

# **Wisconsin Entomological Society**

Newsletter

Volume 41, Number 3

October 2014

# Bio-Blitzing in Lafayette County By Marci Hess

I attended my first insect bio-blitz on Saturday, July 26, 2014, at the Erickson Wetlands in Argyle, WI. The Driftless Area Land Conservancy (DALC) is responsible for this fabulous new legacy that encompasses 220 acres of diverse habitat that contains multiple sloughs and oxbow lakes, plus over a mile of Pecatonica River frontage.

Earlier this year, we joined the folks from Applied Ecological Services (AES) in Brodhead on several bio-blitzes that identified plants, aquatic life, birds, and "herptiles." DALC has hired AES to create a management plan for the property. In order to do that effectively and responsibly, it is important to understand the biota in the area.

The purpose of this particular blitz was to learn what insects use this property.

However, these events are never a "once and done" occasion; they are merely one of

countless that will need to be done over many years time. They do provide an initial assessment of the life that is present, which in turn provides data that will be used for ascertaining land management plans.

We had a great turnout with a number of members from the Wisconsin Entomological Society (WES). This event was held in conjunction with National Moth Week (July 19-27). But we had beetles experts, tree cricket experts, moth experts, and generalists. We met at 4 o'clock and did some preliminary collecting and surveying of the area to figure out the best place to set up for the night's event. Then it was off to Good Fellas, a local pub, for some tasty dinner and great conversation.



Photo by Nancy Collins.

At night, we had a black light and two mercury vapor lamps set up, each with a white sheet hanging vertically behind them. These were powered by portable generators. A black light is an ultraviolet (UV) light which broadcasts wavelengths that are highly visible to insects. The mercury vapor lights emit some UV energy but produce a much more intense visible light source. They attract more insects and possibly a larger diversity of insects.



Some night-flying insects navigate by moonlight; these lights create an artificial moon, attracting them to the white sheets, making it easier for humans to observe, collect, and photograph them. Once the lights were operating, it didn't take long for the insects to arrive! The lights, coupled with the fog arising from the water and moist ground, created an eerie green glow across the land.



Within minutes, two uncommon/rare moths were found. One was an underwing (Catocala sp.) while another was found on a compass plant. Many new county records were probably established on this night. But it will likely be sometime next winter before the insects are vouchered and the photo identifications can be made. When that list is created and shared, it can offer us the same level of excitement all over again!

The Wisconsin Entomological Society Newsletter is published three times per year. The newsletter is provided to encourage and facilitate the exchange of information by the membership, and to keep members informed of the activities of the organization. Members are encouraged to contribute items for inclusion in the newsletter. Please send all news items, notes, new or interesting insect records, seasonal summaries, and research reports or requests to the editor.

#### **Books and Websites**

By Andrew Khitsun

Fossil Insects by D. Penney, et al., shows off some of the best-preserved fossil insects from around the world. If you're fan of shows like "Bones" and want to know more about the biology of maggot masses, this book is for you: The Science of Forensic Entomology by D. Rivers, et al. (It also talks about archaeo-entomology and use of insects in warfare and terrorism). Atlas of Stored-Product Insects and Mites by D. Hagstrum, et al., is a very comprehensive (and very expensive) guide to everything that eats the food that we think of as ours. Most of the above books are fairly specialist, but if you are just looking for an introductory book, or a gift to your friend, Bugs Rule by W. Cranshaw, et al., is your book.

There has been a whole slew of books released in the last few years dealing with aquatic insects: most of them are designed for fishermen (as is the case with most such publications), but they are very good entomologically, too. Some examples include Pocketguide to New York Hatches by P. Weamer; Pocketguide to Pennsylvania Hatches by C. Meck, et al.;

Pocketguide to Western Hatches and Handbook Of Hatches: Introductory Guide to the Foods Trout Eat & the Most Effective Flies to Match Them by D. Hughes; and BugWater: A Fly Fisher's Look Through the Seasons at Bugs in Their Aquatic Habitat and the Fish That Eat Them by A. Thomason.

On the website front, check out

<a href="http://mothlists.com/">http://mothlists.com/</a>. This site collects
websites that deal with moths of particular
regions and locations around the world.
There is an interesting online journal

Insecta Mundi at

http://centerforsystematicentomology.org/de fault.asp?action=insectamundi. While at the site, browse around for other information, including how to buy a book called Revision of the Jumping Spiders of the Genus Phidippus (Araneae: Salticidae) by G. Edwards at

http://centerforsystematicentomology.org/de
fault.asp?action=show\_pubs&id=phidippus
And speaking of books online versus printed
ones: when the WES met this spring at
Schmeeckle Reserve at Stevens Point, Kyle
Johnson showed us a very interesting book:
Rare, Declining, and Poorly Known
Butterflies and Moths of Forests and
Woodlands in the Eastern United States

by D. Schweitzer et al., produced by the
U.S. Forest Service. Unfortunately, the book
is not available anywhere, and not published
as an online .pdf (unlike many other
Lepidoptera books by the U.S. Forest
Service mentioned in previous columns).
The other new book in this series,
Butterflies & Moths of Pacific Northwest
Forests & Woodlands: Rare, Endangered
& Management-Sensitive Species by J.
Miller, et al., is available as a .pdf file at:
http://www.fs.fed.us/foresthealth/technology
/pdfs/MILLER LEPIDOPTERA WEB.pdf.

Two other beauties are: Aleiodes Wasps of Eastern Forests: A Guide to Parasitoids and Associated Mummified Caterpillars by S. Shaw that is available as a .pdf at http://www.fs.fed.us/foresthealth/technology /pdfs/AleiodesBookWeb.pdf and Guide to the Siricid Woodwasps of North America by N. Schiff, et al., available as a .pdf at http://www.fs.fed.us/foresthealth/technology /pdfs/GuideSiricidWoodwasps.pdf. Also, A Review of Selected Species of Lymantria Including Three New Species by M. Pogue, et al., will be of interest to some people, available as a .pdf at: http://www.fs.fed.us/foresthealth/technology /pdfs/Pogue Lymantria web.pdf.

The entire range of online publications and websites produced by the Forest Service is found at <a href="http://www.fs.fed.us/foresthealth/technology/pub\_titles.shtml">http://www.fs.fed.us/foresthealth/technology/pub\_titles.shtml</a>.

Already mentioned in this column, Steve
Chadde has produced yet another great
book: Wisconsin Flora: An Illustrated
Guide to the Vascular Plants of
Wisconsin that includes distribution maps
and line drawings of more than 2100 species
of plants.

2014 dues notices were sent out in January. Please note that the year through which dues are paid appears on the newsletter's mailing label after your name.

Membership Dues:

Individual or family: \$10 per year

Sustaining: \$15 per year Patron: \$25 per year

Please make checks payable to WES and send to: Les Ferge, Treasurer, 7119 Hubbard Avenue, Middleton, WI 53562-3231. lesferge@gmail.com Please report any address changes to the Treasurer.

# Close Encounters with Some Rarities of Metropolitan Southeastern Wisconsin By Jim Ebner

Ever since I was a teenager, growing up in Milwaukee, butterflies intrigued me. Back in those early years, there seemed to be an endless supply of them! Parks, residential gardens, alleys, and vacant, overgrown lots were plentiful, often flourishing with amazing assortments of butterflies. Now, as I reflect upon more than seventy years of chasing these delightful creatures, I was also fortunate enough to have personally observed, collected, videotaped, photographed, and written about them.

When I wrote Wisconsin Butterflies after my college days, veteran collectors had verified 133 species for the entire state. Now, the nine-county Milwaukee metro area has recorded 119 species alone! Since I have resided in this metro area for most of my life, my "butterflying" was concentrated within these counties. Over the years, I have experienced some real rarities. I believe that the ten species I have set forth here are certainly a fair representation of our rarest and most prized. All but two species mark the discovery for a given county. Three are reproduced from my book.



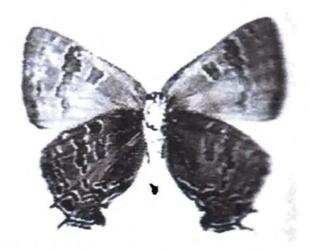
Zebra Swallowtail, Eurytedes marcellus. Okauchee, Waukesha Co. June 9, 2002. First County Record.



Checkered White, *Pieris protodice* (female). Okauchee, Waukesha Co. Sept. 22, 1993.



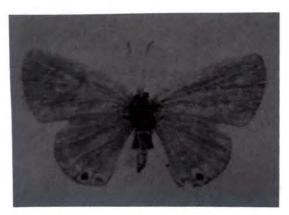
Southern Dog Face, *Colias caesonia*. Kettle Moraine St. Forest near Eagle. Sept. 22, 1958.



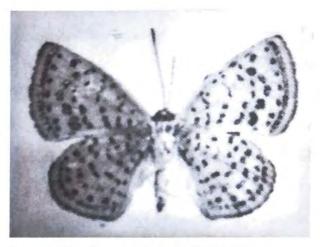
Hickory Hairstreak, Strymon caryvaeorum. 124th St. & Silver Spring Dr., Milwaukee. July 15, 1952. Figured as Banded Hairstreak: Wisconsin Butterflies, p 64. First County Record.



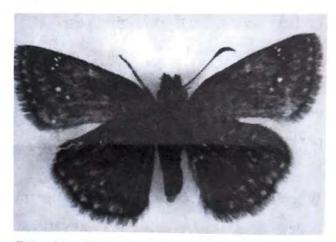
Juniper Hairstreak, Callophyrus grynea. Kettle Moraine St. Forest. Co. Hwy. CI & 67. June 5, 2000. First County Record.



Reakirt's Blue, *Hemiargus isola*. Central City, Milwaukee. Sept 11, 1952. *Wisconsin Butterflies*, p. 84. First County Record.



Swamp Metalmark, Calephalis mutica. Loews Lake, Washington County. July 26, 1957. Wisconsin Butterflies, p. 60. First County Record. ENDANGERED.



Columbine Dusky Wing, Erynnis lucilius. Loews Lake, Washington County. May 30, 1953. Wisconsin Butterflies, p. 60. First County Record.



Poweshiek Skipper, *Oarisma poweshiek*. Kettle Moraine St. Forest near Eagle. June 22, 2012. ENDANGERED.



Broad Winged Skipper, *Poanes viator*. Lannon Swamp. July 26, 1959. First County Record.

#### References:

Ebner, J. A. *Butterflies of Wisconsin*.

Milwaukee Public Museum, Popular Science Handbook #12. 1970.

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Opler, Paul. County Atlas of Eastern United States Butterflies (1840-1982). U.S. Fish & Wildlife Services. 1982.

Reese, Michael. Wisconsinbutterflies.org.

#### Wisconsin Entomological Society Officers:

President: Kyle Johnson

UW-Madison 1630 Linden Drive Madison, WI 53706 kejohnson4@wisc.edu

Vice-President: Patrick (PJ) Liesch

UW-Madison 1630 Linden Drive, Room 246 Madison, WI 53706 pliesch@wisc.edu Secretary-Treasurer: Les Fergie

7119 Hubbard Avenue Middleton, WI 53562-3231 ferge@gmail.com

Newsletter Editor: Jordan D. Marché II 5415 Lost Woods Court Oregon, WI 53575 jdmarche@gmail.com

## News from the Insect Diagnostic Lab: Summer Review

By P. J. Liesch

It's been a busy summer around the UW-Madison Insect Diagnostic Lab. After managing the lab for a few months, I had been offered and accepted the permanent position of lab manager back in July. During the busiest period I was handling 120 or more cases a week, although I'm currently down to a much more manageable 50 cases a week as of late September.

Some of the biggest stories for the year were major insect pests that had low numbers in 2014; the **Gypsy Moth** and **Japanese Beetle** fall into this category. The Gypsy Moth numbers have been fairly low the past few years, and I have a hunch that the disease-inducing, cool, damp weather this spring helped to ensure that the trend continued.

When it comes to the Japanese beetles, I think that the brutal cold managed to work the frost line deep enough to affect the soil-dwelling larvae. The invasive Brown Marmorated Stink Bug that showed up a few years ago has also been very quiet this year, with only a few cases reported from Rock County.

Other insects certainly had a good year in the state. With all the rain we had, the **mosquitoes** certainly had strong numbers through much of the summer. The **Emerald Ash Borer** didn't show any signs of slowing down its march across the state. In 2014 alone, we had several new county-level detections and over a dozen counties were added to the state quarantine, which now includes 36 counties.

One of the biggest insect stories this year was the Hexagenia mayfly hatch along the Mississippi River in the La Crosse area in late July. There were the usual images of gas pumps and ATM machines covered with mayflies, but there was even a report of a traffic accident caused by slippery roads and reduced visibility. While on the aquatic theme, I had many images of the Eastern Dobsonfly come into the lab this summer. This is one species that I've never seen live

in the wild, but have always wanted to. The males have the greatly enlarged mandibles and can be 3-4 inches long! In August, a news story about **Fishing Spiders** had popped up which led to a flurry of calls and emails.

We unfortunately had not one, but two invasive leaf beetles show up in the state over the summer. The first (Lily Leaf Beetle, Lilioceris lilii) popped up in July in the Wausau area and this one was detected several times within a month. A recent find in Wood County (Wisconsin Rapids area) also popped up recently. The other leaf beetle (Viburnum Leaf Beetle, Pyrrhalta viburni) popped up in the Milwaukee area in late August. This one had technically been found in the state back in 2009 in Dane County and had been eradicated. This new find in Milwaukee came as a surprise and we're still trying to determine the source and extent of the infestation.



Amphipyra pyramidoides. Photo by P. J. Liesch.

One final interesting case for the year was the "invasion" of the Copper Underwing Moth (Amphipyra pyramidoides). The caterpillars are known as the "Humped Green Fruitworm" and can be found on a wide range of host plants. There must have been something special about our weather this year, because we had a bumper crop of these moths. I had reports from 10 different counties of these moths congregating on buildings in large numbers or sneaking into homes.

As fall begins, we're just getting into the period of the indoor invaders. Who knows what else will mysteriously pop up this fall?

First Record of Cholomyia inaequipes (Diptera: Tachinidae) in Wisconsin By Jordan D. Marché II

On the afternoon of 29 August 2014, after returning home from collecting at the Town of Oregon Park, I spotted an unfamiliar, light-colored fly resting on a leaf of a highbush cranberry. After getting it into a killing jar, I noticed its most unusual feature — extraordinarily long mesothoracic legs. Upon mounting the specimen (Fig. 1), I recognized that it belonged to the family of

parasitic flies called Tachinidae (because of its prominent post-scutellum). In Marshall (2006, p. 487, Fig. 3), I found it pictured and named *Cholomyia inaequipes* Bigot 1884. An additional reference work (Arnett, Jr., 2000, p. 916) supports the identification because this native species belongs to a monospecific genus. As such, it is unlikely to be confused with another species.



Fig. 1. Cholomyia inaequipes. Photo by J. Marché.

Marshall's work further mentions that this fly is a parasite of weevils. Specifically, its hosts (Arnaud, 1978, p. 15) are species in the genus *Conotrachelus* (Curculionidae: Molytinae), of which at least half a dozen species, such as the plum curculio *C. nenuphar*, are fairly common. To find out whether other specimens had been taken before in Wisconsin, I consulted the online catalogue of the Wisconsin Insect Research Collection (WIRC, 2014), and was surprised to find it absent from that list, I consulted UW–Madison insect diagnostician Patrick J.

Liesch, who confirmed (e-mail message to author, 10 Sept. 2014) that *Cholomyia* inaequipes had not been taken previously in the state. So this specimen represents a new state record in Wisconsin. It is currently housed in the author's collection (JDMC). I wish to thank Patrick Liesch for personally checking the WIRC on my behalf.

#### References:

Arnaud, Paul H., Jr. (1978). A Host-Parasite

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D.C.: USDA, Science and Education

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Arnett, Ross H., Jr. (2000). American
Insects: A Handbook of the Insects of
America North of Mexico. Boca
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http://labs.russell.wisc.edu/wirc/

Editor's note – The following poem isn't about insects per se, but because so many species are pollinators of goldenrod, it is nonetheless appropriate. It was written by Anna W. Threlfall's great grandfather.

#### Goldenrod

No fairer sight the glad year yields
Than when our eyes behold
Spread over summer's fading fields
A royal cloth of gold.

A gift by Nature's hand bestowed When autumn voices call, It gleams along the dusty road By fence and mossy wall.

And rather than exotic blooms

From any tropic sod,

Give me the nodding yellow plumes

That crown the goldenrod.

By William Austin Brooks, 1919

Book notice: The Infested Mind: Why
Humans Fear, Loathe, and Love Insects,
by Jeffrey Lockwood.

Not previously mentioned by Andrew Khitsin, this volume is the latest from the author of *Locust* (2004). Lockwood, a professor of natural sciences and humanities at the University of Wyoming, examines the cultural roots of our attitudes towards insects that range from joy and wonder to horror.

## Fall WES Meeting

Saturday, November 1: 11 a.m. - 4 p.m.

Room 151 in Russell Labs on the UW-Madison campus.

Join us for a day of insect fun! Show up early (or stay late) to mingle with fellow insect enthusiasts or visit the collections.

Lunch will be provided around noon (Glass Nickel Pizza Co.), followed by our annual photo salon – you can enter up to five photos. After this will be "Tales from the Field" by WES members. This year's stories come from just down the road to the far reaches of Alaska (or beyond!). If you have something you'd like to share – even just a few brief words, pictures, or specimens – please do so! (e-mail Kyle or PJ)

Directions/Parking: Russell Labs is located at 1630 Linden Drive, Madison, WI 53706. Free parking is located in the Steenbock Ramp behind Russell Labs (directly northwest).

Heading west-bound on University Avenue:
Take the Babcock Drive exit (0.25 miles
after the Charter Street intersection) and go
straight through the stop sign (Linden Drive)
and continue to next stop sign (Observatory

Drive). Go left (west) 0.1 miles and turn left again (south) to enter the Steenbock Parking Ramp. Walk to the tall building directly to the southeast (Russell Labs) and look for signs.

Heading east-bound on University Avenue:
Take the Old University Avenue exit
(immediately after the University Bay Drive
intersection). Continue 0.4 miles to Walnut
Street; go left (north) for 0.3 miles to the
round-about. Take the first right (east) off
the round-about and continue just over 0.5
miles and turn right (south) to the Steenbock
Parking Ramp. Walk to the tall building
directly to the southeast (Russell Labs) and
look for signs.



The Entomologist (ca. 1830), by G. Spratt, Royal Entomological Society.