

# Kentucky Lepidopterist

Newsletter of the Society of Kentucky Lepidopterists

Volume 32 Number 2 June 2006

THE SOCIETY  
OF  
KENTUCKY  
LEPIDOPTERISTS

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Loran Gibson - 2008\*  
Richard Henderson - 2008\*  
\* term expires

### **The Society of Kentucky**

**Lepidopterists** is open to anyone with an interest in the Lepidoptera of the State of Kentucky.

Membership dues are annual: \$12.00, and can be sent to the Treasurer: Les Ferge, (see above).

## **Summer Field Trip Information**

**7 - 9 July 2006**

The summer field meeting will take place from 7-9 July in South Central Kentucky and will be led by Jeff Marcus. Our focus will again be Mammoth Cave National Park in Edmonson County and the Upper Green River Biological Preserve in Hart County. The timing of our visit roughly coincides with the expected second flight of *Xanthopastis timais*, whose caterpillars have been observed in the park, but which has yet to be collected as an adult in Mammoth Cave. We will be staying at a different location this year: the Maple Springs Research Center (near the Maple Springs Campground), North of the Green River Ferry in Mammoth Cave National Park. For people who prefer to sleep outdoors, there is also space for you to pitch your tents.

On Friday night, July 7, we will gather at the Maple Springs Research Center around 6 pm for a cookout. We will set up sheets and people will be welcome to set out light traps. On Saturday morning, after breakfast (which Jeff will supply) and collecting the light traps from the night before, most of us will explore various parts of the park for butterflies and to scout for additional trap locations. Jeff Marcus (and anyone else who is interested) will lead an outreach program for the general public along the Echo River Springs Trail (off of the Green River Ferry Parking Lot) starting at 10 am. He will set out bait and live-catch light traps the previous day so that people can see different Lepidoptera trapping methods and a wide variety of species. In the evening, we will have dinner either in Brownsville or in Cave City and converge back at the Maple Springs Research Center by 7 pm to set up a sheet. National Park visitors may join us from 7 to 10 pm, when the Green River Ferry closes.

On Sunday morning we will breakfast together, collect traps, and wrap up the meeting.

### **Directions to Maple Springs Research Center Mammoth Cave National Park**

1. Following I-65 north bound.
2. Take the Exit 48 (Park City Exit). If you are running very late, see note at end of directions.
3. At the end of the I-65 off ramp, take a left turn. This will take you into the park.
4. Follow this road (South Entrance Road) until you come to a junction (right past Sloans Crossing Pond) take the road that leads off to the right towards the Visitor's Center (second main road on your right, the first one leads to Cave City).

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5. Follow this road for about one mile (about one quarter of a mile before you reach the Visitor's Center).
6. You will see two road intersections along your way on the South Entrance Road. The first intersection (with blinking light) has a road to the left (goes to cave entrances and is off limits to civilians) and right (goes to Cave City). Go on by these until you come to the next intersection. The road to the right goes to the Ranger Station, Maintenance Area. The road to the left goes to Green River ferry. Follow this road and take the ferry (free) across the Green River. Note: the ferry only operates from 6:00 AM – 9:55 PM Central Time.
7. After exiting the ferry, continue for about 2 miles and take a left turn at the sign for Maple Springs Research Center and Maple Springs Group Campground. The Research Center will be on the right.

Note: If you are arriving after 10 pm, the Green River Ferry will be closed. You will have to take Exit 65 (Munfordville Exit) off of I-65. Take 88 East, turn left onto Cherry Spring Road (which turns into Club Run Road). Turn left onto Green River Ferry Road, which will take you into the National Park. Turn right at the sign for Maple Springs Research Center and Group Campground. The Research Center will be on the right.

## July 4<sup>th</sup> Butterfly Count

1 July 2006

The annual July Fourth Butterfly Count in Oldham County will be held at the Horner Wildlife Sanctuary, Brownsboro, KY, on Saturday, July 1, 2006. We will meet in the parking lot of the small restaurant in Brownsboro at 9:30 a.m. and will be counting from 10:00 a.m. to 3:00 p.m. Alternate date in case of heavy rain or overcast will be the next day, July 2, at the same time. Brownsboro is less than a mile from Exit 14 of I-71. Go left from the bottom of the ramp of northbound I-71. All are welcome, and nets will be provided.



Group photo from the 2005 butterfly count

## Kentucky Lepidopterists Visit the Monarchs Overwintering in Mexico

By Charlie Covell

The overwintering sites of Monarch butterflies in the Transvolcanic range of Michoacan, Mexico, were first discovered in 1976, and for a number of years a thriving but seasonal business has grown up at two of the known sites: El Rosario and Sierra Chincua. In January a group including several Kentucky Lepidopterists flew to Mexico City. Led by Dr. Tom Emmel, the group included Bill and Nancy Black, Chris Black and his daughter Kirby, Charlie Covell and his sister Alice, Marcia and Jim Jumblatt. They were then transferred by bus to the town of Angangueo, a small distance from the overwintering sites. Our small Hotel Don Bruno was clean, comfortable, and scenic, with a lovely garden in the central courtyard. Meals were ample and generally, excellent. After a first night of rest, we embarked to El Rosario, paid a small fee, and walked past a couple hundred yards of shops lining a path up the mountain. Here we were at about 11,500 feet elevation, and the climb up the mountainside was mostly on a good path with irregular steps in parts, and rope handrails to grab onto. Many of us bought roughly carved walking sticks, and I hired a man to assist me by carrying my bag of camera equipment, binoculars, and water supply. With a bad knee, it was tough going even with that assistance.

After we had climbed to a certain level, we were directed off to the right on a roughly made new trail for about 100 yards to the place where the monarchs had moved from their customary spots to find more comfortable "quarters" in the Oyamel Fir trees that covered the mountainside. It is important that the butterflies be in trees where it is not too warm, because if they warm up too much, they use up stores of energy and then have to fly away to find nectar. They are in danger of using up their energy supplies before they can fly north and begin their spring reproductive activities in northern Mexico, Texas, and nearby states. It is also harmful if they experience a winter freeze such as the one in January 2001 that killed off millions of monarchs. Such a kill-off did not occur during this past winter, fortunately, and the population size was estimated to be moderately large again after another drop-off in 2004-05. It is a very delicate balancing act these butterflies go through to exist in this unique pattern of northward and southward migration. Thus the butterflies here were pretty far from the path, and the going was very rough on the crumbly and dusty volcanic dirt. We got to the roosting site, and local men were there to be sure we did not get too close to the clusters high in the trees.

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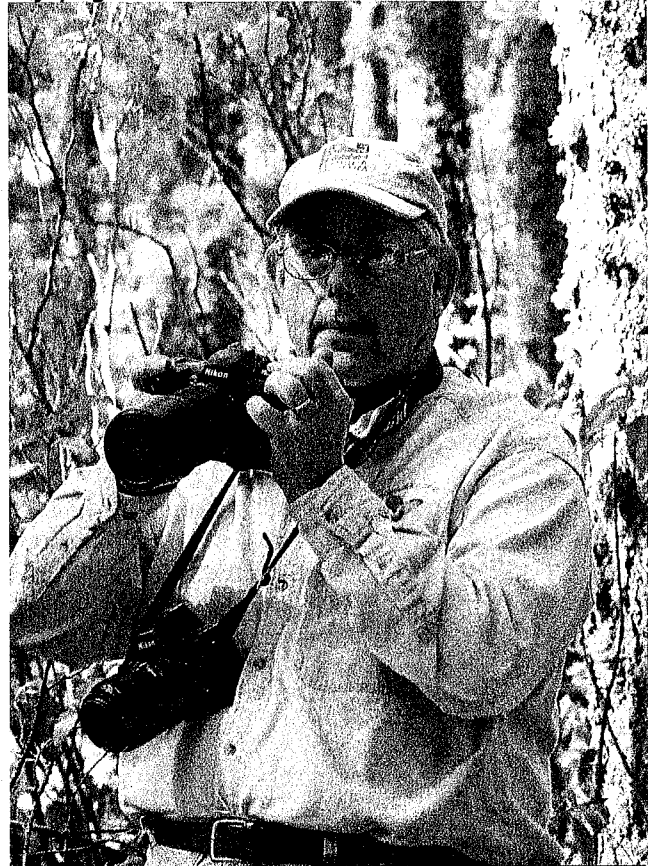
They had ropes cordoning off the site, so we were unable to get amongst the clusters for good close-up photos (which could be done in earlier years before there was this restriction). There were a few clearings where the butterflies soared around; but without the best of telephoto lenses and binoculars the experience was a bit disappointing. We returned to the bottom of the mountain by mid-afternoon, and bought souvenirs and snacks at the shops there. Our bus ride back to town took most of an hour.



A cluster of monarchs in Mexico

Our second day took us a bit farther, to the Sierra Cinqua site. There we rented horses to carry us up the mountain to the roosts about 2 miles up. When we got to the "end of the line", we again were told we had some distance to climb down the far side of the mountain to the place where the butterflies had moved. It was rough going again – more so than El Rosario. Again we were restrained by ropes and thus could not get too close to the roosts. One special feature there, however, was a small draw with a rock wall completely covered with monarchs. To those familiar with the overwintering behavior, this was a new roosting phenomenon. The climb back to the mountaintop where the horses awaited us was excruciating for me and for a few others. However, I was amazed at the large number of tourists – mostly Mexican, including elderly and very young – who

climbed to both sites. I was happy that they were enjoying this national treasure in their midst.



Charlie Covell photographing monarchs in Mexico

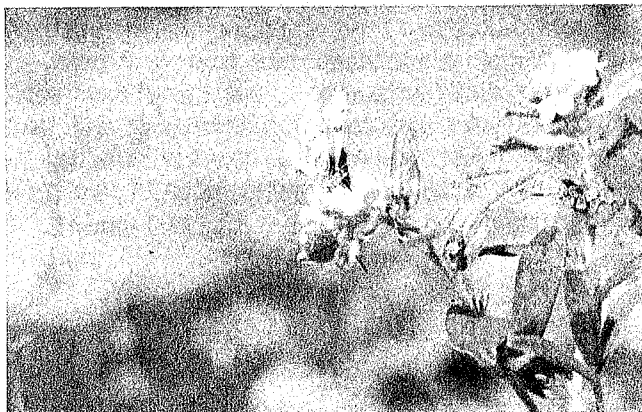
Next day we drove back to Mexico City and to the huge Aztec pyramids at Theotihuacan. We saw ancient stone carvings of butterflies with heads of quetzal birds among the more interesting features. We wove through the city and finally arrived at a downtown hotel, had a great farewell dinner together, and next day returned to our homes. It was an experience of a lifetime, and I hope this phenomenon will continue for generations to come. It will take some improved conservation, however, and lucky weather to assure that the phenomenon of migration to and from Mexico remains.

**Letter from the President**  
***You Win Some, and You Lose Some***

I hope this letter finds everyone well and enjoying the spring weather. It has been a busy spring for me—I had my largest class ever this semester at Western Kentucky University, with about 60 students taking my Genetics course. That's about double what the enrollment was when I started teaching at WKU three years ago.

(Continued on pg. #4)

When I wasn't grading student papers, I spent much of the month of April taking day trips up to Mammoth Cave National Park to see if I could find additional localities for the Olympia Marble (*Euchloe olympia*), other than the Mammoth Dome Sink Trail site that many of you have known about for many years. In particular, I made repeated visits to the First Creek Trail, north of the Houchens Ferry in Edmonson County, where my friend John Andersland had found abundant growth of the host plant smooth rockcress (*Arabis laevigata*). The *Arabis* was certainly abundant, but *E. olympia* certainly was not. In fact, it was completely absent. In order to make sure that I had the timing right, I also visited the Mammoth Dome Sink site every 7-10 days. When *E. olympia* was flying at Mammoth Dome Sink, which this year was roughly April 15 to May 1, none could be found at First Creek. While the maxim of "find the food plant, find the bug" may work much of the time, the presence of the food plant is a necessary, but not necessarily a sufficient condition. I'm not certain why First Creek is not populated with Olympia Marbles, but one possibility is that the tree canopy over the *Arabis* there is much denser than at the Mammoth Dome Sink site. There is also considerably less diversity at First Creek in terms of nectar sources for the adults. At Mammoth Dome Sink, *E. olympia* can be seen feeding on spring beauties (*Claytonia virginica*), hoary puccoon (*Lithospermum canescens*), and false garlic (*Nothoscordum bivalve*), but at First Creek, only spring beauties are found. However, Loran Gibson reports that the adult population of *E. olympia* at his sister's farm in Owsley County seems to be feeding exclusively on spring beauties, so while this may be a contributing factor, it cannot be the entire explanation.



*Euchloe olympia*

So, in the end, I spent a great deal of time looking for a bug that wasn't there. I guess you can't win them all. Next spring, if I have time, I will try to explore some of the other places for which *Arabis* is known

at Mammoth Cave. Randy Seymour, in his "Wildflowers of Mammoth Cave" reports *Arabis* along the Good Spring Loop and the McCoy Hollow Trail, and I have found some of it along the River Styx Trail, too. I would also like to find the as of yet undiscovered populations of *Arabis* that support the abundant *E. olympia* on the north side of the Upper Green River Biological Preserve.

I've also traveled a bit farther afield lately. I really enjoyed the spring field trip to Otter Creek Park in Meade County. Thanks to Richard Henderson for guiding us through a park where he has studied the lepidopteran fauna for decades. Some of the many highlights of the trip were the capture of a mosaic black and yellow tiger swallowtail (*Pterourus glaucus*) by Ian Segebarth, a gynandromorph polyphemus moth (*Antheraea polyphemus*) in one of Bill Black's live-catch light traps, a possible columbine duskywing (*Erynnis lucilius*) caught by Mike McGuinness, and a possible Ozark woodland swallowtail (*Papilio joanae*) captured by Gerald Burnett. I was also able to photograph many butterfly species that I did not yet have in my image collection.

Even farther afield, I have just returned from a weeklong collecting trip to Florida, where I have been working for several years studying the buckeye butterflies (*Junonia*) there. The most exciting part of the trip for me was seeing the tropical buckeye (*J. genoveva*), for the first time in the wild. This species is confined to the southernmost parts of Florida, and is rarely seen outside the Florida Keys. However, with some advice from Florida Lepidopterists, I was able to find it along a very short section (just a few hundred yards) of the 20-mile long Everglades Greenway, a bicycle and equestrian trail that runs along the C111 canal near Homestead, Florida. The common buckeye (*J. coenia*) looks very similar to *J. genoveva* on the wing and was plentiful all along the Greenway, so it took me a very long time to find just the right spot. But I did find it, and I was able to take 3 specimens, but unfortunately no decent photographs. I also collected over 20 specimens each of both *J. coenia* and the mangrove buckeye *J. evarete*, which I use in my laboratory for genetic studies. It was a long time away from home and a lot of traveling, but I got the material I needed, so I consider the trip to Florida to be a winner.

I look forward to seeing you all soon and to learning about your Lepidoptera adventures.

Best regards,  
Jeff

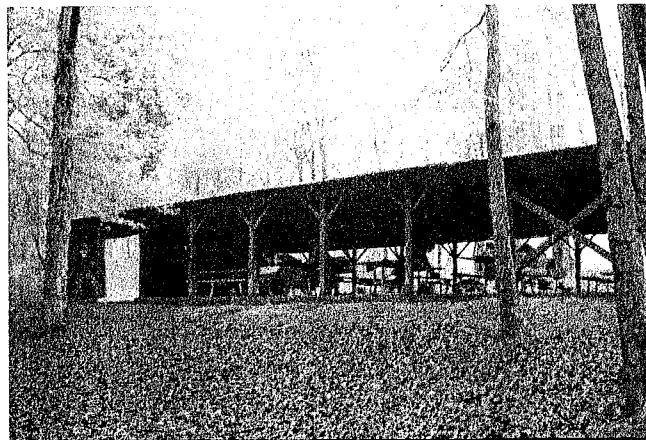
# Report of the Spring Field Trip to Otter Creek Park

By  
Craig Segebarth

The Spring Field Trip to Otter Creek Park began Friday 21 April 2006, when Kevin, Craig, and Ian Segebarth, Tony Merkle, Loran Gibson, and Richard Henderson met at the Nature Station around 1:00 E.S.T. (It was discovered when we arrived, that the pool had been recently taken out and replaced by a playground.) It was raining pretty hard, so we decided to go to the Pine Grove Pavilion and wait for it to stop.

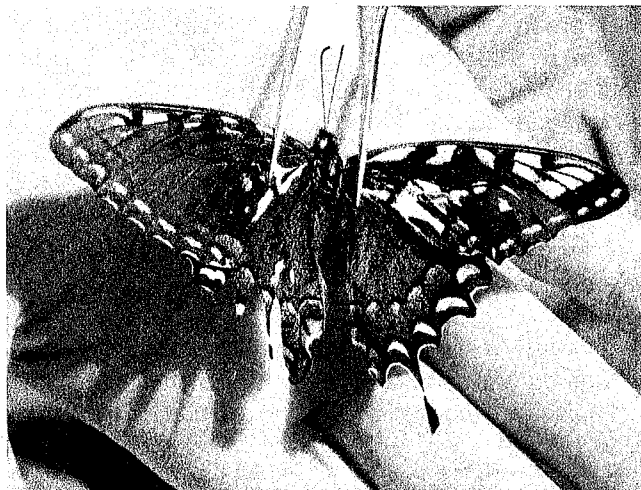
The rain finally subsided a little and we went to Cedar Hill to look around. While there, Loran found some Rockcress – the food plant of *Euhcloe olimpia*. It was still cloudy and sprinkling a little, so no butterflies were seen. At 5:00 we went to the playground (where the pool used to be), and were met there by Jeff Marcus and Gerald Burnett. It was decided to go into Muldraugh and eat dinner at the Pizza Hut, then set traps and some mercury vapor sheet rigs. We contacted Bill Black who was en route and he met us there.

After eating, we went back to the Cedar Hill pavilion where we set out several light traps and 2 M. V. sheet rigs. About 8:00 p.m. we were joined by Charles Wright. Some of the more memorable moths of the night were: *Actius luna*, *Antheraea polyphemus*, *Ceratonia undulosa*, *Laothoe juglandis*, *Darapsa pholus*, and *Eutelia pulcherrima*. The lights were turned off around 12:00 and a few people left to stay in the hotel in Muldraugh, while the rest camped under the pavilion, sleeping in tents or just on the picnic tables.



Campers at the Cedar Hill pavilion

Saturday morning the light traps were recovered, and some of the members went into town for breakfast at the local Dairy Queen. Everyone met at the Playground at 9:30 a.m. EST. We were joined by Mike McInnis and then went searching for butterflies. (Bill Black and Richard Henderson were still retrieving some traps, so they met us at a powerline cut on the main Park road.) Several species of butterflies were found including *Amblyscirtes hegon*, and a Mosaic bilateral gynandromorph of *Pterourus glaucus*. About noon we went over to Ski Hi and collected for several hours. Species seen there included; *Callophrys grynea*, *Calycopis cecrops*, *Eurytides marcellus*, what is possibly *Erynnis lucilius*, and what is possibly *Papilio joanae*. (We are still waiting for the positive id.) Also found along a powerline cut, in some rocks, was a good sized patch of Columbine (*Aquilegia canadensis*), which is the foodplant of *Papaipema leucostigma*. While at Ski Hi a couple of possible places for setting up M.V. sheets were located.



Mosaic bilateral gynandromorph of *Pterourus glaucus*



Group photo at Ski Hi

(Continued on pg. #6)

About 6:00 everyone went to Dairy Queen for dinner and to discuss the evening plans. It was decided to set traps and then meet in the powerline cut at Ski Hi to set up 2 sheet rigs. After dinner, Jeff Marcus and Gerald Burnett both left for home. The rest of the collectors went on to set traps and M.V. sheet rigs. Two sheets were set up in the powerline cut about 250 yards apart. The moths came in steadily until it started to rain, then the lights were taken down so they wouldn't bust. The Segebarths, Richard Henderson, and Bill Black camped at the spot where the sheets were set up, and Loran Gibson and Tony Merkle stayed at the campground so they could charge up their batteries.

Sunday morning, the 23<sup>rd</sup>, some of the campers were woken up by a turkey gobbling. It was a bright morning and it promised to be a great day of collecting. Everyone met at Dairy Queen for breakfast around 9:00, and plans were made for the rest of the day. Loran, Tony and Charles all had to leave right after breakfast. Richard and the Segebarths went to the Wilderness Road to look for butterflies while Bill went and retrieved his traps, and then met up with us. Several species of butterflies were found, including *Poanes zabulon*, and *Celestrina ladon*. More Columbine was found on the rocky hillside along the road. There was talk about organizing a *Papaipema* hunt in the Park for some time in August, because of its diverse selection of food plants.

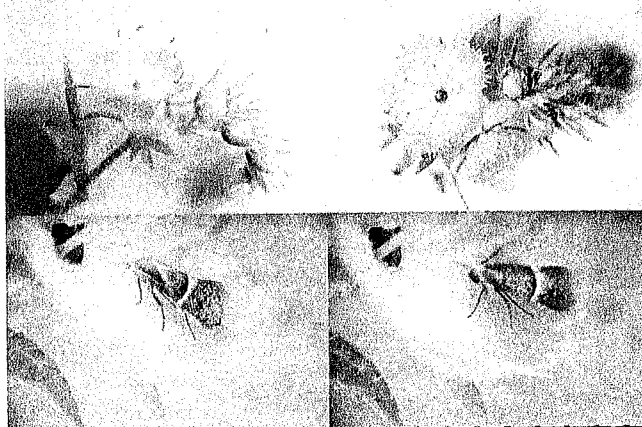
About 2:30 in the afternoon Bill and the Segebarths headed on home to Paducah, and Richard went home to Louisville. Another great field meeting came to a close.

## A New Species of Douglasiidae in Kentucky

By Loran Gibson

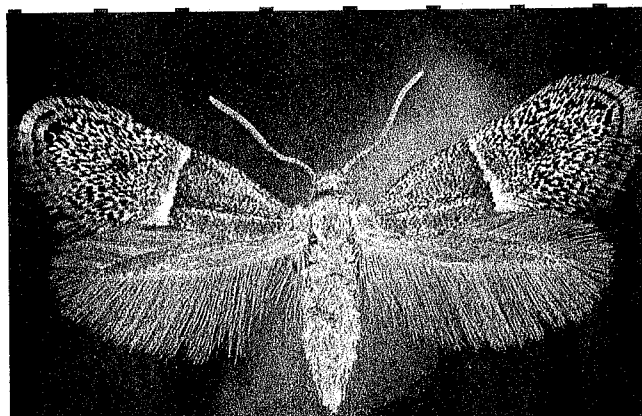
In 2005, Terry Harrison, our lepidopterist friend in Illinois, described *Tinagma gaedikei* (Harrison), a new moth species in family Douglasiidae, from Coles County, Illinois (Harrison, 2005). Terry discovered individuals of this tiny moth during the day, perched on flowers of *Phacelia pushii* (Buckley), a spring wildflower commonly known as Miami-mist. Apparently, adults of both sexes of *T. gaedikei* may be found in association with Miami-mist flowers during the plant's flowering season. This lasts for a couple of weeks in April and into May, depending on latitude. When the flowers are gone, the moth is gone as well until the next spring flowering.

In hopes that others might help locate additional colonies of *T. gaedikei*, Terry e-mailed a request to some of us asking that we search for the moth during the Miami-mist flowering season this spring. On 27 April, the day before I received Terry's request, I had been in Middle Creek County Park in Boone County, Kentucky. Middle Creek is a meandering sandy stream which runs through a mature river-bottom forest in Middle Creek Park, not far from the Ohio River. The gently sloping alluvial area bounding the creek has substantial colonies of Miami-mist flowers. On 29 April I had a chance to return to Middle Creek Park to search for *T. gaedikei*. Terry's excellent photographs of the moth on Miami-mist flowers created an excellent search image. Within an hour I had located the moth, taken several photos, and collected three individuals as vouchers from our Boone County, Kentucky colony. What fun!



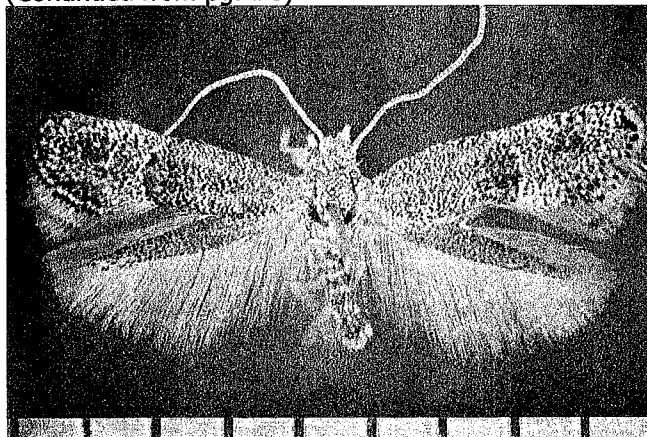
*Tinagma gaedikei* on Miami-mist (*Phacelia pushii*)

One other member of family Douglasiidae occurs in eastern United States. It is *Tinagma obscurolfasciella* (Chambers). According to Terry Harrison and George Balogh, this species is associated with members of the plant family Rosaceae, including: Cinquefoils, Wild Strawberry, and *Geum*. We have one record of *T. obscurolfasciella* from Kentucky. A. J. Brownell collected an individual in a Malaise trap in Burnheim Forest, Bullitt County, 4-8 April 1976. (Cont. pg. #7)



*Tinagma gaedikei*

(Continued from pg. #6)

*Tinagma obscuropasciella*

I hope that others will search for these interesting, diurnal "micros".

Many thanks to Terry Harrison for bringing my attention to *Tinagma gaedikei* and for providing permission to use his excellent photos of *T. gaedikei* and *Phacelia pushii*. Thanks to George Balogh for permission to reproduce Terry Harrison's photo of his excellent specimen of *T. obscuropasciella*.

#### Literature Cited

Harrison, T. L. 2005. A new species of Douglassiidae (Lepidoptera) from the eastern Nearctic. Proceedings of the Entomological Society of Washington. 107 (3), 2005, pp. 569-603.

### From the Editor's Dad:

Congratulations to Craig upon his graduation from High School! He leaves for Honduras on June 15, where he will spend the next four months working at the Hospital Loma de Luz near Balfate. Craig has decided to take this opportunity, made available by the Cornerstone Foundation, to go and serve the people of Honduras while gaining valuable experience that is sure to help him in his pursuit of a career in nursing. I have no doubt that he will make time as well to search out and enjoy as much of the Lepidoptera of Honduras as possible. In Craig's absence, the next newsletter will be put together by his brother Ian and his father (who, by the way, is very proud of him).

## Advice for Encounters with Law Enforcement Personnel

By Harry Zirlin

If you google my name with the words "Scarsdale" and "handcuffed", you should find numerous references to an encounter I had three years ago while collecting beetles. I was held at gunpoint and then forced to the ground and handcuffed. (I pursued a lawsuit against the police in the federal courts, ultimately losing.) But I have had many, many other encounters over my 40 years of collecting and most did not wind up with me on the ground in handcuffs.

When lepidopterists and other naturalists are in the field, here are some tips from me, based on long and hard experience.

(Continued on pg. #8)

When you collect in the Southwest, anywhere within 100 miles of the Mexican border is by matter of law considered the "border", and the border patrol is very suspicious of automobiles parked in canyons or other such places off the beaten path. They believe that cars parked in such locations are indications of drug smuggling or illegal aliens trying to enter the USA. Consider leaving a note on the windshield of your car, identifying yourself and explaining that you are studying insects. If a law enforcement officer stops you to ask questions, always look the officer in the eye when you speak to him. Officers are trained to believe that anyone who does not look them in the eyes when speaking is guilty of something. Always remain calm and always keep your hands where the officer can see them. Always answer the exact question that the officer asks you. Eventually he will ask you what you are doing, and that is when to tell him you are studying insects.

If you stop at gas stations or convenience stores at night to check the lights for moths or other insects, go inside if the store is open and ask the clerk if it is ok to "pick some bugs off the wall". By doing this, you are in a sense asking permission, (permission which I have never been refused), but you are also letting them know that you are not prowling around casing the joint. That way if somebody else reports your presence to the store personnel, they will already know what you are doing. If the stores are closed and you are checking lights when no one is around, be aware that the police may come to check you out. When they do arrive, stand still and identify yourself by name, state of origin and tell them that you are looking for insects.

(Continued on pg. #8)

This will usually satisfy their curiosity, and they will let you continue. If, however, they ask you to move on, always do so without any hesitation, telling the officer that you understand completely and appreciate his vigilance. NEVER AGITATE A POLICE OFFICER. If a police officer says you are trespassing, never argue with him even if you own the property you are on. Police officers are always right until the day they die, and only the Lord can tell them that they were wrong once or twice.

If a ranger or other officer thinks that you are collecting in an area where collecting is not permitted, again I would not argue even if you believe (or know for certain) that collecting is permitted there. Of course, if you have a permit, by all means offer to show it to him. If you follow the 3 Cs (Calm, Courteous, Cooperative) you can usually keep your encounters with the police to a momentary exchange without drawn weapons or handcuffs coming into play. But there are no guarantees in this regard.

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