



ENTOMOLOGICAL SOCIETY OF SASKATCHEWAN

NEWSLETTER

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EDITORS COMMENTS

Once again our spring issue of the newsletter has arrived in your mailbox. We have included the minutes of the spring meeting, a preliminary notice of the 1990 E.S.S. Fall Meeting, and a list of upcoming conferences and workshops.

ESC-ESS JOINT ANNUAL MEETING IN 1992 IN SASKATOON: SCIENTIFIC PROGRAM - KEN PIVNICK

The program committee is presently trying to develop an agenda for symposia at the 1992 meetings. To date, we have four possible topics and we would like to solicit feedback or additional suggestions. Proposed topics to date are plant resistance to insects, sustainable agriculture, insect pathology, and population modelling. Please address comments to members of the scientific program committee (Bob Elliott, Cedric Gillott, Keith Moore, and Ken Pivnick).

38TH ANNUAL ESS FALL MEETING ANNOUNCEMENT - DIETHER PESCHKEN

This year's annual fall meeting will be held November 1 - 3 at the Museum of Natural History in Regina. The theme will be "New Developments in Sask. Entomology - Problems and Solutions". Diether plans to have a mixer and the usual array of invited speakers, submitted and student papers, and the annual business meeting. A final announcement and further details will follow. If you have any suggestions or require more information contact Diether Peschken at 780-2420. Diether has also passed on a list of conference and workshop reminders that may

be of interest to society members. Photocopies of the list are attached to the back of the newsletter.

ATTENTION GRADUATE STUDENTS - MARTIN ERLANDSON

Full-time students who have been registered for at least one academic year in the College of Graduate Studies and Research in the field of entomology, at the University of Saskatchewan or the University of Regina, are eligible to apply for the Arthur R. Brooks Memorial Prize in Entomology. The prize is awarded to an outstanding student who has demonstrated ability in the area of entomological research and contributed to entomology in Saskatchewan. For further information on how to apply contact Dr. Owen Olfert, Secretary, Entomological Society of Saskatchewan, Agriculture Canada Research Station, 107 Science Cres., Saskatoon, Saskatchewan S7N 0X2, or the Departments of Biology at either the University of Saskatchewan or the University of Regina.

REPORT FROM THE GRASSLANDS INSECT SURVEY COMMITTEE - KEN PIVNICK

The collection of insects from the grasslands national park area is growing. It also should be noted that Ron Hooper and Keith Roney have a substantial collection of insects from the same area in the Provincial Museum collection. They also have lists of species collected in the area which our collection has helped to enlarge. I hope to include a list of species in the ESS collection in next spring's newsletter.

I am planning three collecting trips this summer on June 15-17, July 20-22, and September 1-3. Anyone interested in participating, may contact me at 975-7014 (work) or 652-5240 (home). I have purchased pinning equipment and supplies which are available to anyone interested and I also have a light trap and a car battery. Anyone interested in organizing other collecting trips to the grasslands, or in helping to pin, label, identify and arrange insects may contact me.

BUTTERFLY CENSUS - KEN PIVNICK

The annual butterfly census at Pike Lake is planned for July 7. There are also butterfly-watching outings scheduled by the Saskatoon Natural History Society on June 23 and August 18, and as well, an evening butterfly identification workshop on June 21. Please contact me if you are interested in participating.

ENTOMOLOGIST ALERT - JULIE SOROKA

The following letter was received on the BEE-NET system of electronic mail. The author neglected to give his regular mailing address. If any ESS Newsletter readers have fall armyworm specimens which they would like to donate to Mr. Orville G. Marti, Tifton, Ga., contact me and I will reach him by electronic mail. My address: Julie Soroka, Agric. Canada, 107 Science Crescent, Saskatoon, Sask. S7N 0X2.

"I am a USDA parasitologist studying an ectoparasitic nematode of the adult moth Spodoptera frugiperda. The nematode was first found in French Guiana in 1982 and has since been determined to be quite common in S. frugiperda in the U.S. What is puzzling is that there were no reports (that we can find) of the presence of this nematode in the U.S. before we found it here in 1987. I work in a lab which has studied S. frugiperda since 1969 and no one paid any attention to the presence of the nematode (if, indeed it was present). At least since the beginning of the century S. frugiperda has been studied by numerous entomologists but none apparently noted this nematode. Nematodes are small and hard to identify, so it is easy to understand that someone coming across them might tend to think that they were contaminants and thus not relevant to the project at hand."

"I am interested in determining whether this nematode existed in the U.S. prior to 1977 (when there was a major

S. frugiperda outbreak). To do this, I need access to stored specimens of the moths. The nematodes can be found on dried specimens after soaking for several hours in 70% alcohol. I am not asking for museum-quality pinned specimens, but merely for incidental collections such as many entomologists make. Specimens stored in alcohol or formalin will serve just as well as dried ones. If members of this list have such collections, or know of people who do, please let me know. The nematode has potential for biological control of S. frugiperda. Mocis and several other moth species are also parasitized."

BOOK AVAILABLE - MARY MATHESON

"Buggy Books: A Guide to Juvenile and Popular Books on Insects and Their Relatives", written by Gary A. Dunn, is now available. This unique reference provides information on 736 of the most significant "bug books" written for youth. The guide is invaluable to teachers, parents, naturalists, librarians and entomologists, and includes titles, authors, publishers, dates, appropriateness, contents and quality/usefulness rating. Titles are cross-referenced by subject, age-appropriateness, and author. Send \$12.95 (plus \$2 S&H) to the Young Entomologists' Society, 1915 Peggy Place, Lansing, MI 48910-2553.

STUDENT AND AMATEUR ENCOURAGEMENT - ROSS WEISS

On March 9, 1990, a few members of the Entomological Society of Saskatchewan (Murray Brawn, Martin Erlandson, Peter Kusters, Mary Matheson, Owen Olfert, Sharon Smith and Ross Weiss) presented an insect display at the first Gardenscape '90 show held in Saskatoon. The show consisted of the following two sections: a general public section which included displays of garden plants and equipment; and a "Little Green Thumb" section for school children aged 7 to 9 years. This section consisted of the following four displays: good insects and bad insects; fruit and vegetables grown in Saskatchewan; plant development; and seed planting. The E.S.S. display consisted primarily of living insects including grasshoppers, butterflies, aphids, ladybird beetles, leafcutters bees, bertha armyworm larvae, flea beetles, wireworms and aphid parasites. Other presentations included a honey super, pinned insects, posters, and a selection of slides from the E.S.S. collection. Approximately 700 enthusiastic children

viewed the display. The organizers from the Saskatoon Prairieland Exhibition were very happy with the display and invited us back for the show in 1991.

ENTOMOLOGICAL HAPPENINGS AT THE UNIV. OF REGINA - P.W. RIEGERT

The winter semester is drawing to a close at the University of Regina. The last lectures have been delivered, laboratory exercises have been completed and all eagerly await the beginning of the final examinations on April 16th.

The only class in entomology in the winter semester was given by P.W. Riegert - he is supposed to be retired but he just couldn't resist the temptation of putting his hand in once more to "stir the pudding". The class was a reading class (tutorial type) in "Insect Specialization" given to senior undergraduates in biology.

Emily Leung completed her doctoral thesis and ably defended it on March 16. The dissertation is titled, "Ultrastructure of labial palpal sensilla and associated multiterminal neurons and gland cells in adult Graphoderus occidentalis Horn (Coleoptera: Dytiscidae)". Dr. Douglas A. Craig of the University of Alberta was the external examiner; Dr. R.Y. Zacharuk supervised the research.

Laura Stewart, a senior undergraduate in Biology, completed her undergraduate thesis to fulfill the requirements of the Honours Program. Her thesis, "Chemoreceptors on the legs and ovipositor of the prairie tent caterpillar, Malacosoma californicum lutescens (Neumoegen and Dyar) (Lepidoptera: Lasiocampidae)", was supervised by Dr. R.Y. Zacharuk.

Those who want copies of the two following booklets: "Entomologists of Alberta" and "Entomologists of Manitoba" can obtain these free from P.W. Riegert (Dept. of Biology, U of R, Regina, Sask. S4S 0A2) upon payment of a nominal fee of \$2.50 to cover the costs of handling and mailing.

BUTTERFLIES, BEETLES, BUGS, BIRDS AND BATS - AN INSECT COLLECTING TRIP TO THE RAINFORESTS OF COSTA RICA, CENTRAL AMERICA - JOHN KOZIAL

In February 1990 I had the opportunity to spend three weeks exploring the rainforests at two different locations on the Atlantic slopes of Costa Rica, Central America.

My first week was spent in the hot, humid, Atlantic lowland jungle (50 - 100 m) at Selva Verde, a rustic jungle lodge located on the banks of the Sarapiquí river, near Chilamate, in Heredia Province. The lodge is situated on the edge of a five hundred acre tract of virgin lowland rainforest and is a refuge and haven for all manner and variety of jungle life including, to my delight, hundreds of species of butterflies, moths and a whole host of other bizarre and fascinating creatures.

To a person accustomed to a temperate climate, changing seasons, and prairie wildlife and vegetation, the rainforests and their inhabitants can be best described as overwhelming. First impressions are of an incredibly green, lush, rankly overgrown landscape. Here life has evolved undisturbed through time to culminate in one of the most diverse and complex ecosystems in the world. It was all a little bewildering to begin with, but after the first few days, my initial shock at the abundance of life subsided and I began to explore the rainforest in more detail.

My first few days spent roving in the jungle were taken in moderation; it takes a little time for the body to acclimatize to the sudden high temperatures (+30°C) and the constant high humidity (+90%). When I left Saskatchewan it was -30°C in the middle of a snow storm.

The days were typically clear, sunny and hot, as this was near the middle of the dry season; however, we still received frequent heavy showers and rain almost every night. As a consequence of the rain, the jungle paths were incredibly muddy and surprisingly rugged. Rubber boots and a walking stick were required to make it up and down the steep slippery slopes. In addition I carried all my collecting equipment and my camera - my clothes were soaked to the skin with perspiration from the moment I woke up until after I had gone to bed. Despite the difficulties I still had great fun in pursuing the many strange and beautiful butterflies and other insects. I have numerous vivid memories - the sight of my first living Morpho butterfly, huge Caligo (Owl) butterflies flitting about at dusk, the lazy circling flight of the beautiful Heliconius butterflies, giant millipedes, spiders, cockroaches, bizarre mantids and stick insects, bats, toucans, hummingbirds by the dozen, and scores of other brightly colored birds.

The last two weeks of my vacation/working holiday were spent at