

# Kentucky Lepidopterist

Newsletter of the Society of Kentucky Lepidopterists

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## THE SOCIETY OF KENTUCKY LEPIDOPTERISTS

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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).

## THE 2007 SPRING BUTTERFLY SEASON

As Seen By Loran Gibson

After an unusually cold February and March, the spring season began with a string of much-above-average-temperature days during the third week of March. I was visiting family in Owsley Co., Ky on 24 March when the temperature rose to the mid 80s. Such temperatures are usually unheard of during that time of year. I took advantage of the weather by climbing to the top of the narrow ridge that forms the western boundary of my sister's farm, just northeast of Booneville, KY. Spring butterflies "hilltop" on the highest points there in early spring. I recorded the following list of species: *Erynnis juvenalis*, *Battus philenor*, *Pterourus glaucus*, *Eurytides marcellus*, *Pieris rapae*, *Euchloe olympia* (saw at least five), *Anthocaris midea*, *Callophrys henrici*, *Celastrina ladon*, *Polygonia comma*, and *Nymphalis antiopa*. This was a very early date for *E. olympia*, and apparently, the earliest date on record in Ky.

From 31 March until 2 April Tony Merkle and I were in western Kentucky. We were searching for larvae of a Buckeye feeding *Olethreutes* species. Bill and Nancy Black had been keeping an eye on local Buckeye leaves and advising us on the timing of the leaf bud openings. The time seemed right for a visit on the above dates. On our way to the Jackson Purchase, we stopped in the Lyon County portion of Land Between the Lakes and recorded: *Epargyreus clarus*, *Erynnis brizo*, *E. juvenalis*, *E. horatius*, *Pterourus glaucus*, *Eurytides marcellus*, *Anthocaris midea*, *Colias eurytheme*, *Everes comyntas*, *Nymphalis antiopa*, *Phyciodes tharos*, and *Danaus plexippus*. On the way home from our larva collecting trip with Bill Black we stopped in the Trigg County part of LBL and added *Hesperia metea* (one fresh male, apparently a county record), *Battus philenor*, *Pterourus troilus*, *Colias philodice*, *Callophrys grynea*, *Celastrina ladon*, *Euptoieta claudia*, and *Anaea andria*.

On 3 April, with below average cold weather forecast for the coming week, Mike McInnis and I made an unusual Tuesday visit to Laurel County in hopes of finding the Holly feeding *Celastrina* described by David M. Wright and Harry Pavulaan as *C. idella*. We found several male *Celastrina* that did not seem to be *C. ladon* in an area with abundant American Holly. We captured a few individuals that were obviously *C. ladon*, but the majority of the *Celastrina* flying (Continued on page 2).

were larger, lighter blue, and lighter on the underside than typical *ladon*. We saw the following species there as well: *E. clarus*, *E. brizo*, *E. juvenalis*, *B. philenor*, *P. glaucus*, *E. marcellus*, *A. midea*, *C. eurytheme*, *E. comyntas*, *N. antiopa*, *Cylopsis gemma*, and *D. plexippus*. In the afternoon, we drove to Rockcastle County where we saw: *E. clarus*, *E. brizo*, *E. juvenalis*, *P. glaucus*, *Pieris virginiensis*, *A. midea*, *C. philodice*, *C. eurytheme*, *C. henrici*, *C. ladon*, *Celastrina nigra*, *Glaucopsyche lygdamus*, *N. antiopa*, *P. tharos*, and *C. gemma*. From 5 April until 18 April temperatures were below normal to much below normal throughout much of central U. S. Here in Boone County we had several mornings in the low 20s. This completely froze tender young foliage on many deciduous trees. Apparently, other areas of the state were as hard-hit as we were here in the north. Forests in the eastern and southern portions of Ky looked like they had been burned in the weeks just after the freeze.

On 20 April temperatures were near normal again. I returned to Laurel County to search for females of what might be *C. idella*. No female *Celastrina* were found. In fact, only seven species of butterflies were seen in the Holly area including: *E. clarus*, *E. juvenalis*, *Amblyscirtes hegon*, *B. philenor*, *P. troilus*, *C. philodice*, and one male *Celastrina*, species yet to be determined. What had been a bountiful butterfly season had now turned into a "Survivors" episode. In the afternoon I visited a sunnier area and was able to locate an individual or two of most of the species that had been flying before the freeze, along with *Vanessa virginiensis* and *V. atalanta*. Most individuals observed were very fresh indicating that they had probably emerged after the freeze.

By late April above average temperatures were back. Mike McInnis and I returned to Laurel County on 29 April. On this day we finally captured a female that could possibly be the Holly feeding *Celastrina*. We logged a total of thirty species including both early and late spring species, and some rarities. The better sightings were: *Autochton cellus* (collected one), *Achalarus lyciades* (saw one), *Thorybes pylades* (fairly common), *Thorybes confusus* (collected one), *Hesperia metea* (saw one female, apparently a county record that we didn't catch... as I kick myself again!), *Poanes hobomok*, *P. zabulon* (both emerging fresh), *A. hegon* (fairly common), *Calycopis cecrops* (abundant! apparently

having a population boom in the southern part of KY. Ellis Laudermilk reported seeing many white turkey hunting in McCreary Co., earlier.), *Celastrina neglecta major* (we collected four... this date is probably a few days early for that species), and *Hermeuptychia sosybius*.

I've been in the field very little during May; but generally, even with the hard freeze, species diversity seems to be very good, while numbers of individuals seem to be a bit below average. Hopefully, the hard freeze of April 2007 will not cause any long-term damage to Kentucky butterflies.

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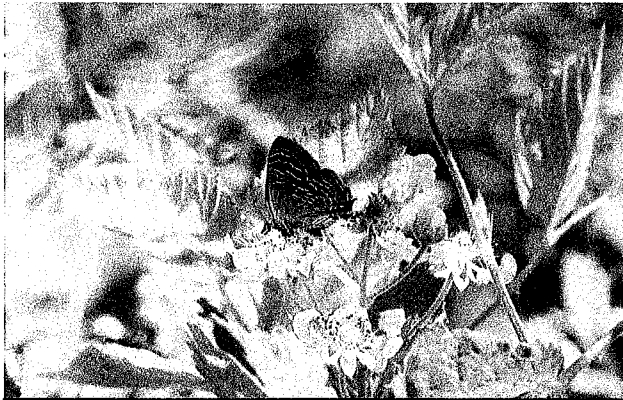
## 23<sup>rd</sup> Annual July 4<sup>th</sup> Butterfly Count

Horner Wildlife Sanctuary  
Brownsboro  
Oldham County

Saturday  
June 30, 2007

Led by Dr. Charles Covell

We will meet at 9:30 AM at the "Brownsboro Eatery" (the only business in the hamlet of Brownsboro) and conduct the count from 10 AM to 3 PM. Please join us!



*Satyrium liparops*

Photographed by Ian Segebarth in the Blood River area of Calloway County on 19 May, 2007.

## Message from the President June 2007

“May you live in interesting times”. This Chinese proverb and curse is a pretty good description of the weather we have had this spring. We had early and warm spring weather in late March, followed by a very impressive prolonged frost at the end of the first week of April. The hot weather in March caused an early flush of butterflies. Loran Gibson reported seeing 11 species flying at his sister’s farm in Owsley County, KY on 24 March 2007, including the olympia marble, *Euchloe olympia*. This is the earliest recorded date (ever) for observations of *E. olympia* in the state of Kentucky. This early emergence was not restricted to Owsley County—I saw *E. olympia* from the Mammoth Cave National Park population in Edmonson County on 2 April 2007, which is the second earliest observation on record. The third earliest record is by Jack Dempwolf, 7 April 1963, from Natural Bridge State Resort Park in Powell County, KY. Then, of course, the early April cold snap killed off much of what was flying.

This got me to thinking about what kinds of patterns global warming might be expected to

produce in our Society’s Lepidoptera database, Kentucky Butterfly Net ([www.kybutterfly.net](http://www.kybutterfly.net)). One is the type I just mentioned, changes in species flight times. In order to make the study of flight times a little easier, we have implemented a new spindle diagram feature in Kentucky Butterfly Net, which constructs a graph of flight times from the data in the database. Species like *E. olympia* are particularly good for looking for flight time shifts because they have short flight periods, and there is reasonably good historical data for these species.

A second pattern that can be observed is the increase in the occurrence of accidentals from the South. I will restrict my comments here to butterflies, since there is more data for butterflies than for most moths. Quite a few Southern butterfly species have been recorded over the last several years, which have never before been observed in Kentucky. Species in this category include the long-tailed skipper (*Urbanus proteus*), the yucca giant-skipper (*Megathymus yuccae*), and the tiger longwing (*Heliconius ismenius*). However, the recent observations of these species may be attributed to an increase in the numbers and/or watchfulness of Lepidopterists in Kentucky, rather than to climate change.

However, when these observations are paired with a third pattern, the apparent disappearance of several “Northern” species that used to be observed at high elevations in Kentucky, the things become even more suggestive. Species in this category include the acadian hairstreak (*Satyrium acadicum* not seen since 1977), the regal fritillary (*Speyeria idalia*, not seen since 1972), the green comma (*Polygonia faunus*, not seen since 1973), and the gray comma (*Polygonia progne*, not seen since 1977). These apparent disappearances have occurred in spite of considerable effort to find these species (one particularly noteworthy attempt involved Leroy Koehn, Richard Henderson, and a very dead snake), so changes in collector effort cannot be used to explain the disappearance of these species.

These patterns reinforce the importance of keeping good field records, and of sharing them with the rest of the community. None of these patterns would have been apparent if people had not been generous in allowing their data to be

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included in the database. Thank you to everyone who has contributed!

I hope that everyone is having a productive Lepidoptera season. I have been doing an awful lot of traveling, but have had relatively little time to spend in the field. Between May 1 and July 4, I have been (or will be going) to Colorado, Maryland, Missouri, New Hampshire, New York, Oregon, England, and Italy (and each of these was a separate trip!). Besides feeling a little bit like a human ping-pong ball, it has limited my Lepidoptera field work to brief glimpses of species that are flying wherever I happened to be. Perhaps most exciting for me thus far has been seeing peacocks (*Inachis io*), small European coppers (*Lycæna phlæas*), clouded yellows (*Colia croceus*), and orangetips (*Anthocharis cardamines*) near Aylesbury, England. I saw cabbage whites (*Pieris rapae*) there too, but they don't make it into the exciting category.

Hope to see you all soon,  
Jeff Marcus

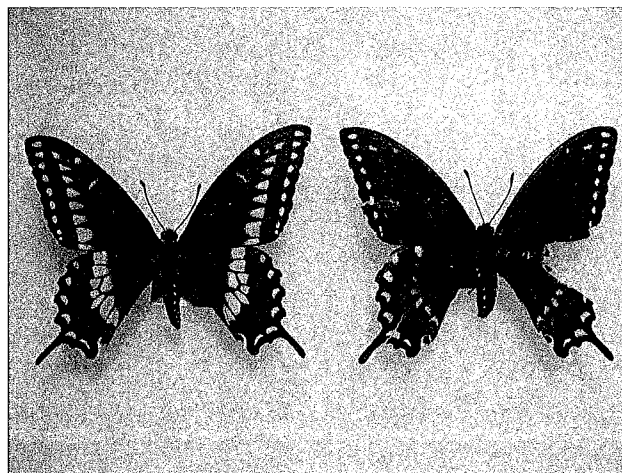
### Summer Field Trip August 24 – 26 Lapland Meade County

Loran Gibson will be leading this trip, with the primary objective being observation of *Calephelis mutica* (Swamp Metalmark). As usual, we will be recording all butterfly species encountered as well as black lighting for moths. Loran reports that the area is one of highly diverse and interesting habitat that should provide us with a very enjoyable and profitable field meeting. All participants will be required to sign a "Hold Harmless Agreement". **Please contact Loran by August 15 if you are planning to attend ([kymothman@fuse.net](mailto:kymothman@fuse.net)).**

## A *Papilio polyxenes* Gynandromorph or the Second Record of *Papilio joanae* from Kentucky?

By Mike McInnis

The March 2007 issue of the Kentucky Lepidopterist, contained my short article regarding a potential gynandromorph of *Papilio polyxenes asterias* Stoll, 1775. The specimens discussed in that article are figured below. Harry Pavulaan, subsequently sent me a thoughtful letter in which he suggested that the dark individual figured (the potential gynandromorph) could be a male *Papilio joanae* J.R. Heitzman, 1974. If so, this specimen would constitute the second Kentucky record for *P. joanae* (the first was from Oldham County). The original description of *P. joanae* can be accessed electronically at [www.doylegroup.harvard.edu/~carlo/JRL/12/table\\_12A.html](http://www.doylegroup.harvard.edu/~carlo/JRL/12/table_12A.html).



For those interested in searching for *P. joanae*, the butterfly is double-brooded with flights in mid-April and mid-summer. The specimen figured above was captured at Camp Sky Hi in Otter Creek Park (Meade County, Kentucky) on April 22, 2006. This individual satisfies the "keys" to *P. joanae* (in the description) except that the forewing postmedian band is less distinct than would normally be expected. Mr. Pavulaan did note that spring *P. joanae* males often look similar to *P. polyxenes* females.

## Dr. Charles L. Remington 1922 - 2007

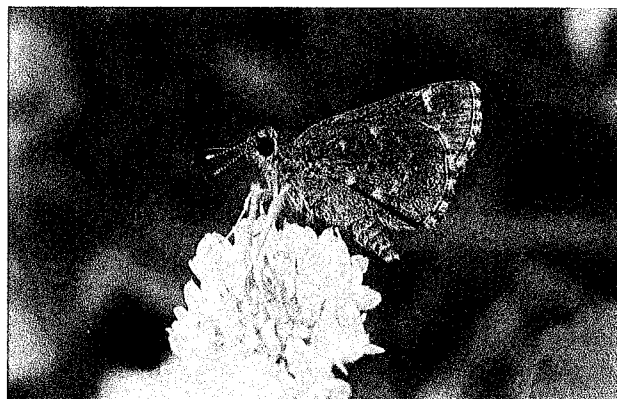
Dear All:

I am very sorry to notify you that Dr. Charles L. Remington, Professor of Biology at Yale University and Curator of Lepidoptera there at the Peabody Museum for over four decades, passed away on the evening of May 31, 2007.

Born in 1922, Charles Remington was the founding father of the Lepidopterists' Society in 1947 along with his Harvard friend, the late Harry K. Clench. He served as the Editor of its initial publication, "The Lepidopterists' News" (Vols. 1-5), and its successor, The Journal of the Lepidopterists' Society, for longer than any other editor. He was an expert on the genus *Colias* and its genetics. He had many outstanding graduate students (e.g., Lincoln P. Brower, Jane V. Z. Brower, Robert Michael Pyle, Charles Oliver, Orley R. Taylor) who have gone on to become major leaders in Lepidoptera research. He pioneered work on butterfly chromosomes in our North American fauna, published extensively on hybridization (recognizing the existence of "Suture Zones" in such areas as northern Florida), and encouraged countless colleagues and students to publish their findings from taxonomy to life histories. He had endless patience with novice authors in editing and improving their manuscripts. He built a magnificent Lepidoptera collection at Yale's Peabody Museum, including saving many valuable private collections from loss or neglect. His legacy is a very important one, and he will be sorely missed. **-Tom Emmel**

PS. He also brokered the opportunity for Charlie Covell to write the Peterson Field Guide to the Moths of Eastern North America by recommending Charlie to Roger Tory Peterson in 1971 after attending the Lepidopterists' Society meeting in Louisville. **-CVC**

## *Amblyscirtes belli* at LBL



Several individuals of *A. belli* were observed and photographed by the Segebarths on 6 May, 2007, on Sugar Bay Road, Trigg County, LBL. ID was confirmed with voucher specimens taken on 12 May from the same location. (Photo by Ian)

## Summer Adventures – Part II

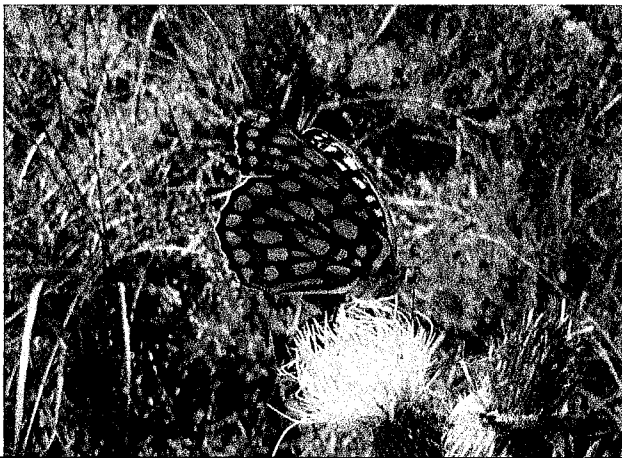
By Ian Segebarth

On 16 July, 2006, I flew down to Florida to begin my internship at the McGuire Center. One of my first tasks was to try to make an approximate count of the number of butterflies in the Butterfly Rainforest because Dr. Emmel thought that their numbers were unusually low. In the afternoon I sorted some specimens of Satyridae that Keith Willmott had collected in Ecuador. Keith is an expert on South American butterflies and is working on the TABP (Tropical Andean Butterfly Project). Tuesday, 18 July, I helped unload a collection from Germany. The McGuire Center had purchased the collection, which contained more than 2.5 million specimens and a large number of books, and had it shipped over from Germany. It was shipped in 25, 4'x4'x8' crates that weighed anywhere from 500 to 1600 kilograms. I spent the rest of the week sorting specimens for Keith Willmott.

On 21 July I went to Colorado with Dr. Emmel, Jim and Vanessa Schlachta and their eight-month-old son Aiden. We were to spend ten days there  
(Continued on page 6)

collecting, visiting other collectors, and doing research on *Cercyonis oetus*. Dr. Emmel has been studying these populations of *C. oetus* for several years. After arriving in Colorado Springs we drove up to Denver and visited Lowell Harris. He has collected for many years and has a large collection of butterflies from around the world. The next day we drove to Hoosier Pass, where we spent the morning collecting butterflies at an elevation of about 11,500-12,500 feet. We found many species of butterflies including *Papilio zelicaon*, *Parnassius phoebus*, *Colias meadii*, *Plebejus saepiolus*, *Agriades glandon*, *Speyeria mormonia*, *Erebia callias*, and *Cercyonis oetus*. We stayed the night in Colorado Springs, then went to the May Museum the next morning. The museum is owned by John May and consists primarily of insects and other arthropods from around the world. From there we drove to Denver and visited Andy Warren. Andy has a large collection of butterflies and is an expert on Mexican skippers. He is now working at the McGuire Center. After spending the afternoon at his house we traveled to The Nature Place in Florissant.

We spent the next few days surveying various *Cercyonis* populations. We found that the numbers of *Cercyonis* were extremely low, possibly due to previous years' droughts. We did, however, find several other species of butterflies including *Lycaena rubidus*, *Speyeria edwardsii*, *Poladryas arachne*, *Euphydryas chalcedona*, *Polygonia gracilis*, and *Piruna pirus*.



*Speyeria edwardsii*

On 26 July we drove down the Shelf Road and collected butterflies along Cripple Creek. We found *Neophasia menapia*, *Lycaena arota*, *Hypaurotis crysalus*, *Limenitis weidemeyerii*, and *Cyllopsis pertepida*. The habitat in this area is very different from the other areas of Colorado that we had visited. It is very dry, with fewer pines and more desert plants.



*Lycaena arota*

One of the highlights of our time in Colorado was a trip to Horseshoe Mountain. In this well known collecting locality we found numerous species of butterflies including *Colias meadii*, *Lycaena snowi*, *Speyeria mormonia*, *Erebia epipsodea*, and *Oeneis chryxus*. Many of these species were incredibly abundant, and the alpine meadows at about 11,500ft were literally swarming with butterflies. After a couple hours of collecting, I decided to hike to the summit, which is approximately 13,950ft. Along the way I caught a few more species including *Erebia magdalena*. As the evening approached it began to cloud over, so we decided to head back to The Nature Place.

The following day, we visited the last few *Cercyonis* sites. Luck was with us, and we found several *C. oetus*. All were very fresh, indicating that they had recently emerged, probably due to the rains of the past few days.

Our time in Colorado had nearly expired, so we reluctantly loaded the van and headed back to Colorado Springs with one detour along the way to drive up Pike's Peak. The following morning we flew back to Gainesville.

(Continued on page 7)

I spent one more week working at the McGuire Center. Mornings I worked with Keith doing some data basing, and in the afternoons I helped Dr. Covell sort and identify *Saturniids*. On 14 August I headed back to Kentucky for a few weeks.

Our next trip began on 22 September when I flew down to Orlando and met up with Dr. Emmel. From there we flew to Miami then on to Bogotá, Colombia. Our purpose in this trip was to visit Dr. Mauricio Linares at the Universidad de las Andes, and to spend a few days collecting.

We left Bogotá the next morning and drove up over the Andes to the town of Villavicencio. After checking in at the Maria Gloria Hotel, we went to a tract of forest on the edge of town that is owned by the Bavaria Beer Brewery. Dr. Linares and two local Colombians guided us along a trail where we collected butterflies for most of the afternoon. We found many species, although not as many as we had expected. After much discussion in Spanish (most of which I did not understand), our two guides said that they might know where to get some UV lights for us to attract moths with. They went off to find the lights and set them up, and we went to get some dinner.

We arrived at the sheet setup at 6:30pm and turned on what seemed to be four 40W UV bulbs. After a short while the moths began coming in, and I proceeded to collect as fast as I could. About one hour and fifteen minutes after I started collecting, I began to experience a burning sensation in my eyes that I at first attributed to fatigue. The burning worsened until my eyes began watering profusely. At this point I concluded that I was having an allergic reaction to something in the area. I tried flushing my eyes with water to no avail, and the pain just continued to increase. We finally decided that it must have something to do with the lights, and that we would leave as soon as Dr. Linares got back from the hotel. Thankfully, he drove up a few minutes later. It turned out he was gone for so long because he had been trapped in the hotel elevator! We then packed up and went back to the hotel. Needless to say, we took the stairs. We later decided that the lights must have been full-spectrum, biocidal lights used for sterilization in the brewery.

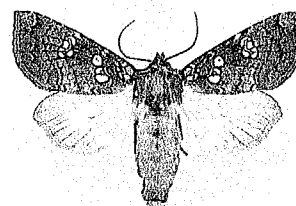
After a long night with little sleep, I woke to find it raining and my condition little improved. In fact,

I could not open my eyes without experiencing pain and when I did open them everything looked like it was in a dense fog. During the night Dr. Emmel and Dr. Linares began having similar symptoms, though not as severe as mine. Since we were obviously not going to be able to collect, we decided to drive back to Bogotá. Along the way we stopped at a drug store and got some eye drops that helped to lessen the pain. I spent the rest of the day sleeping in the hotel. By the end of the day the pain had mostly gone away, but my vision was still very blurry.

The next morning we went to the Universidad de las Andes. There we toured Dr. Linares' department, and met some of his students. Dr. Emmel gave a talk about the McGuire Center to the students and faculty, and then to the president of the university.

The following day, we drove west to the town of La Vega to see the facilities where Dr. Linares raises the *Heleconius* species that he uses in his research. After our tour, I decided to try to collect some butterflies. Over the past two days, my eyesight had been steadily improving. However, I could still only see clearly for about ten feet. This made collecting somewhat difficult, but I tried my best and was able to collect several species of butterflies. After a few hours we drove back to Bogotá.

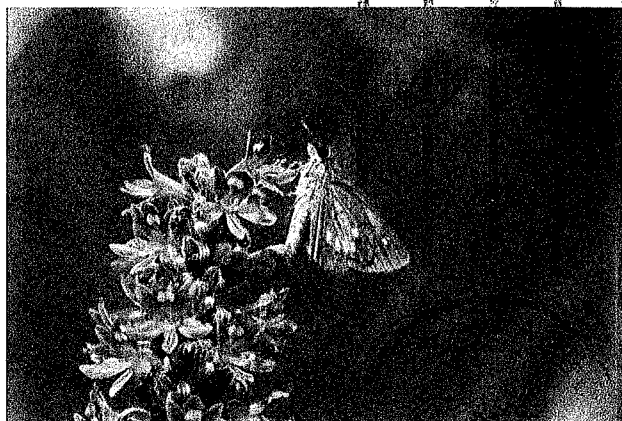
The next morning we flew back to the states; Dr. Emmel to Gainesville and me to Paducah. (Since then my eyesight has returned to normal. Fortunately, there was no permanent damage.)



“Getting Among” *Poanes viator*

Reelfoot NWR  
Obion County TN

May 28, 2007



Society of Kentucky Lepidopterists

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