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PROCEEDINGS OF THE

ENTOMOLOGICAL SOCIETY OF MANITOBA

VOLUMÉ 29

1973

Proceedings of the

ENTOMOLOGICAL SOCIETY

of

MANITOBA

Volume 29 1973

Sub-Editor: P. S. Barker

ENTOMOLOGICAL SOCIETY OF MANITOBA

An official publication of the Entomological Society of Manitoba, printed by the Society free of charge to members in good standing.

PRESIDENT'S REPORT

V. Hildahl, Entomological Society of Manitoba

The Society was saddened during the year by the untimely passing of Dr. W. Allen. Willard was one of the early members and past president of the Entomological Society of Manitoba. His contribution to Agricultural Research in Manitoba, and throughout Canada as well, will be held in high esteem for many years.

The past year (1973) was a progressive and active year for the Entomological Society of Manitoba. Membership continued to increase indicating that the Regional Society is fulfilling its basic objective: "to foster the advancement and exchange of entomological knowledge." It was also a year of change. Due to the demands of his personal research program, Dr. P. Barker resigned as Editor of the Manitoba Entomologist and was replaced by Dr. W. Turnock. To expedite decisions with respect to the Society's Endowment Fund, Dr. C. Buckner of Ottawa relinquished his position as Chairman of the Board of Trustees and was replaced by Dr. R. Brust. One of the principle organizers and first chairman, Dr. Buckner's contribution to this endeavor is reflected in the healthy condition of the Endowment Fund at the present time. On behalf of the membership, the Executive thank you Phil and Chuck for jobs well done.

Greater participation by the membership in the activities of the Society was again emphasized by the Executive. This was accomplished primarily by appointing members at large to serve on standing committees and by holding general luncheon meetings. Three such meetings were held with guest speakers as follows: Mr. J. Bovey of the Manitoba Archives on "What Constitutes Archival Material," Dr. S. Iverson of Atomic Energy of Canada Limited on "The Field Irradiator Gamma Project," and Mr. M. Benum of the Winnipeg Parks and Protection Branch (Metro) on "Metro Winnipeg's Mosquito Abatement Program." In addition, the Executive encouraged increased interest by Industry in the

affairs of the Society. This was reflected in the Technical Sessions of the current Annual Meeting, most of which was devoted to the role of pesticides in economic entomology. We look forward to their continued support and participation.

It is interesting and gratifying to look back on the activities and functions of the Society during the past year. Progress was made on establishing a Publicity Committee. Because of the increased demand for information pertaining to insect problems, it is essential that the Society become more involved with the public. I believe also that the members of the Society, both as a group and as individuals, should accept the challenge and be prepared to provide the expertise for entomological decision making at governmental levels. Future demands on lands for other than agricultural purposes will ultimately require the need for developing new techniques for increased crop production on less and less acreage--much of which will be achieved only through sound entomological polic-Similarly, restrictions on leisure travel over the next decade may lead to the development of more urban recreational areas. Thus, new and better pest control programs may be imperative to encourage maximum use of these facilities.

It was an honor serving as your president in 1973. I would like to express my sincere thanks to the Executive for their assistance, to Dr. W. Turnock for editing the Journal, to those who served on special committees, to the membership for their excellent support, and to Dr. Sam Loschiavo for the excellent job done on arranging the technical sessions. That the meeting was a resounding success was demonstrated by the interest expressed by the membership. I wish the new Executive an enjoyable year working for the interests of the community.

MINUTES DF THE 1973 ANNUAL BUSINESS MEETING

The Annual Business Meeting was held at the Ramada Inn, at $1:30\ p.m.$ on November 2, 1973.

PRESENT:

V. Hildahl, President; D.L. Smith, Past President; R.N. Sinha, President-elect; J.E. Guthrie, Secretary; G.L. Ayre, Treasurer; W.J. Turnock, Editor - Manitoba Entomologist; and:

M.A. Ashraff P. Barker R.G. Barker B. Bowden	A.J. Kolach S.R. Loschiavo J. McCullough J. McLintock - President ESC.	J. Riva A.G. Robinson R. Semple L.B. Smith
R.A. Brust P.A. Burnett G. Gerber	C.E. Osgood W.B. Preston	D.K. Trueman H. Westdal

1. Tribute

The membership stood to observe a moment of silence in tribute to the late Dr. W. R. Allen.

2. Welcome

The President welcomed the President of the Entomological Society of Canada and other distinguished guests, on behalf of the Entomological Society of Manitoba.

Agenda

Motion - D. L. Smith/R.N. Sinha: Adoption of agenda (App \times . A).

CARRIED

4. Minutes

Motion – R.N. Sinha/C.E. Osgood: Adoption of the minutes of the 28th Annual Meeting held 3 November, 1972, as read.

CARRIED

5. Freasurer's Report

Motion - G.L. Ayre/P. Barker: Adoption of Treasurer's Report (Appx. B).

CARRIED

Endowment Fund

Motion - G.L. Ayre/S.R. Loschiavo: The membership authorizes the Executive of the ESM to transfer \$319.00 from the Society's general account to the Endowment Fund, to enable the purchase of a \$2500.00 bond in 1973.

CARRIED

Manitoba Entomologist

Motion - P. Barker/W.J. Turnock: The adequacy of the Endowment Fund objective of \$10,000.00 be reviewed annually.

CARRIED

6. Editor's Report Manitoba Entomologist

Motion - W.J. Turnock/P. Barker: Acceptance of the Editor's Report (Appx. C).

CARRIED

7. Regional Director's Report:

Submitted by Dr. Turnock. Motion - W.J. Turnock/G. Gerber: Acceptance of the Regional Director's report (Appx. D).

CARRIED

COMMITTEE REPORTS

8. Student Encouragement:

Submitted by the Chairman, Dr. L.B. Smith. Motion \sim L.B. Smith/A.J. Kolach: Acceptance of the report of the Committee for the Encouragement of Youth (App \times . E).

CARRIED

9. Common Names Committee Report:

Professor Robinson reported that no common names had been submitted for consideration during the past year.

Motion - A.G. Robinson/D.L. Smith: Acceptance of the Insect Common Names Committee verbal report.

CARRIED

10. Honorary Membership Committee:

Motion - P. Barker/C.E. Usgood: Acceptance of the Honorary Membership Committee's report (App \times . F).

CARRIED

11. Achievement Award:

Referred to the incoming executive for their consideration and recommendations.

12. Public Relations:

Referred to the incoming executive for their consideration.

13. Urban Insects:

The report of the Urban Insect Problems committee was submitted by Dr. R.N. Sinha.

Motion - R.N. Sinha/L.B. Smith: The report of the Urban Insect Problems committee be received as information (Appx. G).

CARRIED

Considerable discussion ensued and the following motions were moved and seconded:

1st Motion - H. Westdal/A.G. Robinson: The dissemination of pest insect control information is best attained by the membership supporting the Provincial Entomologist.

Amendment no. 1 to 1st motion - W.J. Turnock/S.R. Loshiavo: The Urban Insect Committee assist the Provincial Entomologist with background information on the biology and ecology of a particular insect, when he requests.

DEFEATED

The 1st (main) motion was voted on and was Defeated.

2nd Motion - H. Westdal/A.G. Robinson: The Urban Insect Committee be discharged.

CARRIED

OLD BUSINESS

14. Dr. W. Allen's resolution:

Motion - D.L. Smith/W.J. Turnock: That Dr. W.R. Allen's resolution adopted at the 1972 Annual Meeting be rescinded.

CARRIED

NEW BUSINESS

15. Endowment Fund:

Professor R.A. Brust gave a verbal report on the aims, objectives and current status of the Endowment fund.

Motion - R.A. Brust/P. Barker: Acceptance of the Endowment Fund report.

CARRIED

Motion - R.A. Brust/G. Gerber: That the proposed amendments to the Endowment Fund (as detailed in Appx. H. to these minutes) be adopted by the membership of the Entomological Society of Manitoba.

CARRIED

16. Manitoba Entomologist:

Dr. P. Barker notified the meeting that the motion concerning the Manitoba Entomologist, to be moved and seconded by J.E. Guthrie and P. Barker, was withdrawn.

Motion - J. E. Guthrie/P. Barker: The membership endorses the editorial policies of the Manitoba Entomologist and directs that the publication of the journal in its present form shall continue.

CARRIED

17. President's address:

President Hildahl addressed the meeting.

Motion - L.B. Smith/W.J. Turnock: Acceptance of the President's report (Page 2).

CARRIED

18. Nomination Committee:

The report of the Nomination Committee was presented by the Chairman, Past-President D.L. Smith:

Slate of Officers for 1974.

Past-President - V. Hildahl
President - R. N. Sinha
President-elect - T. V. Cole
Secretary - J. E. Guthrie
Treasurer - G. L. Ayre

The chairman called for nominations from the floor.

Motion - P. Barker/C.E. Osgood: Nominations cease.

CARRIED

The slate of officers proposed in the report of the Nominations Committee were declared elected.

19. Transfer:

President Hildahl expressed his appreciation for the opportunity to serve the Society, then surrendered the gavel to the incoming president R.N. Sinha.

Motion \rightarrow D.L. Smith/L.B. Smith: The membership record their appreciation of Vern Hildahl's term of office as President.

CARRIED

20. President - ESC

The President of the Entomological Society of Canada briefly addressed the meeting, and expressed thanks for the invitation to attend.

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21. Adjournment:

Motion - G. Gerber/L.B. Smith: That the 29th Annual Meeting of the Entomological Society of Manitoba be adjourned.

CARRIED

22. The 29th Annual Meeting was adjourned by the President, R.N. Sinha, at 4:05 PM., 2 November, 1973.

President	

APPENDIX 'A' ANNUAL MEETING 1-2 NOVEMBER, 1973

ENTOMOLOGICAL SOCIETY OF MANITOBA

1973 ANNUAL BUSINESS MEETING 1330-1550 NOVEMBER 2, 1973

AGENDA

- 1. Minutes of 1972 Meeting
- 2. Treasurer's Report G. Ayre
- 3. Endowment Fund Report R. Brust
- 4. Editor's Report W. Turnock
- 5. Regional Director's Report W. Turnock
- 6. Committee Reports:
 - i) Student Encouragement (Local and National) L.B. Smith
 - ii) Common Names A. G. Robinson
 - iii) Honorary Membership ESC P. Barker
 - iv) Achievement Award ESC
 - v) Public Relations V. Hildahl
 - vi) Committee on Urban Insects
- 7. Old Business Resolution by the late Dr. Willard Allen "Concerning the development of expertise in appropriate studies on insect ecology and plant protection."
- 8. New Business 1) Notice of Motion: "Amendments to the Endowment Fund Constitution." R. Brust
 - 2) Notice of Motion: that "Publication of the Manitoba Entomologist in its present form be discontinued." J. Guthrie and P. Barker
- 9. Nomination Committee and Election of Officers D.L. Smith
- 10. Presentation of gavel to incoming President
- 11. Adjournment

APPENDIX 'B' ANNUAL MEETING 1-2 NOVEMBER, 1973 ENTOMOLOGICAL SOCIETY OF MANITOBA

Financial Statement - 1 Nov., 1972-31 Oct.,1973

Inc	ome			
	Bank balance 1 Nov., 1972 Membership fees Subscriptions-Manitoba Entomologist Page charges-Manitoba Entomologist Reprint sales-Manitoba Entomologist. Insect Coll. kit sales Grant from Ent. Soc. Can Interest on Canada Savings Bonds Proceeds 1972 Ent. Soc. Man. Banquet. Outstanding cheques Advance registration		1,440.04 230.00 979.15 1,625.00 948.00 168.16 150.00 64.00 192.00 12.91 2.00	5.5.044.26
		Ð	5,811.26	\$ 5,811.26
E×p	enditures			
	Printing costs (Proceedings-reprints) 1972 Annual meeting costs Stationery		1,720.02 352.14 198.68 177.75 80.75 82.00 50.00 27.47 21.66 35.94 28.42	
		8	2,774,83	\$ 2,774.83
	Bank Balance - 31 Dctober, 1973			\$ 3,036.43
Inve	estments Canada Savings Bonds (1969 issue) G.I.R. #667515 and #760658 G.I.R. #667510 Saving Acc. Bal. Royal Trust		800.00 2,800.00 1,000.00 419.94 5,019.94	\$ 5,019.94
	Total Assets October 1973 Total Assets October 1972 Net Income	-	8,056.37 6,223.21 1,833.16	\$ 8,056.37
		Tre	L. Ayre easurer	1073

APPENDIX 'C' ANNUAL MEETING 1-2 NOVEMBER, 1973

Editor's Report

- 1. The Manitoba Entomologist (Vol. 6), is now in the hands of the Queens Printers. Its late appearance can be attributed to the problems encountered by the Editor when he took office early in January, 1973. The assistance of Drs. C. Jay and H. G. Wylie in organizing records and Dr. P. Barker in publishing the Proceedings of the Entomological Society of Manitoba is gratefully acknowledged. Secretarial help, hired for the preparation of invoices and typing of letters, greatly eased the Editor's burden.
- 2. Subscriptions to the Manitoba Entomologists remains at about 78 and there are 28 exchanges. Mr. K. D. Oliver, Librarian, Agriculture Canada, continues to catalogue and care for the exchange material. Authors inform me that coverage of our journal by Abstracting Journals has resulted in reprint requests from around the world.
- 3. The date of appearance of Vol. 7 depends, to a large extent, on how quickly manuscripts are received by the Editor. Manuscripts go to the typist, who prepares the galleys individually after editing and acceptance for publication. Faster service is obtained by early, individual submission than by giving her the whole volume. I would appreciate a response to this call for papers before 1 January, 1974.

Respectfully submitted,

W. J. Turnock, Editor. WJT:1r

APPENDIX 'D' ANNUAL MEETING 1-2 NOVEMBER, 1973

Report of the Regional Director:

At the request of the President, E.S.M., I acted as Regional Director at the Meetings of the Board of Govenors held 30 Sept. to 1 Oct. and 4 October, 1973 at Banff, Alta. I am pleased to report that the Board discussed problems and programs affecting the Entomological Society of Canada with vigor and showed interest in and concern for the role of entomologists and the ESM in relation to both entomological and broader scientific and social problems. The minutes of these meetings are available from me on request. The following items appear to be of most interest to the members of the E.S.M.:

- 1. The Board agreed that a list of "Common Names of Canadian Insects" would be useful, provided that it was compatible with the ESA common names list. The Quebec Society for the Protection of Plants is revising its trilingual (Latin, french, English) list of names of insects of Canada. The Common Names Committee of the ESC is cooperating. The Board asked the Common Names Committee to determine if the list is applicable across Canada, and if so, to recommend means of insuring that its availability is made known to entomologists in all provinces.
- 2. A preliminary description of the method by which "Fellows" of the ESC will be nominated was presented by Dr. Kevin.
 This will be refined, published in the Bulletin (or circul-

ated by mail), discussed at the next Annual General Meeting (1974) and then come before the membership for vote on an early mail ballot. Those opposing the creation of Fellows in principle should be sure to vote against the proposed method of selection because defeat of the proposal will almost certainly cause the whole thing to be dropped.

- 3. As a result of the elections held in 1973, the new officers of the society are: President-elect Dr. C. R. Harris; Directors-at-Large Prof. F. L. McEwan and Dr. I. W. Varty. The incoming President, Dr. J. R. McLintock, appointed Dr. S. R. Loschiavo as Director-at-Large to complete the remainder of the term of office vacated by Dr. Harris.
- 4. The new Editor of the Canadian Entomologist is Prof. V. R. Vickery, and the Associate Editors are C. R. Harris, C. V. G. Morgan, and Rita Wensler.
- 5. There was some discussion of the desirability of recording, on audio or audio-visual tapes, the recollections and comments of well-known entomologists. The Secretary will be contacting the Regional Societies to ask if they wish to cooperate in collecting recordings from retired entomologists.
- 6. Requests for applications for the three ESC Writing Prizes for articles that will be published in "Insect World Digest" have been coming in at a steady rate.

Respectfully submitted,

W. J. Turnock,

Regional Director (proxy for S. C. Jay)

APPENDIX 'E' ANNUAL MEETING 1-2 NOVEMBER. 1973

Report of Committee for the Encouragement of Youth

by L. B. Smith, Chairman
A. J. Kolach
T. V. Cole

This year 50 kits were made up for junior collectors to add to the 4 remaining from 1972. Without increasing the cost of the kit from \$4.75 we were able to include a styrofoam spreading board in addition to the clear-top polystyrene box, 2 ounce bottle of ethyl acetate, 100 insect pins, instruction booklet and key to the orders of insects.

Publicity was increased this year and resulted in the sale of 36 kits compared to 8 in 1972. The channels used were the newsletter of the 4-H Clubs, "Contact" in which notices were run in May and August, a feature article in the Leisure section of the Free Press at the end of July, and advertisements in the Fort Lance and Viewpoint, newspapers that are sent to homes in the South Winnipeg area. The main number of sales resulted from people reading the feature article in the Free Press, followed by the notice in "Contact."

Most of the young people who obtained kits were working on insect projects assigned by their teachers. It is hoped to arrange a workshop for these people and interested teachers in the early part of 1974 to allow an informal exchange of ideas, experience and problems. Funds have been obtained to arrange this meeting from the Committee on Student Encouragement of the

Entomological Society of Canada.

In addition, a seminar on insects was presented twice at the Winnipeg Schools Science Symposium in May and a display was prepared for the open house at the Museum of Man and Nature in May, in response to an invitation from the Museum. The Chairman also spoke on insects to three classes of students at Gordon Bell High School in September.

A financial statement is attached.

APPENDIX 'F' ANNUAL MEETING 1-2 NOVEMBER, 1973

The Chairman of the Honorary Membership Committee was Dr. G. T. Harvey who was succeeded by Dr. N. V. Tonks of Sidney, British Columbia after the 3 October, 1973 Meeting.

There were two activities of this committee during the past year.

The committee has drafted its terms of reference, decided on its structure and its responsibilities.

The second activity was the election of new Honorary Members. According to By-Laws of the Ent. Soc. Canada, the number of Honorary Members is limited to ten and with the deaths of Dr. R. D. Bird and Dr. W. R. Thompson, two vacancies were produced. Therefore, candidates were sought and Drs. G. P. Holland and G. F. Manson were considered and found to be worthy of the privilege of being Honorary Members.

Respectfully submitted to Ent. Soc. Manitoba.

P. S. Barker.

APPENDIX 'G' ANNUAL MEETING

1-2 NOVEMBER, 1973

ENTUMOLOGICAL SOCIETY OF MANITOBA Committee on Urban Insect Problems

- Objectives: 1) To develop programs related to serious entomological problems in urban areas of Manitoba with emphasis on timely dissemination of facts on major insect outbreaks to the affected public (Public lectures, systematic use of media).
 - 2) If necessary, first to prepare an illustrated publication written, in laymans language, on causes of periodic and chronic outbreaks of the most troublesome insects and mites in Greater Winnipeg area suggesting practical preventive and control measures.

Reasons for Establishment of the Committee:

- Because of division of responsibility among three levels of government with regard to solution of specific entomological problems, a 'gray area' or 'information gap' on serious urban insect problems have been created. ESM seems to be best equipped to fill this gap.
- 2. Work programs on urban problems is likely to generate greater public interest in the aims and activities of the Entomological Society of Manitoba, thereby strengthening the Society.

Membership:

- R. A. Brust, Entomology Dept., U. of Man., PH: 474-9204 V. Hildahl, Environment Canada, Freshwater Institute, PH: 269-7379, Ext. 314
- B. Lyster, Assoc. Editor, Country Guide, 1760 Ellice Ave., Winnipeg, PH: 774-1862
- 4) R. N. Sinha, Agriculture Canada, Research Station, Winnipeg, (Chairman) PH: 269-2100
- 5) S. J. Westaway, Plant Science Dept., U. of Man. PH: 474-8221

The first meeting of the committee was held at Board Room, Agriculture Canada Research Station, Winnipeg on 15 October, 1973. Drs. R. A. Brust, R. N. Sinha and Messrs. V. Hildahl, B. Lyster and S. J. Westaway. Dr. Sinha chaired the meeting.

Unanimous agreement was reached on the following points:

There is a need for dissemination of certain types of authentic information on pest insects approved by the E.S.M.

Identification of major areas of urban insect problems and dissemination of information. For dissemination of authentic information on a limited

number of important pests, insects were divided into 7 groups. Each group contains 2-4 problem insects on which the Committee in consultation with appropriate specialists, prepares 2-page mimeographed, factual information sheets at different times of the year. Because of limitations of time, cost, and availability of good information from other sources, the Committee will not cover all insects of economic importance in the urban areas, although it may refer to relevant sources of further information in its information sheets. The groups are as follows:

- I. Tree and shrub pestsa. Cankerworms

 - b. Forest tent caterpillars

 - c. Aphidsd. Pear slug
- II. Garden and vegetable pests
 - a. Cutworms
 - b. Onion maggotsc. Root maggots
- III. Indoor plant pests
 - a. Aphids
 - b. Scale insects
 - Spider mites C.
- IV. Stored-product pests
 - a. Merchant grain beetle
 - Saw-toothed grain beetle
 - c. Confused flour beetle
 - Lawn and soil pests
 - Slugs
 - a. b. Sod webworms
- VI. Pests affecting public health
 - a. Mosquitoes b. Houseflies

. . . 2

3. Mode of dissemination of information
Factual, concise information on appearance, biology,
ecology and control (in some cases) of specific insect
pests should be compiled in simple language in about 2-page
mimeographed sheets and be given to all existing communication points (City Hydro, City Park and Recreation Dept.
4 H Clubs, etc.) for further distribution to the urban
population.

Communication source people in the city (a list is being prepared) may be invited at appropriate times of the year and be given ESM approved pest information sheets in presence of one or more entomologists who may answer their questions.

4. The Committee shall work through service clubs, community centers, schools, professional societies interested in insect problems and <u>shall not</u> give information directly to the 2 main daily newspapers in the city.

5. The chairman of the Comittee, in consultation with the members, shall prepare a timetable for dissemination or specific insect news items, a list of resource people (entomologists) who may help preparation of information

sheets.

Respectfully submitted,

R. N. Sinha, Chairman. 31 October, 1973

APPENDIX 'H' ANNUAL MEETING 1-2 November, 1973

AMENDMENTS TO ENDOWMENT FUND

The following new paragraphs be inserted on page 2 of Exhibit 'A', following \dots "subject of terms of the agreement", of the Endowment Fund articles:

- the Chairman, who is appointed by the Trustees, shall be a permanent resident of Manitoba.
- 2) the Trustees shall be appointed for a three (3) year term. One trustee shall be replaced or reappointed each year by the President of the Entomological Society of Manitoba, beginning in the autumn of 1973. A trustee may serve more than one (1) consecutive term.
- 3) in the absence of a trustee a proxy may be appointed by the President of the Entomological Society of Manitoba.

MEMBERS OF THE ENTOMOLOGICAL SOCIETY

OF

MANITOBA, 28 DECEMBER, 1973

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R. E. Ireland, Geigy Chemicals Limited, 4-1655 Sandgate Crescent, MISSISSAUGA, Ontario.

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A. J. Kolak, Dept. of Agriculture, 711 Norquay Building, WINNIPEG, Manitoba, R3C OP8.

W. H. Lake, 308-3835 107th Street, EDMONTON, Alberta.

S. J. Leonhard, 16 Livingston Place. WINNIPEG, Manitoba, R3T 3T5.

E. A. R. Liscombe, Hollywood Termite Control Company, 6700 France Avenue S., Ste. 207, MINNEAPOLIS, Minnesota 55435. U. S. A.

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F. O. Matheson, 712-72 Donald Street, WINNIPEG, Manitoba, R3C 1L2.

J. McFarlane, Dept. of Entomology, University of Manitoba, WINNIPEG, Manitoba.

E. Nelson,
Dept. of Entomology,
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