Wisconsin Entomological Society

Newsletter

Volume 38. Number 2

June 2011

I am very grateful to the Southern Wisconsin Butterfly Association Chapter of the North American Butterfly Association for posting a series of articles I've written, called "Butterfly Conservation Management in Midwestern Open Habitats." The links are on the chapter's resources web page: www.naba.org/ chapters/nabawba/ resources.html.

This series arises from the field work my husband, Scott Swengel, and I have

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New Butterfly Management Publication by Ann Swengel

done, as well as from the numerous reports and publications of other hobbyists and entomologists. The topics covered draw on the many queries we've received from nature lovers, scientists, managers, and agency staff, asking about habitat management and butterfly conservation in the midwest. I want to thank the many lepidopterists, butterfliers, agency staff,



and funders of butterfly research for their contributions to butterfly and habitat knowl-

edge, and for their inspiring questions. I also appreciate you readers for being willing to consider the ideas expressed here.

Another name for this series could be. "How do I proceed when habitat management recommendations are so confusing and contradictory?" Butterfly declines and losses are being documented in the midwest, and not just in the larger landscape, and not just in small, isolated preserves, but also in large, high-quality nature preserves. Habitat management is a factor that can contribute to declines, but can also help secure and recover butterfly populations. Habitat management is also one of the factors most within the control of humans. This is good news, because it gives us an opportunity to make a significant difference in conserving butterflies.

Each part of the publication begins with a oneparagraph summary of its *Please see* **PUBLICATION**, page 2

The Wisconsin Entomological Society Newsletter is published three times a year, at irregular intervals. The newsletter is provided to encourage and facilitate the exchange of information by the membership, and to keep the members informed of the activities of the organization. Members are strongly encouraged to contribute items for inclusion in the newsletter. Please send all news items, notes, new or interesting insect records, season summaries, and research requests to the editor by Jan. 15, May 15, or Sept. 1st:

J. Mingari, P.O. Box 105, New Holstein, WI 53061, email: turkeyfeather@tds.net (Put WES in subject line) NOTE: Please report any address changes to Les Ferge, 7119 Hubbard Ave., Middleton, WI 53562, email: lesferge@gmail.com. <u>Wisconsin Entomological Society Newsletter – June 2011</u>

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PUBLICATION, from page 1

contents. In these sections, I provide an overview of the issues and problems, my views on how science works, what it can and can't do, how seemingly-conflicting science can be reconciled, what I've learned from my field work and readings, and how I recommend moving forward, based on both what has been documented and what isn't known yet. I encourage you to skip around to the parts applicable to your questions or situations. I hope this is helpful for understanding what the situation is for midwestern butterflies of open habitats and what you and I can do to help them.

My subjects are the compelling problems of butterfly declines, as well as good news you can use to reduce or reverse the declines. A variety of reports indicate losses not just in the developed landscape, but also in large nature preserves, even as some populations of the same species persisted more recently in more urban parks. Based on my field research and scholarship, as well as enjoying wildflowers and hiking and camping around North America, I'd like to share my perspectives on how butterfly populations and their habitats persist and change over time, and how habitat management affects those outcomes. Even though the patterns are complex and variable, butterflies readily demonstrate reliable and orderly patterns. We can't make butterflies play by our rules, but if we learn their rules, there's great potential for our conservation efforts to retain and even enhance the butterfly populations that also call our region home.



Field Trips

If you'd like to be put on the WES Field Trip notification list, contact Kyle Johnson at:

kejohnson4@wisc.edu

Member Information

Please note that the year through which dues are paid appears on the newsletter's mailing label after your name.

Membership Dues

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Wisconsin Entomological Society



http://wisentsoc.org/

Member contributions, images and links, etc., are welcome on the WES website.

Contact Les Ferge for more information: lesferge@gmail.com is early May, and I think I can count on one hand the number of nice days so far. Last year was warm early, and everything was ahead of schedule.

I did see my first imported **cabbage worm** flying during mid-April. I did not see my first

tent caterpillar nests until Mothers Day. I did see my first **monarch** on May 11, when those warm southerly winds hit, and we had our first 80-degree day.

Spring always means ant

season. Some ants, like the larger **yellow ant** (*Lasius* - old *Acanthomyops*) and **carpenter ants** (*Campanotus*), swarm in spring. When nests are found under warm homes or in walls, the ants will be active 4-6 weeks ahead of the outside nests. The most common spring and summer ant has been the non-native **pavement ant** (*Tetramorium species-e*). With multiple queens and nests, this can be a difficult ant to manage.

Since the last newsletter we have received two more samples of the **Brown Marmorated Stink Bug**. One infestation in Madison was a group of what appeared to be overwintering adults in a hotel on the east side. This would suggest a breeding population in the state. Think of the multicolored Asian Lady beetle crossed with the Japanese beetle. The stink bug invades houses and attacks fruits, vegetables and ornamentals. It will be a few years before it gets out of hand in the state, but this critter is going to be a real stinker. Browse the web for the problems seen in New Jersey, Pennsylvania, and Maryland. This is not going to be a popular bug. (Article and photos on page 4 - Ed.)

We may have had a slow spring, but I did not see anything in the winter weather that I would expect to have a major impact. I remember the winters as a child that always had a few days of 20 below or more-- now we see one or two days down to 5 below, and we say it was a cold winter. As I have said before, the governor moved us to Missouri a few years back and did not tell us. I wonder what new treats this year will bring?

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Training Parasitic Wasps to Respond to Bedbug Pheromones

Read about the work of Glen Rains, an engineer with the University of Georgia College of Agricultural and Environmental Sciences, and Joe Lewis, a U.S. Department of Agriculture entomologist.

http://www.uga.edu/aboutUGA/research-wasphounds.html



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News from the

Insect Diagnostic Lab

by Phil Pellitteri

More on the Brown Marmorated Stink Bug by Jordan D. Marché II

In the last issue of the WES Newsletter. Phil Pellitteri announced the presence of the Brown Marmorated Stink Bug (BMSB) in Wisconsin. Given his description, along with other sources. I was able to positively identify two specimens of BMSB in my collection, both of which came from eastern Pennsylvania a few years ago. As it turns out, I was unknowingly living very close to the area in which BMSB was first recognized as an invasive species, and from which it has now spread widely. I am thus enclosing a photo of one specimen to aid others in identifying this hemipteran.

BMSB, Halyomorpha halys (Stål), is an exotic pest from China and Japan that was accidentally introduced into the U.S. near Allentown (Lehigh Co.), Pennsylvania in 1996. Formal recognition of its presence did not occur until 2001, however. Now found in some 23 counties in Pennsylvania, the BMSB has also been collected (often in

traps) in New Jersey, Delaware, Maryland, and Virginia, along with several Midwestern states as well as Oregon and California. The first specimen in my collection was obtained from a friend at Lancaster Co. in 2005; the second I personally collected from the building in which I worked (Berks Co.) in 2007.

Reference:

George C. Hamilton, "Brown Marmorated Stink Bug." American Entomologist 55, no. 1 (Spring 2009): 19-20.

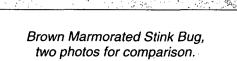
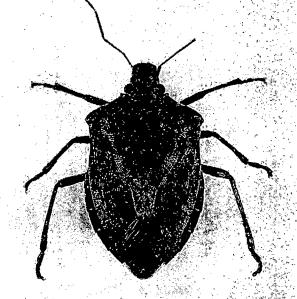


Photo above submitted by the author. Photo below submitted by Phil Pellitteri.



trees and soybeans, where it has the potential to cause considerable damage here in the Midwest. Adults emerge in late spring and lay eggs en masse; five instars are required to reach adulthood. First-instar nymphs have orangeand-black abdomens bearing several transverse median black bars. BMSB can become a nuisance in late fall, where it congregates in large numbers on the sides of houses, garages, or other structures in preparation for overwintering. About 15 mm long, BMSB is larger than any domestic *Euschistus* bug, which it closely resembles. There are two whitish bands on the antennae, the larger one being on the outside. There is also a distinctive pattern of whitish triangles, separated by short vertical lines, found on the dorsal edges of the abdominal segments. We will probably see more of these insects in Wisconsin in coming years!

As mentioned by Phil,

cultural pest of fruit

BMSB is chiefly an agri-

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Books & Websites by Andrew Khitsun

You will not be impressed by the name of the book **Saturniidae of the World**, by R. Lampe, but shocked and awed, having opened it - it illustrates complete life stages of

about one-fourth of all species of Saturniidae (just over 300), from eggs through all the caterpillar instars to pupa to adults of both sexes. **Nomads in the Wind**, from the award-winning photographer Ingo Arndt, is not just another book about Monarch butterflies, but also a compilation of stunning photos of other species. If you ever watched the documentary **Microcosmos**, you might want to know that companion namesake volume is available, written by C. Nuridsany and M. Perennou and showing insects in their most intimate and rarely-seen moments. **Mosquito Crusades** by G. Patterson is a fascinating book detailing Americans' struggle with the bloodsucking pest for over a century.

In the scientific domain. Manual of Central American Diptera in two volumes is a collaboration work of over 70 experts in the field, covering all 106 families of flies and providing identification to the genus level. A Systematic Catalogue of Eight Scale Insect Families by Y. Ben-Dov provides exhaustive information on the families Aclerdidae, Asterolecaniidae, Beesoniidae, Carayonemidae, Conchaspididae, Dactylopiidae, Kerriidae and Lecanodiaspididae of the world (Hemiptera: Coccoidea). University of Nebraska produced yet another volume on beetles - this time not North American but still good - M. Paulsen's The Stag Beetles of Southern South America. Stateside, richly illustrated Butterflies of Alabama by P. Ogard will make us envy lepidopterologists of that state, considering that our own Butterflies of Wisconsin is more than 40 years old now.

If you head to the website of Entomological Society of America, you can find very interesting article **The History of Bed Bug Management** by Dr. M. Potter at <u>http://</u> <u>entsoc.org/history-bed-bug-management</u>. The ESA says the article is available for a limited time - I hope it's still there when you

read this. From the same page, you can click Publications, and then Insect Pest Handbooks to get to several interesting books for sale: Handbook of Corn Insects, Handbook of Forage & Rangeland Insects, Handbook of Household & Structural Insect Pests, Handbook of Small Grain Insects and Handbook of Turfgrass Insect Pests. All of them are expertly written and richly illustrated. If you want to buy any of them - hurry up: they command twice or thrice the price from private booksellers!

The other excellent site selling all kinds of books is **Insecta** at http://www.insecta.de/shop/ openstore.htm. (most of the books there are not about North America). If you have your own website about Beetles, you can join The Beetle Ring at http://www.naturalworlds.org/beetlering/index.htm and be a part of the online beetle community. On the other hand, if you are only interested in Scarabs, oddly named Scarab Workers World Directory at http://www-museum.unl.edu/research/entomology/ workers/index2.htm is your place to go - it lists all the folks interested in the subject worldwide. If you're into blogs, one excellent blog Beetles in the Bush (actually it's a full-featured website that acts like a blog) discusses all the variety of insects at http:// beetlesinthebush.wordpress.com/. To help identify your beetle finds, go to A Photographic Catalog of the Cerambycidae of the New World at http:// <u>plant.cdfa.ca.gov/byciddb/</u> - it has most of the American species. Another excellent site dealing with that family - The Cerambycidae of Florida at http:// www.fsca-dpi.org/Coleoptera/Mike/ FloridaCerambycids/openingpage.htm. Beetles are good, but Saturniidae remains one of the most popular topics, and yet another site with excellent photographs devoted to this group is Leroy Simon Saturniidae Collection at http://

www.silkmoths.bizland.com/poncholeroysimon.htm.

As always, I want to throw in one non-insect book. Mentioned in the previous article, former curator of UW-Herbarium N. Fassett authored a great book, **The Leguminous Plants of Wisconsin**. It's out of print, but still a good reference for that plant family. Wisconsin Entomological Society Newsletter - June 2011



and seven staff from three agencies started a long-term program to monitor regal fritillary presence on remnant and restored prairies in the Military Ridge Prairie Heritage Area, in eastern Iowa Co. and western Dane Co. The regal fritillary is listed as a Federal Species of Concern. Once widespread, it has nearly disappeared from east of the Mississippi. In Wisconsin it is listed as endangered due to low or declining populations, and it is considered critically imperiled because of its vulnerability to extinction within the state. Occurrences have been documented in 14 counties in Wisconsin through the Natural Heritage Inventory program, but currently there are only three or four areas where potentially viable populations still persist.

The regal fritillary is a striking orange, black, and white butterfly slightly smaller than a monarch. The larvae depend on violets for food, and the adults require open prairie habitat. To prevent overgrowth by brush or the incursion of trees or takeover by nonnative cool-season grasses, prairies must be managed through controlled burns, mowing, and/or mechanical clearing of woody growth, all of which have the potential to positively or negatively impact regal fritillary populations. The monitoring program seeks to increase our understanding of how regals respond to management of prairie remnants and creation of new habitat.

vately-owned lands as well as preserves owned by The Prairie Enthusiasts and The Nature Conservancy.

Sixty-two transects were established across the sites for counting observations of regal fritillaries, and 23 additional areas were monitored for the presence of the butterfly. Altogether there were 748 sightings of regal fritillaries made over 113 volunteer hours.

Because the monitoring program has only one season of data. not much can be said about the results. It will be several years before analysis of the data will start. The significance of the first season was getting an enthusiastic group of volunteers involved and getting them started! However, more volunteers are still needed. Would you like to participate? No previous experience is required—just a love of nature and the outdoors and tolerance for warm sunny days. Training will be provided.

We are, however, looking for commitment over several seasons. The monitoring program runs June 25-July 31 with each monitoring team making four visits to their site spaced about a week apart. The monitoring training program has an evening and a field component. Training opportunities will start in May. Please join us in this important endeavor! Contact Ruth Kearley (rekearley@gmail.com or 729-4050) to sign up or to learn more.

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Spring Mystery Insect Meloe Beetle

This insect was found June 1st on the ground in a deciduous (maple) woodland in Calumet County. Meloe identification

Publication: Pinto, John D., and Richard B. Selander. 1970. The Bionomics of Blister Beetles of the Genus Meloe and a Classification of the New World Species. Illinois Biological Monographs, no. 42. 222.

This book can be read online at http:// openlibrary.org/works/OL4079356W/ The_bionomics_of_blister_beetles_of_the_genus_Meloe

According to Pinto and Selander, oil beetles have fairly distinct periods of adult activity. This insect falls into the group of 10 species that are active in spring, and seems to fall also into the subgroup of two that are active in spring through early summer. Its punctures are dense, the elytrae are rugose, the pronotum appears to be longer than wide. The insect is dully metallic blue. Pinto and Selander list only two records of *meloe angusticollis* for Wisconsin, one from Wood Co. and one from Marathon Co. Unfortunately all we have of the mystery insect is the photograph.

Six people had correct genus identifications: Gene Drecktrah was the quickest draw, answering Feb. 25: It's "a beetle (Coleoptera: Meloidae) belonging to the genus *Meloe* but I'm not sure of the species. These beetles are commonly called "oil beetles" based on the oily secretions they produce. The UWO insect collection has 4 specimens of *Meloe impressus* Kirby, all ID'd by D.A. Marschalek. Two were collected in Sheboygan Co. and one each in Forrest and Marinette Cos." Ron Huber responded on the 26th: "It resembles

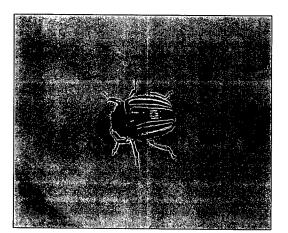
Meloe americanus Leach, but the size isn't obvious in the picture, so it could also be *Meloe angusticollis* Say (or perhaps another look-alike in the genus *Meloe*). On the few occasions that I've run across *M. americanus*, they were large (almost an inch long) and plump, possibly egg-laden females."

Carroll Rudy also responded on the 26th, commenting, "I have found one (seldom more than one) almost every year ever since I was a child. They were always favorites of mine because they looked so odd and I loved the way they would play dead and orange juice oozed out of their leg joints. I've never seen the larvae, nor more than one beetle at a time."

And ditto the 26th for Jordan Marché. Tim Hitzman responded two days later, along with Pam Kahler, who recalled, "A few years ago, I was walking in Cherokee Park in Madison on an unseasonably warm late fall day - maybe November or even early December. I spotted a number of these insects in small clusters on the ground at various spots along my walk. I didn't recall ever having seen them before - in fact, I thought they might be some kind of large ant with an extremely oversized abdomen! I feel fortunate to have seen them on that day, as I haven't seen them since, although I look for them every time I'm in Cherokee in the fall when the weather is warm."

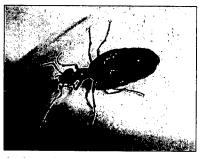
Summer Mystery Insect

Found on a fence in a deciduous woodland May 30, 2011. Size approximately 1/4 inch. All dark areas rusty brown; tarsi golden.



Send your identification to the editor: <u>turkeyfeather@tds.net</u> (with WES in the subject line) or P.O. Box 105, New Holstein, WI 53061

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Wisconsin Entomological Society

J. Mingari, Editor P.O. Box 105 New Holstein, WI 53061

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INSECT FIELD TRIPS 2011

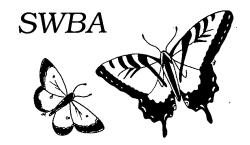
Saturday, June 18: Butterflies of Pleasant Valley Ann Thering and Kathie Brock

Saturday, June 25: Butterflies of Cherokee Marsh *Kathy Kirk*

Saturday, July 2: Madison Butterfly Count Karl and Dorothy Legler

Monday, July 4: Butterflies & Dragonflies of Swamp Lover's Preserve Leglers and Tod Highsmith

Sunday, July 16: Pretty Things With Wings Edgar Spalding



Saturday, August 13: Butterflies at Avoca & Lower Wisconsin Riverway *Mike Reese*

Saturday, August 27: Butterflies and Blossoms at Pheasant Branch Dreux Watermolen

Saturday, September 3: Grasshoppers! Kathy Kirk

For more information, contact Karl Legler at karlndot@charter.net.

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