

# Bulletin

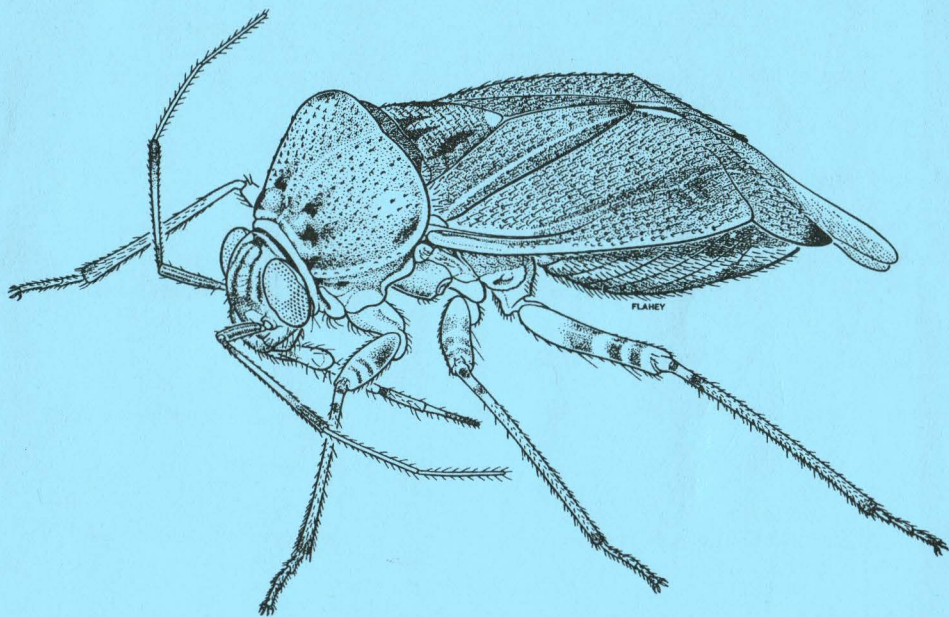
Entomological Society  
of Canada

Société d'Entomologie  
du Canada

Volume 33

No. 1

Mar/mar 2001



*Entomological Society of Canada*  
*Société d'Entomologie du Canada*

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des matières sur la couverture-arrière

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Web Page for the ESC: <http://www.biology.ualberta.ca/esc.hp/homepage.htm>

E-mail: [entsoc.can@sympatico.ca](mailto:entsoc.can@sympatico.ca)

The **Bulletin of the Entomological Society of Canada**, published since 1969, presents quarterly entomological news, opportunities and information, details of Society business, matters of wider scientific importance and book reviews.

Le **Bulletin de la Société d'Entomologie du Canada**, publié depuis 1969, présente trimestriellement des informations entomologiques, des occasions, des renseignements sur les opérations de la Société, des dossiers scientifiques d'importance, et des analyses d'ouvrages.

*Illustrated on the front cover is a female *Lygus lineolaris* (Palisot de Beauvois) (Hemiptera: Miridae). The tarnished plant bug is indigenous to North America and found in nearly all agricultural areas, feeding on buds, flowers, and seeds of over 300 recorded hosts with 130 regarded as economically important plants. In Canada, it causes important reductions of seed yield in oilseed rape, *Brassica napus* L. and *Brassica rapa* L. (Brassicaceae), and alfalfa, *Medicago sativa* L. (Fabaceae). Habitus drawing by Barry Flahey, Manotick, Ontario, courtesy of Agriculture and Agri-Food Canada.*

*Illustré sur la couverture se trouve une femelle *Lygus lineolaris* (Palisot de Beauvois) (Hemiptera: Miridae). La plante ternie par la punaise est indigène à l'Amérique du nord et se retrouve dans la plupart des endroits agricoles, se nourrissant sur les bourgeons, fleurs, et graines au-delà de 300 hôtes enregistrés dont 130 considérés comme plantes importantes économiquement. Au Canada, ceci cause des réductions importantes de rendement des graines à cause de l'enlèvement *Brassica napus* L. et *Brassica rapa* L. (Brassicaceae), et alfalfa, *Medicago sativa* L. (Fabaceae). Dessin d'Habitus par Barry Flahey, Manotick, Ontario, courtoisie d'agriculture et agroalimentaire Canada.*

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The **Entomological Society of Canada** was founded in 1863 primarily to study, advance and promote entomology. It supports entomology through publications, meetings, advocacy and other activities.

La **Société d'Entomologie du Canada** a été établie en 1863 principalement pour promouvoir l'étude et l'avancement de l'entomologie. Elle soutient l'entomologie par l'entremise de publications, de réunions et d'autres activités.



## SOCIETY BUSINESS/AFFAIRES DE LA SOCIÉTÉ

The mid-term meeting of the Executive Council will be held at the Entomological Society of Canada office in Ottawa on **April 28, 2001**. Matters for consideration at this meeting should be sent to the secretary at the address below.

La réunion de mi-session du Conseil Exécutif aura lieu au Siège social de la Société d'entomologie du Canada le **28 avril, 2001**. Veuillez faire part au secrétaire de tout sujet pouvant faire l'objet de discussion à l'une ou l'autre de ses réunions en communiquant à l'adresse suivante.

### 51st Annual General Meeting

The Annual General Meeting of the Entomological Society of Canada will be held at the *Sheraton Fallsview Hotel and Conference Centre* in Niagara Falls, on **October 23, 2001**.

La réunion annuelle général de la Société d'entomologie du Canada, aura lieu au *Sheraton Fallsview Hotel and Conference Centre* à Niagara Falls, le **Octobre 23, 2001**.

### Governing Board Meeting

The Annual Meeting of the Governing Board will be held at the *Sheraton Fallsview Hotel and Conference Centre* in Niagara Falls, on **October 20, 2001**. ([www.fallsview.com](http://www.fallsview.com)) Tel: (905) 374-1077

La réunion annuelle du conseil d'administration se tiendra au *Sheraton Fallsview Hotel and Conference Centre* à Niagara Falls, le **20 octobre 2001**. ([www.fallsview.com](http://www.fallsview.com)) Tel: (905) 374-1077

Matters for consideration at any of the above meetings should be sent to the secretary at the address below:

Veuillez faire part au secrétaire de tout sujet pouvant faire l'objet de discussion à l'une ou l'autre de ses réunions en communiquant à l'adresse suivante:

Dr. Rick West  
Box 515, Portugal Cove  
Newfoundland A0A 3K0  
phone and fax: 709-895-2734  
email: [reely.west@roadrunner.nf.net](mailto:reely.west@roadrunner.nf.net)

**The Canadian Entomologist** and past issues of the **Memoirs** are available from the Ottawa office and may be purchased by Mastercard or VISA as well as by cheque or money order.

<i>Please send all correspondence concerning the Bulletin to:</i>	<i>Please send all correspondence concerning Book Reviews for the Bulletin to:</i>
Dr. Hugh Barclay Bulletin Editor Pacific Forestry Centre 506 West Burnside Road Victoria, B.C. V8Z 1M5 Tel: (250) 363-0736 Fax: (250) 363-0775 E-mail: <a href="mailto:hbarclay@pfc.forestry.ca">hbarclay@pfc.forestry.ca</a>	Dr. Vince Nealis Chair, Publications Committee Pacific Forestry Centre 506 West Burnside Road Victoria, B.C. V8Z 1M5 Tel: (250) 363-0663 Fax: (250) 363-0775 E-mail: <a href="mailto:vnealis@pfc.forestry.ca">vnealis@pfc.forestry.ca</a>

The deadline for submissions to be included in the next issue (Vol. 33(2)) is **May 1, 2001**  
La date limite pour recevoir vos contributions pour le prochain numéro (Vol. 33(2)) est le **1 mai 2001**

**51st Annual General Meeting of the Entomological Society of Canada  
Held Jointly with the Entomological Society of Ontario**

The Annual General Meeting will be held at the *Sheraton Fallsview Hotel and Conference Centre* in Niagara Falls, on **October 23, 2001**.

**Program highlights include:**

*Plenary Session:* 2001: An Insect Odyssey Honouring the Past, Looking to the Future

*Contributed Papers, President's Prize Papers, Scientific Posters*

*Workshops*

- Insects in Captivity
- Entomology in Parks & Protected Spaces

*Symposia:* Emerging Technologies in Pest Management (Speakers include Larry Larson, President ESA)  
Tree Fruit Entomology

*Niagara Falls, Canada:*

**ONE WONDER AFTER ANOTHER**

The natural wonders of Niagara Falls have dazzled visitors for hundreds of years and continue to grow in popularity.

The Journey behind the Falls, historic sites, and Butterfly Conservatory are a few of its many attractions. Restaurants, museums, and casino add to its excitement.

**Meeting site:**

Sheraton Fallsview  
HOTEL AND CONFERENCE CENTRE  
6755 Oakes Drive  
Niagara Falls, Ontario, Canada L2G 3W7  
Tel. (905) 374-1077  
Web site: [www.fallsview.com](http://www.fallsview.com)

**Meeting Chair:**

Dr. Cynthia Scott Dupree  
Dept. of Environmental Biology  
University of Guelph  
Guelph, Ontario N1G 2W1  
Tel. (519) 824-4120 Ext. 2477  
email: [csdupree@evb.uoguelph.ca](mailto:csdupree@evb.uoguelph.ca)



**Entomological Society of Canada / Société d'entomologie du Canada**  
**Committees and Representatives for 1999-2000 / Comités et représentants 1999-20**

**A-Standing Committees / Comités permanents**

*Nominating/Nominations*

D. Johnson, Chair, Ottawa  
R. Bennett, Victoria  
J. Delisle, St. Foy  
R. Foottit, ex officio, Ottawa

*Elections/Elections*

R. Hallett, chair  
J. MacIntyre  
Vacant  
R. Foottit, ex officio, Ottawa

**B-Continuing Committees / Comités en cour**

*Achievement Awards/Prix d'excellence*

B. Roitberg, Chair, Burnaby  
M. Isman, Vancouver  
V. Behan-Peltier, Ottawa  
J. McNeil, Montral  
R. Foottit, ex officio, Ottawa

*Bilingualism/Bilinguisme*

L. Royer, chair, Corner Brook  
F. Fournier  
H. Chiasson  
M. Roy  
R. Foottit, ex officio, Ottawa

*Bylaws, Rules and Regulations/Rèlements*

M. Goettel, chair, Lethbridge  
G. Boiteau, Fredericton  
N.J. Holliday, Winnipeg  
R. Foottit, ex officio, Ottawa

*Finance/Finance*

J.E. O'Hara, chair, Ottawa  
Parker, Ottawa  
Peter Mason  
Mike Sarazin  
G. A. P. Gibson, ex officio, Ottawa  
R. Foottit, ex officio, Ottawa

*Headquarters/Siège social*

V. Behan-Peltier, Chair, Ottawa  
J.M. Cumming, Ottawa  
G.A.P. Gibson, ex officio, Ottawa  
R. Foottit, ex officio, Ottawa

*Heritage/Héritage*

D.C. Eidt, Fredericton, Chair  
P. Riegert, Regina  
E.C. Becker, Ottawa  
R. Foottit, ex officio, Ottawa

*Insect Common Names/Noms communs d'insectes*

J. Garland, chair, Ottawa  
K. Nystrom  
H. Chiasson  
R. Foottit, ex officio, Ottawa

*Marketing/Comité du marketing*

L. Braun, Saskatoon  
K. Floate, Lethbridge  
D.R. Gillespie, Agassiz  
R. Foottit, ex officio, Ottawa

*Membership/Adhésion*

R. Bennett, chair, Saanichton  
AES: L. Hollett  
ESA: R. Bourchier  
ESBC: T.L. Shore, Victoria  
ESM: R.J. Lamb  
ESO: D. Hunt  
ESS: R. Elliot  
SEQ: N. Larocque  
R. Foottit, ex officio, Ottawa

*Publications/Publications*

V. Nealis, Chair, Victoria  
G. Boivin, St Jean sur Richelieu  
R. Bennet, Victoria  
P. deGroot, Sault Ste-Marie  
P. Kevan, Guelph  
L. Gilkeson, Victoria  
J. Turgeon, ex officio, Sault Ste. Marie  
B. Lyons, ex officio, Sault Ste. Marie  
D. Johnson, ex officio, Lethbridge  
R. Foottit, ex officio, Ottawa

*Science Policy and Education/Politique scientifique et éducation*

S. Smith, Chair, Toronto  
K.G. Davey, Downsview  
P. Kevan, Guelph  
R.F. Smith, AES, Kentville  
R. Bourchier, ESA, Edmonton  
T.L. Shore, ESBC, Victoria  
R.J. Lamb, ESM, Winnipeg  
D.B. Lyons, ESO, Sault-Ste-Marie  
O. Olfert, ESS, Saskatoon  
C. Cloutier, SEQ, Québec  
R. Foottit, ex officio, Ottawa

*Student Affairs/Affaires étudiantes*

J. Savage, Montreal  
C. Schmidt, Edmonton  
B. Sarauer, Saskatoon  
D. Gillespie, ex officio, Agassiz  
R. Footit, ex officio, Ottawa

*Student Awards/Prix aux étudiantes et étudiants*

D. Gillespie, Chair, Agassiz  
J. Delisle, St. Foy, Quebec  
D. Quiring, Fredericton  
B. Mitchell, Edmonton  
D.C. Currie,  
D.J. Larson, St. John's  
T.A. Wheeler, St. Anne-de-Bellevue  
R. Footit, ex officio, Ottawa

*Web/Web*

D.B. Lyons, Chair, Sault-Ste-Marie  
T.P. Danyk, Lethbridge  
D.L. Johnson, Lethbridge

W. Riel, Victoria  
R. Footit, ex officio, Ottawa

**C-Ad hoc Committees / Comites ad hoc**

*Joint Meeting Document*

T. Shore, Chair, Victoria  
J. Sweeney  
R. Footit, ex officio, Ottawa

*Bulletin and Website Content*

R. Lamb, Chair  
V. Nealis  
R. Footit, ex officio, Ottawa

*National Insect Commemoration*

H. Philip, Chair  
P. Kevin  
J. Sutcliffe  
R. Footit, ex officio, Ottawa

## **NEW BULLETIN EDITOR**

Following this issue of the *Bulletin*, **Dr. Dan Johnson** will be assuming the position of *Bulletin* Editor. All correspondence and submissions should go to him at: Research Centre, P.O. Box 3000, Lethbridge, Alberta, Canada T1J 4B1. Tel: (403) 317-2214; Fax: (403) 382-3156. e-mail: JohnsonDL@em.agr.ca

I would like to thank all those who have tried to make my job as easy as possible and who have provided me with reports, stories, obituaries, etc. on request. It has been a pleasure serving as the *Bulletin* editor and I have learned a lot from it, as well as having met a lot of nice people.

Hugh Barclay

### **Call for Nominations - Second Vice-President & Director-at-Large**

Nominations for Second Vice-President and Director-at-Large must be signed by three members in good standing and received by 30 April, 2001 by the secretary, Dr. Rick West.

Nominations pour Deuxième Vice-Président et Directeur doivent être signées par trois membres de la Société et envoyées avant le 30 avril 2001 au secrétaire, Dr. Rick West.



## President's Report

The Joint Annual Meeting with the Entomological Society of America and the Société d'entomologie du Québec dominated the calendar and society activities in 2000. The last Joint Annual Meeting with ESA was 1982 (I am pleased to say that I was able to attend, as a graduate student), and the last time the JAM was held in Montreal was 1972. I am honored to have had this position in the year of an international Joint Meeting.



It was a great meeting, and we are grateful to Charles Lorenzetti and ESA President Sharron Quisenberry other members who participated in developing the arrangements and program. I want to especially thank Lorraine Braun, Sandy Devine, Heather White and others enlisted, for designing and running the ESC display booth. Thanks also to ESA President Sharron Quisenberry, ESA Meetings Manager Judy Miller, Program Chair Marlin Rice, and ESA staff and members for their organizational powers and willingness to meet in Canada. I was especially pleased to get to know and work with François Lorenzetti, with whom I was in daily communication for much of the year. We are all grateful to la Société d'entomologie du Québec for their very effective organization and for joining with us in a combined and very memorable joint SEQ Reception and ESC President's Reception.

Although the Joint Meeting of the three societies dominated the year, the ESC has ALSO made good progress in other areas. The ESC received requests from three societies and organizations that would like to meet jointly with us. In July, a request for our five-year schedule of meetings led to the decision to start planning five years in advance, a very sensible approach, I think. At the December meeting this was discussed and agreed by the Governing Board, and a new continuing committee (chaired by Peter de Groot) was struck to schedule joint meetings five years in advance, and thereby have more time to explore scenarios. We are considering the possibility of joint meetings with other Canadian biological science societies.

This year the ESC became the first Canadian society to join the American Institute of Biological Societies. I attended three of their meetings (don't worry - because of my own interests, I made a personal decision to do this at my expense) including the Presidents' Summit (plural), which consisted of the Presidents of 70 science societies, as I reported to you in the September 2000 Bulletin. AIBS is an umbrella organization that assists non-medical biological societies with communications, discussion of issues, publications, meetings, political contacts, and funding links. It also organizes joint meetings and publishes the magazine *Bioscience*.

The Entomological Society of Canada remained in good financial health this year, as described in the report by Treasurer Gary Gibson, indicating that for the first time in a number of years, ESC funds were reinvested into the Society's general investment account.

How quickly and how much to move to electronic publishing remains to be of great interest to all scientific societies with journals, bulletins and newsletters. The ESC Publication Committee, Finance Committee and Scientific Editor Jean Turgeon are investigating this possibility for *The Canadian Entomologist*. During this time the Publications Committee will also investigate the question of copyright of electronic material, including PDF files and images.

It was decided to use the ESC website more extensively for society news and reports. The present Website Committee will join the Publications Committee. Hugh Barclay is stepping down as Editor of the *Bulletin* after five years of generous service. His last issue will be the March *Bulletin*, after which the new Editor of the *Bulletin* will be Dan Johnson. Portions of the *Bulletin* will be abstracted and made available on the ESC website. Ed Becker continues publication of the Newsletter for Senior Entomologists and

Associates, serving our older members well.

Memberships rose significantly in 2000, especially in the student category. This rise is attributable in part to the requirements of the Joint Meeting and the increased profile of the ESC because of the Joint Meeting, but may also reflect a small increase in the number of graduate students specializing in entomology. A short document outlining benefits of membership in ESC, including such items as reduced rates for meeting registration and page charges, was prepared by Robb Bennett (Chair, Membership Committee) and forwarded to the Marketing Committee for inclusion with ESC display materials at the Montreal Joint Annual Meeting.

At the Montreal 2000 JAM, ESC presented the Gold Medal to Dr. Bernard Philogene. Dr. Kevin Floate was awarded the C. Gordon Hewitt Award, Dr. Richard Ring was appointed a Fellow, and Stephane Le Tirant received the Norman Criddle Award. Student Travel Awards were given to Ms. Jessica Janjic, York University and Ms. Jade Savage, McGill University. Ms. Michelle McPherson, Acadia University and Mr. Leonardo Frid, University of British Columbia, were awarded ESC Postgraduate Awards. Dr. Hugh Barclay was presented with a Service Award for five years as Editor of the Bulletin. We also joined ESA and SEQ in handing out the many Presidents' Prizes (plural this time) to student winners for best presentations at the JAM.

We have started a new fund for student conference travel, now at \$2,800 with promises for more, to support students attending the ESC annual meeting. We hope to begin using it in 2002.

The Federal Government's Species at Risk Legislation was discussed by Science Policy but no formal statement was issued. This legislation did not receive formal approval, and it or something like it will be introduced some time later. At that time, it would be useful for ESC to make a formal statement on this issue.

I would like to end by thanking the Executive: Linda Gilkeson, Bob Foottit, Bernie Roitberg, Rick West and Gary Gibson. The President's job relies on the generous, frequent and even-tempered support of Secretary Rick West, Treasurer Gary Gibson, and Office Manager Sandy Devine. Their efforts and continued service to the Society are much appreciated. Please support them and the new President, Bob Foottit, in the work of keeping the ESC healthy and influential.

Dan L. Johnson  
Lethbridge

### **Opening comments, 2000 JAM, Montreal, Dec 3, 2000**

Mesdames et monsieurs, bienvenue.

The Governing Board of the Entomological Society of Canada and I extend our sincere thanks to la Société d'entomologie du Québec, and to the Entomological Society of America for joining in this extraordinary joint meeting.

Thank you, Sharron Quisenberry, Judy Miller, Marlin Rice, Francois Lorenzetti, Steve Clement, Charles Vincent, Helene Chiasson, Noubar Bostanian, and the members and staff of our societies, all the way back to 1993, who have worked to make this Joint Meeting the leap forward that it is.

Given our theme of Insects and Art, it is appropriate for me to share with you some wisdom expressed by a leader in the arts in Canada, at a Prize ceremony last month. While accepting a Giller Award for Best Canadian fiction in 1999, Michael Ondaatje noted that "No one has a good idea in a dress suit." While that may be true for us entomologists, the act of coming together in venues like this one in order to share ideas that give us the tools and inspiration to take home and somehow make new ideas, remains one of the most productive and lasting ways to spend a few days in a group.



This Joint Meeting of our three societies has come together across borders and disciplines, an extraordinary confluence of the waves of change in biological and entomological science. I feel strongly that we need to do this once in a while. As a graduate student present at the 1982 Joint Meeting in Toronto, in some ways I even feel like a product of this process.

There is much to be said for small meetings, but meetings of this magnitude expand the possibilities and contribute to what E.O. Wilson has named *consilience*, the linking of facts and theory across disciplines to create a common groundwork for causal explanation. That should be our ever-present goal.

It is clear from the topics and titles in this amazing scientific program, that there exists a widespread quality in the speakers that we can call "a feeling" for the organism, as R.F. Chapman put in his recent review of *Entomology in the Twentieth Century*, saying "... there is not, and cannot be, any substitute for the people who love and know their insects".

I believe that this description includes all of us more and more, and it is a good thing that we love it, because there is so much more to do.

Entomologists learn astounding things about life on earth, but we also see that we have barely scratched the surface of knowledge of biodiversity and biocomplexity, or even begun to slow the greatest loss of biodiversity since the Mesozoic Era.

We study disease vectors, and implement innovative preventions and cures, but there is so much more to do; e.g. 300 million contract malaria each year, resulting in 2 million mortalities annually.

We model, design, test and improve our pest management systems, but some methods still in use cause unintended environmental effects that threaten the ecosystems on which we depend, and even threaten human health.

We educate and stimulate, often with great success, for example as evidenced in Montreal by the Insectarium and the Biodome, and in the Province of Quebec by the activities of the SEQ. And yet, many in the public still lack appreciation for, and understanding of insect life, or even of living things in general. Last month it was reported that the new science curriculum for Ontario has quietly removed evolution from most biology classes. So, those of you from the 8 or so U.S. states that have suffered from similar actions or campaigns: know that you are not alone.

Our work in these areas and hundreds more is often threatened by the widespread problem of how to pay for research. The cuts and limited resources are especially evident in basic research, despite the fact that it remains the lifeline for discoveries that drive practical advances. As Nobel laureate Arthur Kornberg recently said: "...let us understand the nature of the creative process and provide for its support... The future is not predicted, it is invented."

Dan Johnson  
Montreal

## **Committee Reports**

### **Treasurer**

#### ***A. 1999 Audit***

The 1999 audit of Societal finances by McCay, Duff & Company included two corrections of errors in the 1998 audit, which were noted as items 7 and 8 in the Notes to Financial Statements. Only one error was significant, overstating 1998 net revenue by about \$12,600.

The 1999 audit showed a Societal net operating profit (balance-end of year) of \$24,412. Because of a "paper loss" relating to amortization of the Headquarters building, the real net gain in Societal funds was \$30,030, resulting from the following combined net increase: General Fund - \$22,168, Endowment Fund - \$4,856, Scholarship Fund - \$3,006.

The General Fund audit showed \$69,691 for "Salaries and benefits" for ESC staff compared with a budgeted amount of \$33,460. The \$36,231 difference mostly reflects a salary equalization agreement (\$35,323.27) between the Society and its Office Manager as per prior contractual agreements. Of this amount, \$15,000 was paid during the 1999 fiscal year and the remaining amount in 2000; however, ESC auditing procedures assigns all "accounts payable" to the fiscal year in which they are incurred. Net revenue for the General Fund for 1999 was \$23,362 compared with \$69,436 in 1998. Although substantially less (\$46,074) than in 1998 this largely reflects the one-time pay equity expense. Much more seriously from a long term perspective, the lesser net profit also results from almost \$10,000 less subscription income in 1999 compared with 1998 (568 vs. 610). Subscriptions have decreased by 25% (197) since 1991 and continued reductions will have serious financial implications for the Society.

Excluding amortization, the net cost of operating the physical assets of Headquarters was only \$1,194 in excess of revenue derived from rent, for an averaged cost of \$99.50/month.

The Scholarship Fund increased \$3,006 in 1999 despite \$9,000 in awards and grants. This increase is largely the result of \$2,400 donated to the Scholarship fund by the ESQ from profits resulting from the 1999 annual meetings.

#### ***B. Diseases and Pests of Vegetable Crops in Canada***

During 1999, \$10,000 was reimbursed to the ESC from the Book Project; 345 books were sold (237 English, 108 French) and as of December 31, 1999, approximately 1,860 books remained in stock. Gross revenue for 1999 was \$23,364 versus \$23,738 for 1998 and \$27,838 for 1997. The annual review of the Book Project finances costs each Society \$500/year.

#### ***C. Interim appraisal of 2000 budget***

Subscriptions decreased by 11 in 2000 (= - \$2,500), but there has been a significant increase (+ 59) in membership (17 regular, 42 student) (= + \$2,380). Membership increases likely are correlated with the combined ESC/ESA meeting and I expect membership to decrease in 2001. Because of continued net operating profits over the last few years, \$22,000 was transferred to the Investment Fund from the General Fund, \$10,000 more than budgeted. Also, about \$2,000 unbudgeted funds were used to upgrade Headquarter's computer hardware and software to rectify Internet and document access problems. The Office Manager's contract expires in 2000 and negotiations are currently underway to develop a new three year contract.

Gary Gibson

#### **Finance Committee**

A meeting of the Finance Committee was held on 17 November 2000 to discuss the Treasurer's Report, the Treasurer's 2001 budget, and other matters relating to the mandate of the Committee. Present: J.E. O'Hara (Chair), P.G. Mason, D.J. Parker, M.J. Sarazin and G.A.P. Gibson (Treasurer).

The Treasurer's Report and 2001 budget were reviewed. The budget appears to be in good order and a surplus is expected in the coming year. The Treasurer proposes investing \$12,000 of the surplus into the Investment Fund, and this action is supported by the Finance Committee as a measure to help ensure the financial stability of the Society in future years. Declining subscriptions continue to cause concern and have the potential to undermine the financial health of the Society if the trend persists.



Memberships rose significantly in 2000, especially in the student category. This rise is at least in part attributable to the joint meeting of ESC/ ESA in Montreal in December 2000, but possibly also reflects a small increase in graduate students specializing in entomology in Canada. Memberships are predicted to drop somewhat after the ESC/ ESA joint meeting.

The Treasurer has proposed a new, on-going cost to the Society of approximately \$7500 per year to hire an assistant to the Editor, at the Editor's request. While recognizing the value to the Society of the Editor and the high workload involved in editing *The Canadian Entomologist*, the Finance Committee advises the Governing Board that this is a new and significant cost to the Society and therefore the financial implications of it should be carefully considered, including its future ramifications. At this time the financial health of the Society is not threatened by the proposed hiring of an editorial assistant.

Jim O'Hara, Chair  
Finance Committee

### **Bulletin Editor**

The fifth and final year of my tenure as ESC *Bulletin* Editor is drawing to a close. I have enjoyed the position and hope that I have kept the *Bulletin* alive in a satisfactory fashion. One question that is becoming more important recently is the relevance of the *Bulletin* in its present form and also the relationship between the *Bulletin* and the ESC Web site. I feel that a permanent paper copy of the ESC business is imperative, but that some of the functions of the *Bulletin* might usefully be taken over by the Web, but that is for the Board and the future *Bulletin* editor to determine.

I am happy to say that Dan Johnson has agreed to be the new *Bulletin* editor, and he will be starting with the June 2001 issue, after observing production of the March issue.

Hugh Barclay  
*Bulletin* Editor

### **Publications Committee**

*Changes:* Two members of the Publications Committee; Sheila Fitzpatrick, chair of the committee, and Al Ewen, resigned in 1999. Vince Nealis replaced Sheila Fitzpatrick as chair. No replacement has been solicited for Al Ewen. Two members of the committee, Doug Eidt and Andrew Keddle, are slated for retirement in 2000. A notice for volunteers has been placed in the December issue of the *Bulletin*. Dr. Hugh Barclay will retire from his position as editor of the *Bulletin* in January 2001. On behalf of the Publications Committee, I would like to thank Hugh for his service and efforts in single-handedly making sure the *Bulletin* continues to be the primary vehicle for Society news. Dan Johnson has volunteered for the editor's position in the new year. His appointment will be recommended to the Board at the 2000 annual meeting.

In recognition of the year 2000, the cover of volume 132 of *The Canadian Entomologist*, was changed from the proposed sketch of *Melanoplus sanguinipes* to B. Flahey's *The Millenium Bugs*. As it turned out, Flahey's bugs were far more substantial than their virtual counterparts and way more entertaining. Apologies to *Melanoplus sanguinipes* but I understand it has its own effective means of maintaining its profile.

### **Action from Executive Council Meeting, April 2000.**

*Parallel Publishing.* Not a great deal of progress has been made on this issue beyond the discussion paper by Aldyth Holmes submitted to the Board in 1999. That report highlights key questions that need to be considered.

Complimentary subscription to The H.W. Wilson Company. This company has indexed our journal for several years and now offers an opportunity for full-text indexing. The previous chair, Sheila Fitzpatrick, concluded that any agreement of this nature is premature given the status of the ESC consideration of the whole issue of electronic publishing and copyright protection and its implications for membership, subscriptions, and revenue. Sheila declined this request in 1999 but indicated that we may re-open discussions in the future. Publications committee records indicate no need to contact the company again until we want to talk about specific licensing agreements.

H.W. Wilson is one of many companies currently competing for journals to 'aggregate' in their electronic abstracting services. Although well-known, this particular company is not especially strong in the area of science. If the ESC decides this is a route we want to take, it may be worth shopping around. The primary motive would be to get as wide a distribution of publications as possible. Our titles, and in some case full abstracts, are already abstracted by major database companies such as AGRICOLA, CABI, and BIOSIS.

Before we even reach that point, however, the ESC must critically evaluate future direction in electronic publishing and abstracting. If there is merit, then we can decide on which company best represents our interests. The future may reveal that once we are publishing electronically, the abstracting issue becomes secondary or unnecessary. We must consider carefully the implications to members, and particularly institutional members in terms of costs and complications in referencing 2 sources of electronic information. The recent trend has been for the largest publishing houses to sign up smaller publishers and offer electronic publishing and access via packages of several on-line journals to institutions. Think of cable TV. This trend is correlated to 2- and 3-fold increases in the cost of journal subscriptions to libraries.

*Waivers:* Page charges on 2 papers in volume 132 of *The Canadian Entomologist* were waived.

On a related issue, a request has been made to contribute funds for publication of a book on economic entomology in Canada. This request will be reviewed by the Board at the 2000 meeting.

*C. P. Alexander Fund:* Jean Turgeon, editor of *The Canadian Entomologist* has asked permission to solicit 2 invited review papers. The committee recommends that the editor request M. Sharkey to prepare a review of phylogeny of the Hymenoptera and G. Boiteau, A. Alyokin, and D. Ferro to prepare a review on the Colorado potato beetle for volume 133 (2001).

*Reviews:* Twenty books and 1 video were received for review in the *Bulletin*. Reviews of the video and 7 of the books have already been published and 4 more book reviews will be published in the December issue. A review already published in 1999 appeared again in this year's *Bulletin*. Fortunately, these reviews are identical. Seven books are still out for review and 3 delinquent reviewers have been reminded of their good intentions. Two books, *Environmental Management in Practice*, Volume 3 and *Millions of Monarchs*, *Bunches of Beetles* have yet to be sent out. Anyone interested in reviewing these books should contact V. Nealis.

Reviews from Vol 32. of the *Bulletin* have not been forwarded yet to the publishers. The chair of the publications committee will ask for approval to secure back issues of the *Bulletin* containing the reviews and send these to the publishers. That way, the publishers not only get the review, they get it in the format of one of our Society's own publications.

*Copyright:* Permission was given to reproduce copyright material from *The Canadian Entomologist* and *Memoirs of the Entomological Society of Canada* to: United States Department of Agriculture (both Forest Service and Agricultural Research Service), Terry Morse, Kluwer Publications, Asakura Shoten Publications, University of California Press, Entomological Society of America, Prentice-Hall Inc., University of Chicago, Benjamin Cummings, R.C. Pilgrim, Douglas Wymer, and Brian Sieben. Also, per-



mission was given to the Ontario Ministry of Agriculture et al. to reproduce a few photographs from Pests and Diseases of Vegetable Crops in Canada.

Some requests were for reproduction of more than one figure. Increasingly requests are received by parties intending to place our material on their website. In most cases, these requests came from recognizable publishing houses or government publishers and permission was given without qualification. Two requests, however, have raised questions about the possible need to review ESC policy on copyright permission. Both were from horticultural organizations. One request was for as many as 20 photographs from Pests and Diseases of Vegetable Crops in Canada apparently for this organization's own publication and the second was for use of photos from this same book on a commercial website. As a courtesy, I informed our co-publishers (Canadian Phytopathology Society) of these requests. I discovered that CPS is developing a policy regarding copyright permission in view of the rapidly changing world of electronic publication. A draft copy of this policy was sent to me by the Zamir Punja and will be presented to the Board of the ESC in December as part of this report.

Vince Nealis, Chair  
Publications Committee

#### **Nominations Committee**

The following were nominated to stand for election in 2000:

*Second Vice-President:* Rosemarie DeClerkFloate, Sandy Smith; *Director-at-large:* Helene Chiasson, Owen Olfert.

Linda Gilkeson, Chair  
Nominations Committee

#### **Elections Committee**

Sandy Smith was elected as Second Vice-President. Owen Olfert was elected as Director-at-Large. Geoffrey Scudder was elected as an Honorary Member.

Rebecca Hallett, Chair  
Elections Committee

#### **Achievement Awards**

Dr. Bernard Philogène was selected as the Gold Medal Winner. Dr. Kevin Floate was selected the winner of the C. Gordon Hewitt Award. Dr. Richard Ring was selected to be named as a Fellow of the Entomological Society of Canada.

Robert Footit, Chair  
Achievement Awards Committee

#### **Bilingualism Committee**

In 2000, the Bilingualism Committee translated (1) some modifications for the web site, (2) biographies of candidates for the ESC ballots, (3) biographies of recipients of the C. Gordon Hewitt Award, Gold Medal and Honorary Member, and (4) the logo caption of the ESC *Bulletin*. This work was done by the committee members.

The revision of both "Standing Rules" and "Committee guidelines" was temporarily let aside because most members of this committee were involved in the organization of the joint annual meeting in Montreal.

I would like to ask the Governing Board to allocate a budget to the Bilingualism Committee, in case we receive requests for translation too long to be done by the committee members, and to be informed of the amount.

Lucie Royer, Chair  
Bilingualism Committee

### **Bylaws, Rules & Regulations Committee**

The Committee will recommend to the Board that the following statement be added to every committee in the guidelines: "If applicable, artifacts from annual meetings be preserved nationally through the Heritage Committee."

Another recommendation will be that Standing Rule II be amended to reflect dues for international members:

**Present wording:** II. Dues (By-Laws V)

1. Annual dues for Regular Membership shall be eighty dollars (\$80.00), with option of purchase of Memoirs for an additional twenty dollars (\$20.00). (1 January, 1989).
2. Annual dues for Student Membership shall be twenty dollars (\$20.00), with option of receiving the Memoirs at no extra cost. (1 January 1993).

**Recommended wording:** II. Dues (By-Laws V)

1. Annual dues for Regular Membership shall be eighty dollars (\$80.00) in Canada and one hundred dollars (\$100.00) or seventy-four dollars US (\$US74) for members outside of Canada.
2. Annual dues for Student Membership shall be twenty dollars (\$20.00) in Canada and twenty-five dollars (\$25.00) or eighteen dollars US (\$US18) for student members outside of Canada.

The Bylaws, Rules & Regulations are presently being translated by the Bilingualism Committee. Drs. Gilles Boiteau, Fredericton and Neil Holliday, Winnipeg remain as members of the Committee.

Mark Goettel, Chair  
Bylaws, Rules & Regulations Committee

### **Heritage Committee**

The work of the Committee has progressed favourably, considering that it is constituted of three retirees and an ex officio president, all widely separated geographically. Progress with the index to biography has been slow. It remains to integrate items listed by Riegert and Eidt and to scan a limited number of several journals to find items for the index. Requests will be sent out for volunteers to search numbers not available to us.

The response to our request for missing annual meeting programs and related items has been good. These have been forwarded to the National Archives. We ask that all future program committees routinely forward such items (see recommendation).

The Committee commends Ed Becker for his continued publication of the Newsletter for Senior Entomologists and Associates for retirees and their spouses under the aegis of CanaColl, for his systematic accounting of honours and deaths. Everybody should keep Ed informed (and consider contributions to Canacoll). The Committee also commends Paul Riegert for his 1999 Heritage Lecture Early Prairie Entomology and Entomologists, Bull ESC 31:163-169.

In addition to *Bulletin* articles on JD Tothill, AB Baird, CE Atwood, and R. Frank Morris published in 1999, Heritage articles on RE Balch and the Green River Project were published in March 2000 and arti-



cles on WA Reeks and the European Spruce Sawfly Virus Story in June. Eight other articles of this type are being considered for submission to the *Bulletin*. Paul Riegert published three articles in his series Net Shovel and Axe in the *Bulletin* for March and June 2000.

Eidt has completed his review of the RE Balch papers that fell into his hands. There is much that belongs in the NB Archives because it relates to conservation in NB, but also much that belongs in the National Archives because it demonstrates the commanding influence he had on JJ DeGryse and the development of forest entomology in Canada. There is a book in this material, but who will write it?

Recommendation: that (1) the Program Committee be required to provide the Heritage Committee with a copy of the program and other relevant material, including photographs if available and (2) that this be incorporated into the Committee Terms of Reference, if this has not already been done.

Edward C Becker, Paul W Riegert  
Daniel Johnson ex-officio, Douglas C. Eidt, Chair

### **Common Names Committee**

#### ***Activities for the year 2000:***

The List of Common Names was modified to incorporate changes noted in *Bulletin* 31(4):126. The accuracy of authority names and abbreviations was checked by Dr G. Ball. The web-site was further developed by Dr B. Lyons, to include a set of static read-only files, in addition to the ms-dos Common Names file already present. One name proposed for addition to the List of Common Names was published in *Bulletin* 32(3):71.

The Past-Chair, Dr E.M. Belton, agreed to archive a hard-copy of the 1993 List of Common Names and updates to the year 2000, and relevant documentation. This archive will be kept at the ESC Office.

The ESC web-site was hyper-linked to the North American Integrated Taxonomic Information System (ITIS\*ca), with the help of Dr Guy Baillargeon (AAFC-ECORC); this initiative began in 1998 under Past-President Dr H. Danks.

Kathryn Nystrom, Helene Chiasson  
Dan Johnson ex officio, John Garland, Chair

### **Membership Committee**

**Membership/Subscription Levels.** Both memberships and subscriptions show apparent increases over 1999. Sandy Devine forwarded current figures to Bennett (brackets show changes from 1999).

Total members: 595(+69) (Reg. 400 (+22), Student 112 (+40), Emer. 83 (+7).

Total subscribers: 543 (+12): Canada 62 (+2), elsewhere 481 (+10).

Paid membership levels for 1997 to 2000 inclusive are Regular members: 400, 396, 378, 400; Student members: 76, 66, 72, 112. Devine indicates most of the dramatic increase in student memberships is related to participation in JAM 2000.

***Stemming Lapsed Memberships / Attracting New Members.*** These issues were addressed in the Committee's Mid-Term Report presented to Executive, 15 April 2000. In sum, the Membership Committee recommended that ESC cut operating costs and pass savings on to Members in form of lowered dues. To encourage membership in ESC, the Committee supported concept of higher fees for non-ESC registrants at the AGM.

***Benefits of Membership in ESC.*** As per Spring Executive Council Minutes 9.2.14.1, a short document outlining benefits of membership in ESC was prepared and forwarded to the Marketing Committee for inclusion with ESC display materials at the Montreal AGM.

**Membership Renewal Reminder.** As per Spring Executive Council Minutes 9.2.14.1, an electronic notice outlining benefits of membership and reminding ESC members to pay their dues will be circulated early in 2001 to all members for whom we have current e-mail addresses.

Current Membership Committee membership is Robb Bennett (Chair), Lloyd Hollett (AES), Terry Shore (ESBC), Bob Lamb (ESM), Barry Lyons (ESO), Owen Olfert (ESS), Annie Marineau (SEQ), vacant (Student Rep.), and Dan Johnson (ex-officio).

Robb Bennett, Chair

### **Student Awards Committee**

This will be my final report, since I am resigning as Chair of the Committee immediately. At the time of writing, a successor has not been named. The subcommittees currently consist of the following members:

**Kevan Scholarship Committee:** Dave Larson, Terry Wheeler, Doug Currie

**Scholarships Committee:** Dan Quiring, Johanne Delisle, Bev Mitchell

I would like to thank the members for their dedicated service over the past few years. The Research Travel grant competition had 6 applicants. The two grants were awarded to: Ms. Jessica Janjic, York University, to assist her in travelling to and within Brazil for the purpose of studying genera of the Agaposteminae (Hymenoptera: Halictidae); and Ms. Jade Savage, McGill University, to assist her in travelling to England and Sweden for the purpose of visiting entomological museums for the purpose of studying systematics of the genus *Thricops* (Diptera: Muscidae). As always, the decision was difficult since all applications were good.

There were 7 applications for the ESC Postgraduate Award. The two winners were Ms. Michelle McPherson, Acadia University, studying behavioural responses in dragonflies to structural changes of landscapes, and Mr. Leonardo Frid, University of British Columbia, who is studying the thermal ecology of the western and forest tent caterpillars and their nuclear polyhedrosis virus.

The Kevan Scholarship was not awarded in 2000, but will be awarded again in 2001. The web access to forms etc. is working reasonably well, with a few exceptions. In those cases, electronic or hard-copy forms have been sent out to students. The number of applications for these awards is fairly steady, but applications tend to come from the same institutions each year. These applications are generally of high quality. However, it is possible that a more efficient advertising of the awards should be made. In the past, the Chair of the committee has sent announcements to graduate offices of universities across Canada. I recommend that the ESC office take on this task, since the Chair is operating on a volunteer basis, and it is difficult to justify hiring help for sporadic jobs like these. Updating of the web pages must be done promptly each year, and copies of all updates must go to the Editor of the *Bulletin*. On several occasions over the past few years, information published in the *Bulletin* has been outdated. Students are generally providing the required number of copies for the applications. However, students applying for both ESC Postgraduate Award and Kevan Scholarship do not realize that these are judged by different committees, and send only three copies of the application, rather than six. Therefore, the text on the announcement should be changed to clarify this. Also, students tend to have one copy of Official transcripts sent directly by the Institution, rather than providing copies of transcripts with the applications. This should also be clarified.

Volunteer members have generally been very prompt and conscientious in providing assessments. However, this year, one member did not respond to numerous reminders for one of the competitions. This delayed the process, but since the AGM is in December, it did not have any consequences for anyone except the Chair. Nevertheless, I suggest that the new Chair canvass the current members as to their inter-



est in remaining on the committee to ensure a smooth processing of applications.

There is a need to review the criteria and announcements to ensure clarity. One applicant for ESC Postgraduate Awards was deemed ineligible since the applicant had a Master's degree in Entomology. This assessment was based on the understanding by two of the committee members as to the purpose of this award. It is not clear from the announcement that the award applies only to the first entomology degree, and the eligibility criteria should be reviewed to ensure that the interpretation is correct.

The Research Travel grant applications tend to be in support of activities which are clearly central to the thesis research, and would therefore be performed regardless of whether or not funding from ESC was forthcoming. Thus, the award tends to subsidize the supervisor, who would otherwise pay for the travel. It is my understanding that the award should provide incremental funds for activities otherwise not undertaken. I recommend that this issue should be addressed and clarified. It is often difficult to judge whether or not an activity is incremental, and it may be that this requirement is unnecessary. If not, clearer guidelines may be needed, to ensure that the funds are spent appropriately. Furthermore, it has been very difficult to get constructive criticism of these applications from the committee members, who are volunteers. While such feedback is clearly beneficial for the students, it has not been possible to provide this in the last few competitions, and the wording was in fact changed in the announcement to reflect this. In the 2001 announcement the statement referring to feedback was put back. I recommend that this issue should be revisited and a decision made. If feedback is to be provided, committee members who agree to serve on the Awards Committee must be committed to providing this feedback. If so, it may be helpful to develop a form where comments can be made addressing specific aspects of the application.

I have enjoyed serving as Chair of the ESC Student Awards Committee. It has been exciting to see what goes on at different institutions, and that there are many very bright and innovative young entomologists in Canada. It is also very rewarding to be able to assist these students in their pursuits. However, over the past year I have accepted other responsibilities which take priority, so I regretfully submitted my resignation to the President of ESC earlier this year.

B. Staffan Lindgren, Chair  
Student Awards Committee

### **Science Policy and Education Committee**

#### ***Several issues have arisen this year:***

There was a request for funds from the Entomological Society of Manitoba's Youth Encouragement and Education Committee. The committee fully supported this request. The committee received a position paper from the Biodiversity Science Board of Canada. The committee is currently studying this paper and may issue a response. I initiated a contact with Katherine Aberle Director - Media & Public Relations, Simon Fraser University regarding dissemination of entomological news to various media. She has offered help at two levels. First, she has provided me with a list of media that could be useful at furthering our cause. Once I have identified appropriate venues, the SFU media centre will send ESC news releases to those sites. I am currently working my way through the list. Second, she has offered to help us hire an SFU communications student to help develop communications policy as well as set up a dissemination service. The cost would be in the order of 5K per trimester.

ESC was invited to nominate individuals who might serve on the next NSERC reallocation committee. Several names were discussed but those individuals were either not available or were already serving on NSERC and in the end no names were forwarded.

The Federal Government's Species at Risk Legislation was discussed but no formal statement was issued. Many individuals did respond to the legislation either on their own or through some other channel (see (3) for the need to provide a broad-based outlet for publicizing our policies). This legislation did not receive formal approval thus it or something like it will be introduced sometime down the road. At that time, it would be very useful for ESC to make formal statement on this issue.

Many of the issues raised by the Science Policy Committee had broad ramifications for the entire society. It would be good if each of those issues is posted at the society web site so that members of the society can forward their views to the committee.

Bernard D. Roitberg, Chair  
Science Policy Committee

### **Marketing Committee**

The Marketing Committee has been focusing on preparations for an ESC display at the JAM in Montreal in December 2000. The 20' x 10' ESC booth (#724) will be in the Canadian Pavilion of the Exhibit Hall, Level 1, Room 100A-B of the Palais des Congr s. Booth hours will be from 9:00 - 5:00 Mon., Tues., and Wed. We are fortunate that Alexandra Devine has agreed to help staff the booth on Monday and Tuesday. A schedule will be drawn up to solicit additional assistance from the ESC Executive and membership in staffing the Booth, so that no one person need devote an entire day to the Booth.

With advice and assistance from Alexandra Devine, Dan Johnson, Hugh Danks and Gary Gibson, exhibit plans for the Booth are in final preparation. The booth will contain membership information, items for sale, and promotional materials from the ESC, information for the 2001 Annual Meeting, materials from the Biological Survey of Canada, and materials including *The Canadian Entomologist* from NRC Research Press. We are also in the process of making a large poster to promote the ESC and its Affiliated Societies.

The Chair of the Marketing Committee continued to liaise with the CPS Information Products Marketing Committee on efforts to sell remaining copies of the book *Diseases and Pests of Vegetable Crops in Canada* (DPVCC). A conference call on 19 May 2000 between members of the CPS committee and L. Braun resulted in the following points: CPS is willing to pay \$3000 for updating the DPVCC Brochures; K. Bailey (CPS) has a revised brochure and is investigating use of the original cover photo for use in the revision, as well as obtaining a price quote from MOM publishers for digitizing the brochure. A letter was sent on 25 July from Zamir Punja, President CPS, to Dan Johnson in support of a Joint CPS/ESC Marketing Committee which would have approval to pursue marketing options without going back to the respective boards for approval at every step. K Bailey (CPS) submitted a report on DPVCC sales at the annual CPS meeting in Victoria 2000: 4 copies were sold at a price of CDN \$58.50, one book at US \$45.00.

Kevin Floate resigned his position on the Marketing Committee, and Dave Gillespie will also step down when he assumes his new role as Chair of the Student Awards Committee. Heather White (University of Manitoba) has recently joined the Committee. Therefore there will be two vacant positions. After discussion with Gary Gibson, I feel it would be a good idea to have subdivisions in the committee to encompass specific aspects of marketing, such as: Publications (books, *Memoirs*), Membership, Merchandise (t-shirts, pins, cups or glasses etc.). A much larger and more active committee membership would be required to create these subdivisions, and with difficulty in finding willing participants this may be a problem. I appeal to all creative minds to join our committee!

Dave Gillespie, Heather White  
Dan Johnson ex-officio, Lorraine Braun, Chair



## Affiliated Societies

### Entomological Society of British Columbia

The ESBC continues to be a thriving society. There were 167 members prior to our recent Annual General Meeting, and some new ones since. The AGM was held at Pacific Forestry Centre on October 20, 2000 with a number of interesting papers presented. Best paper awards were presented to Leonardo Frid (MSc) and Ed Mondor (PhD). ESBC scholarships were presented to Kathy Bleiker (UNBC, MSc) and Ed Mondor (SFU, PhD). A number of changes occurred on the executive due to the President-elect, Rory McIntosh, accepting a job in Saskatchewan.

*The new executive is as follows:* President: Rob Cannings, President-elect: Lorraine Maclauchlan, Past President: Neville Winchester, Secretary/Treasurer: Robb Bennett, Directors: Hugh Barclay, Rene Alfaro, Keith Deglow and Tracy Hueppelsheuser, Journal Editor: Dave Raworth, Boreus Editor: Phil Jones, Web Editor: Ward Strong

A number of changes have been made to the ESBC web page which can be accessed through the ESC homepage. Have a look.

Terry Shore  
Regional Director

### Entomological Society of Alberta

The annual meeting of the Entomological Society of Alberta was held October, 12-14 at the Alberta Research Council, Millwoods Campus and the Greenwood Inn in Edmonton. The keynote speaker was Mark Lewis from the University of Utah who spoke on 'Dispersal models and population spread: applications to biocontrol'. Mark will be moving to the University of Alberta this summer as a joint appointment in math and biological sciences. Proceedings from the 1999 ESA meeting at Waterton were available at this years meeting and this years proceedings are in preparation. Both will hopefully be available in the new year on the society web site at <http://www.biology.ualberta.ca/courses.hp/esa/esa.htm>. Troy Danyk is webmaster. Incoming president of the society is Simon Wilkins, Past-President is Darryl Williams, secretary is Gerry Hilchie and treasurer is Greg Pohl. Directors in 2000 are Lloyd Dosdall, Rob Longair and Troy Danyk.

Rob Bouchier  
Regional Director

### Entomological Society of Saskatchewan

The 48th Annual Meeting of the Entomological Society of Saskatchewan was held in Saskatoon this year. The society was very active in Saskatchewan this past year. The society continued to develop their ESS web site this year. It can be found at: <http://www.usask.ca/biology/ess/> and our webmaster is Larry Grenkow. Activities related to public education and youth encouragement were numerous again in 2000. In both, Saskatoon and Regina, members visited schools to bring entomology to school-aged children, including several french-immersion schools this year. Public education is still being supported by our retired members: Paul Riegert (Regina) and Cedric Gillott (Saskatoon) continue to be frequent guests on CBC Radio; and Alf Arthur taught a series of general entomology classes at a summer camp for adults.

The new Executive for 2001 are: President - Martin Erlandson; Past President - Brian Galka; Vice President - Chrystal Lefol and Regional Director - Bob Elliott. The Executive staff are: Secretary - Larry Grenkow; Treasurer - Dwayne Hegedus; Proceedings Editor - Keith Roney; and Newsletter Editor - Wayne Goerzen and Brian Galka. The new Executive was inducted at the business meeting following the scientific conference in October.

Owen Olfert  
Regional Director

### **Entomological Society of Manitoba**

The Entomological Society of Manitoba had a successful year, interacting with the Entomological Society of Canada in a number of ways. The Youth Encouragement Committee of ESM, chaired by Robyn Underwood, and consisting of 20 volunteers introduced over 2000 students to insects over the past year, using presentations given to individual groups of about 20-50 students at their school/daycare center or hosting groups in the Department of Entomology, University of Manitoba. About 800 of the students were seen within 2 days at "Amazing Grains". Volunteers taught groups of 50 children for 40 minutes for eight sessions each day for 2 days. A new addition to the live arthropod supply was a tarantula named Betsy. These activities were supported in part by funds received from ESC. As a matter of general interest to entomologists I report that Rob Roughley, Terry Galloway and others were successful in obtaining a grant from the Canadian Foundation for Innovation to renovate and expand the J.B. Wallis Museum of entomology in the Department of Entomology, University of Manitoba, and create a database for the collection. As Regional Director, I represented the ESC President at the Annual Meeting of the ESM held October 20-21, and read Dan Johnson's remarks, emphasizing the joint meeting in Montreal, links between the societies and encouraging membership in both local and national societies. Three invited speakers gave Keynote addresses interspersed among 15 submitted papers. The Meeting was considered a scientific and financial success with the highest registration ever at 63, and excellent attendance at all the sessions and two social events. Membership in the Society is stable or rising slightly from the 114 indicated in the 1999 report to 121 as of October, 2000. The Department of Entomology, University of Manitoba is sending nine graduate students, most of whom are making presentation, to JAM in Montreal. The current (2000-2001) Executive of the ESM consists of: President, I.L. White; Past President, P. A. MacKay; President Elect, P. Fields; Member-at-Large, B. Elliot; and N. White is Secretary. The three-year term of Regional Director is up this year and so a new Director will be elected in the 2001 ballot. In the current year, I have not expended any funds on behalf of ESC. I recommend, however, the budget for travel be left intact for the next budget year in case it is needed by the new Regional Director. At the request of the President of ESC I have canvassed opinion within ESM on the merits of holding a joint meeting with CSZ in Lethbridge in 2002, and reported to both Dan Johnson and CSZ on this matter. ESM affirms its invitation to ESC to hold a joint ESC/ESM meeting in Manitoba in the autumn of 2002. Pat MacKay, now ESM Past President, formed an organizing committee to begin to prepare for a possible joint meeting in 2002, appointing Don Dixon as Chair of this committee. Don Dixon was the Chair of the last ESC/ESM joint meeting in Winnipeg, and more recently organized a large and extremely successful international meeting, Apimondia.

Bob Lamb  
Regional Director

### **Entomological Society of Ontario**

The 137th Annual General Meeting of the Entomological Society of Ontario was held on 27-28 October 2000 at the Great Lakes Forestry Centre in Sault Ste. Marie, Ontario. The meeting featured a Symposium entitled "Climate Change and Insect Populations". The Meeting also featured a Wine and Cheese Mixer, submitted papers and posters, the annual President Prize Competition for students' submitted papers and posters, and a Banquet.



The current executive for the ESO, which took office at the October 2000 Annual General Meeting, is as follows: President: Gard Otis, President-Elect: Barry Lyons, Past President: Kevin Barber, Secretary/ESC Rep.: David Hunt, Treasurer: Blair Helson, Editor: Dolf Harmsen/Yves Prevost, Librarian: Dave Hull

*Directors:* (1999-2001): Neil Carter, Ron Harris; (2000-2002): Vanessa Carney, Margaret Pickles; (2001-2003): Bruce Broadbent, Kathryn Nystrom

Volume 130 of the Proceedings of the Entomological Society of Ontario was published in December of 1999. The issue contained 5 submitted scientific papers, one submitted scientific note and 5 book reviews. Volume 131 of PESO is currently progressing well. Yves Prevost will be taking over from Dolf Harmsen as journal editor during the coming year. Electronic publishing of the Society's Proceedings is no longer being considered at this time. Savings in printing costs for PESO have been achieved by changing to a different printer.

Plans are well underway for the 2001 Joint Annual Meeting with the Entomological Society of Canada in Niagara Falls, 21-24 October. The theme for the meeting is "2001: An Insect Odyssey - Exploration and Discovery". Cynthia Scott-Dupree of the University of Guelph is the Meeting Organizing Committee Chair, and the organizing committee composition has been finalized. Speakers for the plenary session and symposia have been established, budget estimates are in place, and the fund raising committee is actively seeking support. Brochures for the 2001 Joint Annual Meeting will be available at the ESC booth at the 2000 Annual Meeting in Montreal. The facilities that have been secured for the 2001 Meeting at the Sheraton Fallsview Hotel and Conference Centre are exceptional, and we anticipate that everyone will be very pleased with the venue and program.

David Hunt  
ESO Representative

### **Société d'Entomologie du Québec**

#### **Activités réalisées**

Acquisition d'un nouveau site internet pour la SEQ: <http://www.seq.qc.ca> Appui financier de la SEQ pour l'achat de chrysalides pour la volière du Domaine Maizerets (La Maison des Insectes inc. Charlesbourg).

#### **Activités en cours**

- Appui financier du Bureau du Canada pour le Millénaire pour le projet: 'Une passion partager: La recherche en entomologie'.
  - Exposition 'La recherche en entomologie: quoi à sert' en collaboration avec l'Insectarium de Montréal, la Société des Amis de l'Insectarium de Montréal (SAIM), et la Ville de Montréal.
  - Programme des innovateurs l'école de la Société pour la promotion de la science et de la technologie. Permet d'inviter un entomologiste enchereur dans les classes d'école.
  - Emission de télévision 'Les Débrouillards' qui portera sur les insectes. En onde Radio-Canada le 29 novembre 2000 et TFO le 17 novembre 2000.
  - Projet de sites Internet sur l'entomologie: Hébergement du site internet de la Maison des Insectes inc.
  - Partenariat pour un site internet 'La Toile des insectes du Québec' entre l'Insectarium de Montréal, la Ville de Montréal, la Société des Amis de l'insectarium de Montréal (SIAM), l'Association des entomologistes amateurs du Québec (AEAQ) et la Corporation Entomofaune Québec.
  - Création d'un dépliant promotionnel bilingue présentant la Société d'entomologie du Québec.
- Congrès conjoint annuel 2000 de l'Entomological Society of America (ESA), la Société d'entomologie du Canada (SEC) et la Société d'entomologie du Québec (SEQ):

- Le comité du programme scientifique (présidé par le Dr. Marlin Rice et formé par les présidents des différentes sections de la ESA, d'une représentante de la SEQ; Dr Hélène Chiasson et d'un représentant de la SEC; Dr Noubar J. Bostanian) a lancé un appel pour des soumissions de symposiums travers les *Bulletins* de la SEC et de la SEQ, par courriel et sur les sites webs en obtenant une bonne réponse de la part des membres. La majorité des symposiums sont conjoints (Canada/Etats-Unis).
- Dans le programme général, l'Insectarium de Montréal a fait la promotion de son fondateur, Georges Brossard, comme conférencier d'honneur la Session Plénière de JAM2000. Les présidents D. Johnson (SEC) et F. Lorenzetti (SEQ) ont participé aux différentes rencontres avec l'ESA de façon intégrer les parties de programme qui pouvaient être communes (ex: Session Plénière, Réception de Bienvenue, Remise des prix étudiants dont les prix des Présidents des trois Sociétés, etc.), en plus de réserver un espace commun la SEQ et la SEC, et d'autres organismes oeuvrant en entomologie au Québec; soit le Pavillon Canadien.

La publicité et les arrangements locaux (LAC) sont co-présidé par Charles Vincent et Steve Clement qui ont veillé la publicité entourant l'évènement, le recrutement des volontaires, la formation des volontaires, la gestion de l'audio-visuel, aux activités hors-programme et pour les conjoints, la préparation de textes d'information pour les participants ainsi qu'aux traductions de texte pour le livre de programme. Les activités hors-programme ont été organisées par Antony Daniel avec l'aide de l'Office du Tourisme de la Ville de Montréal.

Le site web de la SEQ qui fut mis jour régulièrement grâce notre Webmestre Benoit Rancourt, a servi de porte d'entrée vers l'ESA et la SEC en plus de fournir des informations détaillées sur JAM2000.

La réception des soumissions des résumés et des inscription ont été sous la responsabilité du Bureau National de la ESA.

L'activité annuelle de la SEC et de la SEQ du 4 décembre a été planifiée conjointement avec le directeur de Montréal (SEQ), Stéphane Villeneuve, et les présidents de la SEC et de la SEQ.

Une entente financière a été signée entre les trois présidents (ESA, SEC et SEQ), et partir de cette entente, les présidents de la SEC et de la SEQ ont préparé une entente financière qui unit ces deux sociétés canadiennes.

La recherche de commanditaires et d'exposants s'est déroulé sous la supervision d'André Poliquin.

#### **Prochaines Réunions Annuelles:**

2001: 128ième Réunion Annuelle, octobre 2000, St-Hyacinthe. Organisé par les membres de l'Institut de Recherche et de Développement en Agroenvironnement (IRDA). Contact: Gérald Chouinard

2002: 129ième Réunion annuelle de la SEQ conjointement avec la 5ième Conférence Internationale francophone d'entomologie (CIFE), juillet 2000, Montréal. Contact: Daniel Coderre et Guy Boivin.

#### **Completed activities**

A new Internet site: <http://www.seq.qc.ca> Financial support from SEQ to the Domaine Maizerets (La Maison des Insectes inc., Charlesbourg) for the purchase of butterflies.

#### **Activities in progress**

- Financial support from the Millennium Bureau of Canada for the project 'A passion to share: Research in Entomology':
- 'Research in entomology: what is it about?', an exhibition in collaboration with the Société des Amis de l'Insectarium, the Montreal Insectarium, and the City of Montreal.



- Educational presentations in schools are given through 'Les Innovateurs l'école' program. Participation in the realization of an episode about insects for the TV youth program 'Les Débrouillards'. Aired by Radio-Canada on November 29th and by TFO on November 17th.
- New Internet sites about entomology and insects: SEQ will host the Internet site of the Maison des Insectes.
- Quebec's Insect Web, an interactive Internet site of entomological resources promoted by many groups and led by the Montreal Insectarium.
- Production of a bilingual promotional leaflet presenting the Société d'Entomologie du Québec.

*Joint annual Meeting 2000 co-sponsored by SEQ, ESC, and ESA:*

The Scientific program committee (chaired by Dr. Marlin Rice and formed by the presidents of the different sections of the ESA, a representative of the SEQ: Dr. Hélène Chiasson, and a representative of the ESC: Dr. Noubar J. Bostanian) has called for symposia proposals through ESC and SEQ bulletins, e-mail and web sites. The response was very good as a majority of symposia are joint (Canada/USA).

General program: the Montreal Insectarium has succeeded in having founder, Georges Brossard, to be the keynote speaker for the Plenary Session. The presidents D. Johnson (ESC) and F. Lorenzetti (SEQ) have participated in several meetings with ESA. These meetings allowed integration of ESC and SEQ functions into the Joint Program (Plenary Session, Welcome Reception, Presentation of Presidents' Prize for Student Competition, etc.) and to secure a common space for ESC, SEQ, and other entomological organizations (Canadian Pavilion).

SEQ's Internet site was kept up to date regularly by our webmaster Benoit Rancourt has served as a gateway to the ESA and ESC sites, and provided details information about JAM2000 in both languages. All functions dealing with poster, 10-minute papers, and registration were managed by the staff at the ESA National Office.

ESC and SEQ Annual functions not included in the Joint Program with ESA ( December 4th ) were jointly planned by SEQ's Montreal director (SEQ), Stéphane Villeneuve and ESC and SEQ Presidents.

A Memorandum of Understanding was signed between the three Presidents (ESA, ESC and SEQ) and from this MOU, ESC and SEQ Presidents have prepared a financial agreement between the two canadian societies.

Exhibitors and sponsors were recruited by SEQ Vice-President, André Poliquin.

*Future SEQ Annual Meeting:*

2001: the 128th Annual Meeting will be held in October in St-Hyacinthe. The Meeting will be organized by the members of the Institut de Recherche et de Développement en Agroenvironnement (IRDA). Contact: Gérald Chouinard.

2002: the 129th Annual Meeting will be held with the 5ième Conférence Internationale francophone d'entomologie (CIFE) in July in Montreal. Contacts: Daniel Coderre and Guy Boivin.

## MINUTES

**Governing Board Meeting, December 2, 2000  
Palais des Congrès de Montréal  
Montreal, Quebec**

The meeting was called to order at 0900 by President D. Johnson. Those present were President, D. Johnson; Past-President, L. Gilkeson; First Vice-President, R. Foottit; Second Vice-President, B. Roitberg; Scientific Editor, J. Turgeon; P. de Groot, R. Bennett, V. Nealis, and M. Goettel, Directors-At-Large; R. Bouchier (ESA), O. Olfert (ESS), D. Hunt (ESO), N. Larocque (SEQ) and L. Hollett (AES), Regional Directors; Treasurer, G. Gibson; and Secretary, R. West.

1. ***Notice of Meeting***

The notice for this meeting was e-mailed on August 9, 2000 and printed in the March, June and September (2000) issues of the *Bulletin*.

2. ***Additions to and approval of the Agenda***

B. Roitberg moved and L. Gilkeson seconded that the Agenda be approved. Carried

3. ***Proxies and absences***

T. Shore (ESBC), R. Elliot (ESS), R. Lamb (ESM), and V. Crecco (Student Representative). O. Olfert acted as proxy for R. Elliot.

4. ***Minutes - Governing Board Meeting, September 25, 1999 (GB I)***

The minutes were circulated by R. West on October 7, 1999 and published in the December 1999 issue of the *Bulletin*. R. Bennett moved and V. Nealis seconded that the minutes be approved. Carried

5. ***Minutes - 49th Annual General Meeting, September 28, 1999 (AGM)***

The minutes were circulated by R. West on October 7, 1999 and published in the December 1999 issue of the *Bulletin*. R. Bennett moved and V. Nealis seconded that the minutes be approved. Carried

6. ***Minutes - Governing Board Meeting, September 29, 1999 (GB II)***

The minutes were circulated by R. West on October 7, 1999 and published in the December 1999 issue of the *Bulletin*. R. Bennett moved and V. Nealis seconded that the minutes be approved. Carried

7. ***Minutes - Executive Council Meeting, April 15, 2000 (EC)***

B. Roitberg and P. de Groot seconded that the minutes as circulated by the Secretary on April 30, 2000 be accepted. Carried

8. ***Business arising from the previous minutes:***

The following items were identified from previous minutes and discussed under New Business:

- 8.1 AIBS (GB I – 9.1, EC – 8.1, moved to 9.2.1.3)
- 8.2 Joint Annual Meeting in Montreal (GB I – 9.2, EC – 8.2, moved to 9.2.1.1)
- 8.3 Joint Annual Meeting in 2001 (EC – 8.3, moved to 9.2.1.2)
- 8.4 Internal Communication Guidelines (GB I – 9.2, moved to 9.2.1.4)
- 8.5 Marketing Strategy for Promoting *The Canadian Entomologist* (GB I – 9.2.4, moved to 9.2.18.1)
- 8.6 Possibility of renaming *The Canadian Entomologist* (GB I – 9.2.4, EC – 9.2.6.1, moved to 9.2.6.1)
- 8.7 Electronic Publishing with NRC Press (GB I – 9.2.4.1, moved to 9.2.6.2)
- 8.8 Complimentary Subscription to H.W. Wilson (GB I – 9.2.6, EC – 9.2.6.3, moved to 9.2.6.3)
- 8.9 Heritage Committee Guidelines (EC – 9.2.12.1, moved to 9.2.11.1)
- 8.10 Dues for International Members (EC – 9.2.14.3, moved to 9.2.11.2)
- 8.11 Password for Downloading Common Names List (EC – 9.2.13, moved to 9.2.19.1)
- 8.12 Lapsed Memberships and Benefits of ESC Membership (GB I – 9.2.14, EC – 9.2.14.1, moved to 9.2.14.1)



- 8.13 Fee Increase (25%) for Nonmembers Attending Annual Meetings (EC – 9.2.14.1, moved to 9.2.11.3)
- 8.14 Conference Travel Fund for Students (GB I – 9.2.15, EC – 9.2.15.2, moved to 9.2.15.1)
- 8.15 Borden Award (EC 9.2.15.1, moved to 9.2.15.2)
- 8.16 Guidelines on Issuing Press Releases (GB - 9.2.16, EC – 9.2.16.1, moved to 9.2.16.1)
- 8.17 Response to Legislation on Endangered Species (EC – 9.2.16, moved to 9.2.16.2)
- 8.18 Discounts and Sales of the ESC-CPS Book (EC – 9.2.18, moved to 9.2.18.2)
- 8.19 Common Name Keyword Search on Web Site (EC – 9.2.19.1, moved to 9.2.19.2)
- 8.20 URL Change, File Access to Web Site (EC – 9.2.19.2, moved to 9.2.19.3)
- 8.21 Annual Meeting Guidelines on Web Site (EC – 9.2.19.3, moved to 9.2.19.4)
- 8.22 Ad hoc Communications Committee (EC – 9.2.20, moved to 9.2.20)

## 9. *New Business*

9.1 Correspondence. President Johnson introduced several items of correspondence including AIBS and other Entomological Societies. These and other items will be discussed under items 9.2-9.3.

Correspondence to the Secretary was routine and pertained mainly to information regarding Student Awards. Members of the Entomological Community who died during the past year included Seyward Smith, Jean Goble, Pete Matthewman, Peggy and Ron Allan, Howard, McDonald, Norm Tonks, Eric Edney, Bob Fisher, R.O. Paradis, Bernie Gollop, Reverend Charles Riotte, John Conroy, Harry Carmody, Carole Matthews, Arthur Gittins, Chuck Doane, Hazen Wigmore, Frank Lord, Tom Cole, and Vladimir Smirnov.

9.2 Reports from Officers, Trustees, Committees and Representatives . O. Olfert moved and L. Gilkeson seconded that all reports be received. Carried.

9.2.1 Executive Council. President Johnson reported briefly on the activities of the President and Executive during the past year and will present a formal report at the AGM and in the December issue of the *Bulletin*. Action: D. Johnson

9.2.1.1 Joint meeting with ESA in 2000 update, process for decisions, financial agreement

President Johnson reviewed the letter of agreement (circulated to Board) between the SEQ and the ESC concerning shared revenues and other matters. D. Johnson moved and M. Goettel seconded that the past presidents of the ESC and SEQ be authorized to work out final sharing of proceeds from the joint meeting. Carried. Action: D. Johnson.

9.2.1.2 2001 and 2002 Meetings. The 2001 Annual Meeting of the ESC will be held October 21-24, 2001 with the Entomological Society of Ontario in Niagara Falls at the Sheraton Fallsview Hotel and Conference Centre. A letter from R. Lamb, circulated to the Board, expressed reservations about holding a joint meeting with another society so soon after the 2000 meetings in Montreal and extended an invitation to hold the 2002 meeting with the Entomological Society of Manitoba. These reservations and need for adequate lead time also were expressed by several Board Members.

V. Nealis moved and R. Bennett seconded that the ESC meet with the ESM in Winnipeg in 2002. Carried. Action: R. Footitt

D. Johnson moved and V. Nealis seconded that the Society enter discussions with the Canadian Society of Zoology to hold a joint meeting after 2003. Carried. Action: P. de Groot.

D. Johnson moved and V. Nealis seconded that a new continuing committee be struck to schedule joint meetings up to 5 years in advance with affiliated and other professional societies, provide guidelines for hosting an annual meeting, and advise the Society on policy concerning annual meetings and meetings with other professional societies. Carried. Action: R. Footitt, M. Goettel, R. West.

9.2.1.3 AIBS (*Bulletin* item, fee payment) . The American Institute of Biological Societies is well recognised in the US and includes 60 societies. The ESC has become a member society at a cost of \$100 (US) per year. D. Johnson wrote an article for the September 2000 *Bulletin* explaining the benefits of being an AIBS member and potential involvement of the ESC.

9.2.2 Treasurer. Report received. G. Gibson presented the Treasurer's Report. Because of continued net operating profits over the last few years, \$22,000 was transferred to the Investment Fund from the General Fund, \$10,000 more than budgeted. Since 1992 there have been 50% savings in costs associated with attending annual meetings. Other segments of the Society's finances, including the Endowment and Scholarship Funds and the Headquarters operations, continue to be stable. A continued decline in subscriptions, the main source of annual revenue for the Society is a major concern. 345 copies of the DPVCC book were sold. The Office Manager's contract expires in 2000 and negotiations are currently underway to develop a new three year contract. The contract includes the right for the Office Manager to retire before the end of the contract provided that 6 months notice is given.

9.2.2.1 Auditors Report. The 1999 audit showed a Societal net operating profit (balance-end of year) of \$24,412. Because of a 'paper loss' relating to amortization of the Headquarters building, the real net gain in Societal funds was \$30,030, resulting from the following combined net increase: General Fund - \$22,168, Endowment Fund - \$4,856, Scholarship Fund - \$3,006. Funds were reinvested into the Society's general investment account for the first time in a number of years.

9.2.2.2 2001 Budget. A small operating surplus is budgeted for the year 2001.

9.2.2.3 ESC Headquarters Committee. No report. Valerie Behan-Pelletier has been appointed as the new Chair, filling a position that has been vacant for the past year. \$3000 has been budgeted for a new furnace in the 2001 budget.

9.2.3 Finance Committee. Report received. The committee supports moving \$12,000 of the surplus into the Investment Fund as a measure to help ensure future financial stability of the Society.

9.2.4 Scientific Editor. Report received. Editor Jean Turgeon summarized activities of his office including manuscript processing and assessment, number and origin of manuscripts, and C.P. Alexander Reviews. Charges for about 23 pages were waived. Dr Terrence Laverty, resigned in May 2000 as Associate Editor. His services to the Society were much appreciated.

9.2.4.1 Electronic Publishing with NRC Press. L. Gilkeson moved and R. Bouchier seconded that the Publication, Finance Committees and the Treasurer work together to recommend to the Board on how to proceed with electronic publishing with regard to access control, a policy for the dissemination and pricing of PDF files and reprints, timetable for adoption, and financial implications by April 2001. Carried. Action: V. Nealis, J. O'Hara and G. Gibson.

R. Bennett suggested that the publications committee contact organizations which have developed successful electronic versions of their journals for advice. L. Gilkeson moved and R. Footitt seconded that the Society adopt a policy copyrights or permission to use original materials for publication in *The Canadian Entomologist* and other societal publications starting in 2001. Carried. J. Turgeon will provide a copy of the copyright form to the board at its next meeting. Action: J. Turgeon.

9.2.4.2 Special Issues of *The Canadian Entomologist*. See Editor's report.

9.2.4.3 Hiring an Assistant to the Editor. This item was moved to the December 7, 2000 meeting of the Board.

9.2.4.4 PDF Files See item 9.2.4.1.

9.2.5 Editor - *Bulletin*. Report received. Editor H. Barclay will resign following the publication of the December 2000 issue which will be produced jointly with the new Editor. The Publications



Committee recommends that Dan Johnson be the new *Bulletin* Editor. The Board applauded Hugh for editing the *Bulletin* over the past 5 years.

9.2.6 Publications Committee. Report received.

9.2.6.1 Possibility of renaming *The Canadian Entomologist*.. The Executive did not support a change in the journal's name at its meeting in April 2000. No action required.

9.2.6.2 Electronic Publishing with NRC Press. See item 9.2.4.1.

9.2.6.3 Complimentary subscription to The H.W. Wilson Company. This company has indexed our journal for several years and now offers an opportunity for full-text indexing. H.W. Wilson is one of many companies currently competing for journals to 'aggregate' in their electronic abstracting services. If the ESC decides this is a route we want to take, it may be worth shopping around. The primary motive would be to get as wide a distribution of publications as possible. Before we even reach that point, however, the ESC must critically evaluate future direction in electronic publishing and abstracting. If there is merit, then we can decide on which company best represents our interests. The future may reveal that once we are publishing electronically, the abstracting issue becomes secondary or unnecessary. We must consider carefully the implications to members, and particularly institutional members in terms of costs and complications in referencing 2 sources of electronic information. No action required.

9.2.6.4 Financial Support of External Publications. S. Castonguay wrote a PhD thesis on the history of entomology in the government service in Canada and is looking for funding to publish in French and English. The Publications Committee will review the thesis and make a recommendation to the board by April 2001. D. Johnson will contact S. Castonguay and inform him of this decision.  
Action: V. Nealis, D. Johnson.

9.2.6.5 Extension of terms for Publications Committee Members. D. Eidt has resigned from the committee. V. Nealis is authorized to extend terms of members of the publications committee.

9.2.6.6 Request for extra copies of the *Bulletin* to the Publications Committee Chair for sending reviews to Publishers. V. Nealis will request copies of the *Bulletin* from S. Devine. Action: V. Nealis.

9.2.6.7 Copyright issues. Two requests from horticultural organizations have raised questions about the possible need to review ESC policy on copyright permission. One request was for as many as 20 photographs from Pests and Diseases of Vegetable Crops in Canada, apparently for this organization's own publication, and the second was for use of photos from this same book on a commercial website. The Canadian Phytopathology Society was informed of these requests and is developing a policy regarding copyright permission in view of the rapidly changing world of electronic publication.

9.2.7 Nominations Committee. The following were nominated to stand for election in 2000:  
Second Vice-President: Rosemarie DeClerkFloate, Sandy Smith;  
Director-at-large: Helene Chiasson, Owen Olfert.

9.2.8 Elections Committee. 182 ballots were counted. Sandy Smith was elected as Second Vice-President. Owen Olfert was elected as Director-at-Large. Geoffrey Scudder was elected as an Honorary Member. B. Roitberg moved and V. Nealis seconded that the Year 2000 ballots be destroyed. Carried:  
Action: R. Hallett

9.2.9 Achievement Awards Committee. Dr. Bernard Philogène was selected as the Gold Medal Winner. Dr. Kevin Floate was selected the winner of the C. Gordon Hewitt Award. R. Footitt moved and D. Johnson seconded that the selection of Dr. Richard Ring as a Fellow of the Entomological Society of Canada be ratified. Carried

The Board extends congratulations to Drs. Philogène, Floate and Ring.

9.2.10 Bilingualism Committee. Report received. The committee requests that some money be budgeted for translations that are too long to be done by its members. \$1500 has already budgeted for committees. A request for \$500 for translations would not be a problem. R. West will convey this information to L. Royer. Action: R. West

9.2.11 Bylaws, Rules and Regulations Committee - Report received.

9.2.11.1 Heritage Committee Guidelines. M. Goettel moved and O. Olfert seconded that the following statement be added to every committee in the guidelines: "If applicable, artifacts from annual meetings be preserved nationally through the Heritage Committee."

Carried Action: R. West

9.2.11.2 Dues for International Members. M. Goettel moved and R. Bennett seconded that Standing Rule II be amended to reflect dues for international members as follows:

1. Annual dues for Regular Membership shall be eighty dollars (\$80.00) in Canada and one hundred dollars (\$100.00) or seventy-four dollars US (\$US74) for members outside of Canada.

2. Annual dues for Student Membership shall be twenty dollars (\$20.00) in Canada and twenty-five dollars (\$25.00) or eighteen dollars US (\$US18) for student members outside of Canada.

Carried: This Standing Rule change will be presented at the AGM for member approval. Action: M. Goettel.

9.2.12 Heritage Committee. Report received. The Committee commends Ed Becker for his continued publication of the Newsletter for Senior Entomologists and Associates and for his systematic accounting of honours and deaths. The Committee also commends Paul Riegert for his 1999 Heritage Lecture Early Prairie Entomology and Entomologists, Bull ESC 31:163-169. The Committee recommends that (1) the Program Committee be required to provide the Heritage Committee with a copy of the program and other relevant material, including photographs if available and (2) that this be incorporated into the Committee Terms of Reference, if this has not already been done. Action: Chair, Annual Meeting Committee.

9.2.13 Insect Common Names and Cultures Committee. Report received. John Garland is resigning as Chair. A new Chair will be appointed. Action: R. Footitt.

9.2.14 Membership Committee. Report received. R. Bennett encouraged members who are government employees to lobby their managers for permission to charge ESC memberships to their research budgets. D. Johnson introduced a letter from the President of the ESC to a research Director General suggesting the value of that permission. More needs to be offered to the Membership such as the Web Site, *Bulletin*, a 'job-line' etc.

9.2.14.1 Lapsed Memberships and Benefits of ESC Membership. The Membership Committee recommends that the ESC cut operating costs and pass savings on to Members in form of lowered dues. To encourage membership in ESC, the Committee supported concept of higher fees for non-ESC registrants at the AGM (note: at the Executive Council meeting in April 2000, the executive recommended that 25% increase in registration fees be applied to non-members attending annual meetings).

A short document outlining benefits of membership in ESC was prepared and forwarded to the Marketing Committee for inclusion with ESC display materials at the Montreal AGM. The Regional Directors were asked to canvas their membership about raising the fees (by the price of an ESC subscription) to non-members attending joint meetings with the ESC. Action: Regional Directors.

9.2.15 Student Awards Committee. Report received. Travel Awards were given to Ms. Jessica Janjic, York University and Ms. Jade Savage, McGill University. Ms. Michelle McPherson, Acadia University and Mr. Leonardo Frid, University of British Columbia, were awarded ESC Postgraduate



Awards. In the past, the Chair of the committee has sent announcements to graduate offices of universities across Canada, but recommends that the ESC office take on this task, since it is difficult to justify hiring help for sporadic jobs like these. The Board requests that the Chair provide the data base and addresses to Sandy Devine for mailing. Staffan Lindgren recently resigned as Chair and has been replaced by Dave Gillespie. The Board thanks Dr. Lindgren for his years of dedicated service. Dave Gillespie requested that candidates for the Post Graduate Award must be in their first entomology degree program. The Board recommended that the candidates be in "the first year of a graduate program." D. Johnson will pass this recommendation on to D. Gillespie. Action: D. Johnson.

9.2.15.1 Conference Travel Fund. D. Johnson started a fund, now at \$2300 with promises for \$4000 more, to support students attending the ESC annual meeting. A request was sent to all student members for feedback on how to spend the money (e.g., accommodation, poster making, registration fees, travel). D. Johnson moved and R. Footitt seconded that a conference travel scholarship be established under the Society's (tax-deductible) Scholarship Fund with the funds collected to date and with future funds in the scholarship fund. Carried. Action: D. Johnson, G. Gibson.

9.2.15.2 Borden Award. R. Footitt summarized a proposal from Leslie Chong to establish a pest management scholarship in honour of John Borden. R. Footitt moved and R. Bennett seconded that the John Borden Award be established under the ESC Scholarship's Fund to support innovative research in pest management subject to the raising of sufficient funds. Carried. Action: Treasurer.

9.2.16 Science Policy and Education. Report received. G. Gibson reminded Regional Directors that their society is eligible to request funding of \$200 year or \$600 every three years for activities promoting public awareness of entomology.

9.2.16.1 Guidelines on issuing press releases - See item 9.2.16.3.

9.2.16.2 Response to Legislation on Endangered Species. The Federal Government's Species at Risk Legislation was discussed but no formal statement was issued. Many individuals did respond to the legislation either on their own or through some other channel for the need to provide a broad-based outlet for publicizing our policies. This legislation did not receive formal approval thus it or something like it will be introduced sometime down the road. At that time, it would be very useful for ESC to make formal statement on this issue. N. Larocque provided the board with a copy of a letter to the Environment Minister, David Anderson. The letter expressed concern that the proposed legislation could adversely affect amateur insect collecting. The response from the minister referred to information on the government web site, but did not address this concern. R. Bennett suggested that the Science Policy Committee work with G. Scudder's committee in responding to legislation on Endangered Species at the general level and at a more specific level dealing with guidelines for e.g., collections. Action: S. Smith.

9.2.16.3 Public Dissemination of Societal News. Katherine Aberle Director - Media & Public Relations, Simon Fraser University was contacted regarding dissemination of entomological news to various media. She has offered help by providing a list of media that could be useful at furthering our cause, offering to send ESC news releases to those sites and offering to help us hire an SFU communications student to help develop communications policy as well as set up a dissemination service. The cost would be in the order of 5K per trimester.

9.2.16.4 Web Page on Science Policy. B. Roitberg recommended that issues raised by the Science Policy Committee which have broad ramifications for the entire society should be posted at the ESC web site so that the committee can receive feedback from the general membership. B. Roitberg will set up the feedback forum and B. Lyons will provide a link from the ESC web. Action: B. Roitberg, B. Lyons.

9.2.17 Student Affairs - No report received.

9.2.18 Marketing Committee - Report received.

9.2.18.1 Promotion of *The Canadian Entomologist*. A booth at the 2000 meeting in Montreal will contain membership information, items for sale, and promotional materials from the ESC, information for the 2001 Annual Meeting, materials from the Biological Survey of Canada, and materials including *The Canadian Entomologist* from NRC Research Press. The committee also made a large poster to promote the ESC and its Affiliated Societies.

9.2.18.2 Discounts and Sales of the ESC-CPS Book. CPS is willing to pay \$3000 for updating the DPVCC Brochures; K. Bailey (CPS) has a revised brochure and is investigating use of the original cover photo for use in the revision, as well as obtaining a price quote from MOM publishers for digitizing the brochure. A letter was sent on 25 July from Zamir Punja, President CPS, to President Johnson in support of a Joint CPS/ESC Marketing Committee which would have approval to pursue marketing options without going back to the respective boards for approval at every step. D. Johnson responded with a financial breakdown (prepared by G. Gibson) of the costs of reduced pricing of the book. The CPS will review their strategy for marketing the book following their Board meeting in the new year. The CPS will be contacted giving them more financial information after the sales at the 2000 JAM are determined. Action: R. Footitt, D. Johnson.

9.2.19 Web Site Committee. No report received. M. Goettel moved and R. Bennett seconded that the Web site committee be merged with the publications committee. Carried. Action: R. West, M. Goettel

9.2.19.1 Password for Downloading Common Names List - G. Gibson suggested that the list should be a benefit for members.

9.2.19.2 Common Name Keyword Search on Web Site. B. Lyons is requested to provide information on whether a key word search function will be added to the Web Site. Action: B. Lyons.

9.2.19.3 URL Change, File Access to Web Site. The publications committee will investigate getting a new URL that is indicative of the Society and, if necessary, a new server. Action: V. Nealis.

9.2.19.4 Annual Meeting Guidelines on Web Site. T. Shore suggested in an email to R. West that a copy of the annual meeting guidelines could be put on the web.

9.2.19.5 Additional Web Features. D. Johnson suggested having a section of the web devoted to the *Bulletin*.

9.2.20 Ad hoc Communications Committee. The ad hoc web/*Bulletin* content Committee was dissolved after the April 2000 Executive Council meeting. Communications including the web site and *Bulletin* will be covered by the Publications Committee. Action: V. Nealis.

9.2.21 Affiliated Entomological Societies. Reports were received from all the affiliated societies except the Acadian Entomological Society. The reports will be published in the December 2000 issue of the *Bulletin*.

9.3 Other Business There was no other business.

Adjournment of meeting: The meeting was adjourned at 1646 h following a motion by R. Bennett. The next meeting of the Governing Board will be held at the Palais des Congres (Room 403C) on Thursday, December 7th at 9 am.



## MINUTES

**50th Annual General Meeting  
December 5, 2000  
Palais des Congrès de Montreal**

President D. Johnson called the meeting to order at 1700 h. Thirty-seven members were present.

1. **Notice of Meeting.** Notices of the meeting were published in the March, June and September 2000 issues of the *Bulletin* (Vol. 32).
2. **Proxies.** There were no proxies.
3. **Additions to the Agenda and Approval of the Agenda.** J. McNeil moved and I. Otvos seconded that the agenda be accepted. Carried
4. **Deceased Members of the Entomological Community.** A moment of silence was observed in memory of the following members of the Entomological Community who passed away during the past year: Seyward Smith, Jean Goble, Pete Matthewman, Peggy and Ron Allan, Howard, McDonald, Norm Tonks, Eric Edney, Bob Fisher, Rodolph Paradis, Walter Touzeau, Bernie Gollop, Reverend Charles Riotte, John Conroy, Harry Carmody, Carole Matthews, Arthur Gittins, Chuck Doane, Hazen Wigmore, Frank Lord, Tom Cole, and Vladimir Smirnoff. The Society greatly appreciates the service of Ed Becker who writes letters of condolence to the families of the deceased.
5. **Minutes of the 49th Annual General Meeting.** Minutes of the 49th Annual General Meeting were printed in the December 1999 issue of the *Bulletin* (Vol. 31). H. Danks moved and R. Lamb seconded that the minutes be accepted. Carried No action required.
6. **Business Arising from the Minutes.** There was no business arising from the previous minutes.
7. **Report from the Governing Board.** President D. Johnson presented a report on behalf of the Governing Board. The report from the Governing Board and regular updates are published in the *Bulletin*. This particular report will be published in the December, 2000 *Bulletin* (Vol. 32).

7.1 Changes to Standing Rules. M. Goettel moved and E. Becker seconded that Standing Rule II be amended to reflect dues for international members as follows:

1. Annual dues for Regular Membership shall be eighty dollars (\$80.00) in Canada and one hundred dollars (\$100.00) or seventy-four dollars US (\$US74) for members outside of Canada.
2. Annual dues for Student Membership shall be twenty dollars (\$20.00) in Canada and twenty-five dollars (\$25.00) or eighteen dollars US (\$US18) for student members outside of Canada.

Carried                      Action: R. West

M. Goettel moved and L. Gilkeson seconded that Standing Rule VIII 4 (j) be amended to reflect the incorporation of the Web Committee under the Publications Committee as follows:

- (j) Publications Committee

The Committee shall consist of six Members. The Chair shall normally be a member of the Board. Each year, two Members shall be appointed to serve for three years, and the two senior members shall retire. The Scientific Editor, the *Bulletin* Editor, the webmaster, and any other full Editors shall be ex officio members of the Committee.

The Committee shall advise the Editors on policies of the Society's publications and web site, ensure that present policies are followed, modify policies and procedures when necessary, and formulate new policies for the approval of the Board.

Carried                      Action: R. West

M. Goettel moved and K. MacKenzie seconded that Standing Rule VIII 4 (n) be changed as follows to reflect the creation of a new Continuing Committee, Annual Meeting Committee and the dissolution of the Web Committee:

(n) Annual Meeting Committee

The Committee shall consist of one member who, as Chair, may appoint additional Committee members whenever they are required.

The Committee shall be responsible for scheduling joint meetings with affiliated and other professional societies five years in advance, provide guidelines for hosting an annual meeting, and advise the Entomological Society on policy concerning annual meetings and meetings with other professional societies.      Carried                      Action: R. West

8. **Auditor's Report** G. Gibson presented the Auditor's Report for 1999 as published in the June 2000 issue of the *Bulletin* (Vol. 31). G. Gibson moved and R. Lamb seconded that the Auditor's report be accepted. Carried. No action required.

9. **Elections Committee Report** R. West read the Elections Committee report. Those elected were: Dr. Sandy Smith, Second Vice-President; and Dr. Owen Olfert, Director-at-Large. Dr. Geoffrey Scudder was elected as an Honorary Member.

10. **Installation of Officers** President Johnson called on L. Gilkeson to escort S. Smith, Second Vice-President, to the dais then turned the gavel over to R. Foottit as incoming President of the Entomological Society of Canada. The new President accepted the gavel and thanked the Members for the honour of being elected President.

11. **Presentation of Service Awards** President Foottit thanked D. Johnson, outgoing President, and H. Barclay, retiring *Bulletin* Editor, for their service to the Society and presented each with a service award.

12. **Appointment of Auditor** G. Gibson moved and P. Dixon seconded that McCay, Duff, and Company be retained as Auditors for 2001. Carried                      Action: G. Gibson

13. **Resolution** At the request of President Foottit, H.V. Danks presented the following resolution on behalf of the Entomological Society of Canada:

13.1 Thanks to Organizing Committee:

Whereas the Entomological Society of Canada has met jointly with the Société d'entomologie du Québec and the Entomological Society of America at the Palais des Congrès de Montreal, Quebec, December 2-7; and

Whereas there has been a full and interesting meeting of lectures, symposia, and papers; and  
Whereas the meeting has been planned with care and concern for those attending; and

Whereas there has been ample opportunity for social interaction and visits to Montreal and surrounding areas;

Be it resolved that the Entomological Society of Canada express its sincere thanks to the Organizing Committee for their hard work and skill in arranging a worthwhile and entertaining program; and



Be it further resolved that the Society thank the Organizing Committee and meeting contributors for their generous assistance; and

Be it further resolved that the Society express its thanks to the Management and Staff of participating hotels and the Palais des Congrès de Montreal for their courteous assistance during the Meeting."

Carried            Action: R. West

14.    **New Business**

15.    **Notice of 51st Annual General Meeting** The 51th Annual General Meeting will be held October 21-24, 2001 with the Entomological Society of Ontario in Niagara Falls at the Sheraton Fallsview Hotel and Conference Centre. Further notices for the meeting will be published in the March and June 2001 issues of the *Bulletin* (Vol. 33).

Action:            D. Johnson

16.    **Adjournment** President Footit adjourned the 50th Annual General Meeting at 1722 h following a motion by J. Shorthouse.

## MINUTES

### Governing Board Meeting, December 7, 2000 Palais des Congrès de Montreal Montreal, Quebec

The meeting was called to order at 0900 hours on December 7, 2000 by President R. Footit. Those present were R. Footit, President; B. Roitberg, Vice-President; D. Johnson, Past-President; P. De Groot and Owen Olfert, Directors-at-Large; R. Bouchier (ESA) and D. Hunt (ESO), Directors from Affiliated Societies; J. Turgeon, Editor of *The Canadian Entomologist*; G. Gibson, Treasurer; V. Nealis, Chair of the Publications Committee; and R. West, Secretary.

1.    **Notice of Meeting**

Notice of this meeting was emailed on August 9, 2000 and printed in the March, June and September (2000) issues of the *Bulletin*.

2.    **Absences and Proxies**

S. Smith, R. Bennett, T. Shore (ESBC), R. Elliot (ESS), R. Lamb (ESM), N. Larocque (SEQ) and L. Hollett (AES) were absent. O. Olfert acted as proxy for R. Elliot (ESS). V. Nealis acted as proxy for T. Shore (ESBC).

3.    **Additions to and approval of the Agenda**

- Add items    7.1 Permission to Reproduce Figures/photographs from the DPVCC Book  
7.2 Electronic Version of *The Canadian Entomologist* for Members  
7.3 Colour of the Cover of *The Canadian Entomologist*

O. Olfert moved and P. deGroot seconded that the agenda be approved.

Carried            No action required

4.    **Minutes of Previous Governing Board Meeting**

Minutes of the Governing Board meeting held on December 2, 2000 will be circulated to the Board by the Secretary and published in the December *Bulletin*.    Action: R. West

5. **Business Arising from Previous Governing Board Meeting**

5.1 Hiring an Assistant to the Editor

J. Turgeon presented reasons why he needed an assistant to help process manuscripts submitted to *The Canadian Entomologist*. The Board recognized the considerable effort and time expended by J. Turgeon in carrying out his duties as Editor.

B. Roitberg moved and R. Bouchier seconded that, for a trial period of one year, up to \$7,000 be budgeted to fund secretarial duties associated with the processing of manuscripts submitted to *The Canadian Entomologist*. Action: G. Gibson

The Finance Committee will review the expenses incurred over this period to determine cost efficiencies. Action: J. O'Hara.

5.2 Changes to Committee Guidelines. R. Bouchier moved and P. de Groot seconded that the guidelines pertaining to the now defunct Web Committee be included with the guidelines for the Publications Committee. Carried. Action: R. West

D. Johnson moved and D. Hunt seconded that the Guidelines for the new Continuing Committee, The Annual Meeting Committee be as follows:

**Annual Meeting Committee**

- STATUS: Continuing Committee (Standing Rule VIII 4n).  
COMPOSITION: One or more Members, plus the President ex officio.  
APPOINTMENT: The Chair is appointed by the President, subject to the approval of the Governing Board. The Chair may appoint other members as required.  
TERM OF OFFICE: One year with no limitations on reappointment.  
OBJECT: The function of Annual Meeting Committee is to schedule joint meetings with affiliated and other professional societies up to five years in advance, provide guidelines for hosting an annual meeting to affiliated societies, and advise the Entomological Society of Canada on policy concerning annual meetings and meetings with other professional societies.  
DUTIES:  
1. Schedule and determine locations of joint meetings with affiliated and other professional societies up to five years in advance.  
2. Update annually and provide meeting organizers with a copy of "How to Organise and Hold an Annual Meeting".  
3. Advise the Entomological Society of Canada on policy concerning annual meetings and meetings with other professional societies.  
4. Provide the Society Office with a copy of the annual conference program and copies of important correspondence.  
5. Provide the Heritage Committee with a copy of the annual conference program and other relevant material including photographs and digital images (if available).  
6. Liaise with Regional Directors and other representatives of Affiliated Societies on pricing registration fees for non-members and Members of the Society.  
7. Provide the Governing Board with the following information when making a recommendation that the Society spend money on a new project:  
(a) purpose of the project;  
(b) background analysis and prediction of impact of the project on the Society;  
(c) pros and cons of the project;  
(d) costs and actions needed to be approved by the Governing Board.  
REFERENCES:  
Standing Rule VIII 4(n)

Carried

Action: R. West



6. **Other Business**

6.1 Appointments

6.1.1. Executive Council. P. de Groot moved and O. Olfert seconded that the Executive Council for 2000-2001 be: R.G. Foottit, President; B. Roitberg, First Vice-President; S. Smith, Second Vice-President; and D. Johnson. Carried No action required

6.1.2. Trustees. R. Bourchier moved and D. Hunt seconded that the Trustees for 2000-2001 be:

Treasurer:	G. Gibson
Scientific Editor ( <i>The Canadian Entomologist</i> ):	J. Turgeon
<i>Bulletin</i> Editor:	D. Johnson
Secretary:	R. West

Carried No action required

6.1.3. Committees and Representatives. D. Johnson moved and B. Roitberg seconded that the Governing Board approve the list of Committees and Representatives for 2000-2001 as prepared by the President and further that the Governing Board accept the President's appointees to remaining positions to be filled. Carried. Action: R. Foottit will provide R. West with the completed list of Committee Chairs and appointees and write to all Committee Chairs and Representatives confirming their appointments for 2000-2001.

The Secretary will send terms of reference and Committee Guidelines to all new Chairs. Action: R. West

6.2 Budget. B. Roitberg moved and P. de Groot seconded that the budget for 2001, as presented by the Treasurer, be approved. Carried. Action: G. Gibson

G. Gibson stated that there is a need to market institutional subscriptions, but recognized the substantial work done by the Marketing Committee to promote sales of the DPVCC book and individual memberships, particularly at the 2000 JAM. \$3000 has been budgeted for a new furnace for the headquarters building.

7. **New Business**

7.1 Permission to reproduce figures/photographs from the DPVCC book. J. Turgeon indicated that substantial charges could be charged to commercial institutions (eg. \$100 per photograph for a one-time use) and be a source of revenue to both the ESC and CPS. B. Roitberg cautioned that a decision to levy charges should depend on the educational value of the product and the commercial status of the companies requesting permission. The Publications Committee will develop guidelines on giving permission and charging for the reproduction of DPVCC and other ESC material.

Action: V. Nealis.

7.2 Electronic Version of *The Canadian Entomologist* for Members  
Action: J. Turgeon and V. Nealis will develop the draft of an authors' authorization agreement with NRC to publish an electronic version of *The Canadian Entomologist*, obtaining legal permission in consultation with G. Gibson, if necessary.

The Publications Committee, Treasurer and Finance Committee will investigate the process and cost of providing an electronic version of *The Canadian Entomologist* to Members. Action: V. Nealis, G. Gibson and J. O'Hara.

7.3 Colour of *The Canadian Entomologist*. The Board authorized the Publication Committee to choose a colour for the cover of *The Canadian Entomologist*. The paper for the current paper is in short supply and soon will be no longer available. Action: V. Nealis.

8. ***Next Meeting***

The next meeting of the Governing Board will be held October 20, 2001 in Niagara Falls at the Sheraton Fallsview Hotel and Conference Centre.

9. ***Adjournment***

The meeting was adjourned by President Footitt at 1020 h following a motion by V. Nealis.  
Carried.

## **PERSONALIA**

### **In Memory**

#### **Dean Seyward Smith (1914 - 2000)**

Dean Seyward Smith passed away peacefully in his sleep in Victoria, British Columbia on October 8, 2000. Seyward was born in London, Ontario on January 15, 1914, but spent most of his early years in Winnipeg, Manitoba.

Seyward obtained his B.Sc. (honors) in Zoology and Chemistry from the University of Manitoba. He went on to take graduate studies at the University of Minnesota, where he obtained his M.Sc. in 1948 and Ph.D. in 1958.

Seyward began his career in 1936 at the Dominion Entomological Laboratory, Brandon, Manitoba, where he studied the ecology of grasshoppers and causes of population increases until 1941, when he joined the RCAF reaching the rank of Flight Lieutenant. In 1945, he returned to the Brandon Laboratory and resumed research on grasshoppers with emphasis on the nutrition for the pest species. In 1949, he transferred to the Crop Entomology Section of the Canada Department of Agriculture, Science Service Laboratories, Lethbridge, Alberta where he continued his research. Seyward pioneered in the field of insect nutrition, developed rearing methods for grasshoppers on hydroponically grown food, demonstrated that food, crowding and fertilizers caused variations in reproduction rates of these insects. He also contributed to the basic knowledge on the distribution of grasshopper species, their life-histories and their damage to crops. He was responsible for annual grasshopper surveys and prepared annual grasshopper forecasts.

Seyward was a Charter Member of the Entomological Society of Alberta and a member of the Entomological Society of Canada. Seyward loved music and was involved in several choirs and music festivals. He was actively involved in Kiwanis and Kinsmen clubs. Seyward retired on December 27, 1973 after 35 years service. Seyward was predeceased by his wife Marion after 57 years of marriage. He is survived by his daughter Carol and son David and two grandchildren.

Joe Shemanchuk  
Ed Swailes  
Lethbridge



**Pat Pielou (1915 - 2000)**

Dr. D. Patrick Pielou died on 13 November 2000 in Comox, BC, at age 85. Pat was born at Burton, United Kingdom, on 1 September 1915 and received his MSc. (1936) and Ph.D. (1939) degrees from the University of Birmingham. From 1945 to 1947, he served as an entomologist with the Colonial Service in Northern Rhodesia. Pat was an assistant professor of entomology at the Ontario Agricultural College in Guelph from 1947 to 1949. He then joined the Department of Agriculture as a research scientist in 1949, working first at the Belleville Research Institute, second at the Summerland Research Station, third at the Entomology Research Institute in Ottawa in 1963, and finally for a year at the Ottawa Research Station in 1970 before retiring in 1971.

Pat was a Fellow of the Royal Entomological Society of London and of the Entomological Society of Canada. He was a member of several organizations, such as the Entomological Society of Canada, Ecological Society of America, Biometrical Society, and the AAAS. (Most of the above information was taken from the American Men and Women of Science.)

His research dealt mainly with the biological control of insect pests, insect ecology, and host specificity of phytophagous invertebrates.

Pat was a very private individual, so much so, that after asking eight colleagues, I received very little information. Actually I received the more personal information about Pat from a former technician than from anyone else. When the technician arrived in Ottawa, he was assigned to Pat. During the interview, the technician noticed a picture of Dr. Stanley E. Flanders on Pat's desk. Pat knew Stanley quite well and the technician said he worked with Flanders on the Hong Kong-China border years before!! The technician said Pat was the nicest person he knew.

Phil Corbet, a friend and colleague of Pat's in the Experimental Biology Section of the Entomology Research Institute, Ottawa, writes: "I remember Pat as a true gentleman - courteous, modest and unfailingly helpful. He was always willing to share his knowledge and wise counsel with colleagues."

Pat is probably best known for the nearly eight years (1966-1973) that he served as the editor of *The Canadian Entomologist* and the *Memoirs*. Pat was the author of many papers, the earliest was one by D. L. Gunn, J. S. Kennedy, and D. P. Pielou in 1937.

After retirement, Pat and Chris moved to Halifax where he was a professor of biology at Dalhousie University. They then moved to Denman Island, BC, and finally to Comox on Vancouver Island. Pat married Chris in 1944 and they have three children.

Edward C. Becker and colleagues.

**Dr. Howard McDonald (1911-2000)**

Howard McDonald, 89, was born February 23, 1911 in Glenside Saskatchewan, and died July 8, 2000 at Evergreen House in North Vancouver, BC, his home for the past 20 years.

He grew up on the family farm at Glenside, attended high school in Outlook, earned his Masters in Agriculture from the University of Saskatchewan and his PhD in Entomology from Ohio State University.

He eventually became Head of Entomology and Assistant Director of the Canada Agriculture Research Station, Univ. of Saskatchewan campus. His professional life was devoted to the control of insects that threaten prairie crops.

Howard married Audrey Black on September 9, 1937 and together they raised six children. He served in the Saskatchewan Light Infantry Reserves during WW II. He was active with his sons in Scouting for many years, eventually serving as Commissioner for Scouts for the Saskatoon Regional Council. The family's annual summer camping trips were legendary, and an unending series of hilarious adventures. He and Audrey shared a love of gardening and together created oases of beauty wherever they lived. They also shared an interest in Shetland sheepdogs, raising and showing pedigreed Shelties.

Following his retirement in 1972, Howard and Audrey moved to Sorrento, BC where they designed and built a lovely home overlooking Shuswap Lake, and took an active role in their new community. In 1986 they moved to North Vancouver to be closer to family. Their annual trips back to the prairies to visit family and friends were a highlight of their retirement years.

Howard's life was characterized by a quiet, gentle and thoughtful nature, remarkable patience, a love of the outdoors, and an appreciation for and acceptance of others and of all that life brought him. Over the past decade as his health began to fail, his greatest pleasure came from happy times spent with family and enjoying the familiar comforts of his North Vancouver condominium.

Howard was pre-deceased by Audrey, his wife of 55 years and is survived by daughters Gwen McDonald (Curt Firestone) of Seattle, and Peggy McDonald of Victoria; by sons Duncan McDonald (Bonnie) and Murray McDonald (Moir McCaffrey) of North Vancouver, Hugh McDonald of Lund, BC, and Don McDonald of Vancouver; by six grandchildren (Shaun, Eden and Megan Pell, Heather and Scott McDonald, Lupin Raudzins); and numerous nephews, nieces and other relatives. He was a loving and deeply loved father, grandfather, husband, son, brother, and uncle.

Bob Burrage

### **Vladimir A. Smirnoff, 1917-2000**

Vladimir Smirnoff died of a cerebral haemorrhage at home, on November 1. He leaves behind his wife Alexandra, his daughters Nathalie, Olga and Tania, their spouses and his grandchildren. Dr Smirnoff was born on September 1, 1917 in St. Petersburg, Russia, which is where he completed his university studies. He received a degree in forest engineering from The Forest Institute of the Soviet Union and a PhD in biological control from the Forestry Academy. At an early stage he became interested in the problem of protecting forests against insect pests. Around the end of the Second World War, he fled the USSR with his wife and their first daughter, Nathalie. He accepted a position as a research scientist with the INRA and conducted leading-edge research for 10 years in Morocco that focussed on developing methods for controlling the scale insect of palms. During this period, he completed a PhD in science at the Sorbonne in Paris, France. In the course of his research in North Africa, he crossed the Sahara Desert several times. He walked so fast on the sand, practically running, that his Moroccan collaborators nicknamed him "Faennec", or sand fox.

In 1957, Dr Smirnoff accepted a position as an insect pathology researcher with the Canadian Forest Service—Quebec Region. In his first studies, he isolated a very active strain of the nucleopolyhe-



drosis virus of the Swaine jackpine sawfly, a hymenopteran that causes severe damage in jackpine forests. He conducted research for the CFS for 28 years, making some very significant contributions to the advancement and recognition of insect pathology. More specifically, he isolated a number of entomopathogenic organisms such as microsporidia (*Thelohania pristiphorae*), nucleopolyhedrosis viruses (NPVs of *Erannis tiliaria*, *Pristiphora geniculata*, *Archips cerasivoranus*) and flagellates (*Herpetomonas swainei*). However, his greatest contribution to the biological control of forest insect pests was without a doubt the persuasive skill he brought to bear in convincing forest resource managers and Canadian society at large of the benefits of using ultra low volume (ULV) concentrations of the microbial insecticide *Bacillus thuringiensis* for the operational control of outbreaks of spruce budworm, the most destructive pest of coniferous forests in North America. Some of these ULV suspensions of *B. thuringiensis* were developed at the CFS-Quebec and can be sprayed at the rate of 2.0 to 2.5 L/Ha using the requisite doses ( 20 to 30 BIU/Ha ). At a hearing before Quebec's public consultation board on environmental issues, he drank a glass containing a ULV suspension of *B. thuringiensis* to demonstrate to the shocked commissioners how safe he considered this product. This bacterium-based insecticide was subsequently adopted as a replacement for chemical pesticides and eventually became recognized as the microbial insecticide of choice for controlling the spruce budworm and other harmful forest lepidopterans in Canada and the United States.

Dr Smirnoff carried out most of his research at the Chute aux Galets Forest Research Station, located near Chicoutimi in the Saguenay-Lac-St-Jean region, 250 km north of Quebec City. This station's activities enabled several dozen researchers and students from Canada and around the world to specialize in biological control of insect pests. The Chute aux Galets laboratory earned international recognition, and the ambassadors of 17 countries visited it in the late 1970s.

During his career and by the time he retired in 1984, Vladimir had published more than 300 scientific articles and earned many awards, notably the Parizeau Award conferred by the Association Canadienne Française pour l'Avancement des Sciences, the medal of the Chemical Institute of Canada and the award of merit of the Quebec Order of Engineers. He was an honorary member of the Quebec Biologists' Association, and was especially proud to be made an Officer of the Order of Canada. Vladimir was not one to rest on his laurels, though. In 1987, he was appointed Researcher Emeritus in the Canadian Forest Service and until recently he was investigating ways of using the essential oils from balsam fir to purify the air.

A tireless worker, dynamic and committed, he was very demanding of both himself and his collaborators and he always kept abreast of the latest scientific advances. Although Vladimir liked to be in the spotlight, he always endeavoured to ensure that his research would benefit society. His motto might have been: 'Give reign to the spirit.' He was a jovial humanist, a lively and witty person, as well as a very faithful friend with an abiding concern for the well-being of others. His excellent communication skills and his imaginative expressions made him a very popular guest speaker. But most of all, Vladimir was a great lover of nature, especially the Laurentian Forest. It was this love that he conveyed in his paintings, which were full of sunshine, flowers, dreams and symbols. Vladimir's legacy to all of us, his family and friends, is the wonder of discovery and a belief in social and humanitarian commitment in science.

José Valéro, Ph.D.  
Ste-Foy

### Robert W. Fisher (1923-2000)

Dr. Robert William "Bob" Fisher, retired (1980) research scientist in entomology from the Agriculture Canada Research Station at Vineland Station, Ontario, died June 4, 2000, after suffering from cancer.

Bob was born on a farm in Bainsville, Glengarry county, Ontario in 1923. He attended high school in Williamstown, ON. He studied entomology at McGill University (Macdonald College), receiving his B. Sc. (Agr) in 1948 and Ph.D in 1951. Enroute to his degrees, he spent two summers at Churchill, Manitoba, engaged in research on mosquitoes and blackflies for the Defence Research Board of Canada.

He began his professional scientific career at Agriculture Canada in London, ON, where he developed the insect rearing section and studied insect toxicology. He moved to Vineland Station in 1958 to work on control of orchard insects with emphasis on pesticide application, studying relationships of droplet size and spray patterns on the effectiveness of pesticides against orchard mites and Oriental fruit moth larvae. With Dr. Donald Menzies, he did much to improve the performance of sprayers in Orchard pest control, and published a bulletin that enabled fruit growers to achieve optimum sprayer performance.

Bob served the Entomological Society of Ontario as a director in 1964-65, Vice-president in 1971-72, and President in 1972-73. Away from the research bench, and in his retirement, Bob pursued three avocations, in each of which his achievements were worthy of professional status.

He was best known for his painting. He began in his early youth, and took formal studies in art when he moved to London. Although very versatile, his favorite subject was the northern Ontario landscape, and, for 37 years, he made annual trips to the Combermere area to paint the fall colours, where he painted along with a number of well-known artists including A. Y. Jackson. Bob also painted in various places around the world. He was accomplished in water colours, oils, and ink and for many years sent his friends Christmas cards made by linoblock engravings based on his own paintings. Bob's works were shown in at least 18 one-man shows; including Avocation of a Lifetime at Rodman Hall in St. Catharines, at which 150 of his paintings were shown. His exposure in group and jury shows and his awards and commissions are too numerous to mention. He taught art at several venues in Niagara, served 4 terms as president of the St. Catharines Art Association and was elected to the Ontario Society of Artists in 1973 and as a life member in 1993.

Bob also developed a keen interest in minerals and mushrooms, and became an expert at identification in both fields, in which he used his illustrating skills to good advantage. He made about 9000 micro-mounts of minerals. More than 200 of his ink drawings of micro minerals appear in the book *Micro Minerals of Mont Saint-Hilaire, Quebec*, by R.W Fisher and Garry H. Glenn. He was a leading founder of the Niagara Peninsula Geological Society as well as the Canadian Micromineral Association, and was elected to the Micromounters' Hall of Fame.

His searches for mushrooms in the Niagara and neighbouring regions led to a collection of more than 800 varieties, including a number of new species, each of which he painstakingly photographed, dissected, and sketched. His collection and descriptions of mushrooms are to be donated to the University of Toronto.

Bob also found time to establish an outstanding wildflower garden in his back yard. He was predeceased by his wife Norma in 1991, and is survived by his daughter, Belinda Rowe, son Kenneth Fisher, sister Lorna MacLean, three grandchildren and his devoted companion of the last 7 years, Eira Voth, also an talented artist.

A. B. Stevenson  
St. Catharines

### **Thomas V. Cole (1918-1999)**

Tom spent four years in the Royal Canadian Air Force and after subsequent university training, he joined the Dominion Field Crop Insect Laboratory in Brandon in 1949. In the early part of his career he investigated the life histories and habits of insects of potatoes, radishes, turnips and onions. In 1953 Tom took charge of the project on insect pollination of alfalfa. He developed a field and bee habitat management program to increase and maintain high populations of wild bees adjacent to seed alfalfa fields. In the years before retirement in 1966 he studied the cause and effects of aster yellows due to virus infection.

Ed. Becker



## Awards

**Entomological Society Of Canada Gold Medal  
for Outstanding Achievement in Canadian Entomology in 2000  
presented to  
Bernard J.R. Philogène  
at Montreal, Quebec, December 3, 2000**

The 2000 recipient of the Entomological Society of Canada's Gold Medal for outstanding achievement in entomology is Bernard J.R. Philogène. Bernard J.R. Philogène is an insect physiologist specialized in the study of insect development, plant/insect relationships, pesticides of plant origin and chemical ecology.

Born in 1940 on the island of Mauritius, in the Indian Ocean, he lived seven years in France before coming to Canada in 1961. He received a B.Sc. (Biology) from l'Université de Montréal (1964), an M.Sc. (Entomology) from McGill University (1966), and a Ph.D. (Entomology) from the University of Wisconsin (Madison) (1970). Dr. Philogène joined the University of Ottawa in 1974 after three years of teaching and research in the Department of Plant Sciences at the University of British Columbia, and five years as a research scientist with the Canadian Forestry Service, in Ste Foy, Quebec. At the University of Ottawa, in addition to his regular teaching and research responsibilities, he has successively been Vice Dean and Acting Dean of the Faculty of Science and Engineering (1982-1985), the first Dean of the newly created Faculty of Sciences (1985-1990) and Vice-Rector (Academic and Research) (1990-1997).

He has constantly been highly rated by biology students for his courses in insect physiology, pesticides and the environment, and chemical ecology, inspiring some of them to further their education in insect- or pesticide-related fields. During his university career he has supervised 28 students at the M.Sc and Ph.D. levels. They have moved on to careers in Agriculture Canada research laboratories, universities, government agencies or industry. Some like R. Aucoin and R. Chénier are today section heads at the federal level, in pesticide regulation and risk evaluation.

Dr. Philogène's main scientific contributions have been in the area of insect development and diapause as influenced by light and temperature, and in the field of plant-insect relationships. Working with species as different as the Swaine jackpine sawfly, the banded woolly bear, the cinnabar moth, and the sugar cane borer, he and his students demonstrated that day-degrees, light energy, and spectral composition were all components of the physical energetic requirements for proper insect development, even proposing that insects have a minimum radiation requirement.

At the beginning of the 80's, Dr. Philogène started to focus on plant-insect relationships, this orientation being greatly influenced by his phytochemist colleague J. Thor Arnason. He has particularly been involved in characterizing some of the biochemical aspects of corn resistance to various insects, showing how hydroxamic acids and phenolic acids can be efficient as a means of reducing the reproductive potential and, consequently, the damage done by corn-feeding insects. He has demonstrated the potential of phototoxic compounds as insecticides, in particular (-terthienyl, a polyacetylene present in marigold. But he has also shown that some naturally-occurring molecules like berberine, an isoquinoline alkaloid, are problematic since they induce chromosomal aberrations. In his search for compounds with a non-neurotoxic mode of action he has investigated the active principles of tropical plants and documented the insecticidal potential of several other molecules, notably asimicin, cedrelone, gedunin, and rocaglamide. More recently his work has focused on naturally occurring synergists from the Piperaceae, such as dillapiol, a lignan that enhances the activity of quite a range of toxic molecules.

His research and university activities have taken him to Europe, Asia, Africa and South America. He has been involved in pest management projects sponsored by CIDA and IDRC, in addition to the support received by NSERC and federal and provincial government ministries, for a total funding of over \$1,000,000, while also participating in projects financed by international agencies.

Aside from poster and oral presentations nationally and internationally on insect problems, pesticide issues, university and policy issues - and involvement in school programs in the Ottawa area - Dr. Philogène has authored or coauthored 145 refereed scientific papers. He has also co-edited or co-authored: *Les Pesticides et l'Environnement* (Environnement Québec, 1983); *Insecticides of Plant Origin* (American Chemical Society, 1989); *La post-récolte en Afrique* (AUPELF-UREF, 1992).

Bernard has been an active member of scientific and professional organizations in Canada and the United States, notably the Entomological Society of Canada, the Entomological Society of Ontario, the Entomological Society of America and the International Society of Chemical Ecology. With the ESC he has been Editor of the *Bulletin* (1976-1979), member of the Managing Council (1976-79), member of the Committee on university research financing (1977-1978). Fellowship committee (1981-84), Finance committee (1981-1982), chair of the Annual meeting (1978), Student awards (1986). He has also served on the editorial board of the *Journal of Chemical Ecology* (1989 to 1998), and *The Canadian Journal of Development Studies* (1981-1990). Dr. Philogène was a member of the Ontario Pesticide Advisory Committee from 1987 to 1991. From 1992 to 1994 he has been the President of the National Consortium of Canadian Scientific Societies whose main task was to bring to the attention of federal politicians the funding requirements for research in Canada. At the international level he has been very active in the scientific endeavours of the Association of French-speaking Universities (AUPELF), notably coordinating the activities of the post-harvest scientific committee.

In 1995 Dr. Philogène was awarded a *Honoris causa* Doctorate by the Université de Technologie de Compiègne (France). He is a Fellow of the Entomological Society of Canada, and an "Officier de l'Ordre des Palmes Académiques" (France).

The Entomological Society of Canada is proud to recognize his achievements in science, his contribution as a high level administrator of a University and his international involvement by presenting him with the 2000 Gold Medal.

**Medaille d'Or de la Société d'Entomologie du Canada**  
**pour souligner la contribution exceptionnelle en entomologie canadienne 2000**  
**présenté à**  
**Bernard J.R. Philogène**  
**à Montréal, Québec, 3 décembre 2000**

La Médaille d'Or, attribuée par la Société d'entomologie du Canada à un chercheur pour ses réalisations remarquables dans le domaine de l'entomologie, est décernée cette année au Bernard J.R. Philogène.

Bernard J.R. Philogène est un spécialiste de la biologie des insectes. Il s'intéresse particulièrement à la physiologie du développement chez les insectes, aux relations plantes-insectes, aux pesticides d'origine végétale et à l'écologie chimique.

Né à l'île Maurice en 1940, dans l'Océan Indien, il a vécu sept ans en France avant de venir au Canada en 1961. Il a obtenu un B.Sc. (Biologie) de l'Université de Montréal (1964), un M. Sc. (Entomologie) de McGill University (1966), et un Ph.D. (Entomologie) de la University of Wisconsin (Madison) (1970).



Dr. Philogène s'est joint à l'Université d'Ottawa en 1974 après trois années d'enseignement et de recherche au département de Plant Sciences de la University of British Columbia, et cinq ans comme chercheur au Service Canadien des Forêts. A l'Université d'Ottawa, outre ses responsabilités d'enseignement et de recherche, il a successivement rempli les fonctions de vice-doyen et de doyen intérimaire de la Faculté des sciences et de génie (1982-1985), de premier doyen de la nouvelle Faculté des sciences (1985-1990) et vice-recteur (Enseignement et Recherche) (1990-1997).

Ses cours de physiologie des insectes, sur les pesticides et l'environnement, et sur l'écologie chimique ont constamment reçu des évaluations supérieures à la moyenne par les étudiants. Il en a inspiré plusieurs qui ont choisi de parfaire leur éducation dans les sciences traitant des insectes ou des pesticides.

Au cours de sa carrière universitaire, il a dirigé 28 thèses au niveau de la Maîtrise et du Doctorat. Des diplômés font maintenant carrière, à Agriculture Canada, dans les universités, les agences gouvernementales ou l'industrie. On doit mentionner, en particulier, Richard Aucoin et Robert Chénier qui occupent des postes de gestionnaires au niveau fédéral, en réglementation des pesticides et en évaluation des risques.

Sa contribution au niveau de la recherche s'est particulièrement manifestée dans l'étude du développement et de la diapause chez les insectes, sous l'influence de la lumière et de la température, et sur les relations plantes-insectes. Avec l'aide d'espèces aussi différentes que *Neodiprion swainei*, *Pyrharctia isabella*, *Tyria jacobaeae*, et *Diatrea saccharalis*, il a, avec ses étudiants, établi que les degrés-jours, l'énergie lumineuse et la nature du spectre lumineux sont tous des facteurs physiques et énergétiques dont l'insecte a besoin pour son développement, allant jusqu'à proposer qu'un minimum de radiations est requis pour le développement normal des insectes.

Au début des années quatre-vingts, le Dr. Philogène commence à s'intéresser aux relations plantes-insectes, cette nouvelle orientation étant grandement influencée par la collaboration avec son collègue phytochimiste, le Dr. J. Thor Arnason. Il a surtout contribué à mettre en évidence le profil biochimique qui donne au maïs sa résistance aux insectes, démontrant comment les acides hydroxamiques et les acides phénoliques peuvent efficacement réduire le potentiel reproducteur et, par conséquent, les dégâts causés par les insectes ravageurs du maïs. Il s'est d'autre part penché sur le potentiel insecticide des composés phototoxiques, en particulier de 1-( $\gamma$ -terthiényl), un polyacétyleène présent dans les oeillettes d'Inde. Mais il a aussi établi que certains produits naturels comme la berbérine, un alcaloïde isoquinoline, comportent des risques car ils peuvent provoquer des aberrations chromosomiques. Dans la recherche de composés non-neurotoxiques, il s'est intéressé aux principes actifs des plantes tropicales et a documenté le potentiel insecticide de différentes molécules, notamment l'asimicine, le cedrelone, la gédunine et le rocaglamide. Tout récemment, sa recherche s'est concentrée sur les synergistes d'origine végétale provenant des Pipéracées, comme le dillolipol, un lignan qui accroît l'activité de toute une gamme de molécules toxiques.

Ses activités universitaires et de recherche l'ont conduit en Europe, en Asie, en Afrique et en Amérique Latine. Il a participé à des projets de répression des ravageurs financés par l'ACDI et le CRDI, en plus du financement dispensé pour ses recherches par le CRSNG et les ministères fédéraux et provinciaux, ainsi que par des agences internationales, ce qui représente un financement total de plus de \$1,000,000.

Le Dr. Philogène a publié seul ou en collaboration 145 articles scientifiques et a donné des dizaines de conférences aux niveaux national et international sur les problèmes reliés aux insectes et aux pesticides, ainsi que sur des questions de politique scientifique et universitaire. Il a également fait de nombreuses présentations dans les écoles de la région d'Ottawa-Carleton. Il a d'autre part publié ou édité en collaboration: *Les Pesticides et l'Environnement* (Environnement Québec 1983); *Insecticides of Plant Origin* (American Chemical Society, 1989); *La post-recolte en Afrique* (AUPELF-UREF, 1992)

Le Dr. Philogène est un membre actif de plusieurs sociétés scientifiques et professionnelles au Canada et aux Etats-Unis, étant notamment membre de la Société d'entomologie du Canada, de la Société d'entomologie de l'Ontario et de l'Entomological Society of America, ainsi que de l'International Society of Chemical Ecology. Dans le cadre de ses activités avec la Société d'entomologie du Canada, il a été successivement éditeur du *Bulletin* (1976- 1979), membre du Conseil d'administration (1976-1979), du comité sur le financement de la recherche universitaire (1977-1978), du comité des Fellowships (1981-1984), du comité des finances (1981-1982), et du comité des bourses (1986), et président de la réunion annuelle (1978). Il a aussi été membre du comité éditorial du *Journal of Chemical Ecology* (1989-1998), et de la *Revue canadienne d'études du développement* (1981-1990). Dr. Philogène a siégé au comité aviseur sur les pesticides du gouvernement de l'Ontario de 1987 à 1991. De 1992 à 1994, il a été Président du Consortium National des Sociétés scientifiques canadiennes. Au niveau international, il a été très actif dans les comités scientifiques de l'Association des Universités partiellement ou entièrement de langue française (AUPELF).

En 1995 il a été fait Docteur *Honoris causa* de l'Université de technologie de Compiègne (France). Il est Fellow de la Société d'entomologie du Canada et Officier de l'Ordre des palmes académiques (France). La Société d'entomologie du Canada est fière de reconnaître ses réalisations en sciences, sa contribution en tant qu'administrateur de haut niveau d'une Université et son rayonnement international en lui décernant la Médaille d'or 2000.

**Entomological Society of Canada  
C. Gordon Hewitt Award  
for Outstanding Achievement in Canadian Entomology 2000  
presented to  
KEVIN D. FLOATE  
at Montreal, Quebec, December 3, 2000**

The 2000 recipient of the Entomological Society of Canada's C. Gordon Hewitt award for outstanding achievement in entomology by an individual under 40 is Dr. Kevin Douglas Floate of the Lethbridge Research Centre, Agriculture and Agri-Food Canada, Lethbridge, Alberta

Dr. Floate was born July 6, 1961 in Prince George, B.C. His interest in insects was fostered at an early age by a neighbour who collected tropical insects by mail, and by understanding parents who probably thought their son's interest was a passing phase. Kevin attended the University of Saskatchewan where he received a B.S.A. (Honours) in 1983 and an M.Sc. in Biology in 1987. His M.Sc. research on carabid beetles as predators of orange wheat blossom midge developed into a general interest in insect community ecology. While in Saskatoon, Kevin met his future wife and fellow entomologist, Dr. Rosemarie DeClerck-Floate. Kevin and Rose subsequently attended Northern Arizona University where Kevin received his Ph.D. in Zoology in 1992 for research on the ecological and evolutionary consequences of hybridization among species of native cottonwoods (*Populus*) to their associated insect assemblages.

Dr. Floate is a research scientist at the Lethbridge Research Centre where he studies wasps parasitic on muscid flies associated with cattle. He is working to characterize assemblages of these parasitoids in various regions of Canada. In combination with field and laboratory studies, this information is being used to develop biological control agents of stable fly and house fly for use in north temperate zones. Kevin also studies the non-target effects of parasiticides applied to cattle on insects developing in the dung of treated animals. He has a growing interest in *Wolbachia* as a tool to manage pest populations and in fluctuating asymmetry as a biomonitor of environmental quality. He organized a symposium on fluctuating asymmetry at the ESC meeting in Edmonton in 1997.



Dr. Floate has 24 articles in peer-reviewed scientific journals, including first-authored papers in *American Naturalist*, *Ecological Applications*, *Ecology*, *Evolution*, and *Oecologia*. He has published 6 book chapters and miscellaneous research reports. He has conveyed results of his research with Internet products [<http://res2.agr.ca/lethbridge/scitech/kdf/intro.htm>] and in more than 50 poster or oral presentations at regional, national and international meetings.

Dr. Floate recently completed a one-year term appointment as Assistant Section Head of Livestock Sciences and is Study Leader for livestock pest research, at the Lethbridge Research Centre. He is a member of the Biological Control Working Group of Agriculture and Agri-Food Canada, the Scientific Committee of the Biological Survey of Canada (Terrestrial Arthropods), and is Secretary of the Western Committee for Livestock Pests. He served as President of the Entomological Society of Alberta in 1996, as a member of the Public Education Committee of the ESC, as a member and Chair of the ESC Marketing Committee, and as Chair of the Student and Amateur Encouragement Committee of the Entomological Society of Saskatchewan. He is a Guest Instructor for the Masters of Pest Management Program at Simon Fraser University and is an Adjunct Professor at the University of Lethbridge, where he co-teaches a course in General Entomology, serves on M.Sc. committees, and supervises undergraduate research.

It is with considerable pleasure that the Entomological Society of Canada awards the C. Gordon Hewitt Award to Dr. Kevin Floate for his outstanding research and contributions to Canadian entomology.

**Société d'Entomologie du Canada  
Prix C. Gordon Hewitt  
pour souligner la contribution exceptionnelle en entomologie canadienne 2000  
présenté à  
KEVIN D. FLOATE  
à Montréal, Québec, 3 décembre 2000**

Le récipiendaire du Prix C. Gordon Hewitt 2000, remis par la Société d'entomologie du Canada afin de souligner la contribution exceptionnelle en entomologie d'un chercheur âgé de moins de quarante ans, est le Dr. Kevin Douglas Floate du Centre de recherche d'Agriculture et Agro-alimentaire Canada de Lethbridge, Alberta.

Le Dr. Floate est né le 6 juillet 1961 à Prince George, Colombie-Britannique. Son intérêt pour l'entomologie a été stimulé très tôt par un voisin qui collectionnait des insectes tropicaux, et a été favorisé par la compréhension de ses parents qui ont probablement cru à tort que cet intérêt ne serait que passager. Kevin a étudié à l'université de Saskatchewan où il a reçu son B.S.A. (Honneurs) en 1983 et sa M.Sc. en biologie en 1987. Son projet de maîtrise sur les carabidés prédateurs de la cécidomyie orangée du blé a déclenché chez lui un intérêt général et marqué pour l'écologie des communautés d'insectes. C'est à Saskatoon que Kevin a rencontré sa future compagne, aussi entomologiste, Dre Rosemarie DeClerck-Floate. Kevin et Rose sont ensuite allés au Northern Arizona University où Kevin a reçu en 1992 son doctorat en zoologie pour ses recherches sur les conséquences écologiques et évolutives de l'hybridation entre les espèces indigènes de peuplier de Virginie (*Populus*) sur les communautés d'insectes qui leur sont associées.

Dr. Floate est chercheur au Centre de recherche de Lethbridge où il étudie les guêpes qui parasitent les mouches du bétail. Il tente de caractériser les communautés de ces parasitoides retrouvées dans les différentes régions du Canada. Les informations provenant de ses études de terrain et de laboratoire sont utilisées pour développer des agents de lutte biologique contre la mouche de l'étable et la mouche domestique. Ces agents seront utilisables dans les zones tempérées nordiques. Kevin étudie aussi les effets des parasitoides sur les insectes se développant dans les excréments des animaux traités. Il s'intéresse de plus en plus à *Wolbachia* comme outil de lutte contre les populations d'insectes nuisibles et à l'asymétrie variable

comme un indicateur biologique de la qualité de l'environnement. En 1997, il a organisé un symposium sur l'asymétrie variable lors du congrès de la SEC à Edmonton.

Dr. Floate a à son actif 24 articles dans des revues scientifiques avec comité de lecture, incluant *American Naturalist*, *Ecological Applications*, *Ecology*, *Evolution*, et *Oecologia*. Il a aussi publié 6 chapitres de livre et différents rapports de recherche. Il a communiqué ses résultats de recherche au moyen de l'Internet [<http://res2.afr.ca/lethbridge/scitech/kdf/intro.htm>] et de plus a 50 affiches ou présentations orales présentées lors de congrès régionaux, nationaux et internationaux.

Dr. Floate a récemment complété un mandat d'un an comme directeur adjoint de la section des sciences animales au Centre de recherche de Lethbridge où il est responsable d'un projet de recherche sur les insectes nuisibles des animaux. Il est membre du groupe de travail sur la lutte biologique d'Agriculture et Agro-alimentaire Canada et du comité scientifique de la Commission biologique du Canada (Athropodes terrestres). Il est secrétaire du Western Committee for Livestock Pests. Il a été président de la Société d'entomologie de l'Alberta en 1996, membre du Comité de l'éducation publique de la SEC, membre et président du comité de marketing de la SEC et président du comité chargé de stimuler l'intérêt des étudiants et des amateurs de la Société d'entomologie de Saskatchewan. Il est professeur invité du programme de lutte intégrée de l'université Simon Fraser et professeur adjoint de l'université de Lethbridge, où il enseigne une partie du cours d'entomologie générale, siège sur des comités de thèses de maîtrise et supervise des projets de recherche d'étudiants au baccalauréat.

C'est avec grand plaisir que la Société d'entomologie du Canada attribue le Prix C. Gordon Hewitt au Dr. Kevin Floate pour sa recherche d'une qualité exceptionnelle et ses contributions à l'entomologie canadienne.

### **Other Awards**

#### **Travel Grant Winners - 2000**

Ms. Jessica L. Janjic, Department of Biology, York University, Toronto. Entomological Society of Canada Research Travel Grant of \$2,000.00. The grant is to assist in travelling to and within Brazil for the purpose of studying genera of the Agaposteminae (Hymenoptera: Halictidae)

Ms. Jade Savage, Department of Natural Resource Sciences, McGill University, Ste-Anne-de-Bellevue. Entomological Society of Canada Research Travel Grant of \$2,000.00. The grant is to assist in travelling to England and Sweden for the purpose of visiting entomological museums there.

#### **Postgraduate Winners - 2000**

Ms. Michelle McPherson, Dept. of Biology, Acadia University, Wolfville, NS, who is studying behavioural responses in dragonflies to structural changes of landscapes.

Mr. Leonardo Frid, Department of Zoology, University of British Columbia, Vancouver, BC., who is studying the thermal ecology of the western and forest tent caterpillars and their nuclear polyhedrosis virus.

### **Fellows and Honorary Members**

Dr. Richard Ring from the University of Victoria was appointed a Fellow of the ESC and Dr. Geoff Scudder from the University of British Columbia was elected an honorary member.



Dr. Richard Ring



Dr. Geoff Scudder



## ARTICLES

Gold Medal Address, JAM 2000 (ESC, ESA, SEQ)  
Montréal, December 3, 2000

### Preliminary remarks

First I want to thank those who have nominated me, and the ESC for this gold medal. How did this happen? The short answer is: 40 years ago I chose Canada! Yes, it is first and foremost the environment, the opportunities, the resources provided by this country that have, in good part, led to my being here this afternoon to receive this award.

Ce n'est pas souvent que l'occasion nous est donnée de dire publiquement la chance unique que nous avons de vivre et de travailler dans un pays où il est permis de s'exprimer librement, de critiquer - parfois sévèrement - mais aussi, et surtout, d'étudier et de travailler généralement dans des conditions que tant de gens ailleurs dans le monde envient, ou auxquelles tant de personnes n'auront jamais accès. Donc, un grand merci à ce pays et à tous ces canadiens et canadiennes de toute origine qui ont contribué à ma formation, mon développement et mes succès.



Dr. Bernard Philogène

In fact, this Gold medal recognizes the contributions of dozens of individuals I have been privileged to study under, work with or collaborate with. Allow me to single out my mentors: Beryl Weare who introduced me to the biological sciences and taught me how to study effectively; le Frère Adrien Robert, ce géant de l'Entomologie classique au Québec, who instilled in me the interest and enthusiasm for insects. I was his only and last undergraduate student in the Entomology course at l'Université de Montréal in 1964. When, as a university administrator, I was confronted with cost-cutting decision makers who could not accept that there were only 2 or 3 students registered in some courses, I took pleasure in reminding them that, if l'Université de Montréal had decided at the time not to offer Entomology because I was the only student enrolled in the course, I would not have had the teaching, research and administrative career I have enjoyed. And I usually added that as somebody interested in pest management, I was very well prepared for university administration!

My M.Sc. Supervisor, the late Jack McFarlane from McDonald College of McGill University, had a tremendous influence on my research orientation, laboratory working habits, and writing skills. Jack was a real friend. Also, at MacDonald College, Dr. E.J. Leroux had quite an impact on the direction my world took.

Dan Benjamin, my Ph.D. supervisor, and the Department of Entomology at UW added new vistas to my education. In the best tradition of American Universities they knew how to make a foreign student feel at home, particularly at a time when the National Guard was very visible on campus, and buses carried signs that aliens must report to the US immigration department every year!

Three institutions have contributed to my career development beyond the Ph.D. level. Le centre de Recherche Forestière des Laurentides où j'ai eu le privilège de travailler aux côtés du regretté Wladimir Smirnoff; the department of Plant Science at UBC where Bill Wellington was the primary reason for moving there. And, over the past 25 years, the department of Biology, at the University of Ottawa where so much was accomplished with numerous graduate students and colleagues, but primarily, since 1979, with John Thor Arnason. If there is one person who deserves to share this medal with me it is you Thor whose friendship, scientific acumen, unlimited availability and good humour have contributed so much to keep

## White Grubs are Doing Well ... and Living in Ottawa

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The National Capital area is well known for its greenery, its manicured lawns, its numerous and easily accessible golf courses and its soccer pitches. The rather rapid deterioration of the grass-covered assets with the significant aesthetic modifications prompted quite a number of people and concerned city officials to request quick and adequate action to eliminate the pest. While in 1998 only 2% of lawns were under attack, prevailing conditions raised this number to 20% in 1999. Thirty to 40% of the city's 250 parks (765 hectares) are currently white-grub infested to the point of visible damage. The adjoining municipalities are not faring much better, although the grubs seem to have a preference for western locations.

This happened at a time when there were calls from many quarters to ban the pesticide spraying of playing fields to minimize risks to children and pets, and to eliminate chemical-related health conditions. The City of Ottawa has taken a pro-active approach to environmental and health issues, and in the Spring of 1999 city council directed its staff to develop an Integrated Pest Management Strategy for the City. Until a strategy has been developed, approved and implemented, an interim pesticide protocol came into effect governing the use of pesticides on city properties 'only in exceptional circumstances where it is determined through the application of the protocol that their use is warranted'.

The specialists contracted to develop the IPM strategy presented their report to the City in June 2000, putting emphasis on the utilization of alternative (i.e. non pesticidal) treatment methodologies wherever and whenever possible. In preparing this document the authors, apart from studying IPM practices in an urban environment elsewhere in North America, held four public hearings which were advertised in the local newspapers and on radio stations. In a city with a metropolitan area population of over 750,000 less than 50 individuals attended all 4 meetings. An additional open day was held prior to presentation to City Council where members of the public were invited to consult all documents gathered and prepared by the consultants. This too did not attract a crowd, but it did result in some individuals and concerned groups submitting written documents. These written submissions emphasized the banning of pesticides from the area. It is therefore not surprising that, at the presentation to Council, after the consultants had clearly and emphatically underlined that pesticides should be a last recourse strategy, some members of the public voiced the opinion that IPM was just an excuse for the ongoing use of pesticides.

A week later, the Canadian Broadcasting Corporation was sending a TV crew to my lab to investigate the current status of white grubs, obviously alarmed if not concerned that no proper cure had yet been found for this terrible eyesore. The eventual broadcast emphasized that the insects were now well established in the Ottawa area, and advised viewers as to the best insecticidal methods currently available, with the reporter demonstrating how to go about it. Absolutely no mention was made of current research on plant products from tropical plants which we have been investigating with the help of a sizeable provincial government grant.

What are the major factors that have contributed to the establishment of white grubs in the Ottawa area?

#### 1. A land of immigrants and refugees:

The so-called discovery of the New World by Christopher Columbus has had more impact on insects and insect-related problems on this continent than is generally recognized. The arrival of thousands of settlers, primarily from Europe, and during the 20th century from other continents has provided the entomofauna with unlimited opportunities for travel and settlement. As pointed out by Cox (1999) in his recent book on exotic species, more exotics have invaded North America than any other continent. Phytophagous insects and biting flies represent a sizeable proportion of the 6,600 species of terrestrial, freshwater, and marine organisms that are currently established or continue to find their way to this part of the world, 970 of these having chosen Canada. Just as this century is coming to an end entomologists and pest management decision makers are preoccupied with the arrival of the long-horned beetle from China.. The influx organisms affecting the welfare of humankind can be expected to continue as global climatic conditions continue to change, more people continue to emigrate, and quarantine conditions at airports and

other ports of entry fail to properly respond to the ever-increasing movement of people across continents, whether it is aboard super-jumbo aircrafts or the smuggling of illegal immigrants .

## 2. An adequate environment

Insects proliferate when they are provided with adequate if not optimal conditions. In city environments a very artificial plant ecosystem has been created with the establishment of lawns and the creation of parks and gardens that include a large number of species exotic to the area. People travel and develop, on other continents, a liking for particular flower beds or trees which they eventually manage to introduce in their neighbourhoods. Even though these plants are introduced into the country with the proper sanitary certificates, once established, they provide local or previously introduced phytophagous insects with new opportunities for development and proliferation. The biochemical profile of an ornamental is not necessarily the same when grown on different continents, and a slight modification in the allelochemical profile may be sufficient to provide adequate to ideal conditions for the development of the pest.

In a new environment immigrants generally prosper. Take for instance the ants introduced from Italy in the 1970's as biological agents against the spruce budworm. While they quickly settled and established satellite colonies, their long time established counterparts introduced from Manitoba to the Quebec forest proved inadequate. Maybe it was a matter of provincial jurisdiction - this was a Canadian Forestry Service endeavour - or inadequate language skills or both!

The absence of natural enemies, the abundance of appropriate resources are well known to favour the proliferation of exotics. In the case of white grubs environmental transformations in urban areas have certainly optimized the conditions for proliferation, since lawns and other grass covered areas (playing fields, golf courses) are ideal for their growth and development.

## 3. A changing climate

The vast expanse of this continent, its varied topography, its climatic fluctuations all provide diverse ecosystems for insects to survive if not proliferate. The major barrier to range expansion, particularly north of the 45th parallel, is the length and severity of winters. Many insect species, even exotic ones are well equipped to cope with these extremes, particularly with the phenomenon of diapause which allows them to properly overwinter, and can even wait longer to complete their development with prolonged diapause.

The adaptability and resilience of insects have allowed them to extend their range further north, particularly in the second half of the 20th century. This is illustrated with the western corn rootworm which is now well established in Ontario and has indeed displaced the northern corn rootworm as a major pest. In his Gold Medal address to the ESC in 1988 John Borden underlined the challenges facing entomologists in a warming environment. Canada's heat wave is now three years old and the weather patterns seem to be well in tune with the theories of global warming. Whether it is El Nino or La Nina climatic conditions appear to be providing new opportunities to our insect friends, particularly those who consume our renewable resources or modify the aesthetics of our urban landscape. If one considers that a recent report by the US Congress forecasts 3 to 6 degrees Celsius of warming in the next century, it is not difficult to understand why white grubs are finding it quite comfortable in the lawns of Rideau Hall and are there to stay. It is worth noting that neither the unusual December 1999 rains that contributed to deeper soil frost, nor the May-June 2000 torrential rains (45 mm on the 25th of June) have sensibly affected the infestation level.

## 4. Pest management strategies

Those who therefore count on climatic factors to maintain insect pests at manageable levels have no choice but to reconsider pest management strategies of newly established exotics. Currently one can prevent visible damage to lawns by a combination of cultural, chemical and biocontrol methods. Only the first two are really effective. Biological control relies essentially on the use of entomopathogenic nematodes whose efficacy under the Eastern Ontario climatic conditions remains to be demonstrated.



Chemical control is under attack and many home owners simply refuse to take advantage of the proven pesticides, namely Diazinon, Chlorpyrifos (Dursban), Merit (Imidochloprid) and Sevin XLR Plus. Chlorpyrifos has been voluntarily cancelled by its manufacturers in the US. By June 2000 the basic manufacturers of this insecticide for Canada, even though involved in the US voluntary cancellation, had not yet agreed to similar voluntary action in this country. For all practical purposes one can consider that Dursban is no longer a viable option for white grub control.

On June 29, 1999 the Pest Management Regulatory Agency (PMRA) announced that it was re-evaluating organophosphate pesticides. This exercise will no doubt lead to restrictions if not cancellations of more active ingredients and therefore to fewer chemical control options. On another front the Standing Committee on Environment and Sustainable Development of the House of Commons released its report on pesticides in May 2000. It recommends that the re-evaluation program be adequately funded so that all pesticides registered prior to 1995 be re-evaluated no later than 2006.

#### *Novel approaches, research funding and public education*

Whether we are dealing with European chafer beetles or European corn borers new strategies are required to minimize pest damage and reduce, if not eliminate, environmental contamination. Most of the environmental and biological elements recognized to be essential for a well designed IPM program are already in place and will be reinforced when the City of Ottawa - which will be substantially enlarged on January 2001 - will approve and implement its new IPM strategy. The more problematic part is the economic, social and political constraints within which the program must operate.

I will not address the budgetary decisions required by city council which will impact the implementation. I am far more concerned about what is taking place at another level and which has a direct bearing on the research opportunities and capabilities of all the insect scientists of this country and on type of opportunities it can offer future entomologists.

The success of pest control can only be as good as the science that has led to the understanding of the ecology of the system, the biology of the target pests, of their natural enemies and of their plant hosts. Thirty four years in this business have taught me that several disciplines must come together in the resolution of pest problems. Whether one is working on the diapause of the Swaine jackpine sawfly, the insect complex of corn, or the control of malaria-carrying mosquitoes, one's achievements and success is highly dependent on genuine collaboration with colleagues from other disciplines. In my case, I have been fortunate to benefit from an in situ partnership with a phytochemist (J. Thor Arnason) and a natural products chemist (Tony Durst), and numerous discussions with many colleagues from other institutions. In other words, there must be inter-disciplinarity.

And that is where the funding situation in Canada fails. When he received the ESC Gold Medal in 1990, Stephen Tobe stated that scientific research in Canada was in crisis. More specifically he stated: 'this situation exists in part because of problems at NSERC, within NSERC, and with the Federal Government.' In spite of the recent influx of infrastructure money via CFI grants, or at the provincial level, via the Ontario Research and Development Challenge Fund, the fundamental culture concerning multi-disciplinary or inter-disciplinary research support has not changed. Scientists whose publications appear in journals generally associated with multi-disciplinarity have been told by research panels that they should publish more in so-called recognized journals, i.e. journals of the discipline. In other words, the imperialism of disciplines which was denounced by Palmade in 1977 still prevails. Nowhere is it more evident than with NSERC where each disciplinary panel is a hunting ground where members make sure they maintain their capacity to secure the largest possible grants from an ever-diminishing financial pie. While there is one panel for each of six areas of biological sciences, there is only one dealing strictly with interdisciplinarity with what can only be charitably described as meagre financial resources.

In a hightech-minded society, it is becoming more and more difficult to convince governments to invest in sustainable development and renewable natural resources. One sometimes gets the feeling that, if it were not for activists, all the good intentions of the Rio summit and the various pronouncements of the United Nations would be quickly shelved if not forgotten. We will no doubt, with the help of cellular and molecular biology, find better ways to address pest problems. But we also need to promote organismic biology, chemical ecology, and environmental studies to better comprehend the co-evolutionary aspects of plant/insect relationships. More often than not pest control programs have proved inadequate because not enough was known about the basic physiological requirements or adaptations of the pest, its natural enemies, or its host, or because such findings were ignored. This is an aspect of pest management which funding agencies would be well advised to remember at a time when more eggs are being hatched in the biotechnology basket.

The unbalanced funding situation can also be the result of recommendations from well-meaning politicians. The latest example falling in this category concerns the May 2000 report of the Standing Committee on Environment and Sustainable Development of the House of Commons, entitled Pesticides - Making the Right Choice. Out of the 4 recommendations concerning future funding, none addresses research associated with pests' strategies for survival and hosts' characteristics for resistance, with a real promotion of multidisciplinary approach.

Under the circumstances, if I were a white grub, I would consider my future in the Ottawa area as highly promising. I would know that I can count on the home gardeners, golf players, soccer players, city park officials, and politicians to debate the question of my presence in the area, rather than come to grips with the scientific interventions that are required for my extermination. My capacity to survive underground seriously limits the efficacy of human intervention. And I know that as part of a phylum that has been on this planet for more than 200 million years I still have a lot of tricks left in my genetic makeup. And as more little humans are being born with a teleprompter in one hand and a mouse in the other, the chances of entomologists taking over are rather minimal. So one has to wonder which species or subspecies will first go the way of my native island, the dodo?

## NEWS OF ORGANIZATIONS

### International Commission on Zoological Nomenclature

#### Applications published in the *Bulletin of Zoological Nomenclature*

The following Applications were published on 29 September 2000 in Vol. 57, Part 3 of the *Bulletin of Zoological Nomenclature*. Comment or advice on any of these applications is invited for publication in the *Bulletin* and should be sent to the Executive Secretary (I.C.Z.N.), c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)).

Case 3096 *Dichrorampha* Guenée, 1845 (Insecta; Lepidoptera): proposed precedence over *Amaurosetia* Stephens, 1835

Leif Aarvik. Zoological Museum, University of Oslo, Sarsgate 1, NO-0562 Oslo, Norway (e-mail: [leif.aarvik@nhm.uio.no](mailto:leif.aarvik@nhm.uio.no))

**Abstract.** The purpose of this application is to conserve the generic name *Dichrorampha* Guenée, 1845 for a widespread and well-known Holarctic genus of *Microlepidoptera* (family *TORTRICIDAE*), by giving it precedence over the name *Amaurosetia* Stephens, 1835. The type species of *Amaurosetia* is *Phalaena albinella* Linnaeus, 1758, now known to be a synonym of *Dichrorampha petiverella* (Linnaeus,



1758), but this was probably based on a misidentification. The name *Amaurosetia* had never been associated with the TORTRICIDAE until 1997, and before that had not been applied to any taxon in the 20th century. *Dichrorampha* currently includes about 80 species in the Palearctic region and 11 species in the Nearctic.

**Keywords.** Nomenclature; taxonomy; Lepidoptera; Microlepidoptera; TORTRICIDAE; moths; *Dichrorampha*; *Amaurosetia*.

**Case 3123** DOLICHOPODINI Brunner von Wattenwyl, 1888 (Insecta, Grylloptera): proposed emendation of spelling to DOLICHOPODAINI, so removing the homonymy with DOLICHOPODIDAE Latreille, 1809 (Insecta, Diptera)

Spyros D. Skareas and Scott E. Brooks. Lyman Entomological Museum and Research Laboratory, Department of Natural Resource Sciences, McGill University (Macdonald Campus), Ste-Anne-de-Bellevue, Quebec, H9X 3V9, Canada. e-mail for S.D. Skareas: pyros\_skareas@hotmail.com; e-mail for S.E. Brooks: sbrook2@po-box.mcgill.ca

**Abstract.** The family-group name DOLICHOPODINI Brunner von Wattenwyl, 1888 (Insecta, Grylloptera) is a junior homonym of DOLICHOPODIDAE Latreille, 1809 (Insecta, Diptera). Both names are currently in use and refer, respectively, to a group of Palearctic wingless camel crickets or cave crickets, and a large family of about 6000 species of long-legged flies with a world wide distribution in most habitats. It is proposed that the homonymy be removed by changing the spelling of the gryllopteran family-group name to give DOLICHOPODAINI by emending the stem of the name of the type genus *Dolichopoda* Bolivar, 1880, while leaving the dipteran name (based on *Dolichopus* Latreille, 1796) unchanged. The names *Dolichopus* Latreille, 1796 and DOLICHOPODIDAE Latreille, 1809 were placed on Official Lists in Direction 49 (November 1956).

**Keywords.** Nomenclature; taxonomy; Diptera: Grylloptera; DOLICHOPODIDAE; DOLICHOPODAINI; *Dolichopus*; *Dolichopoda*; long-legged flies; camel crickets; cave crickets.

## Opinions published in the Bulletin of Zoological Nomenclature

The following Opinions were published on 29 September 2000 in Vol. 57, Part 3 of the *Bulletin of Zoological Nomenclature*. Copies of these Opinions can be obtained free of charge from the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk)

OPINION 1957. *Sphaerius* Walzl, 1838 (Insecta, Coleoptera): conserved; and SPHAERIIDAE Erichson, 1845 (Coleoptera): spelling emended to SPHAERIUSIDAE, so removing the homonymy with SPHAERIIDAE Deshayes, 1854 (1820) (Mollusca, Bivalvia) .....

OPINION 1958. *Macrophya* Dahlbom, 1835 (Insecta, Hymenoptera): conserved by the designation of *Tenthredo montana* Scopoli, 1763 as the type species; and *Tenthredo rustica* Linnaeus, 1758: usage of the specific name conserved by the replacement of the syntypes with a neotype .....

OPINION 1964. *Apis proava* Menge, 1856 (currently *Electrapis proava*; Insecta, Hymenoptera): conserved by the designation of a neotype .....

**Biological Survey of Canada (Terrestrial Arthropods)  
Survey Report**

The Scientific Committee met in Ottawa on 12-13 October 2000. A more detailed account of the meeting is included in the Newsletter of the Biological Survey of Canada (*Terrestrial Arthropods*) 20(1), 2001.

**Scientific projects**

*Arthropods of Canadian Grasslands*

The Survey's Informal Conference on Arthropods of Grasslands was held as anticipated at the joint ESC/SEQ/ESA meeting in December 2000. A formal symposium on the grasslands project is planned at the 2001 ESC meeting in Niagara Falls, focused on habitat-based ecological projects. The symposium proceedings will constitute the first major volume in the Grasslands project. Members of the Committee reported on a variety of grasslands projects across the country. The Committee also reviewed ideas for seeking funding from foundations, other upcoming conferences and additional grasslands conservation initiatives. Plans are being developed for joint collecting efforts in key grassland habitats over the next two or three years. The annual Grasslands Newsletter will be published in the spring.

*Arctic invertebrate biology*

The symposium on cold hardiness held at the University of Victoria in May-June 2000 was successful, with participants from 8 different countries and a wide range of topics. Some of the papers will be published in the journal *Cryoletters*.

The Committee agreed to discontinue the newsletter *Arctic Insect News* (which is well received overseas but now is not really serving the objectives of the Biological Survey), allowing further efforts to be placed on the Grasslands Newsletter. However, an arctic section will now be included in the Survey's regular newsletter.

*Seasonal adaptations*

The project on seasonal adaptations includes papers published or in press on dehydration in dormant insects, measuring and reporting life-cycle duration, and insect cold hardiness in Canada. A symposium at the joint ESC/SEQ/ESA meeting is entitled "Water relations and winter survival in insects". Other papers and invited lectures on the theme of seasonal adaptations are being developed.

*Insects of Keewatin and Mackenzie*

The Horton River expedition was very successful, despite difficulties of the permit process for example. Plans are being developed for an expedition to the Thelon River in 2001.

**Other scientific priorities**

*Invasions and reductions*

A chapter on pathways of introduction in Canada (based on selected distributional data) has been completed for a book that resulted from the session on invasions at the 1999 national EMAN meeting. A new book about alien insects is also being considered.



### *Survey web site*

Delays in contract work on the website, in getting content for some sections, and technical difficulties delayed upload and completion of the BSC site, but most of the redesigned and much expanded site is now available at <http://www.biology.ualberta.ca/esc.hp/bschome.htm>.

### *Faunal analysis*

An introduction to the project and the protocols as well as updated information on some orders was posted on the Survey website. Less current data for other groups will be posted in due course, as well as updates on some other orders.

### *Funding for biodiversity studies*

An introduction to the database of funding sources, with general advice on grant applications, has now been posted on the BSC website. The database itself continues to be expanded. A summary of the introduction will be submitted to the *ESC Bulletin*.

### *Brief on biodiversity studies*

The Survey's brief on Terrestrial Arthropod Biodiversity Projects - Building A Factual Foundation has been published, and is available from the Survey and on the website.

### *Arthropods and fire*

Several investigations are under way on the relationships between arthropods and fire, especially in grasslands. These studies were reviewed, with the potential aim in due course of a symposium on the subject. In the meantime, some items will be included in the Grasslands Newsletter.

### *Publication of systematic and faunistic papers*

Given dwindling avenues for publication of systematic and faunistic papers on Canadian arthropods (because some outlets will not accept certain categories of manuscripts and editorial policies on format, for example), the Committee considered ideas for alternative avenues of publication. These possibilities are being developed further through discussions among various interested parties.

### *Monitoring of continuing priorities for work on Canadian faunas*

Updated information on earlier or currently less active Survey projects was reviewed.

### *Other priorities*

The Committee also discussed other priorities such as old-growth forests, damaged ecosystems and Survey publicity.

### **Liaison and exchange of information**

#### *Canadian Museum of Nature*

Dr. Mark Graham, Director, Research Services, Canadian Museum of Nature reported that the Museum is beginning a new strategic 5-year plan, which will include broad consultations. A special meeting of relevant agencies and workers was held to discuss best practices for care of research collections. The CMN has also been part of preliminary consultations with the Biosphere, a large Montreal-based public organization of Environment Canada devoted to increasing knowledge of the environment, water and ecosystems. Dr. Graham reminded the Committee that the Federal Biosystematics Partnership continues to represent the Canadian position on the Global Biodiversity Information Facility. A final agreement will be

decided upon in early December [see <http://www.gbif.org>].

*Eastern Cereal and Oilseed Research Centre, Agriculture and Agri-Food Canada*

Dr. Robert Footitt reported on the Canadian Biodiversity Network Conference, March 1-4, 2001 in Ottawa [see <http://www.nrc.ca/confserv/biodiversity/>]. The aim of the conference is to develop a position to alert the federal government that there is a biodiversity crisis in Canada. Agriculture Canada now has the North Star Initiative, aiming at research that encompasses bio-fibre, alternative fuels, pharmaceuticals, environmental sustainability and so on as well as the process of growing food. ECORC's advisory committee will be meeting soon: one issue is staffing in systematics, given continued attrition.

*Entomological Society of Canada*

Dr. Robert Footitt, Society Vice-President, reported that much activity is currently being focussed on the joint ESC/ESA/SEQ meeting in December in Montreal and he outlined some highlights of the program. He also mentioned a letter from the AEAQ and the SEQ sent to Minister Anderson in the context of the Species at Risk legislation, concerning the importance of studies in biodiversity and the need to support work in these areas. These ideas are supported by the ESC.

*Parks Canada*

Mr. Stéphane Greffard, Ecological Assessment Officer, explained that the focus at Parks Canada has been the implementation of the Report of The Panel on The Ecological Integrity of Canada's National Parks. Some of the key recommendations include making ecological integrity central in legislation and policy. A position of Executive Director, Ecological Integrity has been established. Parks hopes to improve science capacity within Parks and create formal connections with universities and other science-based agencies for research in Parks. Documents sent by the Survey about research in Parks and about permits for insect collections had been forwarded to the relevant personnel at Parks. Mr. Greffard said that it might be possible to organize a meeting to coordinate research projects but no funds now are available for research. With respect to permits, Mr. Greffard explained that ultimately each park establishes its own policy.

*Parasitology module, Canadian Society of Zoologists*

Dr. David Marcogliese reported that the Parasitology's module main activities have been to produce EMAN protocols for the identification of parasites of vertebrates. The national stickleback parasite survey is now an international IBOY project and funding is being sought. Dr. David Cone hopes to write up his work on the perch project this year. Dr. Marcogliese circulated a number of publications of interest to the committee, and noted forthcoming meetings.

**Other items**

*Regional developments*

Information from different regions of the country was summarized. For example, in British Columbia, a submission on priority setting for biodiversity conservation is being prepared, using georeferenced data on some insects as well as other organisms to recommend how to set up an ideal conservation system to handle both rarity and richness as well as biogeoclimatic representation, and with a focus on land planning options [and see <http://www.bc.natureconservancy.ca/soscp/soscp/soscp.pdf>]. A Checklist of the Hemiptera of Canada and Alaska has been published. A BC Grasslands coalition aims to integrate cattle grazing and conservation in a new way ("biodiversity ranching").

In the prairies, a variety of ongoing research and databasing was reviewed, as well as developments



in the University community. The Conservation Data Centre in Winnipeg is cataloguing considerable insect data by group.

In Ontario, Dr. Doug Currie reported that the Royal Ontario Museum has a new CEO - Mr. William Thorsell. The work of databasing the ROM collection continues. Other entomological research in the province was outlined.

In Quebec, much current activity is directed toward the joint ESC/SEQ/ESA meeting. The Entomological Collections Network meeting, traditionally held in conjunction with the ESA meeting, will be hosted by McGill University. The Lyman Entomological Museum's Curator should soon be hired.

In Newfoundland and the Maritimes, the annual meeting of the Acadian Entomological Society was held recently in Charlottetown. However, the meeting was very poorly attended and an emergency meeting was held to discuss the reasons for such low attendance and ways to improve the organization of the Society. Current issues were outlined, including fish kills in PEI from pesticide runoff, and buffer-strip legislation, work on the dragonflies of the Atlantic region and concerns and plans for West Nile virus. For the Arctic, some entomological field work took place on Ellesmere Island. Recently published is a large monograph summarizing past ITEX (International Tundra Experiment) work from all nations (although Canadian funding is still poor). Dr. Richard Ring circulated several publications of interest concerning northern species diversity and arctic activities. The report of the national task force on northern research has been published [see [ftp://ftp.nserc.ca/pub/nserc\\_pdf/nor/crisis.pdf](ftp://ftp.nserc.ca/pub/nserc_pdf/nor/crisis.pdf)].

#### *Other matters*

The Committee also considered information on international liaisons, membership of the Scientific Committee, standards for specimen data labels, operations of the Biological Survey Secretariat, and recent Survey and other publications of faunal interest.

Hugh Danks  
Canadian Museum of Nature  
Ottawa

#### **More information now on Survey Website**

**The Biological Survey of Canada** (Terrestrial Arthropods) has recently expanded its website to include more content about the fauna of Canada and related themes. Users can now find the complete text of many Survey publications including briefs on planning and executing studies of arthropod biodiversity, current and back issues of newsletters and some larger publications such as the *Insects of the Yukon*. Students will find information on available funding sources for graduate study and research in biodiversity. Current projects such as the Survey's major project on the arthropods of Canadian grasslands are highlighted. A searchable database of workers in systematics and faunistics of Canadian insects will soon be available.

The bilingual website can be found at <http://www.biology.ualberta.ca/esc.hp/bschome.htm> or by following the link on the Entomological Society of Canada's home page.

#### **New Website**

A new website for the recently formed Maine Entomological Society, at <http://www.colby.edu/MES/> After decades of erosion, shrinkage, reorganization and downright destruction of entomological departments and organizations, it is great to see places where the trend is being reversed! Congratulations and best wishes to MES from ESC.

Dan Johnson

## BOOK REVIEWS

Hodges, R. W. 1999. Gelechioidea, Gelechiidae (part) in Dominick, R.B., et al. *The Moths of America North of Mexico*, fasc. 7.6, 47 + 5 pl., 339 pp. ISBN 0-933003-10-2 (soft cover). Available from The Wedge Entomological Research Foundation, 85253 Ridgeway Drive, Eugene, Oregon, USA 97405 (US \$115.).

Fascicle 7.6 of *The Moths of America North of Mexico*, is a revision of the gelechiid genus *Chionodes*. In this important work, Dr. Hodges treats 187 species, 115 of which are described as new. Photographs of the adults are provided in five colour plates and 47 black and white plates show photographs of male and female genitalia. Distribution maps are not provided, but distribution data is summarized for extant species and full label data is given for the newly described species. Six species-groups are recognized and characterized for the genus *Chionodes*, and identification keys are given for the species-groups and for the species within each species-group.

The larvae of most *Chionodes* species are leaf tiers. A wide variety of plant families are used as larval hosts, although species groups are often restricted to one plant family. Host plant information, when known, is given for each species in the text.

Adults are often nondistinct, small brown or gray moths, many of which look the same. The text provides detailed descriptions for extant as well as new species which, along with excellent keys and colour plates, greatly help in the identification of these rather difficult species. The colour plates are very good. Due to the small size of the moths, illustrations are 1.5 to 3X life size, which is a great help. In spite of the keys, descriptions and figures, I suspect that even experts will continue to have problems identifying these little beasts.

This book is not only the definitive guide to the North American *Chionodes*, it is an invaluable scientific document that will be used by researchers for years to come. Dr. Hodges has done an excellent job with this difficult group.

Jim Troubridge  
AAFC, Agassiz, BC

Lacey, L.A. and Kaya, H.K. (editors). *Field Manual of Techniques in Invertebrate Pathology: Application and Evaluation of Pathogens for Control of Insects and Other Invertebrate Pests*. Kluwer Academic Publishers (2000). 911 pp. 334\$ US

The stated purpose of the *Field Manual* is "to provide background and instruction on a broad spectrum of techniques and their use in the evaluation of entomopathogens in the field". This volume is meant to be complementary to the laboratory-oriented *Manual of Techniques in Insect Pathology* (L. A. Lacey (editor) 1997. Academic Press. San Diego. 409 pp., referred to here as the *Lab Manual*). The *Field Manual* contains 38 chapters covering everything from experimental design and statistical analysis for field testing to spray equipment for ground and aerial applications, reviews of the major pathogen groups (viruses, bacteria, microsporidia, fungi, nematodes), application and assessment of entomopathogens for use on various vegetable, grain and fruit crops, in greenhouses, nurseries, forestry, and on livestock, poultry, lawn, turf, stored products, urban pests and vector insects.

As someone who has only recently become involved in field trials using entomopathogens, I looked at both the *Lab* and *Field Manuals* for their usefulness as "how-to-do-it-yourself" books. The *Lab Manual* is certainly helpful in this respect. With little or no direct help from an expert, a biologist, allowing for some trial and error, should be able to accomplish a desired task. Using the *Field Manual* in a similar fashion, however, one would not be less likely to succeed. This is not a failing of the *Field Manual* but



is due to the complex nature of carrying out field trials, especially those involving aerial applications. The scale is so much larger. The pest, crop, entomopathogen, means of application, environment (geography, climate) and size of the area to be treated are all variables that complicate the process. Add to this requirements for application permits and licences (often from two or more levels of government), observation of buffer zones, environmental impact assessments plus all the things that can and do go wrong and it becomes obvious that an experienced "expert" is required, at least at the beginning. The Field Manual does provide background information and enough instruction for a researcher to begin to plan a field trial to the point where he or she could consult intelligently with an expert. The chapter by James Campbell, "Experimental Design: Statistical Considerations and Analysis" illustrates what I mean. This chapter provides a very good overview of the need for setting field trials up in such a way that the data derived will be useful for statistical analyses. Campbell points out that the type of statistical analysis should be considered when planning the field trial. He gives examples of different types of comparisons and the analyses that might be applied to the data. His best advice, however, is in his first paragraph, "I strongly recommend consulting a statistician during the planning stages of any experiment." One might add to this, consultations (or better, direct collaboration) with someone with ample experience in carrying out field trials. For more experienced field-hands, the Field Manual would provide a basis for application methods and assessments in situations new to that individual.

This is a good and useful reference work. The authors of the various chapters are just the sort of people that the uninitiated should seek out for help. The problem with the Field Manual is its price. At \$505 CDN (\$334 US), it is hard to imagine that many personal copies will be sold, especially outside the G-7 countries. Cash-strapped libraries may also decide not to pick it up. This is a shame as the editors and authors put their hard work, knowledge and experience into the Field Manual.

Christopher Lucarotti  
CFS, Fredericton

**Hochberg, Michael E. and Ives, Anthony R. 2000. *Parasitoid Population Biology*. Princeton University Press, Princeton and Oxford, xiv + 366 pp., \$24.25US (paper), \$75.00US (cloth).**

At first glance this volume appears to be another multi-author overview of a specialized subject. In these cases the reviewer's main task is to assess how well the editors have succeeded in homogenizing variable viewpoints and personal writing styles into a consistent and reasonably comprehensive treatment of the subject. The editors of *Parasitoid Population Biology*, however, have exploited the common weaknesses of multi-authored books by purposefully instructing contributors to submit essentially opinion pieces on their favourite aspect of parasitoid population biology; its status and what needs to be done. The result is a book that, although not without the problems typical of the format, is nonetheless more provocative and readable than most.

The editors first introduce the main themes of the book and summarize each single-author chapter. These chapters are organized under three themes: population dynamics, population diversity, and population applications. References for all chapters are usefully collected at the end of the book and there is an index that attempts to capture author, taxonomic group, and subject entries. The 6 chapters on population dynamics run the gamut from the classical perspective of local-stability models to discussion of spatial and landscape aspects of population dynamics. Bernstein provides a good review of the former. If you are like me and have not followed the discussion all that closely of late you may be surprised at how little has changed; theory is presented and the lack of data to support it is lamented. On the other hand, the chapter by Roland offers a refreshing reversal by calling on theoreticians to develop new analytical tools that address the ecological reality of non-independence in connected populations.

The middle 6 chapters on parasitoid diversity are diverse themselves. Contributions from van Baalen and Godfray take a thorough look at the specific issues of egg loading and virulence. Strand gives an interesting review of development traits although his discussion does not have much to do with population biology. The final 3 chapters of this section deal with community ecology. Brodeur and Holyoak demonstrate aspects of parasitoid community structure via food webs. Hawkins gives a characteristically direct answer to the question regarding the importance of competition in shaping parasitoid communities.

Population applications are covered in 4 chapters. Mills contributes what I think is one of the best chapters in the book, dealing out the classical theoretical framework, drawing on the empirical evidence, and then calling the bluff on simple analytical models which focus too often on their own stability properties and not on what they can tell us that is meaningful for biological control; i.e. impact of parasitoids on host populations. Tschamke discusses agricultural landscapes and how the 'set aside' policy, largely motivated by economic issues within the European community, is furnishing interesting ecological information on parasitoids. The final chapters of this section by Roitberg and Hochberg are perhaps the most unique in the book: the former advocating a dynamic modelling approach to address uncertainty (at the same time including daunting equations that will reinforce uncertainty for most of us) and the latter bravely taking up the cause of endangered parasitoids.

Parasitoid Population Biology ends with a dialogue between the 2 editors. Hochberg and Ives exchange opinions of what has been written by contributors as well as holding forth on subjects that have not been addressed explicitly in their book. I liked it. This book may not have the durability of previously-published volumes on parasitoids but it is a timely, inexpensive and informative package of editorials from scientists who know what they are talking about and have been given the latitude to express it.

Vince Nealis  
Victoria, B. C.

## **SCHOLARSHIPS AND GRANTS**

### **Entomological Society of Canada Postgraduate Awards 2001**

The Entomological Society of Canada will offer two postgraduate awards of \$2,000 each to assist students beginning study and research leading to a first post-graduate degree in entomology. The post-graduate awards will be made on the basis of high scholastic achievement.

#### **Invitation for Applications**

**Eligibility:** Applicants for either scholarship must be members of the Entomological Society of Canada at the time of application. The successful applicants must be either Canadian citizens or landed immigrants with Bachelor's degrees from Canadian universities. Applicants must be entering their first post-graduate degree in entomology, and must begin their first year of postgraduate studies between 15 June 1999 and 31 December 2001. The studies and research must be carried out at a Canadian university. Each award is conditional upon certification by the Department Head that successful applicants have been accepted into the first year of a program of study and research for an advanced degree with full graduate status. A student who was unable to gain admission or enters graduate school as a qualifying candidate is not eligible to receive an award.

**Method of Application** -Applicants must submit a properly completed form , with support documents. Application forms are available at <http://www.biology.ualberta.ca/esc.hp/form.htm>, or from the Chair of the ESC Student Awards Committee. The original and three copies of the application and all supporting documents, including transcripts, must be submitted to the Chair of the Student Awards Committee



postmarked no later than **12 June 2001**. Please specify on the application form if you are applying for the Postgraduate Award, or the Keith Kevan Scholarship. Separate applications and documentation packages must be submitted with each award application.

*Process of Selection and Award Presentation* - Applications will be reviewed by a committee of the Society. An announcement of the two winners will be made at the annual meeting of the Society and each winner will receive a certificate. Payment of the award will be made in October 2001.

## **Regulations**

*Earnings from Other Sources* - Award holders are permitted, under normal circumstances, to demonstrate, instruct or assist in non-degree related research for a maximum of 200 hours per annum, provided that the Head of their Department considers this is desirable and that it does not hinder the progress of their studies. Apart from these assistantships, award holders will devote their full time to study and research and will not undertake any paid work during the school term. They may hold other awards and scholarships.

*Transfers* - Awards are made on the condition that the winners engage in a program of graduate studies and research for an advanced degree in entomology in Canada. Students who, after receiving the award, wish to change their graduate program or transfer to a foreign university may be asked to decline the award. Any change in the course of study, department or university in which an award winner is registered requires prior approval of the Scholarship Committee. A request for permissions to transfer must be supported by statements from Heads of Departments.

*Additional Allowances* - The award stipends are all-inclusive. There is no provision for additional grants by the Society for any purpose. Additional grants, for example, to attend meetings, pay course fees, meet publications costs, etc., will not, under any circumstances, be authorized.

All communications regarding these awards, including requests for applications, should be addressed to:

**Dr. David R. Gillespie, Chair, ESC Student Awards Committee**  
**Pacific Agri-Food Research Centre (Agassiz), Agriculture and Agri-Food Canada**  
**P.O. Box 1000, Agassiz, B.C., V0M 1A0, E-mail: GillespieD@em.agr.ca**

## **La Société d'Entomologie du Canada Bourse pour Étudiants Post-Gradués 2001<sup>1</sup>**

La Société d'entomologie du Canada offrira deux bourses d'une valeur de \$2,000 chacune pour aider des étudiants qui débutent des études post-graduées et des recherches en vue de l'obtention d'un premier diplôme d'études supérieures en entomologie. Les bourses seront accordées aux étudiants ou étudiantes en raison des seuls critères de réussite académique.

### **Avis**

*Éligibilité:* Les candidats doivent être membres de la Société d'entomologie du Canada au moment de la demande. Les candidats doivent aussi être Canadiens ou résidents reconnus du Canada et détenir un baccalauréat d'une université canadienne. Les candidats doivent obligatoirement avoir débuté leur première année d'études post-graduées entre le 15 juin 1999 et le 31 décembre 2001 en vue d'obtenir leur premier diplôme d'études supérieures en entomologie, et effectuer leur étude et recherche dans une université canadienne. Les bourses ne seront accordées que lorsque les directeurs de Département auront certifié que les candidats choisis sont inscrits en première année d'un programme d'études supérieures, et ce avec tous les privilèges attachés au statut d'étudiant gradué. Un étudiant qui n'a pu être admis à l'école des Gradués, ou qui s'inscrit en vue de compléter l'obtention de crédits, n'est pas éligible à la bourse.

**Procédure:** Les candidats devront soumettre leur candidature à l'aide du formulaire approprié et y joindre tous les documents requis. Les formulaires sont disponibles auprès du président du Comité des bourses aux étudiants de la Société ou sur notre site internet à l'adresse suivante: <http://www.biology.ualberta.ca/esc.hp/form.htm>. Le formulaire original, ainsi que trois copies, devront être envoyés au président du comité des bourses aux étudiants de la Société et reçus au plus tard le **12 juin 2001**. Veuillez préciser sur le formulaire si vous soumettez votre candidature pour la Bourse Post-graduée ou la Bourse Keith Kevan. Des formulaires distincts accompagnés des documents requis doivent être soumis pour chacune des Bourses.

**Sélection et remise des bourses:** L'analyse des candidatures se fait par un comité de la Société, et l'annonce des récipiendaires se fera à la réunion annuelle de la Société où ils recevront un certificat. Le paiement de la bourse aura lieu en octobre 2001.

## **Règlement**

**Autres sources de revenus:** Un boursier pourra normalement donner des séances de cours ou de démonstration et être auxiliaire de recherche jusqu'à un maximum de 200 heures par année, en autant que le Directeur de son département considère cela profitable et que ces tâches additionnelles ne nuisent pas au progrès de l'étudiant. Mises à part ces exceptions, un boursier devra consacrer tout son temps à ses études et recherches et n'accepter aucune autre rémunération. Il peut cependant jouir d'une autre bourse ou d'un prix.

**Transferts:** Les bourses sont accordées à condition que les boursiers entreprennent des études graduées en vue de l'obtention d'un diplôme en entomologie au Canada. Les boursiers qui décideront de changer de champ d'études, ou de transférer dans une université hors du Canada peuvent se voir retirer leur bourse. Après acceptation de la bourse, tout changement de programme d'études, de département ou d'université devra recevoir au préalable l'approbation du Comité de la Bourse de la SEC. Une telle demande doit être accompagnée de documents provenant des Directeurs des départements concernés.

**Frais supplémentaires:** La somme offerte est invariable. En aucun cas la Société n'accordera de montant supplémentaire. Des frais additionnelles, par exemple, pour assister aux réunions scientifiques, payer des frais de cours, défrayer des coûts de publications, etc., ne seront autorisés sous aucune considération. Toute correspondance relative aux bourses, incluant les demandes de formulaires doit être adressée à:

**Dr. David R. Gillespie, Président, Comité des prix aux étudiants de la SEC**  
**Centre de recherches agricoles du Pacifique - Agassiz, Agriculture et Agroalimentaire Canada**  
**Case Postale 1000, Agassiz, C.B., V0M 1A0, Courriel: GillespieD@em.agr.ca**

1 Le masculin est employé dans ce texte pour désigner les personnes des deux sexes.

## **Entomological Society of Canada Keith Kevan Scholarship 2001**

In memory of Dr. D. Keith McE. Kevan, the Entomological Society of Canada is offering one post-graduate award of \$1,000 to assist students in post-graduate programs who are studying systematics in entomology. The award will be made on the basis of high scholastic achievement and excellence in insect systematics

## **Invitation for Applications**

**Eligibility:** Applicants must be members of the Entomological Society of Canada at the time of application. The successful applicant must be a post-graduate student at the time of application, studying at a Canadian university or be a Canadian citizen studying abroad.



**Method of Application** -Applicants must submit a properly completed form, with support documents. Application forms are available at <http://www.biology.ualberta.ca/esc.hp/form.htm>, or from the Chair of the ESC Student Awards Committee. The original and three copies of the application and all supporting documents, including transcripts, must be submitted to the Chair of the Student Awards Committee post-marked no later than **12 June 2001**. Please specify on the application form if you are applying for the Postgraduate Award, or the Keith Kevan Scholarship. Separate applications and documentation packages must be submitted with each award application.

**Process of Selection and Award Presentation** -Applications will be reviewed by a committee of the Society. An announcement of the winner will be made at the annual meeting of the Society and each winner will receive a certificate. Payment of the award will be made in October 2001.

## Regulations

**Earnings from Other Sources** -Award holders are permitted, under normal circumstances, to demonstrate, instruct or assist in non-degree related research for a maximum of 200 hours per annum, provided that the Head of their Department considers this is desirable and that it does not hinder the progress of their studies. Apart from these assistantships, award holders will devote their full time to study and research and will not undertake any paid work during the school term. They may hold other awards and scholarships.

**Transfers** -Awards are made on the condition that the winners engage in a program of studies and research for a post-graduate degree in entomology. Any change in the course of study, department or university in which an award winner is registered requires prior approval of the Scholarship Committee. A request for permissions to transfer must be supported by statements from Heads of Departments.

**Additional Allowances** -The award stipends are all-inclusive. There is no provision for additional grants by the Society for any purpose. Additional grants, for example, to attend meetings, pay course fees, meet publications costs, etc., will not, under any circumstances, be authorized.

All communications regarding these awards, including requests for applications, should be addressed to:

**Dr. David R. Gillespie, Chair, ESC Student Awards Committee**  
**Pacific Agri-Food Research Centre (Agassiz), Agriculture and Agri-Food Canada**  
**P.O. Box 1000, Agassiz, B.C., V0M 1A0, E-mail: GillespieD@em.agr.ca**

## La Société d'Entomologie du Canada Bourse Keith Kevan 2001<sup>1</sup>

En mémoire du Dr D. Keith McE. Kevan, la Société d'entomologie du Canada offrira une bourse de \$1,000 pour aider les étudiants gradués qui entreprennent des études supérieures en taxonomie des insectes. Cette bourse sera accordée selon des critères d'excellence académique et de la prééminence en taxonomie des insectes.

## Avis

**Éligibilité:** Les candidats doivent être membres de la Société d'entomologie du Canada au moment de la demande. Ils doivent être étudiants diplômés inscrit à un programme d'études supérieures dans une université canadienne ou citoyens canadiens étudiant à l'étranger.

**Procédure:** Les candidats devront soumettre leur candidature à l'aide du formulaire approprié et y joindre tous les documents requis. Les formulaires sont disponibles auprès du président du Comité des Bourses aux étudiants de la Société ou sur notre site internet à l'adresse suivante :

<http://www.biology.ualberta.ca/esc.hp/form.htm>. Le formulaire original, ainsi que trois copies, devront être envoyés au président du comité des bourses aux étudiants de la Société et reçus au plus tard le **12 juin 2001**. Veuillez préciser sur le formulaire si vous soumettez votre candidature pour la Bourse Post-graduée ou la Bourse Keith Kevan. Des formulaires distincts accompagnés des documents requis doivent être soumis pour chacune des Bourses.

*Sélection et remise de la bourse:* L'analyse des candidatures se fera par un comité de la Société, et l'annonce du récipiendaire de la Bourse K. Kevan se fera à la réunion annuelle de la Société où le gagnant recevra un certificat. Le paiement de la bourse aura lieu en octobre 2001.

## **Règlement**

*Autres sources de revenus:* Un boursier pourra normalement donner des séances de cours ou de démonstration et être auxiliaire de recherche jusqu'à un maximum de 200 heures par année, en autant que le Directeur de son département considère cela profitable et que ces tâches additionnelles ne nuisent pas au progrès de son projet de recherche. Mises à part ces exceptions, un boursier devra consacrer tout son temps à ses études et recherches et n'accepter aucune autre rémunération. Il peut cependant jouir d'une autre bourse ou d'un prix.

*Transferts:* Les bourses sont accordées à condition que les boursiers entreprennent des études graduées en vue de l'obtention d'un diplôme d'études supérieures en entomologie. Après l'acceptation de la bourse, tout changement de programme d'études, de département ou d'université devra recevoir au préalable l'approbation du Comité de la Bourse de la SEC. Une telle demande doit être accompagnée de documents provenant des Directeurs des départements concernés.

*Frais supplémentaires:* La somme offerte est invariable. En aucun cas la Société n'accordera de montant supplémentaire. Des frais additionnelles, par exemple, pour assister aux réunions scientifiques, payer des frais de cours, défrayer des coûts de publications, etc., ne seront autorisés sous aucune considération. Toute correspondance relative aux bourses, incluant les demandes de formulaires, doit être adressée à:

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**Case Postale 1000, Agassiz, C.B., V0M 1A0, Courriel: GillespieD@em.agr.ca**

1 Le masculin est employé dans ce texte pour désigner les personnes des deux sexes.

## **MEETINGS**

### **The North American Forest Insect Work Conference**

Located at the Crowne Plaza-Chateau Lacombe Hotel, Edmonton, Alberta, Canada, May 14 - 18, 2001 and hosted by the Canadian Forest Service, Alberta Land and Forest Service, and the University of Alberta

for further information, contact our website: <http://nofc.cfs.nrcan.gc.ca/nafiwc/>  
or E-mail: [nafiwc@nofc.cfs.nrcan.gc.ca](mailto:nafiwc@nofc.cfs.nrcan.gc.ca)

**or contact one of the following organisers:**

Jan Volney, Canadian Forest Service, Natural Resources Canada Tel: (780) 435-7329  
Hideji Ono, Alberta Land and Forest Service, Alberta Environment Tel: (780) 427-6807



John Spence, Department of Biological Sciences, University of Alberta Tel: (780) 492-3003  
Greg R. Pohl, Canadian Forest Service, Northern Forestry Centre, 5320 - 122 St., Edmonton, Alberta ,  
T6H 3S5, Canada Tel: (780) 435-7211; Fax: (780) 435-7359; E-mail: gpohl@nrcan.gc.ca

#### CONFERENCE AIRFARES

We have appointed Air Canada and Northwest/KLM/Continental Airlines as the co-official airlines the conference. To book flights with Air Canada, simply contact Air Canada's North American toll free number at 1-800-361-7585 or your travel agent to take advantage of special discounted airfares. Our convention number, is CV 144482. To qualify for the special conference rate, you must mention this number when booking your ticket.

To book flights with Northwest/KLM/Continental please call the Meeting Services Reservations Desk at 1-800-328-1111 Monday thru Friday between 7:30 a.m.-7:30p.m. (CT) and quote the conference number NEL5K to ensure that you have received the NAFIWC conference rate.

#### HOTEL DISCOUNT:

We have negotiated a discount for Conference attendees at the Crown Plaza - Chateau Lacombe Hotel: 10111 - Bellamy Hill N.W., Edmonton, AB Canada T5J 1N7, Tel. (780) 428-6611 or 1-800-661-8801 Fax (780) 425-6564, <http://www.chateaulacombe.com>

**Hotel Rates:** \$99.00 Single or Double occupancy; \$78.00 Single or Double occupancy - Can & US Government Rate - Must have ID; Please advise the hotel staff upon booking that you are a NAFIWC participant.

#### **5th International Conference of Hymenopterists**

*Held in Beijing, China from July 22-26, 2002.* It is timed to complement the IUSSI Congress to be held in Sapporo, Japan July 28-Aug 3, 2002.

*Conference Venue.* This conference will take place in Friendship Hotel, Beijing, which is very close to Institute of Zoology, Chinese Academy of Sciences. Accommodation will be available in this hotel as well as others in Chinese Academy of Agriculture.

#### *Scientific Program*

The conference will consist of : invited plenary speakers, sessions for submitted talks , symposium presentations, specialist discussion groups and poster sessions.

Visit the conference webpage at:

"<http://www.ioz.ac.cn/zcd/>"  
or "<http://iris.biosci.ohio-state.edu/ish/>"  
or "<http://www.ioz.ac.cn/zcd/shim.gif>"

ENTOMOLOGICAL SOCIETY OF CANADA  
LA SOCIÉTÉ D'ENTOMOLOGIE DU CANADA

393 Winston Ave., Ottawa, Ontario K2A 1Y8

Application for membership - (new members only)  
Demande d'adhésion (nouveaux membres seulement)

Name and Address (please print):  
Nom et Adresse (lettres moulées):

telephone (bus.) / téléphone (au travail):

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Keywords describing interest (up to six):  
Décrivez vos intérêts en utilisant jusqu'à  
six mots clés.

Membership is a personal affiliation; publications are the personal property of the individual member. Membership is on a calendar year basis.

Cotisation est une affiliation personnelle; publications payées ici appartiennent à l'individu. La cotisation des membres s'applique à l'année civile.

**MEMBERSHIP DUES / COTISATION**

Regular member / Cotisation régulier with/avec...Cdn \$80.00 + \$5.60 GST (Can) ....\$.....  
The Canadian Entomologist & Bulletin US\$74 (\$100 Cdn) (U.S.A. & Int'l)

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(ask your professor to endorse this form/demande l'appui de votre professeur)

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Please copy and distribute to interested non-members. Thankyou.



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