SUMMER 2003 INSECT FIELD TRIPS
BY THE MADISON AUDUBON SOCIETY
(Note: These are not collecting trips.

Saturday, June 28th
DRAGONFLIES OF ROCKY RUN (WEST)
Columbia County
9:00 A.M. to Noon

We will travel to the west section of Rocky Run Creek in Columbia County for a two-hour walk along wetland, old field, and woodland edge, focusing mainly on those fascinating, big and beautiful "macro-insects", dragonflies. They occupy a prominent place in the web of life in our aquatic ecosystems. While interest in butterflies and butterfly-watching has grown considerably over the past decade, dragonflies have been, until recently, one of the most neglected of nature's beauties. On this trip we will give them the attention and respect they deserve and learn about the identification, biology, behavior, beauty, and life-style of the various species we encounter. If we have time in between the dragonflies we'll check out some butterflies too!

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. Bring mosquito repellent for the shady areas.

Leaders will be dragonfly enthusiasts, Karl Legler and Dave Westover, authors of the color photographic guide to Common Dragonflies of Wisconsin.

DIRECTIONS: We will carpool and leave at 9:00 A.M. from the middle of the parking lot at Cub Foods on the east side of Madison. From the intersection of Highways 30 and 51 (Stoughton Rd.) go north on 51 and take the first right turn which leads to Nakoosa Trail and Cub Foods.

(Or meet at 9:30 A.M. at the west side Rocky Run Creek parking lot. From Madison go north on Highway 51. Approximately 4 miles north of Poynette turn right onto Morse Road and go east for about 3/4 mile. There is a small parking lot on the north side of the road.) If you have any questions regarding this trip, call Karl Legler at (608) 643-4926 (Sauk City).

Saturday, July 5th
MADISON BUTTERFLY COUNT
Dane County
9:00 A.M. to Noon

Our 13th annual count! This year we will be counting at a new location, the Arboretum's Grady Tract on the south side of the Beltline. Mark this hike and census on your calendar!

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 more than 400 North American counts are published in an annual report. Last year on the Madison census 13 people in 3 groups found 622 butterflies of 43 species. This year's group will have an enjoyable time finding, observing and counting butterflies. Counters are needed. Identification expertise will be provided by long-time butterfly counter, Karl Legler. 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

Please see FIELD TRIPS, page 2.
Accidental Tourists
by Douglas Buege

Tourism is a booming industry for Wisconsin. Just ask any of over 100 species of butterflies making regular or irregular tours of our state. We’re all familiar with Monarchs (Danaus plexippus), as common as Illinois license plates on Memorial Day. Other species, comparable to errant Montanans or Icelandic vacationers, voyage here less often. These “accidental tourists” descend upon us after catching favorable winds, hitchhiking on plants shipped in from southern nurseries, or finding other means still not understood.

2001 was a banner year for one visitor, the Red Admiral (Vanessa atalanta), notable for the striking reddish-orange stripe bisecting its black forewing. These wanderers found favorable winds in early May and July that splashed a bounty of the beasts northward. Widely distributed throughout the south, Admirals are uncommon in Wisconsin. A few successfully overwinter here in barns or hollown trees but not enough to account for the incredible numbers seen recently.

Admirals voraciously consumed nettles, leaving a defict of the tasty spinach substitute. The larvae, hatching from eggs planted on any of the Urticaceae, puncture petioles, causing leaves to droop. Spinning silky strands that fasten leaf edges together, caterpillars fashion tubes where they safely spend their juvenile lives, contentedly chewing up the plant’s flesh.

Wide dispersal of nettles allowed the Red Admirals to raise two or three broods during their sojourn. The more particular American Snout (Libytheana carinenta), relying on the less common hackberry (Celtis spp.), restricts its travels to open deciduous forests in the southern half of the state, where its coarsely barked host tree is found.

Snout Butterflies earn their name from two extended palpi that appear as a distinct proboscis. Lowering head to branch, the butterfly resembles a leaf as palpi imitate petiole and drably-colored angular wings drape to form blade. Even though hackberries are scarce here, the Snout butterfly enjoys a veritable feast when compared with its winged brethren feeding on rarer hosts.

Dutchman’s Pipe or Pipevine (Aristolochia), an anomalous ornamental in Wisconsin, is the chosen food for larval Pipevine Swallowtails (Battus philenor), one of our rarest wayfarers. Historical records of this visitor are spotty with populations appearing in Waushara and Sheboygan County, where escaped populations of pipevine once thrived. Folks who’ve planted Dutchman’s Pipe in their yards have been fortunate to see this special guest who refuses to return more than once in a handful of years.

Perhaps the best way to find these rare insects is to locate the young on host plants. Silk-encrusted nettle leaf tubes betray the secretive caterpillars of the Red Admiral, while the younger terminal foliage of pipevine and hackberry can secrete the other two species. Finding the young, you can search out the adults who won’t be far away. But alas, finding these lepidopteran rarities is more a matter of luck than skill. Their visitations depend on whims of wind and weather. After years of waiting, you might receive a visit from these unexpected guests, a true reward for your patience.

On Page 3 of the Feb. 2003 issue, the wrong name was given for the presenter at our annual meeting in November. The name should have been Anneke Joosse who gave a talk on the mordellidae (tumbling flower beetles) of Wisconsin. Originally, Nadine Kriska had been scheduled to speak, but there was a last minute change in programming. Our sincere apologies, Anneke!
Looks Can be Deceiving

by Megan Hyslop

In June of 2002, I was assisting in a summer school class geared toward middle school students. Everyday in class we’d go on a field trip to collect insects and identify plants. One day, a student asked for my help identifying an insect in his collection. I was dumbfounded. This fairly small insect had two pairs of mottled wings both of similar size, an unusually elongated head that looked like a beak, and most notably, a bulb on its rear resembling that of a scorpion’s stinger. After looking through several field guides, I found a small biography about the insect. I later helped the student spell out the order’s name, Mecoptera, and the common name, scorpionfly.

This dainty insect is very intriguing. It is so small but looks extremely dangerous. As I soon found out, this order had a lot more up its sleeve. To my surprise the “stinger” is harmless and occurs in males from the families Panorpidae. Instead of venom, the terminal bulb-like structure houses the male’s genitals. At the front end of the insect the beak-like structure is really its hypognathous head with chewing mouthparts at the tip.

Members of the family Bittacidae (hanging scorpionflies) are very different from their cousin the common scorpionfly. Bittacids capture prey with their raptorial hind legs while hanging upside down from vegetation. However, the majority of scorpion flies are not predators. Most feed on dead insects, plants and even mosses.

Aside from their appearance, their name is also deceiving. You may think that scorpionflies would live in dry, desert habitats but quite the contrary. Scorpionflies live in cool, moist, wooded places and some even live on snow!

The male scorpionfly’s technique in finding mates is also quite interesting. The male attracts females with a special pheromone. In some families, after the females follow the male’s trail of scent, the male presents the female with a food reward. This reward is thought to aid in the maturation of eggs in the female much like a blood meal is to female mosquitoes. Copulation occurs while the female is consuming her food reward. The adult female then deposits the eggs in moist, protected areas sometimes near stream banks. Scorpionfly larvae live underground and are usually eruciform (lepidoptera caterpillar-like), scarabeiform (‘c-shaped’), or campodeiform (long and flat with well developed legs). The larvae eat decaying matter including plant and animal tissue. After they reach full size, the scorpionfly pupates underground.

The name Mecoptera comes from the Greek word meco meaning “long,” and the word ptera meaning “wings.” In reference to the scorpionfly’s large and almost identical wings (though some species are wingless). Although most Mecoptera are only known from the fossil record, there are nine families and almost 500 extant species worldwide.

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SECOND ANNUAL DOOR COUNTY INSECT FIELD TRIP

Saturday, July 12th
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—whatever we can see and discover. 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. Waterproof 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 at (920) 839-9796 or e-mail: jstiefel@itol.com 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. Scientific research on the Hine's Emerald is taking place in this area.

Because the student's collections were graded primarily on the number of orders present, the student who caught the scorpionfly was very excited. On the last day of class, he donated the specimen to my personal collection. Needless to say I was excited and thrilled to have another order in my own collection. Maybe next summer he'll join our classroom again and find other unusual specimens.

Megan is a member of WES and a sophomore at UW-Madison majoring in Entomology-Natural Resources. This summer, Megan will be the Education Intern for the Butterfly Event at Madison's Olbrich Botanical Gardens. CONGRATULATIONS, Megan!
The University of Wisconsin-Milwaukee Field Station conducts a series of Natural History Workshops. These workshops offer an opportunity to study focused topics at college-level instruction under the guidance of noted authorities. Most workshops present two full days of instruction, and housing and meals are available at the Station. Enrollment is limited to 20; the atmosphere is informal and instruction is individualized. Workshops may be taken for graduate or undergraduate credit by enrolling in UWM, Topics in Field Biology. Fees vary. Please contact the Field Station for more information and a downloadable Registration Form. The 2003 workshop schedule includes seven courses:

**Vegetation of Wisconsin**
Instructor: Dr. James Reinartz
June 2-7 (Mon. - Sat.)

**Sedges:**
Identification and Ecology
Instructor: Dr. Anton Reznicek
June 13 & 14 (Fri-Sat)

**Lichens:**
Identification and Ecology
Instructor: Dr. Martyn Dibben
June 27 & 28 (Fri-Sat)

**Biology of Insects**
Instructor: Dr. Gretchen Meyer
July 18 & 19 (Fri-Sat)

**Spiders:**
Identification and Ecology
Instructor: Dr. Michael Draney
Aug. 22 & 23 (Fri-Sat)

**Composites:**
Taxonomy and Evolution
Instructor: Dr. Robert Kowal
Aug. 29 & 30 (Fri-Sat)

**Field and Laboratory Techniques in Mammalogy**
Instructor: Dr. Christopher Yahnke
Sept. 20 & 21 (Sat-Sun)

University of Wisconsin-Milwaukee
Field Station
3095 Blue Goose Rd.
Saukville, WI 53080
email: fieldstn@uwm.edu
Phone: (262) 675-6844

**Mystery Insect...**
Can you identify it?

This insect is about 3/8 in. in length. Basic color is dark brown to black. Lighter design/markings are bright yellow. The adults can be found on flowers. Larvae live in hardwoods. This specimen was found on July 17, 2002 at Newport State Park, Door County, Wisconsin. Individuals with the correct answer will be announced in the next issue of *The Wisconsin Entomological Society Newsletter.*

“"The conventional response of dousing infested plants and soil with biocides seemed promising at first, but using technology to combat natural processes hasn't worked. Around 1948, at the start of the era of synthetic pesticides, the U.S. used about 50 million pounds of insecticides a year and lost 7% of the pre-harvest crop to insects. Today, with nearly 20-fold greater insecticide use—almost a billion pounds a year, two-fifths more than when Rachel Carson published *Silent Spring* in 1962—the insects get 13% [of the pre-harvest crop], and total U.S. crop losses are 20% higher than they were before we got on the pesticide treadmill.”

— *Natural Capitalism* by Paul Hawken, Amory Lovins, L. Hunter Lovins
The morning of June 6, 2000 started out as an ordinary, quiet, warm summer morning at Hidden Corners Sanctuary north of Bailey’s Harbor. I made my usual morning inspection for new moth and insect visitors under the outside light that is left on all night to attract them. This time I found something special. It was a very large moth that looked like a Cecropia, but yet it didn’t. Comparing it with images in my field guide, I found it to be a Columbia Silkmoth, not a Cecropia. This determination was made because there was no red beyond the postmedial (or pm.) line. Truthfully, up until that moment I had never heard of a Columbia. I should have, because its host/larval plant is Tamarack (Larix laricina)—of which we have many.

In my exuberance, I contacted moth expert, Les Ferge, about the possibility of finding a Columbia in Door County. He, too, was very excited. Unbeknownst to me, the experts had been looking for this species in Door County for over 40 years. This turned out to be a spectacular discovery! Immediately I thought of the possibly of rearing its larvae, since I had never seen them and they, too, had never been found in Door County. Unfortunately, after several days of trying to get the moth to lay eggs, I remembered to check the antennae. Oops, it was a male! The male antennae is long and feathery, while the female’s is short and sparse. No wonder my plan wasn’t working.

The following year, on June 14, 2001, we had another Columbia Silkmoth visit under the same outside light. This time it was a female. I encouraged her to lay eggs by gently placing her inside a large brown paper bag, which she obligingly did on June 14. The eggs were moved to a large rearing jar. The morning of June 26, 2001, I discovered many tiny, black, bristly caterpillars crawling around the jar. Up until this time, the accepted/traditional way to rear this species was to tie the caterpillars inside a sleeve on a living Tamarack branch. Because this method would make it difficult to monitor and photograph growth progression, my husband and I dug and potted up a small Tamarack tree, placing it on our kitchen counter. This way we could closely monitor the fourteen caterpillars we carefully deposited on it. A little voice (you might call it instinct), told me to do it my way, as well. So I took ten tiny caterpillars and two large rearing jars, placing five larvae in each jar—with the cut branch of a Tamarack which had been placed in a small container of water to keep it fresh. The jar was covered with an old nylon stocking, secured by a rubber band, to keep the caterpillars from escaping. In two days, the larvae on the living, potted tree were dead and dried up.

I also sent about ten eggs to Les Ferge for him to place in a sleeve on a living tree at his cottage in northern Wisconsin. That sleeve was attacked by a bear; the sleeve and larvae were destroyed. The only larvae that survived were the ones I placed in the two jars. When the ten surviving caterpillars were eight days old, they made their Door County Caterpillar Debut at one of the Thursday night programs sponsored by The Ridges Sanctuary in Bailey’s Harbor. This was probably the first time caterpillars ever made a debut.

It took until the end of July for the larvae to form their cocoons.

Please see COLUMBIA, page 7
The thermometer outside was below zero and dropping. I was hibernating beside a cheery wood fire, watching something unremarkable on TV because that is where the stove is, and the only place I could get warm, when I saw what appeared to be a flashy little butterfly zipping past—fast. Winter insects are always worth investigating so I gave chase. It was a lively creature and eventually landed on a lampshade, apparently attracted by the light.

Butterflies in our house in midwinter are not unheard of because the larvae that I raise in summer occasionally escape and pupate in some hidden nook only to emerge too soon in the artificially heated environment. As soon as it landed however, I knew it was no butterfly, but a moth.

It was only about an inch across, delicately built, with boldly patterned wings of black and white. At the head and tail ends were patches of lovely golden orange. The eyes were black as tiny beads, the antennae threadlike. The moth sat spread out showing all four splashy wings, then neatly folded the rear wings under to assume a triangle shape. I'd never seen a moth like this one, and it wasn't in any of my insect guides.

I got a jar and tried to catch it, but it was too fast. Later when I got ready for bed, it landed on the bathroom mirror. I popped the jar over it, bottled the moth up and put it into the refrigerator. This is a common way to slow insects down for a leisurely look-see and picture-taking. My plan was to photograph it and e-mail the photo to my friend Janice Stiefel, editor of the Wisconsin Entomology Society Newsletter. She has a large database of her own moth photos. If she can't make an identification, she knows who can.

The next day, I put my plan into action; got the camera ready, then put the moth on a suitable background, and it immediately flew away. It vanished. I hoped it would come to a lamp again the next night, but no luck. I asked Martin, my husband, to watch for it. Two days later he said he'd seen it early in the morning on a window. Luckily it was still there. I grabbed all the camera stuff and went after my photo. I photographed it with some difficulty since it was backlit on a window, but got a usable picture to send to Janice.

But before I could mail it, I found an email from her waiting for the adult moth might hibernate as it was hibernating beside a cheery wood fire, watching something unremarkable on TV because that is where the stove is, and the only place I could get warm, when I saw what appeared to be a flashy little butterfly zipping past—fast. Winter insects are always worth investigating so I gave chase. It was a lively creature and eventually landed on a lampshade, apparently attracted by the light.

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MYSTERY INSECT
ANSWER:

SPITTLEBUG
(Philaenus spumarius)

Terrie Cooper, Ellison Bay
Les Ferge, Middleton
Fred Horneck, Elkhart Lake
Dorothy Legler, Sauk City
Carroll Rudy, Chilton
Andrew Williams, Madison
Karen Wilson, Egg Harbor

Editor’s Note: There were no incorrect answers!

COLUMBIA, from Page 5

They overwintered in our cold fruit cellar, and eclosed (emerged) the following spring, between May 19 and 25, 2002. All were released, except for two females. I placed them in a wire cage, trying to lure males to their pheromones at night. Supposedly males only come out around dawn. Even so, we were not successful in obtaining fertile eggs from those two females.

On June 26, 2002, Hidden Corners had a third visit from the Columbia—another female. She laid eggs and the whole process started over again. Due to previous experiences, I did not place the larvae on a living tree. They survived in a large rearing jar on a cut Tamarack branch placed in water. The cocoons are now awaiting their majestic eclosion in Spring.

In 1983, Les Ferge wrote a detailed paper on the distribution and hybridization of the Columbia Silkmoth. He indicated that this moth "occurs in a rather narrow band extending from Nova Scotia through Ontario to eastern Manitoba, ranging southward in bogggy areas of Maine, Michigan, and Wisconsin...predominantly in the north-central region. The pitted glacial outwash topography distinguishes this area from other parts of Wisconsin, as it is peppered with numerous lakes and potholes, favoring the development of numerous and very large Tamarack bogs." Surprisingly, the Columbia and Cecropia Moths often occur together in the same localities and at the same time and even hybridize. Fortunately, all the Door County specimens were true Columbias, not hybrids. According to Canadian, Bill Oehlke's website, when a Columbia and Cecropia cross, the males will be viable but often the females will be sterile, or if eggs are laid and hatch, the larva will die of disease.

Les goes into great detail on historical records and survey results in his report. Since 1983, when it was published, aside from our three Door County sightings, this species has only been found one time—and in Burnett County. It was recorded once in 1930 from Ozaukee County at the Cedarburg Bog and has never been found in Marinette, Oconto, Menomonee, Brown, Kewaunee, Manitowoc, or Sheboygan Counties. The counties where it has been reported, prior to 1983, are Ashland, Douglas, Iron, Sawyer, Price, Vilas, Oneida, Forest, Lincoln, Langjade, Marathon, and, of course, Ozaukee.

Anyone living in close proximity to Tamaracks might want to leave an outside light on all night, especially during the month of June. Who knows, perhaps you, too, will be visited by the elusive Columbia Silkmoth.

References:
Oehlke, Bill. Website: http://www3.islandtelecom.com/~oehlkew/zcolmoth.htm

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MAGPIE, from Page 3

well. It's usually seen in summer, not winter, fall or early spring, so it might have come into the house as a pupa. But Janice reported that the one she raised from a larva eclosed (emerged) in October, implying that the adult might hibernate. Though we have plenty of nettles growing around our yard, I do not bring any inside for the winter, so how the moth got inside is still unknown. It could have come in on the Christmas tree, firewood, my husband, Martin's bonsai trees, or maybe even in my orchids.

What we do know is that it is remarkably tolerant of cold. It took off after both Janice and I refrigerated it, escaped my first photo attempt and migrated to the coldest room in the house where the night temperatures reach the 40s. As a day-flying moth, it then tried to get out the window, spending the day on the icy-cold pane. It certainly indicated a preference for inhabiting a cold place in the winter.

When canoeing the river in summer and fishing on lakes I have seen many flashy little day-flying moths that resemble butterflies. I could never get close to them, but now believe some of them were probably Small Magpie Moths. Next summer I will find out for sure.

There are always mysteries to explore and interesting puzzles to solve right in our own backyards. If I am lucky, I might find some larvae on the nettles next summer, raise some, and find out how Small Magpie Moths spend the winter.

Carroll is a member of WES, former biology teacher, and editor of Calumet Nature Studies Newsletter, published by Ledge View Nature Center, Chilton, WI.
Field Trips, from Page 2

**Sunday, September 14th**
**HOPPERS!**
(Grasshoppers of Wisconsin)
Sauk County
1:30 P.M.

*Mark this trip on your calendar!* There has been steady progress over the past decade in understanding Wisconsin insects. We've seen several new books on butterflies and dragonflies. But what's next? Now it's grasshoppers on the "cutting" edge. A new book, *A Guide to the Grasshoppers of Wisconsin* by Kathryn Kirk and Charles Bomar, will soon be published by Wisconsin DNR. Our appreciation of grasshoppers will take a big leap forward because the book will—for the first time—exhibit the state's grasshopper species with color photos, range maps, keys for identification and species accounts.

Co-author Kathy Kirk will lead this trip into sand prairie areas in search of these fascinating and beautiful insects. We will spend 2-3 hours learning how to discern grasshoppers from katydids, and learn about behavior, ecology, life history, and the biology needed for identification. We will net-and-release the various species for observation and discussion. Attendees who have aerial nets and minnow nets (!) are encouraged to bring them to have fun chasing grasshoppers. Also bring close-focusing binoculars if you have them; they are always useful.

Meet at 1:30 P.M. at the north parking lot of the Mazomanie Oak Barrens. South of Sauk City take County Hwy. Y west from Hwy. 78 for about a mile. Turn left and take the short road to the parking lot.

Call Kathy at (608) 442-1642 only if you have a question about the trip.