendations

#### Names of the Society

The Society will be known as: the Entomological Society of Canada (as at present), and La Société d'Entomologie du Canada [This name is recommended rather than "Société des entomologistes", because it best expresses the function of the ESC as a society for entomology; "Société entomologique" is now generally regarded to be less appropriate]

#### Use of names

Both names should be used on all official items addressed to the general membership:

- 1. On publications
  - a. Bulletin of the Entomological Society of Canada/Bulletin de la Société d'Entomologie du Canada (bilingual name)
  - b. Society journals. The names of the Society should be used in a subtitle (Official publication of the Entomological Society of Canada/Publication officielle de la Société d'Entomologie du Canada) rather than in the title, since the journal "brand names" are long established in the world literature as "The Canadian Entomologist" and "Memoirs of the Entomological Society of Canada".
- 2. On stationery
  - a. Envelopes
  - b. Letterhead

#### Items to be bilingual

#### General items

Various official items should be comprehensible to all members equally, since all are eligible to act on the information disseminated. Moreover, most of these items are more or less fixed, requiring only a one-time and not continuing translation.

The following items should be bilingual:

- a. Membership renewal form [already bilingual; improvements suggested]
- b. Names of Society awards (Gold Medal/Médaille d'Or, C. Gordon Hewitt Award/Prix C. Gordon Hewitt, Scholarships/Bourses, etc.)
- c. Invitations to nominate for awards
- d. Award brochures
- e. Call for nominations for Society officers

- f. Ballots and related materials
- g. Announcements of Annual Meetings
- h. Publicity brochures (e.g. for memoirs)
- i. Bylaws/Statuts [already bilingual, in Bulletin 9(2), 1977, Suppl.; updates required]
- j. Standing rules/Règlement permanent
- 2. Items in publications

The following items should be bilingual:

- a. Title or subtitle (see "Use of names")
- b. Titles and Abstracts of scientific papers [abstracts already translated automatically]
- c. Instructions to authors [already bilingual, in each January issue of Can. Ent.]
- d. List of Society officers (e.g. inside front cover of Can. Ent.)
- e. General information on the Society (e.g. inside back cover of Can. Ent.)

#### Quality of translations

Translations are useful only if they are accurate and carefully prepared. Therefore, the quality of translations should be properly verified, including those abstracts/résumés submitted by authors of scientific papers.

#### Annual Meeting

We recommend greater efforts to make the Annual Meetings of the Society profitable and agreeable for members of both language groups. Specific actions would include:

a. Following the welcoming address of the ESC President, a brief fluent welcome in the other official language should be made (preferably by a Board member) unless the President is fluently bilingual.

b. Meeting programme committees should be encouraged to include programme elements reinforcing a national atmosphere. Elements that could be considered are, for example, a French-language as well as English-language student competition, or a truly bilingual theme symposium (where the languages of the most appropriate contributors to the subject at hand require it). The latter is feasible with extended written abstracts in the other language from the oral presentation, and with bilingual slides if possible. [Such elements should be implemented on a trial basis as soon as possible.]

#### Other items

Cooperation and better communication between each language group can be assured in two other ways, again making the atmosphere of the Entomological Society of Canada more fully national.

1. Official correspondence

For official communications between the presidents of the ESC and of the SEQ, every effort should be made for the ESC's correspondence to be in French.

2. Representation

Every effort should be made to have representatives of each language group in the administration and committee structure of the Entomological Society of Canada. [The Language Advisory Committee has identified potential candidates, who may have been overlooked, for the information of the President.]

## Subsequent actions

#### 1. Committee structure

We do not believe that a Continuing Committee is needed to consider this question. Rather, the changes just recommended should serve gradually to increase both social and professional contacts between members of different language groups. With the goodwill and participation of members of each group, the Society will have a fully national orientation. Additional actions that may seem appropriate in future can be referred to an ad hoc Committee like the present one if required.

2. Implementation of recommendations

Most of the recommendations here, which concern matters of detail, can simply be implemented upon the agreement of the Executive Council or the Governing Board. A short addition to the Standing Rules, however, will provide a useful point of reference, as well as formal recognition of both languages.

We suggest the following addition to the Standing Rules:

- 1. The Society's business shall be conducted, and its publications appear, in either of the official languages of Canada as appropriate to the circumstances.
- The names of the Society are the Entomological Society of Canada and la Société d'Entomologie du Canada, and both shall be used on letterhead, envelopes, publications, and other appropriate items.
- 3. Official announcements aimed at the general membership, such as ballots and the call for award nominations, shall appear in both official languages.
- 4. An updated version of the Society's Bylaws and Standing Rules shall be maintained in both official languages. [A French translation of the Standing Rules, and an updated version of the Bylaws, will be prepared as soon as possible]

This proposal will be carried forward, given the approval of the Governing Board, to the 1987 business meeting. Ratification of such standing rules by the membership at the AGM requires a 2/3 majority.

2 April 1987

H. V. Danks (Chairman) Conrad Cloutier I. M. Smith

# RAPPORT DU COMITÉ CONSULTATIF SUR LA LANGUE

# Usage des langues à la SEC.

#### Introduction

En raison de l'historique de son évolution, la Société d'Entomologie du Canada a toujours utilisé la langue anglaise presqu'exclusivement, et la plupart de ses réalisations ont été publiées en Anglais seulement. Cependant, la raison d'être de la Société est la promotion de l'entomologie à l'échelle nationale et la stimulation des contacts entre tous ses membres.

Lors de la réunion annuelle de la Société en 1986, certains membres anglophones ont suggéré que des démarches soient entreprises afin de permettre une utilisation plus substantielle des deux langues officielles du Canada, en conformité avec le statut d'une société authentiquement nationale. Cette initiative a reçu le plein appui du Conseil d'administration et un comité ad hoc, le Comité Consultatif sur la Langue, fut chargé de préparer des recommandations. Ce Comité a consulté des entomologistes appartenant aux deux groupes linguistiques, et ses recommandations sont détaillées ci-dessous.

L'intention du Comité et du Conseil d'administration est d'établir au sein de la Société une ambiance qui encourage la pleine participation des deux groupes linguistiques du pays et que permettrait, par exemple, des contacts plus étroits, susceptibles de profiter aux deux groupes. Un pas important dans cette direction pourrait être accompli en adoptant les changements ci-dessous. Ces changements ne sont pas de nature à nuire au fonctionnement de la Société, ils n'impliquent pas de coûts majeurs, cependant ils permettront d'affirmer l'orientation nationale et les bonnes intentions de la Société. Ils peuvent aussi servir de base à toute démarche future en vue d'autres actions qui pourraient sembler appropriées à l'occasion.

### Recommandations

#### Noms de la Société

La Société sera connue comme: la Société d'Entomologie du Canada, et The Entomological Society of Canada (comme actuellement). [Ce nom Français est celui qui est recommandé plutôt que "Société des entomologistes", parce qu'il exprime mieux le rôle de la SEC

comme société vouée à l'entomologie; de nos jours, on considère l'expression "Société entomologique" comme moins appropriée].

#### Utilisation des noms

Les deux noms devraient apparaître sur tous les documents officiels qui s'addressent aux membres:

## 1. Sur les publications

a. Le Bulletin de la Société d'Entomologie du Canada/Bulletin of the Entomological

Society of Canada (nom bilingue).

- b. Les revues scientifiques de la Société. Les noms de la Société devraient apparaître en sous-titre (Publication officielle de la Société d'Entomologie du Canada/Official publication of The Entomological Society of Canada) plutôt que dans le titre lui-même, en raison du fait que les "marques de commerce" des revues sont connues dans la littérature mondiale depuis très longtemps comme étant "The Canadian Entomologist" et les "Memoirs of the Entomological Society of Canada".
- 2. Sur la papeterie
  - a. les enveloppes
  - b. le papier à lettre

#### Documents devant être bilingues

#### Documents divers

Divers documents officiels devraient pouvoir être compris également par tous les membres, puisqu'ils sont tous également éligibles de pouvoir reagir à l'information disséminée. De plus, la plupart de ces documents sont plus ou moins immuables, ne nécessitant d'être traduits qu'une seule fois plutôt que continuellement.

Les documents suivants devraient être bilingues:

- a. le formulaire de renouvellement d'adhésion à la Sociéyé [déjà bilingue; on suggère des améliorations
- b. les noms désignant les décorations de la Société (Médaill d'Or/Gold Medal; Prix C. Gordon Hewitt/C. Gordon Hewitt Award; Bourses/Scholarships; etc.)
- c. les invitations de mise en candidature pour les décorations
- d. les dépliants concernant les décorations
- e. les invitations de mise en candidature pour les officiers de la Société
- f. les bulletins de vote et informations pertinentes
- g. l'annonce des Réunions Annuelles
- h. les dépliants publicitaires (ex. pour les mémoires)
- i. les Statuts/Bylaws [déjà bilingues, voir le Bulletin 9(2), 1977, Suppl.; mise à jour necessairel
- i. le Règlement permanent/Standing rules

## 2. Dans les publications

"Les elements suivants devraient être bilingues:"

- a. Le titre ou le sous-titre (voir "Utilisation des noms")
- b. Le titre et le résumé des articles scientifiques (les résumés sont déjà traduits de façon régulière)
- c. Les directives aux auteurs [déjà bilingues; voir dernier numéro de janvier du Can. Ent.]
- d. La liste des directeurs de la société (comme à l'avant-dernière page du Can. Ent.)

#### Qualité de la traduction

Une traduction ne peut remplir son rôle que si elle est exacte et soignée. Par conséquent, la qualité des traductions devrait être vérifiée, y compris celle des résumés/abstracts préparés par les auteurs des articles scientifiques.

#### Réunion annuelle

Nous recommandons des efforts accrus pour faire en sorte que les Réunions Annuelles soient profitables et agréables aux membres des deux groupes linguistiques. Voici les actions spécifiques à cet égard:

a. à la suite du discours de bienvenue du Président de la SEC, un bref mot de bienvenue dans l'autre langue officielle devrait être addressé aux participants (préférablement par un membre du Conseil) à moins que le président ne soit suffisamment bilingue.

b. les comités du programme de la Réunion devraient être incités à y inscrire des éléments qui favorisent une ambiance nationale. Certains de ces éléments pourraient être, par exemple, une compétition étudiante en Français et en Anglais, ou encore un symposium véritablement bilingue (où les langues des participants les plus appropriés le dicteraient). Ce serait réalisable si des résumés substantiels dans l'autre langue que celle de la communication orale et des diapositives autant que possible bilingues, étaient disponibles. [De tels éléments devraient être inclus aussitôt que possible].

#### Articles divers

Il est possible d'améliorer la coopération et l'ampleur des communications entre les deux groupes linguistiques de deux autres façons, qui sont également de nature à favoriser une ambiance plus authentiquement nationale à la Société d'Entomologie du Canada.

1. Correspondance officielle

Dans les communications officielles entre les présidents de la SEC et de la SEQ, une effort particulier devrait être fait pour assurer que la correspondance de la SEC soit en Français.

2. Représentation

Des efforts devraient être faits pour assurer la participation de représentants de chacun des groupes linguistiques dans l'administration et le réseau des comités de la Société d'Entomologie du Canada. [Le Comité sur la Langue a identifié des candidats possibles qui ont pu passer inaperçus, afin d'en informer le Président.]

#### Actions à prendre

#### 1. Comités

Nous ne croyons pas qu'un Comité permanent soit nécessaire pour s'occuper de cette question. Nous croyons plutôt que les changements recommandés ci-dessus devraient permettre d'accroître graduellement les contacts aussi bien sociaux que professionnels entre les membres des deux groupes linguistiques. Avec le bon vouloir et la participation des membres des deux groupes, la Société aura nécessairement un caractère plus authentiquement national. Toute démarche future qui pourrait s'avérer appropriée pourra être référée à un Comité ad hoc comme le nôtre, lorsque nécessaire.

2. Entrée en vigueur des recommandations

La plupart des recommandations qui precèdent concernent des points mineurs et elles pourront devenir effectives avec le simple accord du Conseil Exécutif ou du Conseil d'administration. Cependant, une brève addition au Règlement Permanent constituers un point de repère utile et une reconnaissance formelle des deux langues.

Nous suggérons les additions suivantes au Règlement Permanent:

### XIV. Usage des langues

- Les affairs de la Société seront conduites, et ses publications paraîtront, dans l'une ou l'autre des langues officielles du Canada, selon les circonstances.
- 2. Les noms de la Société sont la Société d'Entomologie du Canada et The Entomological Society of Canada, noms qui seront tous deux utilisés sur la papeterie, les enveloppes, les publications et les autres documents appropriés.
- Les communications officielles qui s'addressent à tous les membres, tels que les bulletins de vote et les appels de candidatures pour les prix, seront faites dans les deux langues officielles.
- 4. Une version à jour des Statuts et du Règlement Permanent sera maintenue dans chacune des langues officielles. [Une traduction Française du Règlement Permanent, et une version à jour des Statuts, seront préparées aussitôt que possible.]

Cette proposition sera soumise au vote, à condition qu'elle reçoive l'approbation du Conseil d'Administration, à l'Assemblée annuelle de 1987. La ratification d'un tel règlement par les membres à l'AGM requiert une majorité de 2/3 des votes.

2 avril 1987

H. V. Danks (Président)

C. Cloutier

I. M. Smith

# **INSECT COMMON NAMES**

The Insect Common Names and Cultures Committee have approved five new common names and one name change and are submitting them to the membership for consideration:

common green lacewing Chrysoperla carnea (Stephens) Neuroptera: Chrysopidae oak gall borer Synanthedon decipiens (Hy. Edw.) Lepidoptera: Sesiidae pale banded leafroller Choristoneura fractivittana (Clem.) Lepidoptera: Tortricidae blueberry flagleaf webworm Cheimophila salicella (Hbn.) Lepidoptera: Oecophoridae ash twig girdler Hylesinus californicus (Swaine) Coleoptera: Scolytidae mullein bug Campylomma verbasci (Meyer) Heteroptera: Miridae

Members should let me know if they disapprove of any of these names within 30 days of receipt of this Bulletin. Unless substantial objections are made, the proposals will be adopted by the Society.

If you would like to propose a new common name please obtain a Proposal Form from me

and fill it out as fully as you can to assist the Committee in their deliberations.

Dr. E. M. Belton, Chairman Insect Common Names and Cultures Committee Department of Biological Sciences, Simon Fraser University, Burnaby, B.C. V5A 1Z6

# **AUTHORS' CRITIQUE**

The Grasshoppers, Crickets and Related Insects of Canada and Adjacent Regions, Ulonata: Dermaptera, Cheleutoptera, Notoptera, Dictuoptera, Grylloptera and Orthoptera. The Insects and Arachnids of Canada. Part 14, 918 pp. incl. 7 plates, 824 text figures, 237 maps. Published December, 1986. Research Branch, Agriculture Canada publ. No. 1777 [of] 1985.

We, the authors, feel that we must explain a few anomalies regarding this publication. During the mid-70's we applied for and received a contract from the Department of Supply and Services, Canada, to produce a "Monograph" of the orthopteroid insects of Canada. In June, 1980, a manuscript entitled "The orthopteroid insects of Canada and adjacent regions" was submitted to the Biosystematics Research Institute, Ottawa, as specified by the contract. This was later than the original intended date, owing, in part, to illnesses and to the move, in 1978, of the entire Lyman Entomological Museum complex to a newly constructed building.

Some time later, we were informed that the manuscript would be altered and published as part of the Agriculture Canada "Handbook" series, "The Insects and Arachnids of Canada". We pointed out that our contract was for a monograph — not a handbook — but the decision was not changed. The conversion of the original work to handbook style was not carried out by the authors. The systematic arrangement of taxa at all levels was altered without the approval of the authors. Notes on distribution were reduced to single phrases, under the "Range", and taxonomic keys were altered to delete adventive species. We were able to make a few changes, but a number of errors remain, although we had advised the publishers that they should be corrected.

We agreed, however, to let the publication proceed, provided that (1) a prefatory statement be included, informing readers that the taxonomic sequence was not as recognized by us, and (2) a check-list be included as an appendix, with the taxa in the phylogenetic sequence that we deemed appropriate. This was agreed at a meeting of the head of the Biosystematics Research Institute, the scientific adviser and the first author. The other alternative seemed to be to relegate the manuscript to a filing cabinet.

Readers will note that the "Handbook", as published, meets neither of the above stipula-

tions, although appropriate text was supplied by the authors.

When we discovered several years ago that the work was not to be published as a monograph but as a "Handbook", it was decided, with the full knowledge of the head, at that time, of the Biosystematics Research Institute, to produce a limited number of copies (about 100) of the original monograph, which the Lyman Entomological Museum would distribute (as No. 13 of its Memoir series) to libraries and major research workers concerned with orthopteroid insects, especially in countries other than Canada. This was done in 1983. The entire two-volume set was typed by Mrs. Muriel Vickery, wife of the first author, without renumeration. The first author was responsible for assembling the work and setting the illustrations and distribution maps in the appropriate places throughout the text. The Museum production contained 6 coloured plates and 6 in black-and-white, as well as a coloured frontispiece. The bibliographic synonymies in this original version were complete, at least so far as the region covered is concerned. In the "Handbook" they have been greatly reduced (not always logically), one of the main reasons for producing the Lyman Memoir.

Although the sequence in which taxa were originally arranged has been altered in the "Handbook", the sequence of illustrations remains as in the original manuscript (and in the Lyman Museum Memoir 13). The maps have been rearranged. The "Handbook" still contains illustrations of some species (adventives and fossils) which have been deleted from the text!

It now would seem to be necessary to publish a complete check-list, not to enable the authors to justify themselves, but to provide a guide enabling those managing insect collections to arrange their specimens appropriately. We intend to publish such a check-list. We shall also update it, because events over the 8 or 9 years since the original manuscript was written make this necessary.

The single advantage of the "Handbook" over the Memoir is that it has the taxonomic keys in both English and French. The French language versions were not provided by the authors.

Despite the shortcomings of the "Handbook", we hope that readers will find it useful. In cases of doubt, or need of additional information, a check may be necessary using the Lyman Memoir, and of course, the forthcoming check-list when it eventually appears.

Vernon R. (Vic) Vickery, Emeritus Curator, Lyman Entomological Museum and Research Laboratory.

D. Keith McE. Kevan, Emeritus Professor, Department of Entomology, Macdonald College, McGill University

# NOTICE OF 1987 ANNUAL GENERAL MEETING

The 1987 Annual General Meeting of the Entomological Society of Canada will take place on 29 September 1987 at 1630 hours at the Delta Lakeside Hotel in Penticton, B.C.

# 1987 ANNUAL MEETING

Entomological Society of Canada Entomological Society of British Columbia Washington State Entomological Society

28-30 September 1987 Delta Lakeside Hotel Penticton, British Columbia

#### Tentative Schedule:

September 26: 0900-1700 September 27: 0900-1700 September 28: 0900-1200 — ESC Governing Board Meeting
— ESC Governing Board Meeting

Opening Ceremonies

- ESC Awards

Gold Medal Address

Heritage Lecture
 Jack Gregson, formerly of Agriculture Canada,
 Veterinary Insects Lab.
 Kamloops, B.C.

Plenary Lecture

 J. Henry, USDA, ARS,
 Rangeland Insect Lab
 Montana State University

 Bozeman, MT

1300-1700 — Feature Symposium:

#### "PHEROMONES — FROM THE LAB BENCH TO THE FIELD"

- J. Borden, Centre for Pest Management, Simon Fraser University, Burnaby, B.C.
- W. Burkholder, Dept. of Entomology, University of Wisconsin, Madison, WI.
- R. Byers, Agriculture Canada, Research Station, Lethbridge, Alta.
- L. McDonough, USDA, ARS, Yakima, WA.
- C. Oehlschlager, Dept. of Chemistry, Simon Fraser University. T. Payne, Dept. of Entomology, Texas A & M University, Col-
- lege Station, Texas.

  C. Sanders, Great Lakes Forestry Research Centre, Sault Ste. Marie. Ont.
- I. Weatherston, Fermone Chemicals Inc., Phoenix, AZ.

1830 — Graduate Students meet the Governing Board

1930 — Wine and Cheese Reception

September 29: 0800-0900 — ESBC Business Meeting 0900-1630 — Submitted Papers

1630-1800 — ESC Business Meeting

— WSES Business Meeting— Banquet

1830 — Banquet — Awards — Fellows, Criddle, Student Paper Competition Winners September 30: 0900-1200 — Submitted Papers
1200-1330 — Governing Board Meeting
1330 — Submitted Papers
— Special Interest Groups
— Field Trips/Tours

Rooms can be made available for anyone interested in organizing a special interest group by contacting:

Fred Banham Agriculture Canada Research Station Summerland, B.C. VOH 1Z0 (604) 494-7711

For inclusion in the printed program, notice must be received before 1 July 1987.

# **ACCOMMODATION**

Registrants are requested to make their own reservations for accommodations. The price will be \$55.00 per night single or double occupancy. Indicate that you will be attending the Entomology Meeting in order to get the special rate. Contact:

The Delta Lakeside 21 Lakeshore Dr. West Penticton, B.C. V2A 7M5 (604) 493-8221.

**Note:** Rooms will be held only until 6:00 p.m. (1800 hrs) on the day of arrival unless guaranteed with a major credit card or deposit. Reservations must be made at least 30 days prior to arrival.

# **PHOTO CONTEST**

A photo contest will be held in conjunction with the 1987 Joint Annual Meeting in Penticton. Submit your prize-winning arthropod related slides to:

Dr. B. Roitberg
Dept. of Biological Sciences
Simon Fraser University
Burnaby, B.C.
V5A 1S6

Entries should be marked to identify the owner and must be received by August 1, 1987.

# ORCHARD ENTOMOLOGY WORKSHOP

# October 1, 1987 Agriculture Canada Research Station Summerland, B.C. V0H 1Z0

This workshop has been planned to follow immediately after the entomology meeting in Penticton, Sept. 28-30. It will be held at the new facility of the Summerland Research Station, 10 km north of Penticton. Summerland is a major center in B.C. for tree-fruit research. More than 20 entomologists from eastern and western Canada and the western USA are expected to participate in the workshop since many will be coming to the Western Regional Coordinating Committee WRCC-43 meeting (Codling Moth Management in the Orchard Ecosystem) scheduled for Oct. 2 and 3 in Summerland.

The workshop theme is "Future Directions in Orchard Entomology Research." Following brief introductions to different aspects of this theme, participants will discuss them informally to develop a concensus on the direction of future research in orchard entomology.

If interested in attending this workshop, contact Arnold Dyck at the Summerland Research Station. Further information will be sent to you.

# ENTOMOLOGICAL SOCIETY OF CANADA FINANCIAL STATEMENTS DECEMBER 31, 1986

# **Auditors' Report**

To the Members, Entomological Society of Canada.

We have examined the balance sheet of the Entomological Society of Canada as at December 31, 1986 and the statement of revenue and expenditure for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the Society as at December 31, 1986 and the results of its operations for the year then ended in accordance with accounting principles as described in the notes to these financial statements, applied on a basis consistent with that of the preceding year.

MCCAY, DUFF & COMPANY
Chartered Accountants

Ottawa, Ontario, March 19, 1987.

# NOTES

#### 1. SIGNIFICANT ACCOUNTING POLICIES

- (a) The Society uses the accrual method of accounting.
- (b) Furniture and equipment purchases are expensed in the year of acquisition.
- (c) Entomological Society of Canada is incorporated without share capital under Part II of the Canada Companies Act and is non taxable.

#### 2. INVESTMENTS

GENERAL FUND	1986	1985
Bonds, at cost (market value 1986 — \$371,640, 1985 — \$334,102)	\$349,901	\$319,901
ENDOWMENT FUND Bonds, at cost (market alue 1986 — \$27,480, 1985 — \$25,760)	\$ 23,840	\$ 23,840

#### 3. ENDOWMENT FUND

The direction of the bequest, by which this fund was founded, states that, without imposing any legal obligation, hope is expressed that the principal will not be invaded and that the income will be utilized to aid in the publication of the Canadian Entomologist.

#### 4. COMPARATIVE FIGURES

Certain comparative figures have been reclassified to conform with current presentation.

# **ENTOMOLOGICAL SOCIETY OF CANADA**

# **Balance Sheet**

AS AT DECEMBER 31, 1986

ASSETS	1986	1985
GENERAL FUND CURRENT		
Cash	\$156,936	\$117,034
Deposit certificates		10,000
Accounts receivable	58,065 5,331	47,280 331
Advances to International Congress Due from Scholarship Fund	2.225	255
Accrued interest	4,741	5,149
Prepaid expenses	3,706	6,133
	231,004	186,182
INVESTMENTS (note 2)	349,901	319,901
ENDOWMENT FUND	580,905	506,083
Cash	9,920	6,651
Accrued Interest	562	571
Investments (note 2)	23,840	23,840
	34,322	31,062
	\$615,227	\$537,145
LIABILITIES		
GENERAL FUND		
CURRENT Accounts payable	\$ 42,888	\$ 31,434
Deferred revenue	74,731	72,639
	117,619	104,073
EQUITY		
GENERAL FUND		
BALANCE — BEGINNING OF YEAR	402,010	348,244
Net revenue for the year	61,276	53,766
BALANCE — END OF YEAR	463,286	402,010
	580,905	506,083
ENDOWMENT FUND (note 3)		27.027
BALANCE — BEGINNING OF YEAR Interest income for the year	31,062 3,260	27,397 3,665
BALANCE — END OF YEAR	34,322	31,062
J. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	\$615,227	\$537,145
Approved on behalf of the Board:		
Approved on behalf of the board.		
Governor		Governor

# **Balance Sheet**

AS AT DECEMBER 31, 1986

INCOME FUND	ASSETS	1986	1985
INCOME FUND Cash Due from General Fund		\$12,773 307	\$12,289 —
		13,080	12,289
CAPITAL FUND			
Cash Investments (note 2)		8,526 33,895	4,464 33,895
		42,421	38,359
		\$55,501	\$50,648
	LIABILITIES		
INCOME FUND Due to General Fund		\$ -	\$ 255
E	EQUITY ACCOUNT		
INCOME FUND			
Balance — beginning of year Interest income		12,034 5,046	9,392 4,642
Scholarship awards		17,080 4,000	14,034 2,000
Balance — end of year		13,080	12,034
CAPITAL FUND			
Balance — beginning of year Donations received		38,359 4,062	33,523 4,836
Balance — end of year		42,421	38,359
		\$55,501	\$50,648

# **Notes to Financial Statements**

**DECEMBER 31, 1986** 

 SIGNIFICANT ACCOUNTING POLICY The Fund uses the cash basis of accounting.

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	1986	1985
Bonds, at cost (market value		
1986 — \$36,248, 1985 — \$35,235)	\$33,895	\$33,895

COMPARATIVE FIGURES
 Certain comparative figures have been restated to reflect a correction of a misallocation between accounts.

# ENTOMOLOGICAL SOCIETY OF CANADA Statement of Revenue and Expenditure

FOR THE YEAR ENDED DECEMBER 31, 1986

	Canadian Entomologist	Memoirs and Other Publications	Society	1986 Total	1985 Total
REVENUE					
Regular memberships	\$ 15,870	\$ 2,693	\$15,870	\$ 34,433	\$ 32,137
Student memberships	1,250	_	1,250	2,500	3,310
Sustaining memberships	100	_	100	200	500
Subscriptions	54,280	27,140	_	81,420	83,618
Reprints	16,268	_	_	16,268	9,028
Page charges	66,684	60,987	_	127,671	138,772
Back issues	4,424		_	4,424	4,491
Sales of Memoirs	_	2,015	_	2,015	6,673
Sales of Arctic Arthropods		151		151	F74
and Bibliography	_	151	10.000	151	571
Gain on currency exchange	20,000	_	10,069	10,069	9,665
Government grant	32,000		40.700	32,000	32,000
Contracts and services	_	_	12,780	12,780	_
Miscellaneous			4,617	4,617	598
EXPENDITURE	190,876	92,986	44,686	328,548	321,363
Publishing and mailing costs	100,772	54,348		155,120	152,597
Reprint costs	9,285		_	9,285	12 Teachers and a second
Bulletin publishing and mailing		_	15,701	15,701	11,801 13,354
Salaries and benefits	51,150	5,562	14,752	71,464	65,450
Editor's expenses	4,986		14,752	8,694	3,908
Office	5,475		5,475	11,498	14,648
Professional fees	1,325		1,325	2,650	3,500
Prizes, awards, brochure, etc.	1,323	_	1,246	1,246	
Honoraria	1,200		1,700	2,900	1,182 2,580
Committees:	1,200	_	1,700	2,900	2,560
Education		S-201			49
Science Policy		_	2.969	2,969	2.834
Common Names	_	_	2,909	2,909	576
Employment	_				125
Fellowship		_			123
Finance	_	_	4.822	4.822	5.406
Support of other organizations			4,822	4,822	5,406
Annual Meeting:			4,022	4,022	3,400
Grant			4.918	4,918	2.500
Honorees	_	_	4,510	4,510	1,292
Governing Board:					1,232
Interim meeting	_	_	2,992	2,992	2,322
Annual meeting	_	_	13,233	13,233	16,717
Other meetings	_	_	-	-	1,582
President's discretionary					1,002
expenses	_	_	_	_	1,445
General		_	2,461	2,461	1,585
	174,193	64,166	71,594	309,953	305,453
REVENUE (EXPENDITURE) FOR					
THE YEAR FROM OPERATIONS		28,820	( 26,908)	18,595	15,910
Interest on investments	_		42,681	42,681	37,856
NET REVENUE (EXPENDITURE FOR THE YEAR	) \$16,683	\$28,820	\$15,773	\$ 61,276	\$ 53.766
OR THE TEAR	φ10,000	φ20,020 = =====	φ13,773 ======	\$ 61,276	\$ 53,766

# **PERSONALIA**

## Retirements

# **Douglas Keith McEwan Kevan**

#### A Personal Vignette on his Emeritization

Since before I was knee-high to one, my Dad was interested in them. I know that because he was chasing them all over East Africa before I was born. In fact, I have known my Dad for a shorter time when many people have known theirs. I was about 1.5 v when I first met him in Nairobi, Kenya. I remember the moment well. My Mum tells me my immediate reaction to the presence of his flaming red hair was to slash myself with a razor. Fortunately, I am still here (the hair is not so red) to write this small piece in honour of my Dad's retirement and emeritization. I thank the Editor of the Bulletin of the Entomological Society of Canada for asking me to do that.

Before I entered my Dad's life, he was already a distinguished scholar. He won medals in Botany, Zoology and for Herbarium studies while an undergraduate at the University of Edinburgh where he received his B. Sc. with First Class Honours in Zoology. As a British Colonial Office Agriculture Cadet, he obtained the equivalent of an M. Sc. (Associate of the Imperial College of Tropical Agriculture) in Trinidad in 1943. His research there was on corn borers and Orthoptera. In 1943, he returned to Britain, became married (and I was on the way), and promptly departed for Kenya where he worked with the Department of Agriculture and the Anti-Locust Directorate for 5 y. The duties in East Africa involved long absences "on safari" in remote parts of southern and eastern Ethiopia, the Somalilands, Kenya, northern Tanzania, and Uganda. From that period of knowing my Dad, I remember little. I do remember riding in his "safari lorry" and not seeing lions (too distant), giraffes (invisible in the trees), and hippopotamuses (just bubbles rising from the bottom of a muddy river down a steep bank). I did see lots of large tadpoles in the puddles of water that accumulated in the garden during the rains. Clearly biology, and the frustrations of field biology, were part of my self-made kindergarten in Kenya. One of Dad's returns from safari was at least long enough for me to have a brother, Martin, born in Nairobi. Thus, a family of four Kevans returned to Britain in 1948. The family reached its maximum human population of five when my brother Simon was born in August of the next year.

In some ways, I feel that I have grown up with the Insecta, and especially the grasshoptera. As a small boy, growing up in Britain, I remember our holidays, outings, and walks usually had time devoted to collecting insects. This was especially true when visits were made to my Grandparents in Edinburgh, as then, not only were grasshoppers eagerly sought after, but also the miniscule beetles1 that my Grandpa collected were game. I do not remember that I actually nabbed a beetle of interest to Grandpa: some of those beetles were almost too small to be detected by the naked eye of an energetic youngster. However, my prizes of large rove beetles, ground beetles, and scarabs were indulgently received, commented upon at length, and released. The contents of Grandpa's beating-net was not so interesting. Grasshoppers and bush-crickets (katydids) were fun to catch. Especially fun was the capture of a very rare species<sup>2</sup> for Britain (from near Corfe Castle in Dorset), which bit my Dad's finger so severely that it drew blood. My respect for grasshoppers jumped several notches. I remember being tantalized by the prospects of finding large pale earwigs (though I never found one - and neither did Dad!), and the thrill of catching the more ordinary bush-crickets for the first time. The colony of stick insects4 which Dad brought home were fascinating. I fed them on privet, they grew, laid vast numbers of eggs without the intervention of sex, but the eggs never hatched.5 Keeping colonies of insects at home was part of childhood. Cinnabar moth caterpillars<sup>6</sup> were collected almost annually, but not so the hairy caterpillars which came from a hawthorn hedge<sup>7</sup> a couple of miles from home: I still remember the urticaria, the rash, the itching, and Mum's patient attentions. My respect for caterpillars grew.

All this was going on while my Dad was completing his Ph. D. while on the staff at the University of Nottingham. That was accomplished in 1956. Not only did he obtain his Ph. D., he also established the Zoology Section of the then new University of Nottingham's School of Agriculture. As Head of that Section, he continued his interests in Grasshoptera, and particularly in their taxonomy, and directed research on various injurious insects such as aphids,

thrips, cutworms. In 1955, he convened and organized the *First International Colloquium on Soil Zoology* from which eventuated the publication of the Proceedings<sup>8</sup> in the same year; now the classic first compendium which formally set the discipline of Soil Zoology into international prominence. From that background, he wrote the first textbook in English, *Soil Animals* (1962)<sup>9</sup> on the subject.

In 1958, Dad became Professor and Chairman of the Department of Entomology at Macdonald College of McGill University. He was one of the youngest full professors at McGill and probably the youngest departmental chairman at the time. While at "Mac", he taught many aspects of Entomology, Parasitology, and the newly developed science of Soil Zoology. He has guided many undergraduates into Entomology and Soil Zoology, and been associated with 21 Ph. D. and 22 M. Sc. students at "Mac", as well as with 8 Post-doctoral Fellows. He initiated the highly successful, student-run and continuing departmental seminar series at "Mac", to which I have had the honour to be invited as a speaker on two occasions.

The beginning of Dad's career in Canada was a period of intense hard work and dedication. It seemed that the family saw little of him. We did enjoy a splendid holiday touring the Maritimes and camping along the way. My Dad was, of course, influential in my decision to study in Entomology, but at no time did he push or cajole me in that direction. My parents did not think that I would become a scientist, let alone an Entomologist: other professions from clergyman to confidence trickster were mooted. Nevertheless, after High School, I did want to study Biology. My Dad did not feel that it would be appropriate if I were to be an undergraduate in his own Department, but in my final year at McGill, I worked at "Mac" on my Honours thesis and used facilities in the Department of Entomology and Institute of Parasitology. Upon completion of my B. Sc., it was suggested that I consider "Mac" to continue in Entomology, but the West and the Arctic beckoned.

The Lyman Entomological Museum and Research Laboratory has been one of my Father's greatest joys and heartaches. He was chairman of the Lyman Entomological Committee from 1962 on. The Lyman Entomological Collection was then part of the Redpath Museum and housed on the main campus of McGill University. Dad worked to bring the collection to the appropriate location at "Mac". That was finally accomplished in 1961. In 1971, he became the first Director of the Museum, a position which he held until the day of his retirement. The Museum has gained stature and recognition both nationally and internationally and is now ranked as the second most important insect collection in Canada (after the National Collection in Ottawa). Special housing for the Museum was designed in close collaboration with the curator, Prof. "Vic" V. R. Vickery, and incorporated into the new Macdonald-Stewart building at "Mac", into which the collection was moved in 1978. Recently, demands on space have threatened to undo the years of planning and negotiation which eventuated in the Museum facilities as they now exist. Needless to say, Dad is in the forefront of the defence.

Dad's academic standards and administrative ability not only helped build Entomology at Macdonald College and McGill University, they have helped lessen the enormity of the erosion of "Mac" at the hands of political expedience and financial difficulties at McGill. He was nick-named the "Red Fox" by his colleagues for his administrative abilities. For his academic stature, he was appointed among the first Pro-Deans of the Faculty of Graduate Studies and Research at McGill.

Outside the University, Dad has received various honours and accolades. He is a Fellow of the Royal Society, Edinburgh, of the Royal Entomological Society of London, of the Entomological Society of Canada, and of the Institute of Biology (U.K.), an Honorary Fellow of the Entomological Society of Finland, and an Honorary Member of the Panamerican Acridological Society (now the international "Orthopterists' Society"). He has been a Director (1963-65) and President (1972-73) of the Entomological Society of Canada, and, in 1981, was honoured by the highest award of our Society, the Gold Medal.<sup>10</sup>

Those honours are for his dedication to Entomology. His research productivity is voluminous (nearly 500 publications, several of book length) and far ranging. I have published twice with my Father, once on springtails as flower visitors and on how grasshoppers hop away from threats. 11 Apart from works on insect taxonomy, morphology, ethology, and soil biology, he has sought to integrate the Humanities with his science by research and publication on the history, literature, and art related to insects, especially to Orthopteroids. 12 This latter work in Cultural Entomology is widely respected for its scholarly thoroughness and has been supported by grants from the Canada Council (held simultaneously with NSERC grants). It is worth noting that Dad has also written, directed, and acted in amateur theatrical productions, is a bit of a poet himself, 13 and has an aptitude with languages.

As can be appreciated from all the above, my Father has been intimately involved in the promotion of Entomology throughout his career. Of particular importance to the Canadian scene was his initiating, with Eugene Munroe and Anthony Downes, the Biological Survey of Canada (Terrestrial Arthropods) on behalf of our Society. He continues to be involved in that project, contributing extensively and serving on its Scientific Advisory Committee.

So, with all that and 15 or more insect taxa named in his honour, I agree with my Dad's colleagues at "Mac" and elsewhere throughout the world, I am sure, and with the Chairman of the Board of Governors of McGill University that my Dad, D. Keith McE. Kevan, was fully

deserving of being awarded the title of Emeritus Professor on 6 June, 1986.

Peter G. Kevan (number one son and proud of it) 352 River Rd. Hespeler, Cambridge, Ont. N3C 2B7

- Pselaphidae, Nitidulidae, Lathridiidae, Catopidae, Apionidae and Aleocharinae (Staphylinidae).
- Decticus verrucivorus (L.), the wart-biter. I do not remember that Dad was actually afflicted by warts at that time.
- 3. Labidura riparia (Pallas) on the south coast of England at Christchurch.

4. Carausius morosus Br. v. W.

5. Dad assures me "Yes, they did!".

- 6. Hypocrita jacobaeae (Arctiidae) from the ragwort, Senecio jacobaea.
- 7. Probably the gold-tail moth, Euproctis chrysorrhoea (L.) (Lymantriidae).

8. Kevan, D. K. McE. (Ed.), 1955. Soil Zoology.

- 9. Kevan, D. K. McE., 1962 Soil Animals. H. F. & G. Witherby, Ltd., London. 244 pp.
- 10. See Bulletin of the Entomological Society of Canada 13(3): 70-71 (September, 1981).
- 11. Quaestiones Entomologicae 6: 311-326 (1970) and Canadian Entomologist 115: 115-122 with J.G.H. Cant (1983).
- 12. Land of the Grasshoppers. Lyman Entomological Museum and Research Laboratory Memoirs No. 2, 326 pp. (1974) and Land of the Locusts, Parts I, II, and III. ibidem No. 6, 530 pp. (1978); No. 10, 554 pp. (1983); No. 16, 466 pp. (1985).
- 13. I am not sure which "bit" he is, but certainly one of the more witty bits.

# Robert J. McClanahan Retires

Robert McClanahan retired in September 1986 from the Agriculture Canada Research Station at Harrow, Ontario, completing a 34-year career of research in entomology.

Dr. McClanahan, a native of Northern Ontario, graduated from McMaster University in biology in 1950 and specialized in insect morphology at the University of Western Ontario, obtaining his M.Sc. degree in 1953. He then joined the staff of the Entomology Laboratory, Agriculture Canada, at Chatham, Ontario, to study biology and chemical control of tobacco insects. His later work at Chatham emphasized insects on vegetable crops. Bob took educational leave from Chatham to become a graduate student in entomology at Michigan State University; he was granted his Ph.D. in 1962. His thesis concerned the role of insects in dissemination of cucumber mosaic virus.

Dr. McClanahan transferred to the research station at Harrow in 1965 to study biological and chemical control on insects of field-grown and greenhouse-grown vegetables. At Harrow, Bob made several valuable contributions to the science of entomology and to the local agricultural industry. His leadership in the research, development, and commercialization of the use of the parasite *Encarsia formosa* for control of the greenhouse whitefly, particularly on greenhouse-grown cucumbers and tomatoes, is his best-known contribution. He developed an integrated management program for these greenhouse crops based on the use of a chemical pesticide which was active against the whitefly but not against the parasite. Later, control of the pest in greenhouses was accomplished with parasites alone. Bob also studied the control of leafminers on chrysanthemums and vegetables by hymenopterous parasites and developed the use of the predaceous mite *Phytoseiulus persimilis* to control the mite *Tetranychus urticae* on greenhouse vegetables. He made a tremendous contribution to entomology and to the agricultural industry, particularly in Ontario, by his studies on effectiveness of chemical insecticides against insect pests of vegetables and detection of resist-

ance of pests to insecticides. His data formed a basis for the improvement of recommendations for protection of several vegetable crops over the years, including peppers, sweet corn, potatoes and cruciferous crops. His finding that hybrids of sweet corn may be quite resistant to infestation by the corn borer suggested the potential of this aspect of pest management.

Dr. McClanahan developed a vast knowledge of control of insects and the use of pesticides. Not only did he apply his knowledge in his research but he also provided valuable assistance to his colleagues by helpful advice. We transferred his knowledge of pest control by active participation in several Crop Protection Committees. He was Chairman of the Protected Crops Sub-Committee of the Ontario Horticultural Research Committee and was Editor of the Protected Crops section of the Report of the Expert Committee on Use of Pesticides in Canada. In addition, he served the agrifood industry well by participating in local meetings and by answering requests of growers for help. He responded to these enquiries with a great deal of ability and expertise and with a generous amount of understanding and friendliness.

Bob was leader of the Greenhouse Vegetable Research Team at the Harrow Research Station, providing leadership in the important area of research. In addition, he provided leadership in his discipline as a member of the executive of the Entomological Society of Ontario (1970-75) and President of the Society in 1976.

Dr. McClanahan published 35 research papers describing his work, contributed to national and international symposia and workshops, and authored a significant number of miscellaneous papers, reports and articles.

Bob plans a busy retirement at his home on Lake Erie near Kingsville. He enjoys volunteer work for his Church, birdwatching, various activities at home, and being a good husband, father and grandfather. We wish Bob and his wife Erla many years of health to enjoy the good things in life.

R. P. Jaques Agriculture Canada Research Station Harrow, Ontario

# P. S. Corbet Retires

Philip Corbet, having completed a three-year term as Head of the Department of Biological Sciences at the University of Dundee, Scotland, took early retirement on 31 December 1986. As Professor of Zoology, he has been re-engaged part-time by the University from 1 January 1987 to continue research and some teaching. He is closely involved with the recently formed and conservation-oriented British Dragonfly Society which has a membership of about 400 and continues to expand.

# **Gressitt Center Dedicated**

Bishop Museum's Department of Entomology was formally dedicated as the J. LINSLEY GRESSITT CENTER FOR RESEARCH IN ENTOMOLOGY on 26 July 1986. The event was well attended by the local entomological community, as well as by two of the Gressitt daughters, Mrs. Rebecca Lau and Mrs. Ellyn Brown, and by Dr. Felicia Bock and Ms Audie Bock, sister and niece of the late J. L. Gressitt. Dr. Allen Allison, Bishop Museum Zoologist, officiated the ceremony, Drs. Alexander Spoehr and Edward Creutz, former directors of Bishop Museum, gave addresses, and Dr. Felicia Bock gave closing comments. Highlighting the dedication, a bronze plaque was unveiled citing the late Dr. Gressitt as a "Leader in taxonomy, biogeography, and biological exploration; noted founder of research centers and scientific publications; and preeminent builder of Bishop Museum's entomological collections." The plaque says of Gressitt that "He never faltered in climbing great mountains, of the earth and of the mind."

Under the direction of the recently appointed Chairman of Entomology, Dr. Scott Miller, the Museum has recommitted to the Department's mission of being a center for the study of the systematics, biogeography, and ecology of insects and related arthropods of the Pacific Basin and their source areas.

## **Obituaries**

# Lawrie Booth, Smith, 1930-1987

Dr. Lawrie B. Smith, 56, entomologist, teacher, and counsellor, died of hepatic dysfunction in Misericordia Hospital in Winnipeg, Manitoba, on 29 January 1987. For 31 years he had been engaged in research, specializing in the biology and ecology of stored product insects at the Canada Agriculture Research Station in Winnipeg. He held appointments as an Honourary Professor at the University of Manitoba and an Adjunct Professor at Simon Fraser University.

Lawrie, the eldest son of Hiram and Mary Smith, Oakville, Ontario, was born on 6 June 1930 and spent his boyhood years on the farm. He learned his three R's in a one-room school at Pine Grove, completing his secondary education at the Oakville High School. His curiosity and love of nature channelled his further education into a study of biology, which course he pursued with dedication and distinction at McMaster University in Hamilton, Ontario. He graduated with a B.Sc. (Honours) in Biology in 1952.



His first exposure to the science of entomology came in his third year at McMaster when he took a course in systematic entomology. From then on he was 'hooked' on insects. The summer's work at Harrow, working on the biology and control of peach insects, triggered his desire to learn more. In his fourth year he took a course in economic entomology from Doug Davies and upon graduation felt he was prepared to go forth as a practising entomologist.

Nothing came of the many applications for employment that he sent to potential employers. A visit to Guelph and a chat with Prof. A. D. Baker of the Entomology Department at the Ontario Agricultural College, convinced him that his future in entomology demanded further post graduate training. Consequently, he enrolled in a master's program, completing his thesis research on the chemical control of wireworms, supervised by Tony Musgrave.

After receiving his M.Sc. degree in 1955, he once more sought gainful employment in entomology. Of his three applications: one to Harrow to work with peach insects; the second to Chatham where they needed someone to work on potato insect control; and the third to H. E. Gray of the Stored Products Insect Unit, of the federal Division of Entomology, the last netted him a position in entomology. Lawrie was one to tread softly and not rush into an unknown in haste and blindness. He learned the trade of the grain handling industry by getting involved in a lengthy insect pest survey of all bay-port elevators, collecting all the insects he could find, even the caddisflies that flew in through an open window. Despite the grumblings from systematists in Ottawa who identified all the "stored product insects" he collected, Lawrie got an early appreciation of the complex of species with which he would be associated for the next 31 years.

It was at this time that active consolidation of all research work within the Canada Department of Agriculture was being contemplated by K. W. Neatby of Science Service and by R. Glen of the Division of Entomology. This goal had been envisioned by these men for several years and was now becoming a reality. A Research Station was being built in Winnipeg which would house all entomologists engaged in stored product insect research. Lawrie decided that if he was to remain in entomological research he would have to acquire a doctorate. Also, the Stored Product Insect Laboratory in Ottawa was being closed and personnel were to be transferred to Winnipeg. Lawrie made the decision to take educational leave, obtain an advanced degree, and then join the group in Winnipeg. He was accepted for doctoral studies at the University of Nottingham; his mentor, D. Keith McE. Kevan. Much of the research work was conducted in the laboratory at Slough where his inquiring mind was able to garner the best of knowledge from some of the world renowned stored product entomologists. Because the rusty grain beetle was the principal grain pest in western Canada at that time, Lawrie selected the study of its population dynamics as his doctoral thesis research.

Lawrie returned to Canada after receiving his Ph.D. in 1960, proceeded directly to Winnipeg and the Research Station which would be his "home" until he retired. His initial work on the population dynamics of the rusty grain beetle led to further inquiries into their cryobiological capabilities, and piqued his interest in the conditions in granaries that would be conducive to the production of large populations of beetles. His findings of the ability of the beetles to supercool, and to become acclimated to cold; their moisture and minimum heat requirements, contributed to an understanding of the ecological parameters so expertly exploited by the beetles to ensure their survival in the prairie cold.

But Lawrie's interests in biology ran deeper than just to insects; he was an ardent lover of birds, although he rejected the designation of being an ornithologist. When complaints of damage, caused by blackbirds to cereals and sunflowers in Manitoba, reached B. N. Smallman, the then Co-ordinator of Entomology in the Research Branch, someone had to be found to investigate the matter. Lawrie was sufficiently interested to accept the task, as was R. D. Bird who had a wealth of practical ornithological experience. Together they embarked on a five-year program of studying the feeding, flocking, and nesting habits of blackbirds in southern Manitoba, and offered methods of control. It wasn't entomology, but Lawrie once more demonstrated his innate versatility as a scientist to adapt biological principles to all life forms and arrive at just and cognate conclusions.

Lawrie's holistic approach to a problem encompassed studies of many stored product insects; their inter-relationships and spatial distribution in stored grain bulk bins. His research, coupled with that of his co-workers, has led to a greater understanding of conditions that trigger insect population explosions, be they in boxcars, in farm granaries, or large terminal elevators. This in turn has led to recommendations for effective non-chemical control measures to protect grain bulks.

Lawrie Smith was a member of several scientific organizations; principally the Entomological Society of Canada (Regional Director, 1965-1967), Entomological Society of Manitoba (President, 1962; Editor, 1965-1967), Entomological Society of America, British Ecological Society, and the Ecological Society of America. His congenial personality made him a pleasant conference attendee where his ready insight into mutual entomological problems, and his observant analyses of tactical solutions, endeared him to his listeners.

But Lawrie possessed a deeper, almost unknown, aspect of life. He was concerned about his fellow man and the societal changes of the times. His relationship within the Anglican Church, and especially that of St. Aidans in Winnipeg, was not just one of mere affiliation but one of sincere and committed, deep involvement. His avowed belief in the love of God and the inherent goodness of man enabled him to participate in the Christian counselling of adults for the past several years, including that of the mentally disabled. He selected early retirement from his entomological career — he had earned 31 years of service and retired on 28 November 1986 — and had initiated studies leading to a Masters degree in Social Work (Counselling) at the University of Manitoba. All this fell short when his health deteriorated early in the New Year, probably as a result of infectious hepatitis that had struck in 1969. With his family at his bedside he drifted peacefully into the beyond leaving a sorrowing family and grieved friends, but not without the realization and rejoicing of a life filled with compassion, goodness, truth, and accomplishment.

In his passing he has left a devoted wife, Marion; two sons, Kevin and Christopher and a daughter Jennifer; many caring relatives, and a multitude of friends. To entomologists it has meant the removal of a valuable co-worker, seeker of truth, and a small part of the scientific spirit of excellence. We, of the Entomological Society of Canada, extend our heart-felt sympathy to the family, bolstering their sorrow with many happy memories.

Paul W. Riegert

# Robert John Heron, 1919-1987

Jack Herron died on February 25, 1987, at his home in Brentwood Bay, British Columbia. He was born on November 22, 1919 in Winnipeg, Manitoba, where he attended public and high schools. He obtained the B.Sc. (Hons) degree in 1945 at the University of Minnesota, where he specialized in Entomology, and the Ph.D. degree in 1962 at the University of Manitoba. He taught school for a year before deciding to go into the biological sciences ultimately focusing on Entomology in which he spent his career. He was employed as Forest Entomologist and Research Scientist with the Canadian Forestry Service in Winnipeg from

1945 to 1970, and later, 1970 to 1971, as Research Scientist with the Canadian Forestry Service, Sault Ste. Marie, Ontario.

Jack made valuable contributions and published several scientific papers on the ecology and physiology of the larch sawfly and spruce budworm. He was especially interested in physiological adaptations of the larch sawfly and feeding behavior of the spruce budworm. Out of his doctoral thesis came some significant basic papers on the feeding behavior of the spruce budworm which were published in reputable scientific journals. Jack was meticulous, exacting, thorough, and totally dedicated to his work. Even after retirement he maintained an active interest in butterflies, birds, and marine biology. One of his most enjoyable projects was done from 1974 to 1976, after his retirement from the Forestry Service, as a Research Associate with the Department of Entomology, University of Manitoba, when he spent three summers conducting field studies for Parks Canada on the butter-flies and skippers of Riding Mountain National Park, in Manitoba.

For many years Jack had a summer home on the Lake of the Woods, near Longbow Lake, Ontario and he made welcome many visitors, including both of the undersigned. He was an ardent naturalist, particularly in Zoology, and for many years participated in the meetings of the Natural History Society of Manitoba. For about five years after retirement he spent winter months at Bradenton, Florida, where he was active in the local branch of the Audubon Society and the Camera Club. He was a member of the Entomological Society of Canada, and had served as President and as Editor Librarian of the Entomological Society of Manitoba.

He enjoyed reading, listening to good music, and canoeing. Although quiet and unassuming, Jack was socially active and enjoyed the company of family and friends. He had a

healthy sense of humor and was fond of telling and listening to anecdotes.

The word Mensch literally means a man or human but in Yiddish it has a much broader connotation in that it describes a person of superior qualities — reliable, responsible, dependable, compassionate, understanding, and kind. Jack was a Mensch. He will be greatly missed by his family and friends. He is survived by his sister Florence Donald, four nephews and their wives and children, and many friends who will keep his memory very much alive.

S. R. Loschiavo A. G. Robinson

# Arthur Charles Sheppard, 1902-1987

The staff of the Lyman Entomological Museum and all who knew Arthur Charles Sheppard feel a deep sense of loss with his death on March 10, 1987.

Mr. Sheppard was born at Henley-on-Thames, Oxford, England, on August 4, 1902. At the age of 5, he came with his parents to live in Montréal. His formal education in schools was rather limited as he left school at the age of 13 to obtain gainful employment. He did, however, continue his education at night schools in order to prepare himself for the business world. He was employed by the Canadian Import Company in Montréal, from February 1920, until he retired in April 1968, from the position of Chief Accountant.

Charles Sheppard's father provided the "spark" that initiated his life-long interest and avocation in the world of nature. Together they observed and studied birds on their weekly Sunday morning walks. In those days, Montréal was much different than it is now and observations of birds and insects could be made by strolling along Decarie Boulevard. At the age of 9, he became fascinated with insects and their ways and started his first insect collection.

By 1917, he began more intensive study of insects and exhibited a small collection of butterflies at a Y.M.C.A. hobby show, and similar exhibits at Boy Scout hobby shows. It was at one of these shows that he met Mr. Albert F. Winn, who was then Curator of the Lyman Collection of insects at the Redpath Museum, McGill University. Mr. Winn urged him to join the Montréal Branch of the Entomological Society of Ontario, which he did in June 1918. The meetings of the branch provided the opportunity for the young man to meet many entomologists, both amateur and professional. His association with these people, all with common interests, was all that was needed to develop and intensify his enduring interest in the Lepidoptera, particularly of the eastern Canadian species.

Mr. Sheppard was Secretary-Treasurer of the Montréal Branch of the Entomological Society of Ontario during the years 1937 and 1946-1949, and was Treasurer in 1950. Following the revival of the Entomological Society of Québec, he was Treasurer in 1951 and then

Treasurer of the Montréal Branch from 1952 to 1954. At the time of his death he had been a member of the society continuously for 68 years, 9 months. The Québec society honoured him several years ago by conferring upon him the status of Honorary Member.

He was a charter member of the Lepidopterists' Society, formed in 1947, and was a member of the Québec Society for the Protection of Birds since 1935. From 1938 to 1947, he was a member of the Southern California Academy of Sciences.

His association with the Lyman collection of insects began in 1918 and continued over the years as many of the Entomological Society meetings were held at the Redpath Museum in the "Lyman Room". He was closely associated with Mr. George A. Moore, who was Curator of the Lyman collections after the death of Mr. Winn in 1935.

The Lyman collection of insects was moved to Macdonald College in 1961, to become the Lyman Entomological Museum, when I was appointed Curator.

Mr. Sheppard's association with the collection continued, and following his retirement from the Canadian Import Company, he was appointed as Honorary Curator (Lepidoptera), a position he held until his death. He was also a member of long standing on the Lyman Entomological Committee of McGill University, the committee which has served for many years as overseer of the Museum operations.

His work on the Lepidoptera was invaluable. The Museum (classed since 1972 as the Lyman Entomological Museum and Research Laboratory) has benefitted, not only by his great skill and patience in pinning specimens of the tiniest of the Microlepidoptera and rearing of specimens, but also by his arranging and curation of the collection. He donated many thousands of specimens to the Museum, and when the Museum purchased his personal collection of Lepidoptera (approximately 30,000 specimens) we determined that he had already donated over the years at least that many specimens. The result is that the Lyman Lepidoptera is the finest and most complete collection of Québec Lepidoptera in existence.

Mr. Sheppard discovered several new species of insects. He described one species and a number of other species were named in his honour.

#### LEPIDOPTERA

Incisalia lanoraieensis Sheppard, 1934, Can. Ent. 66: 141-142.

Phlyctaenia sheppardi McDunnough [now Udea sheppardi (McD.)] 1929, Can. Ent. 61: 267. Eupithecia sheppardata McDunnough, 1938, Can. Ent. 70: 171.

Hyaloscotes sheppardi Freeman [= Hyaloscotes pithopoera (Dyar)] 1944, Can. Ent. 76: 186. This species was placed in synonymy by Davis (1964), U.S.N.M. Bull, 244: 85.

#### HYMENOPTERA: ICHNEUMONIDAE

Allocota sheppardi Walley, 1941, Can. Ent. 73: 165-166.

As well as these, two additional species of Lepidoptera have been described, which include in the type series specimens collected by Mr. Sheppard. These are *Crambus abnaki* Klots. 1942, and *Phlyctaenia quebecensis* Munroe, 1954.

Mr. Sheppard has published, in addition to the paper listed above, first records of European species of Lepidoptera in Canada: *Acentropus niveus* Olivier from Montréal (1945), Can. Ent. 77: 55, and *Caradrina morpheus* Hufnagel, from Montréal and also from British Columbia (1959), J. Lepid. Soc. 13: 77. The record of *C. morpheus* was the first in North America. He also published a note on Mr. George A. Moore, (1959) Can. Dep. Agric. Res. Br., Entomology Newsletter 37 (10): 2-3.

In 1970, he published a paper on five species of Palaearctic Lepidoptera new to Québec: Astyages cylindrella Stt., Coleophora frischella L., Nepticula turbidella H. S., Ethmia bipunctella F. and Lampronia rubiella Bjerk; Ann. Soc. ent. Québec 15 (1): 14-16. In 1974 he published a correction to the identity of one of the above species, Astyages cylindrella = Scythris chenopodiella Hubn.; and in the same paper, reported another Palaearctic species, Aglossa pinguinalis L., new to North America; Ann. Soc. ent. Québec 19: 119-120. In the following year 1975, he added another species from Europe, Lygris associata Bork, also new to North America; Ann. Soc. ent. Québec 20 (1): 7. During the same year, 1975, he and I co-authored a paper on the types of North American Lepidoptera in the Lyman Museum; Can. Ent. 107: 1129-1132. He was interested in the introduced skipper, Thymelicus lineola (Ochs.) and in 1977, he recorded the pale form (pallida Tutt) in Québec as comprising more than 30 per cent of the population of the species at Lakefield, Québec in July, 1976; Ann. Soc. ent. Québec 22: 215-217.

On a personal basis, all of us who worked closely with him in the Museum, particularly Dr. D. Neil Duffy, who was (and still is) an Honorary Curator, Lepidoptera, and myself, knew him

as a shy, unassuming individual, always ready to share his seemingly endless store of knowledge, yet too modest to accept the credit that he so richly deserved.

He was a true and loyal friend and in every way a real gentleman. He will be sorely missed

by all of us.

He is survived by his wife Dorothy, daughter Helen (Mrs. C. W. Walker), grandaughters Brenda, Laurie and Nancy, his sister Dorothy and a number of step-children and their families. We sympathize with them and share their loss.

V. R. Vickery Emeritus Curator Lyman Entomological Museum and Research Laboratory

# **Recent Deaths**

KITELEY, Eric F. Roxboro, Que. Age 83. On 18 June 1986. Retired cereal chemist with Robin Hood Mills and amateur coleopterist. Member ESC.

MAYBEE, George. Belleville, Ont. On 23 July 1986. Formerly with Biological Control Laboratory, Belleville.

# Canadian Agricultural Insect Pest Review (CAIPR)

Each year we solicit contributions for the CAIPR. This Review is the only comprehensive record of agricultural insect pest populations and damage in Canada. Quantitative data, especially on crop loss, are ideal but even casual observations are welcome.

Contributions are voluntary and can be credited to the authors as non-refereed, miscellaneous publications. This year we would like to get as early a start on this as possible in order to try and make this publication available before the following growing season (May 1988).

If convenient, please submit the information on separate sheets under the following commodities: (1) cereal crops (2) corn (3) lawns, forage grasses, and legumes (4) oilseed crops (5) tobacco (6) greenhouse crops (7) vegetable crops (8) pome fruits (9) stone fruits (10) small fruits (11) stored products (12) miscellaneous crops (13) ornamentals (14) man and animals (15) households (16) beneficial insects.

Your early response, before the end of November, would be appreciated.

Michael J. Sarazin Biocontrol Unit Biosystematics Research Centre Room 3123, K. W. Neatby Building Central Experimental Farm Ottawa, Ontario K1A 0C6 Tel.: (613) 996-1665

# SCHOLARSHIP

# **Ontario Mosquito Control Association**

From the capital generated from a successful joint meeting of the Ontario Mosquito Control Association and the American Mosquito Control Association, the OMCA will make available a \$500.00 annual scholarship. The scholarship is open to any student registered at a Canadian university conducting research on arthropods of medical importance. Applicants are asked to submit:

1) An academic record.

 A two-to-three page summary of research objectives and methods. methods.

3) Two letters of recommendation.

For further information or submission of applications write to:

Mr. G. Rodgers, Secretary
Ontario Mosquito Control Association
687 Woodcrest Avenue
London, Ontario, N6K 1P8

Deadline: August 1 of each year.

Notification of Award: by September 15 of each year.

Award Criteria:

- 1) Primarily based on competence and objectives of student's research program.
- 2) Academic performance.
- 3) Letters of recommendation.

# **MEETINGS**

Society for the Study of Evolution, Annual Meeting on 21-24 June 1987 at Bozeman, Montana.

CONTACT: Dr. R. G. Harrison, Department of Biology, Yale University, New Haven, Connecticut, U.S.A. 06511-7444.

The Biosystematics of Haematophagous Insects, an international symposium on 29 June to 2 July 1987 at the Liverpool School of Tropical Medicine. Registration fee£25, Students £10. CONTACT: Dr. M. W. Service, Liverpool School of Tropical Medicine, Pembrooke Place, Liverpool L5 5QA. England.

Acadian Entomological Society, Annual Meeting on 18-19 August at Rodd's Royalty Inn, West Royalty, Prince Edward Island.

CONTACT: M. W. Houseweart, College of Forest Resources, 210 Nutting Hall, University of Maine Orono, Maine 04469. (207) 581-2878.

XVIth International Congress of Genetics on 20-27 August in Toronto, Ontario.

CONTACT: Mr. Laurier Forget, Office of Conference Services, National Research Council, Ottawa, Ontario, Canada, K1A 0R6.

XVI Pacific Science Congress at Seoul, Korea on 20-30 August, 1987.

CONTACT: Prof. Choon Ho Park, Secretary-General, Organizing Committee, XVI Pacific Science Congress, Seoul, 1987. K.P.O. Box 1008, Seoul 110, Korea.

Joint Annual Meeting of the Entomological Society of Canada, Entomological Society of British Columbia and Washington State Entomological Society on 28-30 September 1987 at the Delta Lakeside Hotel, Penticton, B.C.

CONTACT: Dr. N. Angerilli, Agriculture Canada, Research Station, Summerland, B.C. V0H 1Z0.

XVIII International Congress of Entomology, at the University of British Columbia, Vancouver, B.C., on 3-9 July 1988.

CONTACT: Dr. G.G.E. Scudder, Secretary General, XVIII International Congress of Entomology, Department of Zoology, University of British Columbia, Vancouver, B.C. V6T 2A9. Telephone (604) 228-3168.

Soil Residue Analysis Workshop, (International Association of Environmental Analytical Chemistry) on 8-10 August 1988.

CONTACT: Dr. D.C.G. Muir, Fisheries and Oceans Canada, 501 University Cres., Winnipeg, Manitoba, Canada R3T 2N6.

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