Janice went to be with her Lord on March 18, 2008. She suffered a burst intestine at home about 3 p.m. on March 17 and was immediately taken by ambulance to Door County Memorial Hospital. The diagnosis was that she would not survive. She died peacefully at 8:40 p.m. the following day with John, Kay, Mark, and his wife Kay at her side.

Janice was born in Chicago, IL and lived in Skokie, IL while attending grade school. Even the name of the school fit with her interests—East Prairie Grade School. She spent whatever free time she had on the prairie around their house exploring and playing with all the “critters” that she found.

After her graduation in 1949 the family moved to a farm in Pittsville, WI. She attended Pittsville High School and graduated in 1953. The high school years were busy with schooling, farm work, and any spare moments spent in the field with her beloved “critters.”

Once again, the family moved, this time to Milwaukee, WI, and Janice found employment as an executive secretary at Cleaver-Brooks Co. She and John met at Christ Memorial Lutheran Church in 1954 and were married in that church on Sept. 7, 1957. They spent the next two years at Madison, WI where she worked as executive secretary at Wisconsin Power and Light Co. while John finished his BSME degree at UW.

Upon graduation in 1959, John took a job with Gilson Brothers Co. and they moved to a new home they designed and were building in Mequon, WI. Janice became a stay-at-home mom when Kay was born in 1960, followed by Mark in 1962. She gave priority to managing the household while continuing to nurture her interest in things natural.

In 1971, John took a job with Gilson Brothers Co. in Plymouth, WI. The family moved into a new home they designed and were building on 3+ acres along the Mullet River. Janice continued managing the house but was also active with the kids at St. John Lutheran Church and School.
elastrina is a most perplexing genus of butterflies, with a number of closely similar North American species being described and named in recent years (Wright & Pavulaan 1999, Pavulaan and Wright 2005). Two species have previously been recognized in Wisconsin: the Spring Azure, Celastrina lucia (Kirby, 1837), and the Summer Azure, Celastrina neglecta (W. H. Edwards, 1862). A third newly described species has now been documented in Wisconsin.

A single female specimen answering the description of the Cherry Gall Azure, Celastrina serotina Pavulpan and D. Wright 2005, was located in the collection of Les Ferge. It was captured in Marathon County on 3 June 1968, and its identity verified by Harry Pavulpan and David Wright. It is likely that other specimens may be found in collections at the UW-Madison and the Milwaukee Public Museum, but these resources have not yet been searched.

Celastrina serotina is unique in that its larvae feed on elongate red galls on the upper surface of Black Cherry (Prunus serotina) leaves. The galls are produced by the Eriophyid mite Phytoptus cerasicrumer Walsh (Pavulaan and Wright 2005).

The following identification tips are extracted from the original description of Celastrina serotina (Pavulpan and Wright 2005), which also contains much more detailed information on all these species. Celastrina lucia is the most easily identifiable of the three, with the underside dusky gray and heavily marked with black. It is the earliest of the species in Wisconsin to emerge, with its flight occurring from early April into early May. Distinguishing the closely similar C. neglecta and C. serotina solely by wing characters is challenging. Both have a similar arrangement of black spots on a white underside. The flight of C. serotina in Wisconsin is likely to occur from late May into early June, while C. neglecta begins its emergence in late June. While this seems quite straightforward up to now, there is another source of confusion. C. neglecta has been found to produce a spring brood occurring at about the same time as C. lucia. The best way to distinguish spring neglecta is by examining the dorsal forewing, which has strong whitish veins along the leading edge (David Wright, pers. comm.).

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There are so many wonderful treasures to witness in the world. Insects bring millions of possibilities to those of us who study and observe them. Most people do not stop and take the time to learn about or even look closely at the hexapod world. We have lost one very special treasure this year - our newsletter editor and friend, Janice Stiefel.

My first contacts were from a woman from Plymouth, Wisconsin who took great pictures of any caterpillar she could find. They were great photos, and Janice would rear many of the larvae out and then document the adult moths and butterflies that developed. She had so much enthusiasm, passion, and energy. Janice always had a smile and a great observation to share.

You could tell John and Janice had a very special relationship. Door County was the perfect place for them to settle. Every time I saw Janice and John, it was as special to me as a Door County vacation.

The WES newsletter blossomed when Janice took over as editor. Her lovely writing and her many contacts with other writers and lovers of the natural world brought the newsletter to new heights.

Janice had an impact on a national level, and her passing has been acknowledged by a number of people and societies. I feel blessed at having had a chance to know such a special person who was as much a treasure to me as swallowtail butterflies, wild silkworms, and shiny beetles.

**Lab Notes**

In the world of insects, 2008 has been on the damp side. **Mosquitoes** have had a great year, and we may have added a new species, which brings the total to 56 species in the state.

I saw my first **monarch** on May 18\(^{th}\) and have had a couple of successful larvae on our butterflyweed, but overall it seems a down year for day-flying leps. The **red admiral** outbreak of 2007 has not been repeated.

I have had a number of calls on and have seen in our own garden a low number of bee pollinators. **Honeybees** had an average winter kill, and the colony collapse disorder that has caused so many problems for migratory beekeepers and is getting so much press is not an issue in Wisconsin. I have been getting more swarm calls in the last few years, which suggest feral colonies are returning. This means some honeybees have partially solved the mite issues.

The pest of the year is the **Japanese beetle**. Populations are taking off for the first time in Appleton and Green Bay but have been high for a number of years in the southeast and south-central parts of the state. My colleague Chris Williamson found grub densities of 75/sq ft in a golf course in Madison (new world record?). The heavy rains of last August, little frost in the ground, and a wet spring made for ideal conditions for the grubs. The good news is the adult feeding is cosmetic.

The **earwigs** liked the wet spring, and I received a specimen of a three-inch long spotted **garden slug** (*Limax maximus*) from Manitowoc County. This is the first one of these European critters I have ever seen in the state. The rains did promote an outbreak of the **Entomophaga** fungus and helped drastically reduce **Gypsy moth** populations in many parts of the state. It has been a great year for **fireflies** - but overall I would say has not been a banner year for anything that does not swim.

Phil Pellitteri

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**Fall Meeting**

Our fall meeting of the Wisconsin Entomological Society will be on

**Sat., October 18**

**1- 4 pm**

**at Russell Laboratory**

**UW Campus**

**1630 Linden Drive**

**Madison**

This will be the 25\(^{th}\) anniversary of the annual William A. Seiker memorial photo salon. You can bring, email or send a CD to me of 1-5 images. We judge the photo quality as well as the difficulty of getting pictures of the subject matter, with equal points given to each. We will also have a couple of talks to round out the day. Please contact me if you have something to share or want to be on the program. We will have elections of officers and a discussion and vote on raising the membership dues. If you have any questions, you can email me at pellitte@entomology.wisc.edu or call (608) 262-6510.

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**Spotted Garden Slug**

*Limax maximus*
Mystery Insects
Submitted by Phil Pellitteri

1. At left is an insect that was found in Columbia County, Wisc., in early August, crawling on garden plants.

2. At right is a "ball" of insects found on a spruce tree in Lincoln County, Wisc. Close-up of one of the insects below.

Send your answers to the editor:
P.O. Box 105
New Holstein, WI 53061
or email
turkeyfeather@tds.net
(Please put WES in the subject line)
The staff at Ledge View Nature Center in Chilton had a good laugh back in 2006. Something we said to retired biology teacher Carroll Rudy—who had recently developed a fascination with the beauty and amazing life cycles of moths—caused her to exclaim in surprise that we’d never told her there were moths in our caves.

We were so accustomed to seeing them that we’d given them no thought, but her surprise made us begin to think there might be something strange about moths in a cave. Our curiosity was piqued.

The moths are found in Mothers Cave, which can only be accessed and traversed in a belly-crawl. From April through November staff are in the caves every day with school kids, teaching geology and biology. The moths sit quietly, wings flat against the rock ceiling, pretty much the same color as the dirt, the rock, and the bat poop—brown, gray, dark brown. They cling to the cool limestone and are dotted, like it, with condensation. Their tiny eyes shine like copper beads in a flashlight beam, but the water droplets shine like silver beads, so the moths are easy to overlook. The kids almost never even notice them. Carroll identified them as hopvine moths, *Hypena humuli* Harris (thanks to Phil Pellitteri and the UW-Madison entomology lab for verifying the vouchers’ ID).

It was difficult to locate resources specifically on hopvine moths and caves, and we didn’t find much on hopvine moths alone, either. Most literature on hopvine moth ecology appears to focus on their damage to crops. Our search was aided by Janice Stiefel, who kindly shared entries in her reference database.

We found that though it is unusual for moths to be found in caves, it is not extraordinary to find them there. A few species have previously been reported in caves, such as the herald (*Scoliopterix libatrix*) and *Triphosa haesitata*. We can recall three occasions when a herald was seen in our caves; we thought it was accidental.

Much of the little information we found tended to generalize. Personal observations of course simultaneously widened and narrowed the knowledge we had. For example, Wagner/Schweitzer/Sullivan/Reardon’s online draft, “Owlet Caterpillars of Eastern North America (Lepidoptera: Noctuidae),” reported that hopvine moths are found in wet, mesic, or riparian areas. Ledge View sits on an outcropping of the Niagara dolostone (limestone) with no water. The nearest water is half a mile away. However, the moths are found exclusively in one room of Mothers Cave, and this room exits out the dumb and cool north-facing, mossy bluff of the ledge, into mature deciduous woodland. Clearweed (*Pilea pumila*), a type of nettle, grows at the cave exit, and nettles (usually found in damp places) are one of the reported food plants of hopvine moths.

The Arnett book, *American Insects* (1985), described sexual dimorphism in coloration. Based on their color, our moths appeared to all be males. In fact, Carroll found that our cave moths comprised both males and females. A random sample of seven produced four males and three females, and our population could not be gender-separated based on variations in color or pattern.

After two years of observations, we hypothesize that the moths are using Mothers Cave as an aestivation and hibernation site. Carroll found hopvine moths coming to lights generally in May, at which time there were no moths in the cave. The first “cave” moths have only been found in July (48 counted 7-30-06, 49+ counted 7-13-07, 30+ counted 7-29-08. There may have been more: Moths tucked into crevices could not be counted, as we would not have been able to see them.). The room temperature in July is 46-49°F and relative humidity 93-96%. On 8-3-07 we counted 125 moths in the cave.

Carroll reported again seeing hopvine moths at evening lights in late August-mid September. Numbers of moths in the cave dropped to little more than sin-

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Four hopvine moths, Mothers Cave, Chilton, WI  
*Hypena humuli* Harris (Noctuidae)

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Please see, MOths IN CAVES, page 6
had the same effect on five of the
seven as would losing the head:
severe brain damage (Rudy 2006).
This made us wonder if the moths
in the cave were surviving the low
temperature due to adaptive strategy
like concentration of glycerols,
or if they were just “deadheads,”
since the observed behaviors were
similar. Nevertheless, the numbers
of moths in the cave dwindled
through the winter. On 4-9-07
there were four left. By the end
of April '07 and '08, none were
found.

The moth population inside
the cave was impacted by preda-
tion. Loose little piles of wings
were occasionally observed on
stones against the walls. Joe
Senuulis (Wisc. Dept. of Natural
Resources) did a bat survey on
1-22-07, counting 25 myotis
(lucifugus and septentrionalis)
and pipistrellus. These are the
smallest of the Wisconsin bats,
and they have been seen inside
Mothers Cave. Myotis do glean
(Faure 1993; Ratcliffe & Dawson
2003). My opinion is that the
moths were instead eaten by
mice, though, because every one
of the little wing piles was on a
small stone platform against a
wall. In contrast, bats could
have discarded moth wings any-
where.

In winter 2007 it was decided to
drop the moth survey to pro-
tect the hibernating bats from
disturbance.

(Other life found commonly
in Ledge View’s caves include
cave spiders, Meta menardii;
cave crickets, Hadenoecus
subterraneus; big brown bats,
Eptesicus fuscus; hellomyzid flies
(thanks again to Phil P. for verifi-
cation of voucher); an unidenti-
ified mosquito; and garter
(Thamnophis sirtalis) and fox
snakes (Elaphe vulpina).

*Amateur entomologist/
photographer Bill Johnson of
Minneapolis had photographed
both herds and hopvine moths
in caves in August 1998;
and McKillop (1993) reported
herds and triphosa haesitata
in Minnesota caves. Kikukawa
(1982) reported hopvine moths
near the entrance of a Boone County,
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Pink-Legged Tiger Moths
(Spilosoma latipennis)
Notes and photos by Carroll Rudy

Here are photos of stages for #8133, Pink-Legged Tiger Moth (Editor's note: adults can be seen in color at http://mothphotographers-group.msstate.edu/)

The first 3 instars all looked the same except for size. They were greenish with white fuzz. They looked like bits of lint.

I did not photograph the first two instars as they were too tiny. It was all I could do to feed them without squashing them. Some got lost.

The first two instars were communal. I fed them dandelion leaves.

In third instar the caterpillars went their individual ways.

In the fourth instar the bristles were longer and darker. I had 20 caterpillars left.

Two spun cocoons that included their own bristles, and went into diapause.

In third instar the caterpillars went their individual ways.

The fifth instar changed color to chestnut brown. Caterpillars would not sit still anymore and ran very fast, making them difficult to photograph. One got away.

The rest dried up and died. I don't know why.

And... Here's Mama before she laid her eggs. The eggs were white and placed in two patches inside the vial. She's playing dead as most tiger moths do when they are disturbed.

At the end of the 5th instar they quit eating and began to roam for several days, then they became quiescent. Six pupated without cocoons.
spite so many responsibilities she also found time to continue her fascination with things natural, concentrating on plants.

By the time the kids were in high school she found more and more "free" time to pursue the study of wildflowers, accumulating over 1,000 typewritten pages of notes and photos. As the kids graduated and went off to college, Janice blossomed as a writer, researcher, and photographer. She eventually became editor of various publications. The 30 years at Plymouth ended when John retired from Sargento Foods Corp. in 1998. They moved in 2000 and Janice continued her research into things wild, concentrating mostly on moths and their life cycle—egg, larvae, pupae, and adult. She was now lecturing extensively to spread her knowledge and to try to get others to share the same enthusiasm that she felt for her subjects. Her expertise became recognized nationally with more than 800 photos and documents on two different websites. She also provided photos and data for several different field guides.

On Sept. 7, 2007 Janice and John celebrated 50 years together with the kids at Hidden Corners Sanctuary. Janice’s edema health problems had already kept her off the trails for the previous two summers, and she was looking forward to better health for the summer of 2008. Unfortunately, that was not to be.

Her legacy of written works, photos, and data will continue to carry her memory forward. She would be quick, however, to play down her contribution and to give thanks to God "for great things He has done!"

Janice wrote many poems in her lifetime and loved rhyming poetry. John found one poem that she had among her archives which contained no author. She may or may not have written it, but it sure fits.

**God's Gift of Today**

Look to the day with a challenge. 
Lift your eyes to the sun, not the shade. 
Keep your heart filled with Son, as you travel along 
For this is the day that the Lord hath made.

Look to the day with a purpose 
Of fulfilling the plans that you've had. 
With a joy in your heart that will never depart 
For God's made this day to be glad.

Look to the day with a prayer 
And a quiet request for His aid. 
And be glad all day through 
No matter whatever you do.