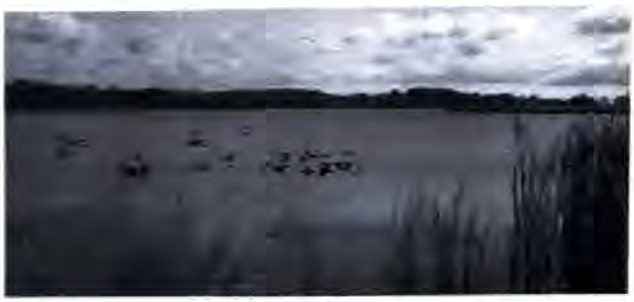
Wisconsin Entomological Society
Newsletter

Volume 42, Number 2 June 2015

Monitoring and Management — A Sensible Pairing

By Beth Goeppinger, Wisconsin Department of Natural Resources

Richard Bong State Recreation Area is a heavily used 4,515 acre property in the Wisconsin State Park system. It is located in western Kenosha County. The area is oak woodland, savanna, wetland, sedge meadow, old field and restored and remnant prairie. Surveys of many kinds and for many species are done on the property—frog and toad, drift fence, phenology, plants, ephemeral ponds, upland sandpiper, black tern, grassland and marsh birds, butterfly, small mammal, waterfowl, muskrat and wood ducks to name a few. Moths, except for the showy and easy-to-identify species, have been ignored.



That is, until volunteer moth surveyor, Steve Bransky, came onto the scene. Steve had done a few moth and butterfly surveys here and there on the property. But that changed in 2013. Armed with mercury vapor lights, bait and a Wisconsin scientific collector's permit, along with our permission, he began surveying in earnest.

He chose five sites in woodland, prairie and savanna habitats. He came out many nights in the months moths might be flying. After finding that moth populations seemed to cycle every 3-5 days, he came out more frequently. His enthusiasm, dedication and never-ending energy have wielded some surprising results. Those results, in turn, have guided us in our habitat management practices.

Of the 4,500 moth species found in the state, Steve has confirmed close to 1,200 on the property, and he isn't done yet! He found one of the biggest populations of the endangered *Papaipema silphii* moths (Silphium borer) in the state as well as 36

species of *Catocola* moths (underwings), one of the densest and most diverse populations in the state. Six confirmed state records, over one hundred range extensions and over sixty county records make the monitoring even more impressive.

So what does all that have to do with management? Obviously, the way we have managed in the past has created appropriate habitat for these species. Mowing and prescribed burning and invasive species removal is our management regime. We try to burn each habitat unit on a three-year cycle, but due to budgets and weather these often turned into 5-7 years which, as it turns out, was beneficial to the insects.

There has long been a balance in prescribed burning; native habitat must be maintained and burning is the most efficient way to do that but you also don't want to burn too much and negatively affect the insect life. What the monitoring has helped us to do is change and fine-tune our management strategies to better benefit the insects as well as the habitat.

We now make sure we have unburned habitat around the edges for recruitment. We mow some of the higher quality remnants more frequently than we burn them. We also purposely try to leave unburned spots around host plants in places where these populations are or could be. The monitoring data has also affected our brushing decisions; for instance, *Catocala crataegii* (Hawthorn Underwing) needs hawthorn, which is present but not in large numbers. To that end, we are focusing on planting and keeping larger blocks of hawthorn.

They say that knowledge is power and I think that that is true. We were lucky before in our management but now that we know the amazing diversity of moths on the property, we can consciously and effectively manage for *all* the resources. You have to know your site, whether it's birds, plants, mammals, or insects before you manage it, not just burn it all. Now, I realize that not everyone is lucky enough to have access to a moth expert but perhaps you could contact a local university or museum or resource expert to do some monitoring, or you could bait and take photographs for identification. Just get out there and collect the data to help guide your decision-making. It makes good sense.

[Note: Steve Bransky is a member of the Wisconsin Entomological Society.]

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

If you need a gift for someone who adores the beauty of insects, shells, etc., pick up **Biophilia** by C. Marley (author of the previously mentioned **Pheromone**). But if you want to read a story of the rarest insect on earth (*Dryococelus australis*) — then **Return of the Phasmid** by R. Wilkinson is for you.

Longhorned Woodboring Beetles (Coleoptera: Cerambycidae and Disteniidae): Primary Types of the Smithsonian Institution by S. Lingafelter is exactly what it claims to be — a color photograph catalog of the famous collection. **Catalogue of the Cicadoidea** by A. Sanborn is a third volume of the scientific work that is a source of biological and systematic information on cicadas and related groups.

Courtesy of the Illinois Natural History Survey at http://wwx.inhs.illinois.edu/ comes **Freshwater Mussels of the Midwest** by K. Cummings, et al. (Yes, I know it's not insects, but I think it's proper to mention any spineless wonders in these pages), plus a couple of specialized brochures: **Microlepidoptera from the Sandy Creek & Illinois River Region** by G. Godfrey, et al.; **Catalog of the *Cinara* Species of North America - Homoptera: Aphididae** by D. Voegtlin et al.; and the mother of them all — **The Chewing Lice: World Checklist and Biological Overview** by R. Price, et al.

Some eight-legged creepy-crawlers got extensive coverage recently, too: **Biology of Ticks** by D. Sonenshine, et al., is probably the most comprehensive work on ticks (two volumes — pricey!), while **The Brown Recluse Spider** by R. Vetter is more affordable and suitable for a general audience. **Connecticut Butterfly Atlas** by J. O'Donnell is hard to find, but is available on the Connecticut Department of Energy and Environmental Protection's website at: http://www.ctdeepstore.com/DEEP-Publications_c41.htm.

A Photographic Field Guide to the Butterflies in the Kansas City Region by B. Betros stands out for its detailed photography. On the other hand, **Tortricid Fauna of Apple in New York** by P. Chapman, et al., has high quality pictures (not photos) of not only dozens of moth species but seldom illustrated caterpillars of that group. But if you're seriously into microlepidoptera, then the gorgeous **Eucosma of the Contiguous United States & Canada (Lepidoptera: Tortricidae: Eucosmini)** by D. Wright, et al., is a must-have; it's sold by The Wedge Entomological Research Foundation at: http://www.wedgefoundation.org/Eucosma.asp, familiar to many for producing **The Moths of America North of Mexico** series. If that whetted your appetite for micros, **Field Guide to the Micro-Moths of Great Britain and Ireland** by P. Sterling may be for you.

I have mentioned quite a few dragonfly books in this column, but there are so many more. There is a set of 5 books, **Dragonflies & Damselflies of Texas** by J. Abbott, as well as **Dragonflies of Texas** and **Damselflies of Texas** — two field guides from the Texas Natural History Guides series by the same author. There is also the superb **Dragonflies & Damselflies of Northeast Ohio** by L. Rosche, et al. One hard to find book, **A Field Guide to Dragonflies & Damselflies of Massachusetts** by B. Nikula, et al., can be purchased from the Massachusetts Department of Energy & Environmental Affairs at: http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/publications-forms/publications/.

I keep finding interesting books from the Ohio Biological Survey at http://www.ohiobiologicalsurvey.org/publications/. Several gems stand out, like the richly illustrated **The Slug Caterpillar Moths & Other Zygaenoidae of Ohio** by D. Profant, et al., and **The Dragonflies and Damselflies of Ohio** by R. Glotzhober (not to be confused with the Ohio book mentioned just a few entries above), as well as the more humble **Aquatic Beetles of Northeast Ohio** by E. Chapman; **A Pictorial Key to the Hawkmoths of Eastern United States** by C. Selman; and **The Tiger Beetles of Ohio** by R. Graves, et al.

Check out Project Mantodea at http://mantodearesearch.com/ if you're

interested in that group of insects. And for those who are into butterflies — while the butterfly sites on American Lepidoptera tend to be a fluid environment, a current winner is **Butterflies of America - Interactive Listing of American Butterflies** at http://butterfliesofamerica.com/intro.htm.

And at the end, I want to mention the rare (and fairly expensive) book, **Amphibians and Reptiles of Wisconsin** by R. Vogt, full of color photos, maps and information on that group of animals, which is a very good read for everybody interested in Wisconsin nature.

Editor's note — **The Bee: A Natural History** by Noah Wilson-Rich, with Kelly Allin (2014), also deserves mention here.

'Snow fleas' (Collembola) found at the spring 2015 WES meeting. Photo by Nancy Collins.

2015 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.

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
lesferge@gmail.com

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

Updates from the Diagnostic Lab

By P. J. Liesch

With summer inching closer, samples are starting to pick up around the UW-Madison Insect Diagnostic Lab. I'm currently at just over 500 cases for the year, which is nearly the same as last year at this time.

The most exciting things lately have been the butterfly sightings. I saw my first swallowtail in late April and just heard my first reports of monarchs in mid-May. Many of us probably have milkweed and other wildflowers in our yards for pollinators, but it's exciting to hear the details of the recently released plan from the President's Pollinator Task Force. Besides focusing on the health of honeybees and monarch butterflies, the plan is calling for the improvement of millions of acres of pollinator habitat.

Throughout the past winter, there were the usual cases of overwintering boxelder bugs and multicolored Asian lady beetles, as well as insect stowaways in firewood. The brown marmorated stink bug has popped up six times in Dane, Milwaukee, and Rock counties earlier this winter. I only had 3-4 cases all year last year, so hopefully we're not seeing the beginning of an unpleasant trend . . .

Speaking of unpleasant trends, I'm expecting the mosquitoes to pop out any day now. We've had a decent amount of rain and I've seen a few mosquitoes as early as mid-March, but I haven't seen a big "boom" yet (as of 5/25). I'm guessing that within the next week or so, they may start making an appearance. On the topic of blood-sucking arthropods, the ticks have been out in force this spring. I've had plenty of reports of deer ticks and a lone star tick came in from Middleton on the west side of Madison. The wood ticks have been out in force as well: my wife and I had been hiking on Big Island in the Turtle-Flambeau Flowage in mid-May, and pulled nearly 50 wood ticks off from our our two black labs. Our dogs pretty reliably find ticks, but never this many! Perhaps, I should volunteer their services to the medical entomologist in our department for conducting tick surveys . . .

The two most interesting cases so far in 2015 have been a new fly species in the state and an Australian beetle associated with orchids. The flies came in from a business in Milwaukee and had been captured in a pest control company's black light trap. You

could tell from a quick glance that they weren't our standard cluster flies as they had the patterned wings of a ulidiid. The species ended up being *Ceroxys latiusculus*, which is known from the western US <http://bspm.agsci.colostate.edu/files/2013/03/Ceroxys-latiusculus-Picture-winged-fly1.pdf>. The Australian beetle came in from an orchid enthusiast in the Milwaukee area. It turned out to be the silvanid, *Cryptamorpha desjardinsii*, which had actually been recorded twice before in the state by Jordan Marché (each time associated with imported orchids).

That's all from the lab for now!

Calling all *Lycaeides*

By Ann B. Swengel

Wisconsin's Karner Blue conservation staff are asking for our help. Please share your observations of both subspecies (or species) of Melissa Blue (Karner and Melissa) and Northern Blue. All three have been found in Wisconsin. Can you find any new sites? Can you re-find them at historical sites? Are abundances changing at familiar sites? I'm also concerned about Saepiolus Blue, so let's be on the lookout for this fourth blue, too.

In surveys with my husband, Scott, we've seen Karners have poorer trends in sites with less conservation effort, and happily, we've documented better trends in some sites with more conservation effort. But we've also seen other butterflies have better trends in these sites with better Karner outcomes, including elfins and grass-skippers. Private landowners have also implemented site management sympathetic to Karners and have reported similarly beneficial results for a variety of butterfly species.

But landscape-scale economic pressures and dramatic climate changes loom. Global research indicates that butterflies respond dramatically to these pressures, but the outcomes are not always predictable nor need they be inevitable. Please help conservationists understand what's happening out there and how to prepare for the future. One way you may share your findings is to upload your observations and photo documentation of blues to: http://www.wisconsinbutterflies.org.

Thanks!

First Records of *Microsicus obscurus* (Coleoptera: Zopheridae) from Wisconsin

By Jordan D. Marché II

A somewhat fortuitous event, namely the cutting of a large, dead oak tree at the Town of Oregon Park near the author's home, has led to the finding of a new beetle species in Wisconsin, *Microsicus obscurus* (Horn). On 11 April 2015, I examined the trunk of the freshly-cut tree and collected an elongated, 2-mm grayish-black beetle specimen which I did not recognize, in association with a still smaller species, *Clypastraea lunata* (Coleoptera: Corylophidae). I do not know the date on which the tree was cut by park workmen, but it had to have preceded 16 March, the first time that I visited the park this spring, when I only found a few species of flies attracted to the fresh sap and sawdust. Large sections of the tree's trunk had also been cut and left beside the paved trail, which seemingly added to the oak volatiles produced.

The beetle (see figure) has 10 antennomeres, the final segment of which is considerably enlarged and roughly globose. Its pronotum is distinctly transverse, with a series of closely spaced hairs or setae projecting from the sides in a somewhat forward-pointing direction. Through the help of *BugGuide* (2015), and especially volunteer coleopterist Skip Blanchard, the beetle's family was first recognized as Colydiidae (cylindrical bark beetles) and probably the genus *Microsicus*. I was then able to propose that its identity, according to N. M. Downie and R. H. Arnett's *The Beetles of Northeastern North America* (1996), was *M. obscura* (p. 1129). This has subsequently been verified by the editors of *BugGuide*, along with Patrick J. Liesch and Daniel K. Young (University of Wisconsin Department of Entomology). However, the rules of nomenclature state that the ending of a species' name must agree in gender with that of its generic name, which meant that the scientific name should be *Microsicus obscurus*, a fact verified by Peter W. Messer. This species constitutes a **new state record** for Wisconsin. Previous specimens had reportedly been collected from the District of Columbia, Pennsylvania, New Jersey, and Oklahoma. Further, newer taxonomy has moved the genus *Microsicus* (now in the

subfamily Colydiinae) to a different but closely related family, Zopheridae (zopherid beetles), the classification scheme adopted by the editors at *BugGuide* (2015).

Best of all, I have made repeated trips back to examined the same oak stump, and on 2 May 2015, captured another specimen identical to the first, which has been donated to the Wisconsin Insect Research Collection (WIRC). The first specimen is kept in the author's private collection. These captures provide the first reliable 'window' or interval known upon their local emergence times under current climatic conditions, and verify that oaks are one of two tree species especially attractive to the beetles. [Hickories are also claimed by Downie and Arnett (1996, p. 1129) to be associated with the species.]

I thank those mentioned above for their assistance in helping me to reach an identity for this very uncommon species and verifying its novelty to Wisconsin.

References:

BugGuide (2015). http://bugguide.net/node/view/1056887#1875514.

Downie, N. M., and R. H. Arnett (1996). *The Beetles of Northeastern North America*, vol. 2. Gainesville, FL: Sandhill Crane Press.

"Whenever I hear of the capture of rare beetles, I feel like an old war-horse at the sound of a trumpet."

Charles Darwin

Bioblitz— Schlitz Audubon Nature Center, August 21-22, 2015

By Susan S. Borkin, Milwaukee Public Museum

Greetings. I am inviting all WES members to participate in a Milwaukee Public Museum (MPM) Bioblitz that will be held at the Schlitz Audubon Nature Center (SAC).

The Bioblitz is an activity that will occur rain or shine between Friday, August 21, starting at 3 p.m., and ending Saturday, August 22, at 3 p.m., where knowledgeable biologists and researchers survey a specific site within a 24-hour period to see how many species they can detect/collect within that timeframe. [Note: "detect" does not necessarily mean to determine each species;

instead, we are simply looking to index the relative biodiversity with a tally of the number of species within various taxa that can be found.]

A tent with electrical power and some microscopes will be set up for sorting activities. You are welcome to participate for as much time as you care to contribute (from 1 hour up to 24). For folks coming in from out of town, camping will be allowed at SAC and light meals/beverages/snacks will be provided.

Educators from SAC and MPM will have activities planned for the public on Saturday. They will be allowed to observe and learn about the diversity of species found, but will not be participating in the surveys. It should be fun and a time for good comradery (and/or competition).

Please contact Susan Borkin <borkin@mpm.edu, 414-278-6158> or Julia Colby <colby@mpm.edu, 414-278-2760> if you are interested in participating or would like more information. Thanks much!

Upcoming Entomology Events:

June 13: The Lower Sugar River Watershed Association will be hosting an all day bioblitz along a portion of the Sugar River in southern Wisconsin. The event will be looking for a wide range of taxa at the site and entomologists are welcome to join in. For more information, visit the WES website <www.wisentsoc.org> or the LSRWA website <www.lsrwa.org/events/>.

July 10-12: The 2015 BugGuide Gathering is being held in Turtle Lake, WI this July. Visit: <bugguide.net/node/view/1050955> for details.

July 18-26: The ever-popular National Moth Week <nationalmothweek.org> is being held from July 18-26 this year. WES held a successful event at Erickson Wetlands, near Argyle, WI last year (see insert report given ahead). Plans are in the works for another National Moth Week outing this year. Check the WES website <www.wisentsoc.org> for updates about a possible outing.

I-Heart-Entomology T-Shirts

At the spring 2015 WES meeting, some "I-Heart-Entomology" T-shirts were worn by new members Stacy Stewart and her daughter. They are available from The Neato Shop: http://www.neatoshop.com/product/I-Heart-Entomology.

Botanist (and former Wisconsin resident) Linda Curtis (a.k.a. "Lindaeus") will be giving a public lecture on the topic, "Bog-Fen *Carex* of the Upper Midwest" (from her new book of that title) at the Fremont Public Library, 1170 N. Midlothian Road, Mundelein, Illinois 60060 (a northern suburb of Chicago) on Tuesday, July 7, 2015, at 7 p.m. Curtis is also the author of Woodland *Carex* of the Upper Midwest. Further details are available at <laketoprairie.wildones.org/events/bog-fen-carex-of-the-upper-midwest/>.

WES member M. J. Hatfield has notified us concerning the Iowa Insects Mailing List, which offers a regional (and not just Iowan) subscriber service. Those who wish to sign up to receive its news items may do so at the URL below: <http://bio.cgrer.uiowa.edu/herbarium/InsectMaList.htm>

Is it time?

Is it time to fly with the moon?

When did day dim into twilight?

What perception I lacked,

that day flight should end and moon flight should begin.

I hear wings and rustlings in a

soft, muted light. Is it mine?

Will day be but a memory?

And night flight, what will it be?

I am poised before flight, not knowing.

Do I need new wings? No, I have wings,

formed during the day, but never used.

They're mine, they're mine, I didn't know

I could morph. I didn't know I would

morph.

I'm new again.

I'm going to fly with the moon.

By Linda Curtis ("Lindaeus"), 1999

[**Editor's note** — The enclosed two-page insert contains the species records from the 26 July 2014 Erickson Wetlands Bioblitz. The first page was compiled by P. J. Liesch; the second page by Jordan Marché.]

WES National Moth Week Bioblitz

Erickson Wetlands, Argyle, Lafayette Co., WI

July 26 2014

Count	Order	Family	Species	Common Name
1	Lepidoptera	Noctuidae	Catocala ultronia	Ultronia underwing
2	Lepidoptera	Saturniidae	Eacles imeprialis	Imperial Moth
3	Lepidoptera	Geometridae	Haematopsis grataria	Chickweed geometer
4	Lepidoptera	Sphingidae	Hyles lineata	White-Lined Sphinx
5	Lepidoptera	Erebidae	Lascoria ambigualis	Ambiguous Moth
6	Lepidoptera	Crambidae	Chrysoteuchia topiarius	Cranberry Girdler
7	Lepidoptera	Crambidae	Pyrausta bicoloralis	Bicolored Pyrausta
8	Lepidoptera	Crambidae	Lygropia rivulalis	Bog Lygropia
9	Lepidoptera	Pyralidae	Arta statalis	Posturing Arta Moth
10	Lepidoptera	Noctuidae	Noctua pronuba	Winter Cutworm
11	Lepidoptera	Noctuidae	Agrotis ipsilon	Black Cutworm
12	Lepidoptera	Noctuidae	Harrisimemna trisignata	Harris's Three spot
13	Lepidoptera	Noctuidae	Eudryas grata	Beautiful Wood-Nymph
14	Lepidoptera	Erebidae	Haploa reversa	Reversed Haploa
15	Lepidoptera	Erebidae	Grammia virgo	Virgin Tiger Moth
16	Lepidoptera	Erebidae	Apantesis nais	Nais Tiger Moth
17	Lepidoptera	Erebidae	Phragmatobia fulginosa	Ruby Tiger Moth
18	Lepidoptera	Sphingidae	Hemaris thysbe	Hummingbird Clearwing
19	Lepidoptera	Noctuidae	Mythimna unipuncta	True Armyworm
20	Lepidoptera	Noctuidae	Amphipyra pyramidoides	Copper Underwing
21	Lepidoptera	Crambidae	Nomophila nearctica	Lucerne Moth
22	Lepidoptera	Noctuidae	Catocala sp.	Underwing
23	Lepidoptera	Noctuidae	Catocala sp.	Underwing
24	Lepidoptera	Noctuidae	Catocala sp.	Underwing
25	Hemiptera	Dictyopharidae		
26	Hemiptera	Lygaeidae		
27	Coleoptera	Meloidae	Epicauta cinerea	Clematis Blister Beetle
28	Coleoptera	Curculionidae		Weevil
29	Collembola			
30	Hymenoptera	Apidae	Apis mellifera	Honey bee
31	Diptera	Syrphidae		
32	Megaloptera	Corydalis	Chauliodes pectinicornis	Summer Fishfly
32	Coleoptera	Lampyridae		
33	Coleoptera	Cerambycidae	Oberea sp.	
34	Ephemeroptera	Baetidae		
35	Ephemeroptera	Caenidae		

Count	Order	Family	Species	Common Name
1	Coleoptera	Carabidae	Stenolophus lecontei	
2	Coleoptera	Carabidae	Platynus tenuis	
3	Coleoptera	Carabidae	Platynus melanarius	
4	Coleoptera	Carabidae	Harpalus pennsylvanicus	
5	Coleoptera	Carabidae	Badister neopulchellus	
6	Coleoptera	Hydrophilidae	Hydrochus squamifer	
7	Coleoptera	Hydrophilidae	Tropisternus lateralis	
8	Coleoptera	Hydrophilidae	Hydrochara obtusata	
9	Coleoptera	Dytiscidae	Hygrotus impressopunctatus	
10	Coleoptera	Dytiscidae	Hygrotus dissimilis	
11	Coleoptera	Heteroceridae	Heterocerus cf. undatus	
12	Coleoptera	Heteroceridae	Heterocerus cf. tristis	
13	Coleoptera	Scirtidae	Cyphon variabilis	
14	Coleoptera	Staphylinidae	Lathrobium cf. armatum	
15	Coleoptera	Staphylinidae	Philonthus cf. fulvipes	
16	Coleoptera	Scarabaeidae	Tomarus relictus	
17	Coleoptera	Scarabaeidae	Ataenius spretulus	
18	Coleoptera	Buprestidae	Agrilus politus	
19	Coleoptera	Lampyridae	Photinus pyralis	
20	Coleoptera	Meloidae	Epicauta vittata	
21	Coleoptera	Mycetophagidae	Litargus tetraspilotus	
22	Coleoptera	Cerambycidae	Smodicum cucujiforme	
23	Coleoptera	Chrysomelidae	Diabrotica cristata	
24	Coleoptera	Curculionidae	Listronotus appendiculatus	
25	Coleoptera	Curculionidae	Sitona hispidulus	
26	Coleoptera	Curculionidae	Lignyodes bischoffi	
27	Lepidoptera	Noctuidae	Euxoa perpolita	
28	Lepidoptera	Arctiidae	Phragmetobia assimilans	
29	Lepidoptera	Sessiidae	Synanthedon exitiosa	
30	Diptera	Ulidiidae	Tritoxa incurva	
31	Diptera	Therevidae	Psilocephala sp. (escaped after capture)	
32	Hemiptera	Membracidae		
33	Hemiptera	Lygaeidae		