

The Entomological Society of Manitoba *Newsletter*



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About the ESM Newsletter

The Entomological Society of Manitoba Newsletter is published three times per year. It is a forum whereby information can be disseminated to Society members. As such, all members are encouraged to contribute often. The Newsletter is interested in opinions, short articles, news of research projects, meeting announcements, workshops, courses and other events, requests for materials or information, news of personnel or visiting scientists, literature reviews or announcements and anything that may be of interest to ESM members.

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Editor's Commentary

Consider the questions: does the act of cutting and pasting make you giddy as a schoolgirl? Do you find yourself correcting friend's/family's/complete stranger's grammar without solicitation? Do you currently reside in Manitoba and love insects? If you answered yes to any of these questions than you qualify to become Editor of the ESM Newsletter! That's right, your current editor has jumped ships and is currently looking for a suitable replacement. All interested parties should contact the Head Bug at 204 474 8365 where you will be prompted to answer one skill-testing question. If you cannot answer this question, you will still become editor! It's that simple!

My jump is rather a record breaking one. I now stand among the few Ontarians who, having lived in Manitoba managed to break away from its Avalon like clutches. Now when I recall how much I enjoyed living in the 'peg, I usually get a blank stare in return; the charms and beauty of Manitoba are a well-kept secret. What is not a well kept secret are your mosquitoes. Currently I'm working for Toronto and Region Conservation on West Nile Virus of which part of my job involves public education. I have quickly learned I can gain much more respect from the audience when I start telling stories about my close encounters with Manitoba Mosquitoes.

As potentially my last editorial I'd like to thank everyone who has contributed to the newsletter. I'd also like to make special mention of my right hand, Michael Alperyn especially for his technological hocus pocus and photographic wizardry. You have made this job

easier, particularly with this issue. To the rest of you bug people, I hope to see you all at the upcoming Annual Meeting!

All the best!

Nicole Lauro



Tales from the Head Bug

For those who have not lived in Manitoba all their lives, perhaps one of the most striking aspects of the Province is the vigour and speed of its seasonal cycles. In spring, with renewed plant growth, insect activity switches into high gear, primarily in response to warmer temperatures. For many insects, the response is apparently very precise, a precision born of



ESM President: Neil Holliday

evolutionary necessity: emerge too early and food plants are not yet leafed out, or there is a risk of death from cold temperatures; emerge too late, and food plants are past their most nutritious stage, or competition is severe, or there is insufficient time to complete development before conditions become unfavourable. Spring-active arthropods such as crucifer flea beetles, cankerworms and ticks seem to have achieved a high degree of success in emerging at the “right” time. In the late summer and fall, insects respond primarily to shortening days as signals of the onset of colder more unfavourable conditions. As I write in the

\$students: \$ave your \$tipend. Student members of the ESM can attend the Annual Meeting for only \$5. However, if you have not paid your \$10 ESM membership fees for 2003, registration will cost \$45. Not only that, student members can gorge themselves at the ESM banquet for only \$12, but will have to fork out \$25 as a non-member. *Ian Wise ESM Treasurer*

Article Solicitation. The Prairie Garden is soliciting for articles on common garden insects, beautiful, beneficial, conspicuous, or pest. I urge you to put together an article, with pictures, on one or more species. For further information including a copy of the current issue and “Instructions to Authors” contact **Bill Turnock**: ph. (204) 269 4229 or email wturnock@agr.gc.ca

last days of August, there is already evidence of this.

The seasonal cycles are not in themselves unique, but their compression into a scant four months or so of summer activity is quite unusual. Perhaps this is why, unlike our insects, I find myself to be never quite ready for the next event in the whirl of the seasons. It seems just moments since we were at the New Members’ Social at Mark Lowden’s House, yet now the summer season is at an end, the annual media surprise about wasps is in full swing, and the Society is preparing for its Annual Meeting.

Recently, all members should have received information about the 2003 Annual Meeting on 24 and 25 October. This year, the meeting’s Friday venue is the Freshwater Institute, and there we will have sessions of submitted papers. The Saturday venue is at the Canadian Science Centre for Human and Animal Health, and the main event at that location is a symposium on mosquitoes and West Nile Virus. We are hoping that this symposium will attract both members and non-members. The latter, I hope, will learn not only of the complexities of a specific insect-borne disease, but also something of the diversity of insect biology and of entomological activity within our Society. The Programme Committee have been working very hard in planning the meeting, and I urge all members to participate to the fullest extent. Consider submitting a paper — deadline 12 September — and mark your calendars now for the scientific and social events of the two days. *Neil Holliday, President.*

Prairie Day 2003: Sweeping through the Tallgrass Prairie

It was a hot and humid day and rain threatened much of the time, but that didn't stop the 40 or so prairie enthusiasts that gathered at the Tallgrass Prairie Preserve, just east of Tolstoi on 9 August. The site itself is well sheltered, and there is an extensive self guided tour through one of Manitoba's finest examples of tallgrass prairie habitat. Many of the plant species are identified using discrete signs, and August is prime time to visit the tallgrass prairie, as the big bluestem begins to change colour. But on this annual event, Christie Borkowsky and the staff who work for the Nature Conservancy had arranged for an interesting and informative programme for all those interested in the prairie. There was a demonstration on the bird banding programme, there were guided walks, and there were displays and presentations on the tallgrass prairie and on critical water management issues in the region.

Of greatest interest to our members was the critter tour. Originally, Christie had organized two specific times, one in the morning and one in the afternoon, where people could join the entomologists, nets in hands, and explore the insect life in the area. This worked pretty well for the morning time slot. People showed up at the designated table and we all set out across the grassland and forest margins. Even the adults waded through the grass, swinging at every dragonfly and butterfly that flew by. But it was the kids that attacked the grassland with unbridled enthusiasm. In every direction you turned, there was a youngster beating the herbage with a net. Christie had set up a large, clear acrylic box to hold specimens for close observation, and it wasn't long before it began to fill with dragonflies, grasshoppers, katydids, and butterflies. The green tree frogs and leopard frogs soon ended up in there too, and the children learned their lessons in predation in model ecosystems.

As everyone realized that there were only so many different large insects to capture, sweep netting became the focus. The Tolstoi site at this time of year has an enormous diversity of small

insects, including leafhoppers, spittle bugs, acalyprates, tiny beetles and spiders. A few sweeps through the grass yielded a blizzard of small insects into the face of the curious collectors. It's hard to ignore biodiversity when it gets up your nose and in your hair. The discovery of one of our common crab spiders, *Misumena*, stole the show though. The thought that these beautiful spiders could be white or yellow, and that they sat among the flower petals waiting to ambush visiting pollinators really captured the imagination of some of the budding entomologists.

The rest of the morning was spent peering into the flowers, and no crab spider was safe. There was a brief break in the action, when barbecued lunch was served, and when most of the kids fanned out on a scavenger hunt, but it wasn't long before they assembled again to stalk the glen in search of insects. The schedule went out the window. There were seven young entomologists, ranging in age from seven years old to eleven, and even though the temperature and humidity rose through the afternoon, they wouldn't give up. One young lady insisted that we head over to the dugout to see what insects were over there. In all seriousness, she turned to me and said, "You have to come along so if one of us gets hurt, you get blamed." We even eventually enticed the reticent teenager, who had tended the fire and helped with the bannock, to take up a net and swing along. It wasn't long before he was in there with the others, and if you didn't look too closely, you couldn't tell him from the other children.

Prairie Day was great fun. When I left, as the tents were coming down and the displays were being packed away, there were still a few kids running through the grass with their nets. The tallgrass prairie is a magical place. If you get a chance to visit, I'm sure you will agree.

Terry Galloway is a professor with the Department of Entomology at the University of Manitoba and the ESM Proceeding Editor.

Featured Article: Australia - An Entomological Travel Destination.

As I write this for the fall ESM Newsletter, it's almost exactly one year until the 22nd International Congress of Entomology in Brisbane, Australia, which runs from August 15 to August 21, 2004. I'm always glad to have an excuse to think about Australia, and August is a great time to be thinking of traveling to Australia, or at least to some parts of Australia. The northern summer, or southern winter is perfect for visiting the Top End (Darwin and Kakadu, or Cairns and the Daintree) or perhaps the Red Centre (Alice Springs and Ayer's Rock). It might not be such a great time to visit the island of Tasmania or Melbourne, the capital city of Victoria, both of which would probably be damp and cold at best. You could, however, go skiing in the Snowy Mountains of Victoria and New South Wales. Sydney would probably be fairly pleasant, with daytime temperatures in the mid to high teens and nighttime temperatures in the high single or low double digits most days. Brisbane, which is in southern Queensland, has a subtropical climate, and would be warmer than that. The southern winter is the time to visit those places which are entirely too hot the rest of the year. To assist you in planning for and fantasizing about Australia next year, I've included below, a personalized list of the entomological experiences you might expect to have.

Beautiful Insects: Cockroaches! Yes, cockroaches. Try brilliant iridescent green insects about the size of American cockroaches. Alternatively, how about creamy white and black patterned roaches. Australia has an incredibly diverse roach fauna, pretty well all of which is to be found in natural habitats rather than human habitation. Their pest species are more or less the same as ours. Intimidating Insects: Ants, bulldog ants to be precise. Easily 2cm long, and looking like mostly mandibles, but able to sting as well, these charming creatures will go after any unwary walker who strays onto their mound. They do so with the most athletic and enthusiastic leaps imaginable. I have not been unlucky enough to have been stung, but it is reputed to be extremely unpleasant. The Australian ants, like the

cockroaches, are an amazingly diverse group, and offer many other interesting versions.

Abundant Insects: Australia has over 600 species of Eucalyptus, so it isn't surprising that there are abundant groups of insects, from many orders, adapted to that genus. And some of these specialists can themselves be unbelievably abundant. One such insect is a sawfly. Not a pretty insect, it is a shiny greasy looking black larva which aggregates on the trunks and major branches when not actually feeding, rather like the forest tent caterpillar does here. During one outbreak, we saw many boulevard trees with aggregations 3,4 metres long, 20 centimetres or more wide and several larvae deep. Where homeowners had decided to control the insects, they were then faced with raking the corpses up into huge piles half a metre deep. What to do next. Well since they were Eucalyptus feeders, they were full of eucalyptus oil. Just put a match to them.

Deafening Insects: Cicadas, a pleasant sound of summer you say. Not Australian style. We have hiked in forests so full of cicadas that it hurt your ears. On one occasion Bob took to, wearing cotton plugs for most of our walk. And yes, it was the cicadas and not me he was defending himself against.

More Deafening Insects: Yet again I must write that an Australian insect group is incredibly diverse. This time it's the Orthoptera. One particular member of this group has also caused Bob ear problems. Along the edge of our driveway, on one of our stays in Canberra, were some mole crickets. These are the ones you see diagrams of in all the standard textbooks, the ones that make a special underground chamber to amplify their song. We had never actually seen one of these crickets, only heard them. One evening, Bob decided he was going to find one. There he was down on his hands and knees, trying to locate one, but all had gone at least temporarily silent. Then while Bob's face was centimetres from the ground, the nearest one let loose. It was quite while before he could hear properly again.

Irritating Insects: How could an entomologist be irritated by insects, you ask. Well try bushflies. These are small housefly like insects, the larvae of which live in dung. The adults, which can be present in huge numbers, don't bite but need moisture of course and also a small protein meal in order to produce eggs. Well they will go anywhere to get that protein meal: up your nose, down your ear canal, into your mouth whenever it's open, even across the surface of your eyeball. You don't know the full meaning of the word irritating until you have experienced 100's of bushflies crawling on you.

This is only a small sampling of what awaits you in Australia. I haven't mentioned Lepidoptera, I

haven't mentioned Coleoptera, and on and on! In fact the only insect group I can think of at the moment which isn't bigger, or more colourful or more abundant in Australia than at home, is my own group. The native Australian aphid fauna is pretty thin in fact. But they do have all the same introduced species that we do, so there are lots of interesting things happening aphidologically speaking. Besides, I'm not fussy, I'll admire any insect, anywhere, any time. See you in Australia!

Pat Mackay is a Professor Emeritus with the Department of Entomology at the University of Manitoba and the Representative to the ESC.

ESM's 59th Annual Meeting

During the Fall, Manitoban entomologists get together at the ESM Annual Meeting to share new scientific discoveries in a friendly and relaxed environment. This year the meeting will take place on Friday the 24th and Saturday the 25th of October. The theme of the meeting is "Mosquitoes and West Nile Virus: Present Situation and Perspective. Both oral and poster presentations on a variety of entomological subjects are scheduled to take place on Friday at the Freshwater Institute in Winnipeg. On Saturday, the symposium will change venues and take place at the Canadian Science Centre for Human and Animal Health located at 1015 Arlington Street.

The key note speaker for the symposium is Dr. William K. Reisen. Dr. Reisen is a research entomologist with the Centre for Vector-borne Diseases at the University of California at Davis as well as the Director of the Arbovirus Field Station at Bakersfield, California. He leads a team of medical entomologists, arbovirologists, ornithologists, climatologists and operational specialists in a research effort to study the epidemiology and control of endemic and exotic encephalitis viruses in California. His specific research projects include surveillance diagnostics, use of climate models to forecast virus amplification, and new approaches to adult host competence effects on seasonal wetlands,

encephalitis activity, arbovirus persistence in *Culex* control. Dr. Reisen has chosen "California Invasion by West Nile Virus" as his title for the symposium. Four additional speakers will be presenting at the symposium including Dr. I. K. Barker (University of Guelph), R. Gadawski (City of Winnipeg), Dr. M. Drebot (Health Canada) and Dr. J. Kettner (Manitoba Health). Additional highlights include a tour of the Canadian Science Centre for Human and Animal Health followed by the ESM Annual General Meeting will be held on the afternoon of the Saturday. Again, Pat Mackay and Bob Lamb have kindly invited everybody to their place for the "Meet the Visitors" Mixer on Saturday evening.

For those that are still interested in presenting at the Annual Meeting you'll have to hurry and send me your titles and abstracts. I hope to see you all at the meeting!



Mahmood Iranpour is the Scientific Program Chair.

A New Student!



My name is **Kathleen Ryan**; I'm a new graduate student in the department of Entomology at the University of Manitoba. I have an eclectic academic and work history but to keep it short, I ended up in the Entomology department after finishing a BSc. in Geography at the University of Winnipeg in the spring. An odd start for an Entomology student I agree. Let me tell you how I got here. I love to know how natural systems work, how components fit together and why everything is where it is. Since I spend most of my free time (a rare commodity this year) outdoors, in my kayak, canoe or on a trail, ecology was an obvious extension of my interests and our impact

on ecological systems a concern. After exploring the abiotic and the botanical aspects of ecology it occurred to me that insects were an obvious choice of study since their distribution is largely the result of the interactive effect of these other components.

My Masters project involves conducting a follow up to 10 years of previous research done through the department. I am looking at the impacts of plantation forestry, in comparison to natural regeneration, on the biodiversity of butterflies and carabids in jack pine stands. I have re-established plots in the original locations in the Sandilands Provincial Forest and will be conducting fieldwork throughout next summer. I am not quite through my first field season and I may not have very much data but I already have enough stories of run ins with bears, confused deer, hunters, Johnny Cash impersonators, and curious locals, of rescues by the local fire crew, broken truck parts, driving on washed out, decommissioned roads and of animals tampering with data to write a book. The things that you never hear about graduate school! Since my fieldwork fulfills the hiking component of my outdoor pursuits, I am hoping to find a way to squeeze in a bit more paddling next summer.

Greetings! My name is **Scott McMahon**, and I'm a Master's student in the Department of Entomology at the University of Manitoba. I grew up in the small farming community of Roland, Manitoba, where insects, like grasshoppers and aphids, were not looked upon kindly. I have no aspirations to become a farmer. I'll leave gambling on the weather to my dad. Through my bachelor's degree at the University of Manitoba, I majored in Zoology and was fascinated with the area of parasitology. After taking Introductory Entomology in my fourth year, I became fascinated with insects. Spending a summer dissecting



marine fish for endoparasites, I decided that ectoparasites would be more interesting. I've been funded by the Tire Stewardship Board to investigate the role of tires in providing habitat for mosquitoes in southern Manitoba. From lists of waste transfer stations (dumps/landfills) and tire dealers around Manitoba, I randomly selected 40 sites to visit over the course of the summer. I didn't realize how many shapes and sizes tires could come in, and the great numbers that could accumulate. I don't think the same about 18-wheelers anymore. Bringing the samples back to the lab, I'm counting and identifying each larva. Next year, I will be emphasizing the experimental part of my research an attempt to find out what it is about tires that attracts female mosquitoes and makes them suitable oviposition sites. Well, that's me and my research in a nutshell, and if you need to find me this summer, I'll probably be down in the dumps.

2003 Joint Annual Meeting

The 2003 Joint Annual Meeting of the Entomological Societies of Canada and British Columbia is happening on November 2-5 in Kelowna, BC. The theme this year is 'Insects in Shifting Environments' and includes symposiums on insect adaptations, resistance, biodiversity and introduced species. For more information check out the official web page at <http://esbc.harbour.com/jam.html> .



General Information

If you are interested in becoming a member contact Brent Elliot at Telephone: (204) 745-5669 or email BElliott@gov.mb.ca. Annual dues are \$10 for students and \$25 for regular members.

ESM EXECUTIVE 2003

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