



Entomological Society of Saskatchewan Inc.

NEWSLETTER

Issue 1 Vol. # 5

February 1984

Editor - Bruce Neill, PFRA Tree Nursery, Indian Head,
Saskatchewan, SOG 2K0

This newsletter is the result of a co-operative effort of a number of people who were conscripted by myself to gather news at the various institutions across our province. I think it is important for us to communicate through our newsletter to let other entomologists know what we are doing. We are a small group scattered across a large province. Any means of drawing us closer together has to be worthwhile. If you have anything of entomological interest you want published in our next newsletter, I suggest you contact me, or your closest regional contact. The following have 'volunteered' to be contacts:

- Diether Peschken - Agriculture Canada - Regina
- Paul Riegert - University of Regina - Regina
- Lloyd Harris - Saskatchewan Agriculture - Regina
- Carl Lynn - Agriculture Canada - Saskatoon
- Cedric Gillott - University of Saskatchewan - Saskatoon
- Warren Steck - National Research Council - Saskatoon
- Ron Hooper - Museum - Fort Qu'Appelle
- Dorothy Murrell - Saskatchewan Agriculture - Prince Albert

Any suggestions for improvements for future newsletters would also be most welcome.

A/ The Society and it's members

1983/84 executive for the ESS

President - Owen Olfert
Vice-President - Lloyd Harris
Past-President - Cedric Gillott
Sec/Treasurer - Bruce Neill

1983/84 Paid Memberships as of February 8/84

Alf Arthur	Peter Kusters
Larry Burgess	Murray Maw
G.R.F. Davis	Keith Moore
John Doane	M.K. Mukerji
Bob Elliott	Bruce Neill
Hartley Freedon	Owen Olfert
Margaret Gatsby	Diether Peschken
Peter Harris	Don Reynard
C.F. Hinks	Paul Riegert
Jim Jowsey	Ralph Underwood
John Kozial	

NOTE

*** If your name is not on the above list, please forward a cheque for \$5.00 to:

Bruce Neill
Sec/Treasurer ESS
Box 484
INDIAN HEAD, Saskatchewan
SOG 2K0

B/ Fall Meeting of the ESS/ESC

The October joint meeting of the ESS and ESC appeared to be a success in all ways. A vote of thanks go out to all involved in organizing and running the meetings. Many are probably wondering how our society made out financially - so Diether has provided the following summary:

RECEIPTS

Grants: Ent. Soc. Canada	\$ 2500.00
Industry	1650.00
Prov. Saskatchewan	1730.00
City of Regina	474.75
Exhibitor's Booths	900.00
Registrations	<u>6517.00</u>
TOTAL	13,771.75

EXPENDITURES

Scientific Program	\$ 3300.40
Banquet, Receptions	
Coffee, Entertainment	4222.52
Printing	2675.40
Spouses' Program	453.85
Miscellaneous	<u>735.24</u>
TOTAL	\$11,387.41

**SURPLUS: \$2384.34

Enclosed with this newsletter you will also find the minutes of the October 5/83 business meeting of the ESS. If you notice any errors or omissions please let me know.

C/ New Saskatchewan Insect Records

First, please note the following corrections to the last newsletter (Vol. 3, Issue 3). Ron Hooper has requested the following changes:

1. The reference to *Agabus margaret*: (Larson) read "It surely must occur throughout southwestern Saskatchewan and northern Manitoba" but should have read "... and northern Montana".

2. There was a reference to "*Pyrgus scripta*" which should have read "*Pyrgus scriptura*".

Ron Hooper has also forwarded the following list of new records for Saskatchewan.

NYMPHALIDAE

Speyeria hydaspe sakuntala (Skinner) - The first Saskatchewan record was collected by Mrs. Myrna Conrad of Regina in Cypress Hills Park on August 9, 1977. It has previously been collected north to south western Alberta. It has also been taken in northern Montana within 100 kilometres of the Saskatchewan border. Her specimen was donated to the Sask. Provincial Museum.

NOCTUIDAE

Melipotēs jucunda (Hbn.) - This species was previously collected in southern Manitoba, and British Columbia. It was missed in Saskatchewan and Alberta. Mrs. Myrna Conrad of Regina collected a specimen at Outlook, Sask., on May 21, 1980. Her specimen was donated to the Sask. Provincial Museum.

Hypenodes fractilinea (Sm.) - One specimen of this species was taken north east of Nipawin, Sask. in the Maurice Street Sanctuary on August 10, 1982 on an entomological expedition by Keith Roney, Rudy Valerio, and Ronald Hooper. This is the first record for Saskatchewan, and the farthest west the species has been taken. The specimen was identified by the Dept. of Agriculture in Ottawa and retained there.

Schinia verna (Hardwick) - In volume 37, #1 of the "Journal of the Lepidopterist's Society", Dr. D. F. Hardwick of the Biosystematics Research Institute of Ottawa described this species from specimens from Manitoba and one (of several) specimens collected in 1980 at Saskatoon, Sask. by Dr. Warren Steck. Warren had given one of his specimens to the Provincial Museum. It was sent to Ottawa for identification check and retained.

Dr. R. Valerio of Moose Jaw collected two additional specimens at Buffalo Pound Park on July 16, 1983.

Besides collecting adults Dr. Hardwick raised Manitoba specimens from the flowering heads of *Antennaria neodioica* (Greene). It flies with *Euticropis nexilis* (Morrison)

Schinia verna rather similar to *Schinia bina* (Guenee) which occurs in the south-eastern States of United States.

D/ Entomological News

Dorothy Murrell, Apiculture Specialist with Saskatchewan Agriculture at Prince Albert submitted the following Report:

Seeing that I am a bee person and know bees a little better than other insects, and since the other insects are all busily dormant

now anyways, I will contribute a few bee facts for your next newsletter.

We now have about 100,000 colonies of honey bees in Saskatchewan, of which almost half are overwintered. Right now the bees in these wintering colonies are clustered together for warmth. Bees in the cluster continually exchange positions, with the outer bees working their way to the centre and the inner bees moving to the edge of the cluster. The cluster itself also moves within the bee hive, as the honey stores in each frame are used up. Up until now the cluster has utilized very little honey but, amazingly enough, the queen will soon start laying eggs again, at which time the honey consumption will rise as the bees maintain a 30°C inner cluster temperature. Most beekeepers help their colonies to conserve heat in the winter by grouping them together and wrapping each group with insulation and tar paper.

Leafcutter beekeepers have recently been confronted with a new and potentially serious situation. Two years ago an American researcher announced that he had found the disease chalkbrood in Canadian leafcutter bees. Chalkbrood is a fungal disease of both solitary and social bees, caused by species of the genus *Ascosphaera*. Leafcutter bee chalkbrood has decimated managed leafcutter populations in the United States, so that many alfalfa seed producers now must either purchase leafcutter bees each year or switch to other crops. Canadian bee and seed producers have a reputation for a high quality product, with a large number of live cocoons per pound and low levels of parasitism and disease. This announcement therefore caused serious concern and anxiety.

For the past two winters I have screened samples of leafcutter bees for evidence of chalkbrood. I am pleased to tell you that so far I have seen no typical chalkbrood in our Saskatchewan leafcutter bee populations. One or two other species of *Ascosphaera* are present, but these are saprophytes or facultative parasites and do not appear to be serious.

Carl Lynn, Information Officer at the Agriculture Canada Research Station submitted the following summary of activities of entomologists at his station:

The wheat midge has been number 1 on the top 10 list of insect problems here at the Saskatoon Station for the last 8 months. Several meetings have been held with farmers and extension staff about the insect. Of the later meetings, November 3rd, 520 farmers met at Nipawin, 85 at Leask on December 1st, and on February 16, a meeting will be held at North Battleford with Bob Elliott as speaker.

John Doane, Head of Integrated Pest Management, says research is currently going on. They are rearing the adult midge in the lab observing egg laying, breaking diapause and observing the insect on wheat plants to get preliminary ideas for this summer's research program. Work on surveys is being done in conjunction with the province.

Alf Arthur is writing the text for sunflower moths for the identification sheets series of Agriculture Canada. A couple of papers are in the preparation stage.

Mukul Mukerji has finished a couple of papers (Can. Ent. 116: 5-9, 1984):

1. Field evaluation of Cypermethrin and Carvaryl as sprays and baits for Grasshopper (Orthoptera : Acrididae) control in Saskatchewan, M.K. Mukerji and A.B. Ewen.
2. A model simulating the population dynamics of the grasshopper (Acrididae) *Melanoplus sanguinipes* (Fabr.) *M. Packardii* Scudder and *Camnula Pellucida* (Scudder), J.M. Hardman, Lethbridge, and M.K. Mukerji, Saskatoon.

Larry Burgess is working on a paper of the Relative abundance of striped and crucifer flea beetles in the northern and central parklands. Burgess will be speaking at the Feb. 16 SIA course at North Battleford about canola insects. As well, he and Mukerji are awaiting Minister's approval of a trip to the August International Congress of Entomology in Hamburg, Germany. Burgess says he's still trying to find overwintering false chinchbugs, so if you know of any, let him know. Burgess is working on a paper of the distribution patterns of overwintering flea beetles. As well, he and Hinks will be scouting flea beetle predators this summer.

Hartley Fredeen met with the Blackfly Advisory Committee Feb. 1 and 2. Lehmkul and Jowsey were in attendance as well as several others. Fredeen is continuing work on the Bovaid eartag. He has applied to the Horned Cattle Trust Fund for funds to test the fenvalerate eartags.

Bob Elliott, one of the new Entomologists at the Station, will be working on the wheat midge and flea beetles for the summer. Also work on *Bacillus thuringensis* with grad student, Brian Galka, will go this summer in conjunction with Cedric Gillott. Lab and field studies will be undertaken.

Chris Hinks, the other new Entomologist, will be working on the midge on lab insecticide trials and lab rearing. On grasshoppers, Hinks is working on mode of action of insecticides and looking at new chemicals also.

That fairly well wraps up what entomologists are looking at for the next few months.

Diether Peschken at the Regina Station reports that Murray Maw has a new status in two ways. Murray is currently the Acting Superintendent of the Indian Head Experimental Farm and he also just became a grandfather for the first time.

Speaking of new family additions, you may have noticed that Lloyd Harris was looking a little rattled at our October meetings. Did you know that he became the proud father of a baby boy (Andrew) on October 2 - the day before the start of our meetings. Despite such "distractions" he still got everyone