

# Wisconsin Entomological Society Newsletter

Volume 26, Number 3

November 1999

## Milwaukee Public Museum Hosts Butterflies ALIVE Exhibit



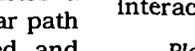
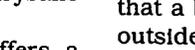
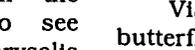
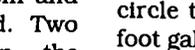
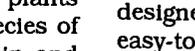
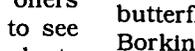
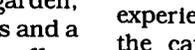
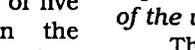
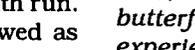
Wear bright clothing. Speak in whispers.

Stand as still as you can. And then—enjoy the magic. Live butterflies have returned to the Milwaukee Public Museum.

"The Puellcher Foundation presents *Butterflies ALIVE!*" opened July 10 and runs through Jan. 2, 2000 in the Museum's second floor Steigleder Special Exhibits Gallery. Created by Museum staff, the exhibit debuted in 1997, attracting an unprecedented number of visitors during its five-month run.

People of all ages are awed as they stand amidst hundreds of live butterflies flying freely in the exhibit's 1,000-square-foot garden, complete with flowering plants and a waterfall. This environment offers the opportunity for visitors to see butterflies sip nectar from plants and lay eggs. Twenty-five species of butterflies native to Wisconsin and North America are featured. Two transformation stations in the garden allow visitors to see butterflies emerge from the chrysalis right before their eyes.

The butterfly garden offers a tranquil setting with a circular path around a colorful flowerbed and



waterfall where hundreds of butterflies fly freely. Many of the butterflies will land on the heads, shoulders, arms, and backs of visitors. That "personal" butterfly experience generates great enthusiasm, according to Susan Borkin, curator of Lepidoptera and project coordinator of the exhibit.

"These delicate insects, all weighing less than 1/50th of an ounce, clearly take the spotlight and create the magical atmosphere," Borkin said.

"Adults and children will stand with outstretched arms, hoping to entice a butterfly to land on them. That experience for many is the highlight of the visit."

The visitor's "personal" butterfly experience is intended to serve as the catalyst to learn more about butterflies and moths, according to Borkin. Eight educational stations, designed with colorful graphics and easy-to-read interpretive text panels, circle the rest of the 7,000-square-foot gallery.

Visitors will learn that butterflies taste with their feet and that a butterfly's skeleton is on the outside of its body. Hands-on interactive stations outline the

Please see **BUTTERFLIES**, Page 2

### WES Annual Meeting to be held at the Milwaukee Public Museum

The next meeting of the Wisconsin Entomological Society will be held on Saturday, Nov. 13, 1999 at the Milwaukee Public Museum (map and directions appear on page 8). The meeting will begin at 1:30 P.M., in the ground floor Education Lab (signs will be posted). WES members will need to register at the Security Desk before proceeding to the lab.

The main focus of this meeting will be a guided tour through the *Butterflies ALIVE* Exhibit. The program will also feature our annual photo salon. Any members having slides of entomological subjects are encouraged to participate. Each entrant may submit up to five slides, labeled with the subject and name of photographer. The slides will be evaluated by the audience, which will vote to select the winning entries. The winner's name will be added to the William E. Sieker Memorial Plaque, and a print of the first place slide is added to the display in the Entomology Department office, and is also awarded to the photographer. Short presentations are scheduled.

Also on the agenda is the election of officers for 2000. Nominations are welcome, and can be made at the meeting. ☺

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 Stefel, W6311 Mullet Lane, Plymouth, WI 53073. e-mail: jstefel@excel.net

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

**BUTTERFLIES, from Page 1**

difference between butterflies and moths and help visitors better understand the impact these animals have on biological diversity. For example, learn that 50 to 90% of a butterfly or moth's offspring will not survive to become adults. Instead, they will become an integral part of the food web, fueling many other species's survival.

The return of "Butterflies ALIVE!" provides the Museum staff the opportunity to build on the earlier success of the exhibit in preparation for the Museum's permanent butterfly wing, scheduled to open in spring of 2000. William Moynihan, president of the Museum stated, "The exhibit is intended to educate and increase sensitivity to the natural world we live in." ☞

**1999 Dues Notice**

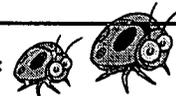
Several of our members are past due in their annual dues payment for membership in WES. To determine your status, please check the address label on this newsletter. Appearing after your name will be the last year dues were paid and your membership category:

Individual (\$5/yr.), Family (\$10/yr.), Sustaining (\$15/yr.), or Patron (\$25/yr.)

Dues are to be sent to treasurer, Tom Rocheleau, 3100 Buena Vista St., Madison, WI 53704. Be sure to notify us of any address changes or corrections. ☞

*Butterfly sketches on Pages 1 and 5 are by artist and naturalist, Therese Randall of Greenbush, WI.*

**To the Editor:**



I read the June WES Newsletter from cover to cover and delight in its crisp new format. There's even a quotation from H.D. Thoreau which, like so much of his writing, is perfectly apropos today. I'm also motivated to write by the two articles concerning the Multi-colored Asian Lady Beetle. Both Phil Pellitteri and you wrote that this animal is harmless. I disagree: I believe it is harmful hereabouts. This species is not native to eastern North America, though many other species of lady beetles are native here. This species feeds on aphids and scale insects, many of which are native here. Given the astonishing abundance of the Multi-colored Asian Lady Beetle, it seems probable that some native aphid or scale species may disappear, that some parasitoids using these aphids or scale species may disappear, and that some native lady beetles that would have fed upon these aphids and scales may also disappear. Locally, our ecosystems are already burdened with the common Seven-spotted Lady Beetle, another large alien predator.

Both of these alien species were introduced by economic entomologists, who generally fail to look beyond the immediate short-term affects to their target crop pest. I think the time has come to value the conservation of biodiversity of native organisms much more highly than we have in the past.

To paraphrase your H.D. Thoreau quotation: "These native species, living here in concert, present the greatest of God's gifts seen from this vantage point, and the influence of introduced alien taxa is usually caustic. Though God may have pronounced His work good, we are shamelessly dismantling it as we homogenize Earth's fauna and flora."

Sincerely,  
Andrew H. Williams  
Fellow in the Entomology Dept.  
University of Wisconsin—Madison



Male Tree Cricket

**Request for Information:  
Crickets, Katydids and Cicadas**

by Karl Legler

I am gathering information on the distribution and abundance in Wisconsin of various species of Crickets, Katydids and Cicadas. I would like to hear from anyone who has a private collection (or observational records) that contain any of the species listed below. I am interested in the

COUNTY where the species was collected (or observed) and, if possible, the date of collection. I am also interested in corresponding with anyone who is especially interested in these three groups of insects.



Female Tree Cricket

Bush Katydids (PHANEROPTERINAE): AMBLYCORYPHA oblongifolia, rotundifolia; MICROCENTRUM rhombifolium; SCUDDERIA curvicauda, septentrionalis, texensis.

Cone-headed Katykids (COPIPHORINAE): NEOCONOCEPHALUS robustus, lyristes.

Meadow Katydids (CONOCEPHALINAE): ORCHELIMUM campestre, concinnum, delicatum, nigripes, volantum; CONOCEPHALUS attenuatus, nemoralis, strictus.

Northern True Katydid: PTEROPHYLLA camellifolia.

Field Crickets (GRYLLINAE): GRYLLUS pennsylvanicus, veletis.

Ground Crickets (NEMOBIINAE): ALLONEMOBIUS allardi, griseur, maculatus; NEONEMOBIUS palustris.

Tree Crickets (OECANTHINAE): OECANTHUS niveus, quadri-punctatus, argentinus.

Bush Crickets (TRIGONIDIINAE): ANAXIPHA exigua.

Cicadas (HOMOPTERA: CICADIDAE): ALL cicadas (except TIBICEN canicularis).

Karl Legler, 429 Franklin St., Sauk City, WI 53583  
Phone: (608) 643-4926 e-mail: karlindot@bankpds.com  
Photos: Janice Stiefel, Sheboygan County, WI (9/13/94)

**I**t was a very warm, sunny day and my job was to send the rocks I had just washed, along with mortar, up to my husband who was positioned on the roof of our Door County building project. He was constructing the masonry on the final 5 ft. of the outside wall on our fieldstone fireplace. This was not the most exciting job I've had in my life—but that was about to change...

We have observed that butterflies like wet rocks and are drawn to them like magnets. Obviously, they are seeking the minerals and moisture that the rocks contain. We've had White Admirals, Red Admirals, Mourning Cloaks, Pearl Crescents, Meadow Fritillaries, Great Spangled Fritillaries, Gray Commas, Question Marks, and occasionally a Monarch, visit our wet rock pile. We don't need a butterfly garden, we have rocks! On the 18th of September (1998), around 1 o'clock in the afternoon, an unusual, striking butterfly was fluttering around the rock pile. It didn't match any of the pictures in my butterfly books but it came closest to the description of a Common Buckeye—shades of tan, prominent eye spot along the margin of both forewing and hindwing, and two orange bars (outlined in black lines) at the top edge of the forewing. It lacked the bright cream patches on the forewing that are shown in most butterfly books. On this one the patches were quite subdued and almost unnoticeable. The Common Buckeye is migratory and somewhat rare in our part of the country, being much more prevalent in the southern states and the tropics. When it does

appear in Wisconsin, especially Door County, it would probably be in the autumn. There are some fifty species of Buckeyes throughout the world; only one of them is found in North America.

## Courtship on the Rocks!



by Janice Stiefel

...To continue...this butterfly took a position on one of the rocks and just sat there. Within a few minutes another butterfly appeared, very similar, with bright cream patches on its forewing (matching the description of the Buckeye in my books), then another one arrived, and another. Now there were three Buckeyes with bright cream patches and one without the cream. It was quite obvious that the one without the cream patches was the female and the other three were males. The three males positioned themselves in equal distances from the female (about 6 in.). As soon as one tried to get closer to her, the other two would attack him and the three males would fly off in a "dog fight" to settle their dispute in the air. In a few seconds they would be back, completely encircling her again, at equal distances. This courtship went on for three hours. All she ever did was flick her wings slightly, which sent the males into a frenzy, but she did not move from her position during all that time. The guys were continually fighting or encircling her. Finally at 4 o'clock, with no mating taking place, she flew away—leaving the males. It looked like they said, "She's gone! What happened?" After a few minutes, when she didn't return, they left. I never saw them again.

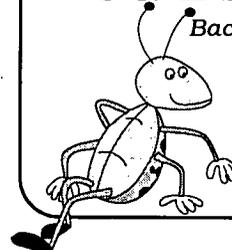
As I was observing this courtship, which I will probably only see once in my lifetime, I recalled something

my mother told me many years ago. She had a girl friend who was so beautiful that the guys went crazy over her. They fought over her continuously, so much so that she never had one real boyfriend. This went on for several years, until she was so disgusted with men that she wanted nothing to do with them. Ultimately, she never married. I remembered this true story, when the female Buckeye flew away, leaving the males to fight among themselves.

During this three-hour courtship, my husband was patiently waiting for me to send rocks and mortar up to him on the roof. I did manage to sneak these materials to him by a much longer route—around the butterflies. It's fortunate that my labor comes cheap, because he certainly had grounds to fire me for lack of attention to my work, incompetence, and just laying down on the job. ☺

© 1998 Janice Stiefel

## BUG BYTES...



Backyard and field observations, plus information of interest

From: Ann Shebesta  
Mishicot, WI

I thought I would tell you about a web site that may be worthy of the WES's attention. The web site address is:

<http://www.learner.org/jnorth>

This is my favorite web site because I've been following it all spring. It is an organization that tracks the migration of the Monarch Butterflies as they move north (and south) each season. It is updated each week as they are migrating. This site also tracks hummingbirds, robins, whales, etc. I hope the Wisconsin Entomological Society enjoys this fun technological wonder. ☺

For inclusion in the next BUG BYTES column, please send field observations or notes to the editor.



Male Common Buckeye (9/18/98)

Photo: Janice Stiefel

## Controlling Earwigs

Phil Pellitteri

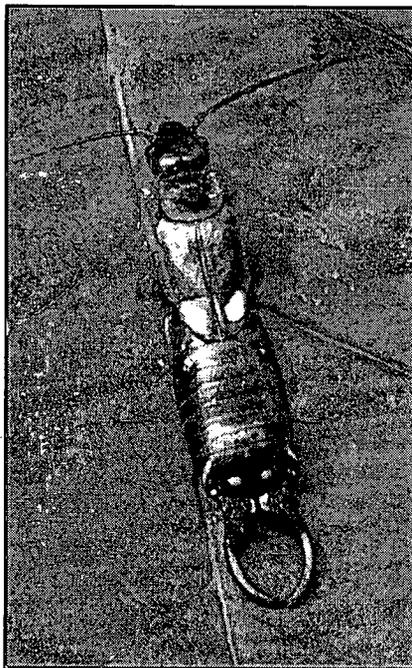
Earwigs have large, pincers-like protrusions at the rear of the body, which give them an evil appearance, but they don't harm people directly. Still, they can cause people problems by feeding on flowers and vegetables outdoors, by crawling into the home, and by congregating under well caps.

The first American report of a European Earwig (*Forficula auricularia*) came from Newport, Rhode Island in 1901. Until 1982 European Earwig reports in Wisconsin were limited to the Lake Michigan shoreline.

But in the years since, earwig infestations have spread fast across Wisconsin. The name "earwig" derives from a false European superstition according to which these insects enter the ears of sleeping people and bore into the brain. In fact, earwigs rarely bite—usually when sat upon or handled—and their bite is only mildly painful.

### Identification and Life Cycle

Adult European Earwigs are reddish brown and about ¾ inch long. Their most distinctive feature is the prominent, pincers-like cerci (pronounced "sir-see") on the end of the abdomen. Earwigs use their cerci for defense, capturing prey, and sensing the environment. The cerci can pinch you if you stick a finger between them, but they can't break the skin. Male earwigs have curved cerci that are thicker at the base, while females have thin, straight cerci. In Wisconsin, pairs of earwigs overwinter by digging 2-3 inches into the soil to hibernate. Sometime during the winter or early spring the female lays 25-30 eggs. Males leave the hibernation sites first, and the females follow in late May. You may see your first earwig of the summer by mid-June. In some parts of the country the females enter the soil again to deposit a second set of eggs, but Wisconsin earwigs most likely produce just one generation per



European Earwig

Photo: Janice Stiefel

year. Unusually wet springs and summers often intensify earwig infestations.

Earwigs eat an omnivorous diet of other insects and plants. This diet can be beneficial: earwigs feed on aphids, mites, fleas, and insect eggs. Unfortunately, in gardens they munch on dahlias, marigolds, lettuce, potatoes, and hostas. They will also feed on mosses, lichens, and algae. Earwigs are active at night and hide during the day in almost any dark, confined space, particularly if it is moist.

Female earwigs exhibit an instinct that is very rare among insects: they care for eggs and young. The females turn, lick, and reposition their eggs. They also bring food to the newly hatched young and protect them in the nest. It takes about 2 months for nymphs to mature. Earwigs' nocturnal activity, quick movements, size, and color often cause them to be mistaken for cockroaches. Although, like some cockroaches, earwigs have wings, they fly very badly. Earwigs spread largely by infested plant material, cut flowers, and other human activities.

### Earwig Problems

The earwigs' habit of hiding leads them into trouble with people. They often come indoors to hide, or they

conceal themselves under outdoor furniture, hoses, garbage cans, or poor-fitting well caps. They do not breed indoors but simply hide, then become active at night.

### Well Problems

Loose-fitting well caps provide an ideal hiding place for earwigs: dark and damp during the day. Once inside a well cap, an earwig may fall into the water, die, and decay, thereby increasing bacterial contamination of the well. Earwigs are not considered a public health threat and are not associated with any disease; nevertheless, you should replace poor-fitting well caps with vermin-proof caps to prevent any insects from contaminating the water.

### Plant Damage

Earwigs eat small holes in plant leaves during the night. Earwig damage often appears small compared to the large pest populations present, and it can be confused with injuries caused by slugs, cutworms, or even rabbits. Larger plants will tolerate the feeding, but seedlings and flowering plants can be severely damaged or killed by dense populations.

You should suspect earwig problems if you find damage during the day but can't find any insects on the plants. Confirm the presence of earwigs by checking the plants at night, or by looking for them congregated under boards, firewood, or tree bark next to your plants.

### Control

Earwigs congregate in areas that are shaded or filled with lush plant material, boards, debris, or organic mulch. Exposed, sunny yards have fewer problems. Two species of parasitic fly, including *Digonichaeta setipennis*, have been introduced to help control earwigs naturally. In good years these parasites attack and kill over ¼ of the earwig population.

You can trap earwigs in rolled up newspapers or in old tuna fish cans baited with fish oil or vegetable oil. Place traps near the problem areas and check them each morning.

Please see **EARWIGS**, Page 5

**EARWIGS**, from Page 4

Shake live insects into a pail of soapy water to kill them. Converting the backyard to a dry, sunny environment with few hiding places will also help control earwigs. Remove any shelter sites, prune low-growing bushes, avoid growing the earwigs' favored food plants, and destroy moss and algae. Avoid over-watering and don't use thick organic mulches.

**Chemical**

A variety of insecticides available to homeowners are labeled for earwig control. You can use the following materials as baits, liquid sprays, granules, or dust: diazinon, carbaryl (Sevin), chlorpyrifos (Dursban), and propoxur (Baygon). Read the label to determine the proper sites and vegetable restrictions. Applying insecticides to the daytime hiding places will give more successful control. Insecticide applications made late in the day are most effective. Wettable powders and granular formulations perform better. A common recommendation is to apply insecticides as a barrier treatment. Sprays or dust are applied to the exterior foundation walls and a 2-3 foot swath along the adjacent ground. Flower beds and mulches can also be treated. Many lawn insecticides could be used on grass, but that would be an extreme response to this problem.

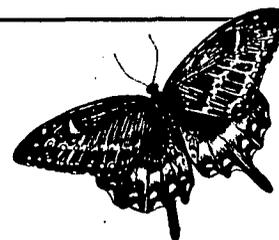
**Indoor**

If earwigs are getting into your home, caulk cracks and crevices and weather-strip doors to prevent their entry. Check windows, the junction of the siding with the foundation, and all outdoor water faucets for openings that earwigs can squeeze through. Remove firewood, unneeded plant material, and organic mulches from the foundation area. Create a clean, dry border along the foundation and consider replacing wood chips or bark mulch with stones or other material that will be less attractive to earwigs. Clear debris and leaves from the troughs of eaves. ☞

*Phil is president of WES and District Outreach Specialist at the Insect Diagnostic Lab, U. W. Madison, Dept. of Entomology.*

**Swallowtail Tale...**  
A Summer Play in Three Acts

by Pat Seawell



**Act I**

Few things are as rewarding as sharing nature's wonders with children. With that thought in mind, I planted Trailing Lantana and Parsley in the narrow space between the sidewalk and the curb in front of my San Antonio home.

**Husband:** "Pat-teeeee, what's going on in our front yard? Every time I look out, there are kids I've never seen before squatting around that plant!"

**Me:** "Mmmmm, word travels fast in this neighborhood! My lab project is working even better than I thought it would! This morning I showed the Eastern Black Swallowtail eggs to my ten-year-old neighbor, Theo. By evening, every child in the neighborhood has been by to peer at them."



**Act II**

Because of previous experiences with wasps, assassin bugs, anoles, and fire ants, I make a "protective custody cage" for Theo's baby caterpillar. I showed him how to keep the Parsley fresh. He sets up his project on his living room coffee table. Seven-year-old Philip wants a pet. His nine-year-old sister, Amy, wants a pet. They bring their mom over. We discuss the responsibilities involved in raising a pet caterpillar.

**Me:** "No, you won't have to make emergency trips to the super-market like I did last year. I've planted enough parsley for the whole neighborhood." I make another protective custody cage. Philip and Amy are ecstatic.

**Act III**

Ding-dong!

**Philip:** "Mrs. Seawell, Avenger has eaten almost all the parsley you gave me yesterday, may I have some more, please?"

Ding-dong!

**Amy:** "Mrs. Seawell, guess what? Watercolor has made a chrysalis!"

Ding-dong!

**Theo's mom:** "Pat, guess what? Theo's butterfly came out of the chrysalis this morning! We put it on a bush like you said and in a few minutes it flew away. It was so exciting! Thank you for doing this! We're all enjoying it!"

Ding-dong!

**Philip & Amy's dad:** "We appreciate what you're doing for our children. They're learning so much. We never thought to do anything like this. Actually, Katherine and I are learning a lot, also!"

Ding-dong!

**Theo's dad:** "Theo and Philip both had butterflies this morning! We had a double launch! And I got it all on video!"

**Husband** (in an aside to me): "When is this project scheduled to end?"

**Me:** "I thought they'd be bored with it after the first caterpillar."

**Husband:** "How many launches have YOU had so far this summer? Twenty-six? Twenty-eight?"

**Me:** "Mmmmm, I suppose I'd better plant some more parsley!"

*Pat is a WES member residing in San Antonio, TX. By planting native shrubs and grasses, she is attracting an astonishing variety of moths and butterflies to the "wilderness" of her suburban backyard. A retired high school English teacher, she reads, writes books for children, and watches caterpillars graze.*

There is no better place I know to find Hummingbird Moths (*Hemaris thysbe*) than a several-acre tall-grass prairie remnant in Racine County. There, Hummingbird Moths are often seen nectaring on Field Thistle and Blazing Stars and their favorite flower, Wild Bergamot. On the last weekend in July 1997, when the bergamot was in peak bloom, I headed out to see the moths.

The largest clump of Wild Bergamot on this prairie measures about four by five feet. For many years, I have watched day-flying Hummingbird Moths nectar on this plant between the hours of 11:00 A.M. and 4:00 P.M. Today, just before noon, two moths, flashing iridescent green in the summer sun, fly past me and begin to nectar on the flowers. As I approach, one of them flies off. The other remains, hovering over flower spurs, sipping nectar.

A spider web, connecting the undersides of two heads of the tubular lavender flowers, catches my eye. In a corner of the web, not two inches in from the flowers, a large Cross Spider (*Araneus diadematus*) waits. As the moth nectars above, getting closer to the flower above the spider's web, the spider moves towards the moth. At the outermost tubular flower, the moth hovers within two inches of the spider. In a flash, the moth drops—the large spider appears to have jumped out and grabbed it. In a fraction of a second, the spider is back on its web, wrapping the moth in spirals of silk.

As usual, I've forgotten a camera. But I have brought my sketchbook and I quickly sketch the spider at work. Several days later, while looking at my sketch and reading over my field notes, I start to think about what I've seen. An orb-weaving spider, like the Cross

Spider, responds only to vibrations on its web. The moth was not on the spider's web. How, then, did the spider catch its prey? I call Joan Jass at the Milwaukee Public Museum and explain what I've seen. Joan confirms that orb-weaving spiders cannot find prey unless it is touching their web. She asks me what I think happened.

Me? I'm neither spider nor moth expert, I'm merely an observer. But I

touching the web. The spider's web was intertwined between flowers the moth nectared on just before it was caught. While the moth nectared, the vibrations from its wings were carried through its proboscis, into the nectar in the flower. The vibrations passed through the walls of the flower to the web. Could the spider have felt the direction and intensity of the vibrations through the web? Feeling these vibrations,

could the spider then have reached out and grabbed the moth as it hovered within a fraction of an inch of its web?

The whole episode of a spider "jumping out" to catch a moth seems somehow familiar to me. I pester my ever-patient husband to drag boxes of my old field notes out of the attic. After many evenings of reading through them, I find this old journal entry:

"Sunny, about 80, no wind. A few cumulus clouds. Saw four Hummingbird and three Bumblebee Moths. There is a European (Cross) Spider in a web under the wild pink mints (Wild Bergamot). I was very

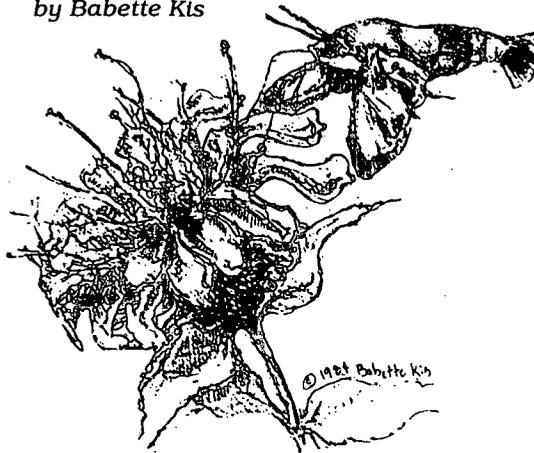
close, and a Hummingbird Moth came and sipped nectar just over the spider. The spider jumped out and caught the moth. I hit the spider's web. The moth fell to the ground, then it flew off. How did it (the spider) know about the moth being there? How can a European spider catch a flying moth? I never saw these spiders catch anything that didn't get caught in its (their) web until now." — August 1963

Where did I make my August 1963 childhood observation? At the same place I saw the Cross Spider catch the Hummingbird Moth in July 1997. ☺

*Babette is a wife and mother of three children, full-time project architect at the City of Milwaukee, part-time naturalist, writer, artist, and former science teacher. She has written notes and made sketches of her field observations from the time she was eight years old.*

## How Can an Orb Spider Catch a Flying Moth?

by Babette Kis



Sketch: Babette Kis

describe what I have seen and Joan and I come up with this possible explanation. Although the wings of a flying moth give off appetizing vibrations to a spider, an orb-weaving spider only responds to these vibrations when they are transmitted through its web. To the best of my recollection, the moth was not touching the spider's web when it was caught. However, one of the moth's legs could have brushed the web, triggering the spider's response.

It may have been this way, but the moth showed no distress or erratic flight prior to being caught. Is there a way that the spider could have caught the moth if the moth didn't touch its web? With Joan's encouragement, I go through what I have seen again, this time focusing on how the vibrations of the moth could have been transmitted to the web without the moth actually

1999 MEMBERSHIP

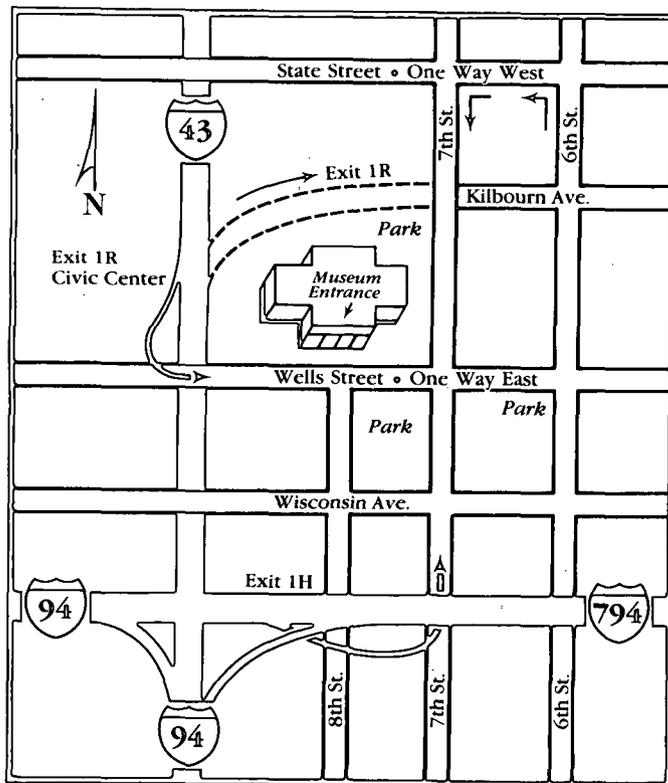
BALOGH	GEORGE	1999-I	6275 LITEOLIER		PORTAGE	MI	49002
BARINA	TOM	1999-I	15050 VERA CRUZ		NEW BERLIN	WI	53151
BEHNKE	CHARLES	1998-I	2760 S HERMAN ST		MILWAUKEE	WI	53207-2239
BELLIN	DEENA	1999-I	1372 DENEYS PL		GREEN BAY	WI	54303
BENJAMIN	DANIEL	1999-S	1656 CHADWELL DR		SANTA MARIA	CA	93454-3400
BOLLES	J CRAIG	1997-I	3934 MANITOU WAY		MADISON	WI	53711
BORKIN	SUSAN S	1999-I	2119 E WOOD PL		SHOREWOOD	WI	53211
BORTH	ROBERT	1999-I	6926 N BELMONT LN		FOX POINT	WI	53217
BOSSERT	FREDERICK	1997-I	3392 SILVER LAKE DR		WEST BEND	WI	53095
BOYER	DOROTHY	1999-I	1969 LAKEFIELD RD		CEDARBURG	WI	53012-9110
BRUST	MATHEW	1999-I	1717 E KANE PL APT 22		MILWAUKEE	WI	53202
BRYANT	ROBERT	1999-I	522 OLD ORCHARD RD		BALTIMORE	MD	21229
BUCHLI	BYRON	1999-F	3055 FADNESS RD		DEERFIELD	WI	53531
BUSLAFF	JOY	1999-I	S89 W22630 MILWAUKEE AVE		BIG BEND	WI	53103
CARPENTER	ANITA	1999-I	304A SCOTT AVE		OSHKOSH	WI	54901
CONWAY	PATRICK	1998-I	17053 N 290TH AVE		GALVA	IL	61434
COPPEL	HARRY	1999-I	5025 SHEBOYGAN AVE APT 212		MADISON	WI	53705-2815
DAUB	ED	1999-I	4258 MANITOU WAY		MADISON	WI	53711
DERNEHL	NANCY	1998-I	UW-WAUKESHA	1500 UNIVERSITY DR	WAUKESHA	WI	53188
DICKE	ROBERT	2001-I	3717 COUNCIL CREST		MADISON	WI	53711
DITTL	TIMOTHY	1999-I	1721 BOB-O-LINK CT		WISCONSIN RAPIDS	WI	54494
DRECKTRAH	GENE	1999-S	BIOLOGY DEPT	UW - OSHKOSH	OSHKOSH	WI	54901
DUNFORD	JIM	1999-I	3143 MAPLE VALLEY DR APT 112		MADISON	WI	53719-3164
EBNER	JIM	1999-S	N57W34476 NICKELS POINT RD		OKAUCHEE	WI	53066-2536
EVANS	MARK	1998-I	217 ISLAND DR		MADISON	WI	53705
FAMILY	CHAUDOIR	1999-F	N3856 LOSS RD		WEYAUWEGA	WI	54983
FERGE	LES & CAROL	1999-F	7119 HUBBARD AVE		MIDDLETON	WI	53562
GRIMEK	HERBERT	1999-I	1101 TEMKIN AVE		MADISON	WI	53705
GRIMSTAD	PAUL	1997-I	UNIV OF NOTRE DAME	DEPT BIOLOGICAL SCI	NOTRE DAME	IN	46556-0369
HAINZE	JOHN	1999-I	4747 N LAKE DR		MILWAUKEE	WI	53211-1257
HANSEN	DEAN	1999-I	402 SOUTH 6TH ST		STILLWATER	MN	55082
HEMPEL	JOHN C.	2000-I	3007 COLTMAN LN		EAU CLAIRE	WI	54701-7589
HENDERSON	RICH & KATHY	1999-F	2845 TIMBER LN		VERONA	WI	53593
HILSENHOFF	WILLIAM	1998-I	DEPT OF ENTOMOLOGY	1630 LINDEN DR	MADISON	WI	53706
HOFFMAN	RANDY	1999-I	305 5TH ST		WAUNAKEE	WI	53597
HOGG	DAVID & SUSAN	1996-S	DEPT OF ENTOMOLOGY	1630 LINDEN DR	MADISON	WI	53706
JAVOREK	JEFF	1999-I	886 S COUNTY ROAD X		MOSINEE	WI	54455
KAISER	KURT R	1997-F	CHERYL L BARRETT	1320 W WASHINGTON	CLEVELAND	WI	53015-1429
KHITSUN	ANDREY	1999-I	409 EAU CLAIRE AVE APT 207		MADISON	WI	53705-2846
KIRK	KATHRYN	1999-I	DNR - ENDANGERED RESOURCES	PO BOX 7921	MADISON	WI	53707
KLEIN	MICHAEL	1996-P	1520 SILVER RD		WOOSTER	OH	44691
KMENTT	WALDEMAR	1999-S	4330 E WOOD TR		BELOIT	WI	53511-7828
KRUSE	JAMES	1999-I	1305 SOLANO AVE APT B		ALBANY	CA	94706-1845
KUGLER JR	WALTER M	2002-I	525 PIPER DR		MADISON	WI	53711
LEARY	ROBERT	1999-I	612 S WESTFIELD ST		OSHKOSH	WI	54901-5540
LEGLER	KARL	1999-I	429 FRANKLIN ST		SAUK CITY	WI	53583
LEVIN	ANN	1999-I	3101 104TH ST		KENOSHA	WI	53142
LIBRARY	REFERENCE	1999-I	MILWAUKEE PUBLIC MUSEUM	800 W WELLS ST	MILWAUKEE	WI	53233
LILLIE	RICHARD A	1999-I	8609 SCHOEPP RD		SAUK CITY	WI	53583
LINTEREUR	LEROY J	1998-I	1428 MARY ST		MARINETTE	WI	54143
LUKES	ROY	1999-I	3962 HILLSIDE RD		EGG HARBOR	WI	54209
MACARTHUR	KENNETH	1997-S	15900 W MONTEREY DR		NEW BERLIN	WI	53151
MARTIN	ROBERT	1999-I	1310 ORANGE ST		RACINE	WI	53404-2932
MATZKE	CURTIS	1998-I	1817 WESLEY AVE		JANESVILLE	WI	53545
MAXWELL	JUDI	1997-I	5834 BALSAM RD APT 3		MADISON	WI	53711-4248
MERKHOFER	RICHARD	1999-S	39 PARKVIEW DR		APPLETON	WI	54915
MERTINS	JAMES	1999-I	3028 NORTHRIDGE PKWY		AMES	IA	50010
NIELSEN	MOGENS	1999-S	3415 OVERLEA DR		LANSING	MI	48917
OTTO	LORRIE	1999-I	9701 N LAKE DR		MILWAUKEE	WI	53217-6103
PARKINSON	JAMES C	1999-I	1951 JAMES ST		MOSINEE	WI	54455
PEACOCK	JOHN W	1999-I	185 BENZLER LUST RD		MARION	OH	43302-8369
PELLITTERI	PHIL	1999-I	DEPT OF ENTOMOLOGY	1630 LINDEN DR	MADISON	WI	53706
PFUTZENREUTER	MARY A	1999-I	E2249 ROCKLEDGE RD		LUXEMBURG	WI	54217-9702
PHELPS	LAURENCE	1998-S	6472 WILSON RD		ROCK SPRINGS	WI	53981
RABE	MARY	1998-I	MI NATURAL FEATURES INV	PO BOX 30444	LANSING	MI	48909-7944
RADKE	DAVID	1999-P	1076 W MURRAY LN		HUBERTUS	WI	53033
RANDALL	THERESE	2000-I	N6065 HILLTOP LN		GLENBEULAH	WI	53023
ROCHELEAU	TOM & NINA	1999-F	DEPT OF ENTOMOLOGY	3100 BUENA VISTA	MADISON	WI	53704
ROMEYN	RICHARD	1999-I	W5306 EMERALD CT		LACROSSE	WI	54601
SCHABEL	HANS G	1997-I	COLL OF NATURAL RESOURCES	UNIV OF WISCONSIN	STEVENS POINT	WI	54481-3897
SEAWELL	PAT	1999-I	1114 TRANQUIL TRAIL		SAN ANTONIO	TX	78232
SHEBESTA	ANN L.	1999-I	651 CHURCH ST		MISHICOT	WI	54228-9618
SIEKER	KATHERINE T	1999-P	P O BOX 1032		MADISON	WI	53701-1032
STIEFEL	JOHN & JANICE	1999-F	W6311 MULLETT LA		PLYMOUTH	WI	53073
SULLIVAN	RAYMOND	1999-I	125 N 123RD ST		MILWAUKEE	WI	53226-3809
SWENGEL	ANN B & SCOTT	1999-F	909 BIRCH ST		BARABOO	WI	53913
THRELFALL	ANNA M	2000-I	N3438 WOOD LAWN RD		KENNA	WI	54537-9476
TRICK	JOEL A	1999-I	351 CLEMENT ST #6		GREEN BAY	WI	54302-6000
TURNBULL	JAY	1997-S	N1632 SUGARBUSH RD		ANTIGO	WI	54409
VOGEL	THOMAS	1999-I	522 WISCONSIN AVE		KEWAUKEE	WI	54218
WATERMOLEN	DREUX	1999-I	PO BOX 302		MADISON	WI	53701-0302
WEISMAN	KEN	2000-I	2893 HUMBOLDT RD		GREEN BAY	WI	54311-5746
WESTOVER	DAVE	1997-I	324B N. MONROE ST		WATERLOO	WI	53594
WILLIAMS	ANDREW H	1999-F	413 COLUMBIA AVE		DEFORREST	WI	53532
YOUNG	DR DANIEL K	1999-I	DEPT OF ENTOMOLOGY	1630 LINDEN DR	MADISON	WI	53706
YOUNG	ALLEN M	1999-I	MILWAUKEE PUBLIC MUSEUM	800 W WELLS ST	MILWAUKEE	WI	53233

Address Correction Requested

Wisconsin Entomological Society  
Janice Steffel, Editor  
W6311 Mullet Lane  
Plymouth, WI 53073



Directions  
to the  
Milwaukee  
Public  
Museum



**DIRECTIONS**

**From North:**  
South on I-43  
Exit 1R (right)  
Civic Ctr. / Wells St.  
Wells St. to 8th St.

**From South:**  
North on I-94 / I-43  
Exit 1R (right)  
Civic Ctr. / Kilbourn Ave.  
Left on 6th St.  
Left on State St.  
Left on 7th St.

**From West:**  
East on I-94  
Exit 1H (right)  
Civic Ctr. / 7th St.  
3 Blocks North on  
7th St. to Wells St.