

Wisconsin Entomological Society Newsletter

Volume 31, Number 2

June 2004

SUMMER 2004 INSECT FIELD TRIPS BY THE MADISON AUDUBON SOCIETY

(NOTE: These are not collecting trips.)

Saturday, June 26 DRAGONFLIES OF THE UW ARBORETUM

Dane County
9:30 to 11:30 A.M.

This 2 hour walk at the UW Arboretum (we may go to a second site) will focus on dragonflies, those magnificent "living flashes of light." There are 111 species in Wisconsin. Although dragonflies occupy a prominent place in the web of life in our aquatic ecosystems, they have, until recently, been one of the most neglected of nature's beauties. This trip will give dragonflies the attention and respect they deserve and we'll learn about the identification, biology, behavior, beauty, and life-style of the various species we encounter. Observe with binoculars if you have them, (the close-focusing type are the best).

Leader will be dragonfly and butterfly enthusiast Karl Legler (author of the color photographic guide to *Dragonflies of Wisconsin*.) Dress for protection from the heat and sun (a hat and long pants). Meet in the parking lot at McKay Center in the UW Arboretum at 9:30 A.M. **Directions:** In Madison, heading west on the Beltline (Hwy 12), take the Seminole Highway exit and go north. After several blocks you will see the sign at the Arboretum entrance. Turn right into the Arboretum and continue until the road ends at the McKay Nature Center parking lot. Call the leader, Karl Legler, at (608) 643-4926 (Sauk

City) only if you have a question about the trip.

Saturday, July 3 MADISON BUTTERFLY COUNT

Dane County
9:00 A.M. to Noon

Our 14th annual count! **Mark this hike and census on your calendar!** The leaders, bird and butterfly enthusiasts Karl and Dorothy Legler, will provide identification expertise. Each year within a few weeks of the Fourth of July, butterfly enthusiasts all over North America participate in a census of butterfly species. Each count is conducted at several sites within a 15-mile diameter circle and the same circle is surveyed each year. These censuses help to monitor the health of our butterfly populations and the results of nearly 500 North American counts are published in an annual report. Last year on the Madison census about a dozen people in two groups at two sites found 447 butterflies of 38 species. This year's group will have an enjoyable time finding, observing and counting butterflies. Counters are needed. If you can identify butterflies, or can help spot butterflies, or just want to see and learn about butterflies, join us on this count. Observe with eye or close-focusing binoculars. Dress for protection from the heat and sun; a hat is recommended.

The organizer, NABA (North American Butterfly Association) requires a \$3.00 fee from each count

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participant (similar to Christmas Bird Count) to cover administrative and publishing costs. Meet at the parking lot at the Grady Tract in the UW Arboretum at 9:00 A.M. We will count until noon.

Directions: In Madison, from the intersection of Fish Hatchery Road and the Beltline (Hwy 12) head west on the Beltline and take the Seminole Highway exit. Turn left on
Please see, FIELD TRIPS, page 2

The Wisconsin Entomological Society Newsletter is published three times a year, at irregular intervals. It 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:

Janice Stiefel, 2125 Grove Road, Bailey's Harbor, WI 54202, (920) 839-9796, e-mail: jstiefel@itol.com

NOTE: Please report any address changes to Les Ferge, 7119 Hubbard Ave., Middleton, WI 53562. e-mail: ferge@chorus.net

FIELD TRIPS, from Page 1

Seminole Highway driving south across the overpass to the corner parking lot for the Grady Tract.

Call the leader, Karl Legler, at (608) 643-4926 only if you have a question about the butterfly count.

**Saturday, July 10
BUTTERFLIES OF CHEROKEE
MARSH**

Dane County

10:00 A.M. to Noon

On this morning trip we'll observe and learn about butterflies, those small but exquisitely beautiful creatures that dance about our ankles in summer. Butterfly enthusiasts Karl and Dorothy Legler will lead this two hour hike at Cherokee Marsh on the northeast side of Madison. We will observe a variety of butterflies as they take nectar from wildflowers, and learn about their identification, behavior, and lifestyle.

Bring binoculars if you have them (close-focusing ones work best) or just get close! It's best to wear long pants and a hat for protection from the sun.

Directions: Meet at 10:00 A.M. On the north side of Madison take Northport Drive (Highway 113) then turn north on Sherman Ave. Meet at the Cherokee Marsh parking lot at the north end of Sherman Ave. The trip will last until noon.

Call Karl Legler only if you have a question about the trip, at (608) 643-4926 (Sauk City). ☘

**Wisconsin
Entomological Society
Membership**

Dues for 2004 (due 1/1/04)

Individual...\$5.00 per year

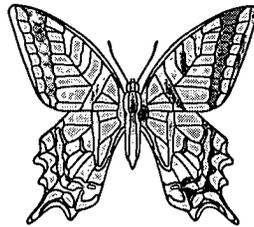
Family...\$10.00 per year

Sustaining...\$15.00 per year

Patron...\$25.00 per year

Please make checks payable to:
Wisconsin Entomological Society

Send to:
Les Ferge
7119 Hubbard Ave.
Middleton, WI 53562-3231



**THE 2004 NABA
BUTTERFLY COUNT**

by Ann Swengel

The 30th annual NABA Butterfly Count will be held this summer. These counts are fun-filled but also track the butterfly populations of North America. Volunteers select a count area with a 15-mile diameter and conduct a one-day census of all butterflies sighted within that circle. These counts are usually held in the few weeks before or after early July.

The North American Butterfly Association (NABA) organizes the counts and publishes their annual reports. These reports provide important information about the geographical distributions and population sizes of the species counted. Comparisons of the results over the years monitor changes in butterfly populations and reveal effects of weather and habitat change on the different species. In some years the butterfly count shows dramatic changes in butterfly populations, while other years indicate little fluctuation in butterfly numbers. Either way, the butterfly counters are always curious about what next year's results will be! No matter how much or how little butterfly watching you've done, the results of butterfly counting can be surprising and interesting. If a count already exists in your area, please join them for a day of fascinating butterfly counting. If there is no count in your area, you may start your own if you know how to identify the butterflies. Otherwise, inspire a nature center or butterfly club to start one for you!

For more information on the count program and on NABA, please consult NABA's website at www.naba.org, or send a self-addressed, stamped envelope to: NABA - Butterfly Count, 4 Delaware Road, Morristown, NJ 07960. ☘

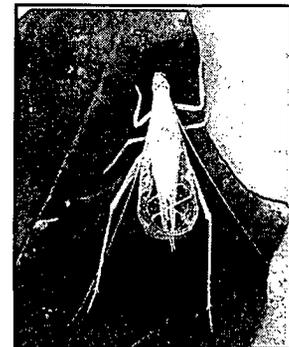
**THIRD ANNUAL
DOOR COUNTY
INSECT FIELD TRIP**

**Saturday, July 10th
Dragonflies, Butterflies, Moths,
and Various Insects
9:00 A.M. to Noon**

Join biologist and dragonfly specialist, Paul Burton, and insect enthusiast, Janice Stiefel for a morning of insect intrigue. We will look for butterflies, day-flying moths, dragonflies, eggs, caterpillars, pupae, and more. It is certain that the Federally-endangered Hine's Emerald Dragonfly will be searching for insects in this vicinity, as well.

This fascinating, educational morning will be spent in the Mud Lake Wildlife Area north of Bailey's Harbor. Water-proof footwear is essential for this trip. We will meet at 9:00 A.M. at the end of Lime Kiln Rd. Please register by calling Janice (see officers on page 8) by July 5.

Directions: From Bailey's Harbor, go north on Hwy. 57 for 4½ miles to Lime Kiln Road. Turn right (or east) and go almost to the end of the road, where you will see the Mud Lake Wildlife Area sign. ☘



Mystery Insect
Can you Identify it?

Insect is pale green, about 5/8 in. long, wings transparent. Adults eat aphids and caterpillars. Found in deciduous forests. Please send answers to the editor via e-mail, telephone or snail mail. Individuals with the correct answer will be announced in the next issue of *The Wisconsin Entomological Society Newsletter*.

GOOD NEWS FOR REGAL FRITILLARIES

Article, Photo & Chart by Ann B. Swengel

The spectacular Regal Fritillary (*Speyeria idalia*) has been a conservation concern for decades. This quintessential prairie butterfly was listed in Wisconsin as threatened in 1989 and endangered in 1997.

In 1990, my husband Scott and I started surveying known Regal populations in Wisconsin, as summarized in "Update on the Regal Fritillary in Wisconsin" in the *Wisconsin Entomological Society Newsletter*, volume 28 number 1, March 2001. We've continued monitoring these populations every year since 1990 (or since the first year we knew the population existed) through 2003.

The graph here is like the one in that previous article; it shows the highest survey count of Regals along the same survey route at each site each year, but adding 2001, 2002, and 2003. The sites are the same as before, except that the Buena Vista totals here include more areas sampled each year than in the previous article.

One "constant" throughout our study has been how much these counts vary from year to year within a site. This is typical in butterfly population monitoring studies, and appears to relate strongly to climatic variation among years (among other possible factors). To help see the regional pattern—whether it was a "good" or "bad" year for Regal numbers—the bars show the average for the sites surveyed each year from 1992 on (Muralt Bluff, Hogback, Thomson 1, and Thomson 2). (The average for all sites, that only goes from 1997 onward, showed similar patterns for those years.) In our study, 1994 was the "worst" year and 2003 the "best" for Regal numbers, although an individual site might not follow the average pattern in any given year.

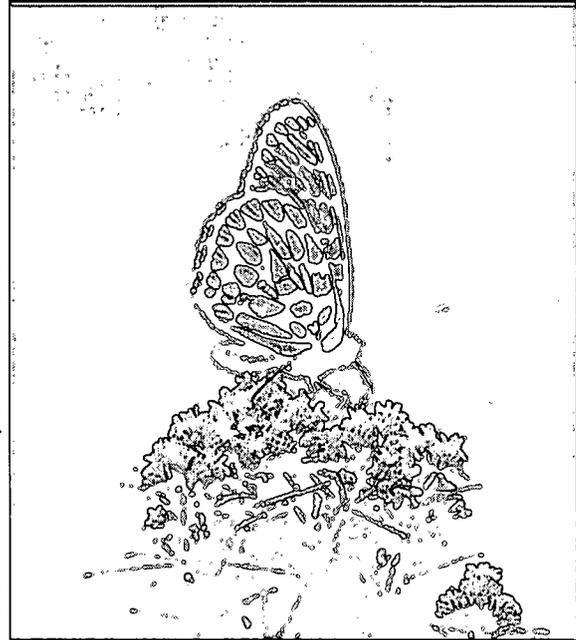
Much of our Regal research, in Wisconsin and elsewhere, has been

aimed at habitat management (also described in previous articles in this newsletter). The main story of our population monitoring in the 1990s was the decline of populations in unfavorably managed sites. The population at site 2 at Pine Island disappeared when the site was burned in its entirety in spring 1997, and as of 2003, we've still not found any there. The population at site 1 at Pine Island, which has been managed with fire rotated among units, remains small and fragile. At Muralt Bluff, also rotationally burned, the population steadily declined in the 1990s. Before our time, little Oliver Prairie (near Muralt Bluff) supported regular Regals, but we've never seen that. We found 1-4 individuals on five dates in 1991, 1993, and 1994, but none in 1990, 1992, or 1995 on, except for two seen on one survey in 2002. The entire prairie was burned in 1989, 1992, 1997, and 2000, then partially

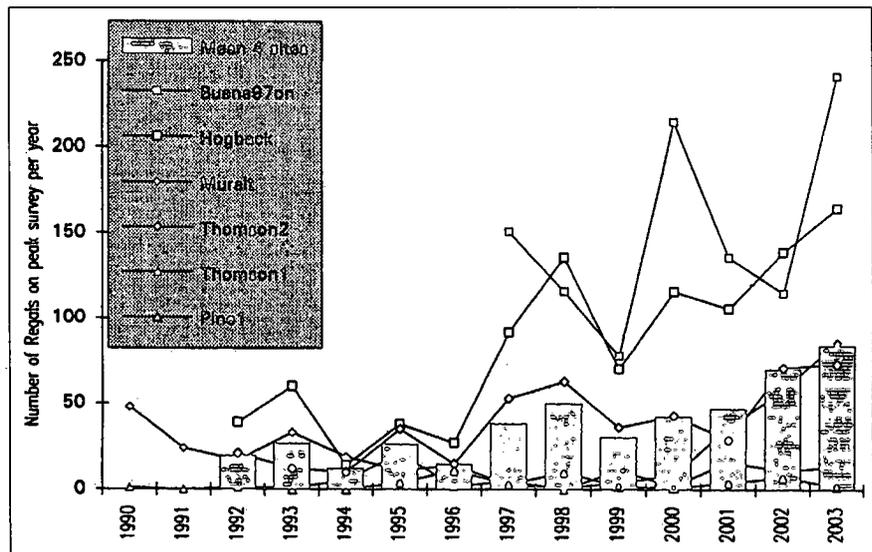
burned in 2003.

But in this decade, our results are showing the upside of favorable management. The Wisconsin Department of Natural Resource's Bureau of Endangered Resources has promoted the concept of the "permanent non-fire refugium", where a part of the site important as habitat for Regals is set aside to be excluded from burning entirely, and hopefully is managed with a favorable treatment, such as occasional mowing or brush-cutting.

Please see, **REGALS**, page 4



Regal Fritillary (*Speyeria idalia*)



Highest survey count of Regal Fritillaries per site per year.

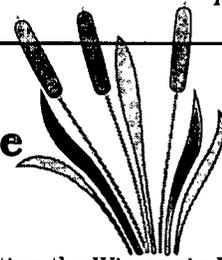
REGALS, from page 3

This strategy was particularly suggested by area 2 at Thomson, owned and managed by The Nature Conservancy. The population was discovered in summer 1992, not many months after the first fire had occurred in this tract, in the east half. Thus, we'll never know how many Regals occurred in that east half before any fire happened. But through summer 2003, a fair portion of the west half has not been burned at all, and in the years of our surveys here, most of the Regals have consistently been in this never-burned area—83% of individuals in 2003, for example.

Buena Vista has the largest known land area in Wisconsin occupied by Regals with localized areas of high density. Only about 5% is burned per year, 5% grazed, 5% hayed, plus some areas are brush-cut, all in scattered units that are small relative to the size of the site. Managed percentages are lower in some years, but quite importantly not much higher in any year we've observed. It's also valuable that these managements aren't mixed together within a unit, but instead, some areas have only been grazed, or hayed, or burned, or brush-cut (while others have had a mixture of managements), and some have been unmanaged for many years. Thus, permanent non-fire refugia are, in effect, occurring here too.

At Muralt, no fire occurred anywhere at this site in 1990, 1993, 1998, and 2000, and in all those years except 1998 (when numbers were very low), the population showed an increase. The area that has seemed most important as habitat for Regals was (as of summer 2003) last burned in spring 1991. Since then, this area has been brush-cut several times, which is highly favorable for Regals. The Regal decline in 1991 was very large, and it took many years for the population to benefit from lack of fire there. Starting in 1999, the negative trend started to turn around and finally, in 2001, the population strongly increased and continued to do so through 2003. While the last several years have been "good" years at many

Manual for Interpreting Aquatic Macroinvertebrate Data Now Available



Are our streams healthy? That's one question the Wisconsin DNR staff members strive to answer when they collect annual aquatic insect samples from hundreds of sites around the state. The resulting data can be used for watershed appraisals, basin assessments, stream classifications, pre- and post assessments of pollution sources, other water quality assessments, and ongoing monitoring. A new reference published by the DNR's Bureau of Integrated Science Services entitled *Macroinvertebrate Data Interpretation Guidance Manual* (PUB-SS-965 2003) has been designed to assist researchers and others in understanding the biological significance of various macroinvertebrate indicators. Specifically, the report provides detailed descriptions of each biological metric, a simplified explanation of the significance of each metric, and instructions as to how and when each metric should be applied. A comprehensive list of references provides access to the literature for those who wish to explore the topic further. The authors also provide some perspective on the evolution of the metrics by including a short history of the development and use of macroinvertebrate indices in Wisconsin.

The manual can be found online and downloaded as a .PDF file at <http://dnr.wi.gov/org/es/science/publications/misc.htm> by choosing either "Guidance Documents" or "Reference Publications." Print copies of the report can be ordered online or by contacting DNR's Science Communications Manager Martin Griffin at Martin.Griffin@dnr.state.wi.us.

Submitted by Dreux Watermolen

sites, no other population in our study has ever increased like that five years in a row.

We have visited other Wisconsin Regal sites regularly, too, but not always in the timing and weather necessary to include them in our population monitoring study. But our annual surveys at Barneveld Prairie, owned by The Nature Conservancy, also show the pattern of high Regal numbers in the never burned area, with low numbers spread elsewhere in the site, which is managed with fire. This shows how beneficial it is

to exclude prime Regal habitat from fire occurring elsewhere in the site. But it also illustrates how important it is to continue not burning this refugium, because of how dependent the population is on the concentration of individuals in that refugium.

We hope that other species vulnerable to fire benefit from these fire-free units helping Regals. But even more, we hope the success of permanent non-fire refugia for Regals will inspire such refugia to be established specifically for these other species as well. ☘

The Regal Fritillary is officially listed as Endangered on Wisconsin's State List of Threatened and Endangered Species (originally listed as Threatened in 1989; changed to Endangered in 1997).

Ann is a member of WES. She is coordinator of NABA's Program for Butterfly Gardens & Habitats (which puts out downloadable brochures: www.naba.org). She and her husband, Scott, are co-editors of the annual NABA Butterfly Count Report. They diligently and energetically survey butterflies, grassland birds, forest owls, and have published a number of scientific papers on their observations.



Monarch Butterfly

METAMORPHOSIS... GOD'S MIRACLE

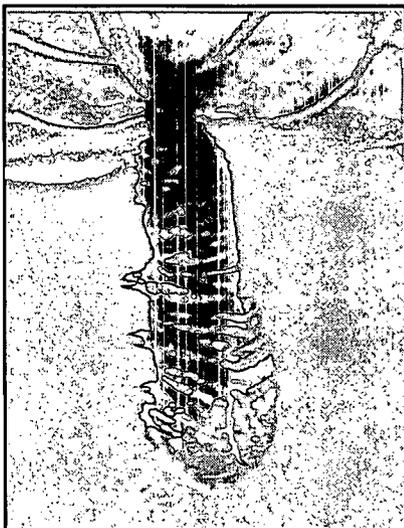
Photos: Janice Steffel

Editor's Note: So often adults and children have asked me what happens inside the chrysalis when a Monarch is being miraculously transformed from a caterpillar into a butterfly? Up until now, I never had an answer, except that it was a "miracle." I have also been asked about those shiny gold spots on the chrysalis. The best answers I've seen to these questions, appeared on the *Journey North Website* this spring. Here are excerpts of answers given by Monarch expert, Dr. Karen Oberhauser.

From: Powell County Schools, Slade, Kentucky

Q: Hello, We could only find limited general information about what happens inside the chrysalis. We would like to know more specific details about what happens inside as the larva changes into a butterfly. We read some information that said the larva liquifies - does it melt? This doesn't make sense to us. We are confused, usually things become liquids when you heat them up. If it does turn into a liquid, how does it become a solid butterfly?

A: While the process of complete metamorphosis looks like four very



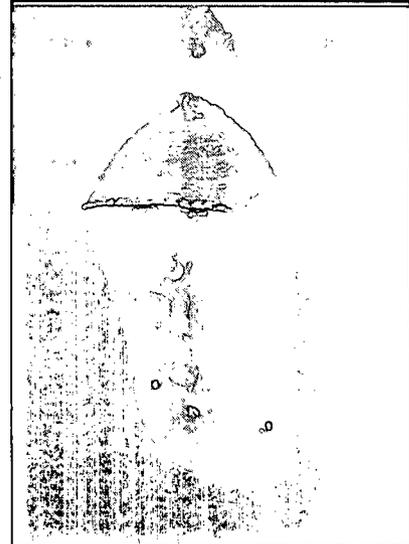
Monarch Larva (starting chrysalis)

distinct stages, continuous changes actually occur within the larva. The wings and other adult organs develop from tiny clusters of cells already present in the larva, and by the time the larva pupates, the major changes to the adult form have already begun. During the pupal stage this transformation is completed; in many ways it's similar to the process of development that occurs in a human embryo - organs form and grow from specialized cells. Despite what some books say, the Monarch does NOT turn into liquid during the pupa stage. I'm not sure where this mistruth started—maybe someone dissected a dead one and it had liquefied. You can read a lot more detail about the process of metamorphosis in a good insect encyclopedia or on the web.

From: First Baptist Christian, Weymouth, Massachusetts

Q: A question I get every year when we study the metamorphosis of the Monarch is: What are the gold spots on the chrysalis and how did they get there? Why and for what purpose are they there? I have asked many people who have some knowledge of the Monarch and have never gotten a clear answer. Thank You.

A: Fred Urquhart first studied the gold spots on Monarchs in the 1970's. He felt that the spots were involved in the distribution or formation wing scale coloration. However, the experiments that he did involved cauterizing the gold spots on the pupa, and it is possible that this process may have damaged the underlying tissue and affected the color patterns. Interestingly, all danaine butterflies (Monarchs and their relatives) have metallic spots on them. A group of researchers in Germany did a careful study of the properties of these spots. I'm not going to summarize all of their work because it goes into a lot of detail about the structural and optical



Monarch Chrysalis with Gold Spots
24 hrs. about forming



Monarch Chrysalis, 10 days later
(moments before eclosing)

properties of the spots. However, they hypothesized that the spots might be used for:

- a) Camouflage—they could reflect colors of the surroundings and break up the shape of the pupa; they might also look like dew droplets.
- b) Warning coloration.
- c) Filtering particular wavelengths of light which might be harmful to the Monarchs
- d) They might not have any function, but just be the result of something else in the cuticle of the insect.

Used with permission from Journey North (www.learner.org/jnorth) and Dr. Karen Oberhauser

There is a strikingly beautiful insect, the American Pelecinid (pel-i-CY-nid), now on the wing, that will be commonly seen and most often misunderstood until well into September. This weak-flying, large, shiny black creature, especially the female with her exceedingly long ovipositor, often startles people into thinking that it's a dangerous stinging wasp to be avoided.

Actually the ferocious-appearing insect is stingless and feeds upon nectar and water. Being in the huge insect order, Hymenoptera, along with, for example, Ichneumans, wasps and bees, they have two sets of wings. In the case of the Pelecinid, its hindwings are only one-third the length of the forewings. Actually the wings are proportionally small in comparison to the large size of the two-inch female making her flight relatively slow.

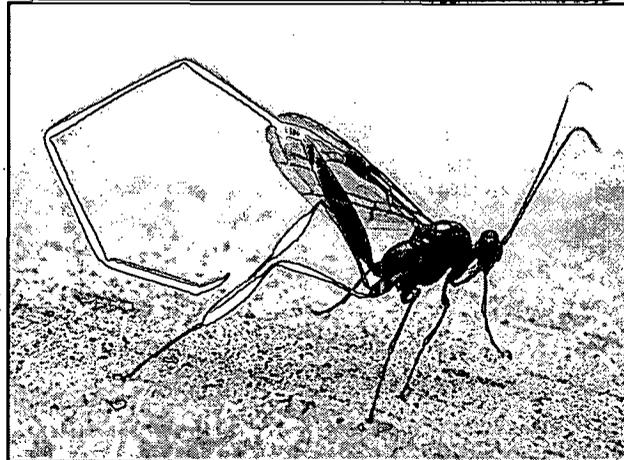
I can easily imagine the first response of many unsuspecting people upon first seeing this insect and rearing back ... "What kind of a weird bug is that?" Little do they realize that all insects are not bugs. Yes, there are about 50,000 species of bugs in the world including soldier bugs, stink bugs, ambush bugs, bedbugs, water striders, cicadas, spittlebugs, leafhoppers and aphids, but there are also several hundred thousand other insects species that are not bugs.

Unfortunately, common interests of people and many insects overlap. Take for example farm, orchard and garden crops and one can itemize hundreds of insects, or their larvae, eating the very things you are hoping to harvest. Sadly a massive application of pesticides, if that were the final solution to the problem, ends up killing as many or more beneficial insects as harmful species.

Hardly a summer passes without extensive damage being done to lawns by skunks digging and ripping up the turf in order to locate the fat juicy larvae of the May Beetle, also called the Junebug. The bulky,

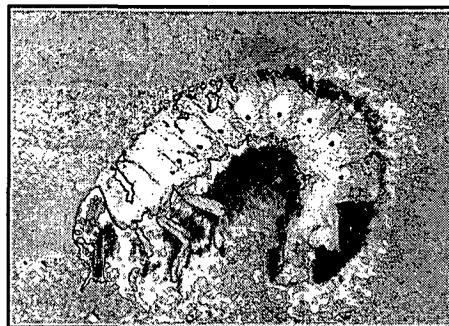
AMERICAN PELECINID *Junebugs, Beware!*

by Roy Lukes



American Pelecinid (*Pelecnus polyturator*)

Photo: Roy Lukes



Junebug/May Beetle Larva

Photo: Janice Stiefel

shiny, reddish-brown to nearly black adult, one of about 1300 North American species, laid eggs in the lawn or fields bordering woods a few summers ago. The eggs hatched into white larvae with brown heads. Eventually by the third summer they had grown to about two inches in length.

The Junebug name of the adult is misleading because they are not bugs but rather beetles. They are members of a rather well-known group called scarab beetles having a bad reputation because of damage done by either larvae or adults or both.

Getting back to the star of this story, the American Pelecinid, most folks would see little but a

dangerous creature in this handsome insect. This happens to be the only Pelecinid species in the entire country. Females are fairly common, especially in Eastern North America, while males are extremely rare.

The two-inch long female has a lengthy slender abdomen and ovipositor. She shoves her needle-like abdomen deep into the soil to locate host larvae below. Finding one, she lays one egg at a time, each on a separate host. The Pelecinid larvae hatch and burrow into the hosts, killing them. Scavenging on the remains, they eventually pupate there.

Now comes the surprise. The host larvae upon which the American Pelecinids lay their eggs happen to be those of the Junebugs! Here is a case where the unknowing person would be inclined to flatten and kill the slender black wasps while at the same time plugging up the gaping holes made in their lawn the night before by a skunk in search of the very same grubs that the wasp was probing for.

In this case it's the fearsome, slow-flying, stingless, totally harmless American Pelecinids you should be protecting in order that their natural parasitic tendencies (of the larvae) will help to control the Junebug population.

Very likely the thousands of square miles of carefully manicured lawns along with the vast acreage of food crops have helped greatly to increase the May Beetle population by leaps and bounds. Now if only we could figure out a way to expand the number of American Pelecinids we wouldn't have so much trouble with the skunks digging up the lawns! 🌿

Roy is a member of WES, a self-employed environmental educator, writer, and photographer. He can be reached at Nature-Wise, P. O. Box 105, Egg Harbor, WI 54209 or lukes@dcwis.com.

ROBBER FLIES... *Keeping Nature in Balance*

Article and Photos by Janice Stiefel



THE CLEARING

Are you interested in taking a different kind of vacation? The Clearing offers week-long classes in the arts and fine crafts, humanities and natural sciences. Classes are informal and there's ample time to enjoy quiet forest trails and beautiful sunsets.

Located in Door County, Wisconsin, The Clearing is on the National and State Registers of Historic Places. For more information, or to request a class schedule, please call (920) 854-4088/toll free (877) 854-3225, or write The Clearing, P. O. Box 65, Ellison Bay, WI 54210, or visit The Clearing on the Internet at www.theclearing.org.

Upcoming Entomological CLEARING Event

Butterflies, Moths & Caterpillars: Masters of Display, Deception & Intrigue
Tuesday, August 10
9:00 A.M. - 4:00 P.M.
Instructor: Janice Stiefel

Delve into the fascinating, secret world of butterflies and moths, including their immature phase—the caterpillars. Through slides, stories, live specimens, and a meadow walk (depending on the weather), you will hear about these often misunderstood insects, their larval plant requirements, as well as how to rear them from their egg stage, through the caterpillar phase, and finally to the beautiful adults that you see flying through your gardens and around your lights at night. Participants are encouraged to bring and share live specimens and pupae. 🌿

The Robber Fly is often thought to be a wasp or a bee (which belong to the Order Hymenoptera). Actually Robber flies belong to the Order Diptera (Flies), meaning "two-winged." This quickly distinguishes them from the four-winged bees and wasps. They also have different flight patterns. Because the wings of flies beat many more times per second, they fly in straight lines and can turn on a dime. Wasps and bees move more slowly and tend to make rounded corners when they change direction.

Most of the 1,000 species of Robber Flies in North America belong to the Family Asilidae (Robber Flies).

gardens where they actually capture beetles, leafhoppers, butterflies, moths, flies, bugs, or whatever crosses their path—in flight. While in flight, they inject their prey with a saliva cocktail of neurotoxic and proteolytic enzymes. The nerve toxins immobilize the unfortunate insect, while the digestive enzymes turn its innards to mush—which the Robber Fly then proceeds to eat. They have been known to take on a prey as large or larger than themselves.

Adults fly from July to September and are one of the few insect species that will mess with a nest of hornets. Mated pairs often rest on leaves or flowers, flying off quickly if disturbed. The stronger adult takes the other by the tail and tows the mate—which makes no attempt to fly away.

After mating, the female presses her abdomen into holes in the soil and deposits eggs. Larvae tunnel downward in search of prey and pupate in the soil, close to the surface. Eggs of the Robber Fly are usually whitish; laid in the soil or



Robber Fly (*Tolmerus spp.*)

Photo: 8/4/93 Door County, Wisconsin Hidden Corners Sanctuary

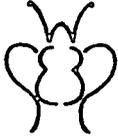
These furry-faced creatures have large compound eyes similar to a typical house fly and very short, three-segmented antennae. [The specimen in the photos had beautiful emerald-green eyes.] Their slender gray and black abdomen is from ½ to ¾ in. long, tapering to a tip. Legs are mostly black, with black bristles. Wings are clear. It has a stout beak, hairy mouth and produces a loud buzzing sound. Robber Flies are usually found in open fields and



Magnified close-up of eyes

on plants. Larvae are white, flat, cylindrical. Most species hibernate as larvae in the soil. They prey on white grubs or beetle pupae and sometimes grasshopper eggs. Consider the Robber Fly to be a beneficial insect in your garden. 🌿

Wisconsin Entomological Society



Janice Stiefel, Editor
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Bailey's Harbor, WI 54202

Address Correction Requested

Wisconsin Entomological Society Newsletter — June 2004

Page 8

COOL TOOL...BUG OUT

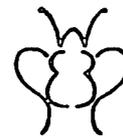
by Mike Penn

The little doorway behind Birge Hall [UW-Madison campus] seems uninviting, and the room behind it doesn't even have a formal name. But it houses some of the more interesting research tools around. Inside are between four and six large stainless steel containers, each one filled with larvae of the Dermestid Beetle, which thrive by eating the flesh of dead animals.

The beetles' creepiness is exceeded only by their contributions to science: they help prepare bones for the UW Zoological Museum, one of the foremost research collections of animal remains in the country. When the museum acquires a deceased rhino or giraffe—as it did recently when a Madison zoo giraffe suddenly died—curators drop the bones into one of the containers and let the beetles munch away. After a few days, bones emerge so clean that they need only minor preparation before they can be catalogued into the collection, which now contains 17,000 specimens from beasts common and exotic.

Researchers travel from around the world to study the collection, housed in the Noland Zoology Building. (A veterinarian recently wanted to examine a tiger's skull before trying to treat the living thing.) Not many people get to see the beetles, though. Their little underground chamber, which was originally constructed in 1877 as a magnetic observatory, is specially designed to allow tight control of temperature, humidity, and cleanliness. That means no guests at this particular dinner table. 🐞

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