

Kentucky Lepidopterist

Newsletter of the Society of Kentucky Lepidopterists

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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).

Spring Field Meeting To Otter Creek Park

21 - 23 April 2006

This year's spring field meeting will be hosted by Richard Henderson and Loran Gibson. We will be collecting in Otter Creek Park, in Meade County Kentucky. The meeting will begin Friday afternoon, 21 April, with everyone who can make it meeting at the Park Store/Swimming pool parking lot at 5:00 pm EST. (A Park map is on a separate paper inside.) We will set out light traps in various areas of the Park and then decide on a place to set up a Mercury Vapor light for moths. Richard has the key to all of the gates so we may be able to see some parts of the Park that are rarely visited.

Saturday morning, 22 April, we will meet at the Park Store/Swimming pool parking lot at 9:30 am EST. We will then retrieve our traps and search some of the old great spots in the Park for spring butterflies. Hopefully we will have some time on Saturday to explore some of the back roads of the Park for good habitats. Late arrivals on Saturday afternoon can meet at the Park Store/Swimming pool parking lot at 5:00 pm EST. Plans for Saturday evening will be made during the day on Saturday.

Sunday morning, 23 April, we will again meet at the Store/Pool parking lot around 9:30 am EST. After we collect the traps there should still be some time to look for butterflies, for those interested. By early afternoon the meeting will come to a close.

Anyone wishing to arrive early on Friday should get in touch with Richard or Loran to set up a time to meet. Richard and Loran plan to be in the park around noon on Friday.

Richard Henderson: Home phone: 502-426-8799, cell phone: 502-475-8299, e-mail: mothcollector@hotmail.com

Loran Gibson: Home phone: 859-384-0083, cell phone: 859-750-6419, e-mail: kymothman@fuse.net

There are several choices for lodging in and around Otter Creek Park.

O.C.P. - Van Buren Lodge - \$125.00/ night

O.C.P. - 2 Bedroom Cabin - \$65.00/ Mon. through Thu., \$80.00 / Fri. through Sun.

O.C.P. - 4 Bedroom Cabin - \$80.00/ Mon. through Thu., \$125.00/ Fri. through Sun.

O.C.P. - Campground - \$16.00 a night/ Rustic, \$18.00 a night/ with water & elect. hook-up.

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Golden Manor Motel 116 South Dixie Hwy. in Muldraugh, KY. 40155 - \$65.00/ night - www.goldenmanormotel.com , or 502-942-2800 for registration.

The Great Papaipema Chase, 2005

By Bill Black

In the Summer of 2005, Leroy Koehn suggested to Bill Black that Kentucky Lepidopterists interested in the Noctuid genus *Papaipema*, rendezvous in key food plant locations to concentrate their searches for these moths, during their flying season.

Papaipema caterpillars bore into the stems of host plants. They scour out the interior of the stem or root, and feed in hiding, protected from predators by the very plant they are devouring. Many pupate inside the plant as well. Others exit the plant to pupate in the soil. Adults emerge and fly on fairly regular schedules in August, September, or October.

Since 1999, Kentucky Lepidopterists have been traveling informally to Paducah to help search the surrounding area for two undescribed species of *Papaipema* that feed on cane (*Arundinaria gigantea*). Eric Quinter, who is writing the MONA fascicle on *Papaipema*, is describing several new species. He has given the three cane feeding species temporary designations: *Papaipema new species # 3*, *Papaipema new species # 4*, and *Papaipema new species # 5*. *P.n.s. #3* occurs on the Atlantic Coast, where "switch cane" (*Arundinaria tecta*) grows. *P.n.s. #4* and *P.n.s. #5* occur in Kentucky and presumably elsewhere in the South where *A. gigantea* grows. Collectors have agreed to make their specimens available to Quinter for his studies.

Leroy Koehn, who edited the Kentucky Lepidopterist for five years, moved from Kentucky to North Carolina in September, to become Plant Manager of a manufacturing facility. He thus had to miss the KY Leps' first official Great Papaipema Chase, which he had sparked. He headed East, pledging to pursue *Papaipema* in North Carolina.

During the Kentucky Lepidopterists' September Field Trip, members set light traps in Livingston Co. on 9 SEP 05, at Bissell Bluff. (They contributed their data to the county's survey and the Nature Conservancy). Several of the early *Papaipema* species showed up. Charlie Covell collected a *P. baptisiae* at the base of the bluff near Bissell Creek. Ian and Kevin Segebarth collected two specimens at the top. The Segebarths

also collected one *P. araliae*, and Jeff Marcus collected three with light traps set along a wooded bluff containing Hercules Club (*Araliae spinosa*). Local Western Kentuckians call this thorny food plant, "Devil's Walking Stick".

During the Winter of 2005, the Segebarth family had spotted stands of cane while driving near the West Fork of the Clarks River in Graves County, KY. There on 4 OCT The Great Papaipema Chase, 2005 shifted into high gear. Craig, Ian, and Kevin Segebarth collected twelve *Papaipema n.s. #4* with two light traps set in their newly found cane sites. Bill Black joined, and on 5 OCT he got three *P.n.s. #4* and Ian got four *P. n.s. #4*. Hope continued for the more elusive *P.n.s. #5*. (In 2001, a long-time *Papaipema* aficionado, Mo Nielsen, characterized *P. n.s. #5* as the "Holy Grail of *Papaipemas*.") They also set two light traps in a cane complex Bill had just discovered on the Mayfield Creek between Ballard and Carlisle Counties. Bill's trap, in Carlisle Co., caught one *P. n.s. #4*, and Ian's, in Ballard Co., caught seven *P. n.s. #4*. On 6 OCT, North winds swept down at 10-25 MPH, and the temperature dropped to 46° F. That night only two *Papaipema* specimens were collected among three light traps in the Graves Co. cane. No *Papaipema* were in the trap at Mayfield Creek in Ballard Co. In Western Kentucky nightly lows of 50° F and higher, have proven to be productive for trapping *Papaipema*. A few degrees colder may still be worth the effort; but temperatures in the low 40's have produced little, (with only two notable exceptions in six seasons). The *Papaipema* chasers suspended trapping for the next two nights.

Loran Gibson and Black consulted about the weather, and whether the five hour drive from Florence in Northern Kentucky, to Paducah in the West, would be worthwhile. Loran committed himself and The Chase resumed on 9 OCT 05, setting four light traps in the Blood River Bottoms. There he came up with the first records of *P.n.s. #5* in the 2005 season - two pristine male specimens in Calloway Co., KY, and one from Henry Co., TN. The following night he collected an additional four specimens of *P.n.s. #5* in cane sites along the unnamed creek at Burkley, Carlisle Co., KY, - again, all males.

On the half hour drive from Burkley to the new Mayfield Creek sites, Black told Gibson the story of getting lost at night in the Blood River Bottoms of Henry Co., TN in OCT 2003.

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Letter from the President

Winter is not always the most exciting time to be a Lepidopterist. The freezing weather keeps most of our winged friends in diapause for most of the winter months. That leaves us with only the backlog of specimens and photographs taken in more clement times, and the infestation of *Plodia interpunctella* in our kitchen to satisfy our cravings. Though I'm tempted to try it, my wife refuses to allow me to set up a light trap on the kitchen table to see what it pulls in. She claims the ethyl acetate bothers her, but I think she's just afraid of what else I might attract to the light. I hear tell that in Tanzania, light traps work for hippos almost as well as they do for moths.

That is not to say that I go completely cold turkey (or should I say cold moth?) in the winter. As many of you know, I grow colonies of *Junonia coenia* and *Junonia evarete* for work, so I can visit with them any time I like, but it is not quite the same as interacting with the animals in the field.

We had a very warm autumn, too. On 12 November 2005, Joanne and I were visiting the Shaker Village at Pleasant Hill in Mercer County. Joanne was really impressed with the beautiful architecture, and the sheer number of Shaker buildings that had survived since the Shakers left. I was impressed that I was seeing *Junonia coenia* and *Colias philodice* flying in Kentucky in the middle of November. An old saying about the possibility of taking a boy out of the city, but not the city out of a boy comes to mind.

We've done some traveling out of state, too. In early January, we went to Sarasota, Florida to visit my father, where he has a home. We were officially on vacation, but he insisted on pointing out to me every winged creature he saw and asking me to identify it. (Gulf fritillary, monarch butterfly, great blue heron....you get the idea). It can get pretty chilly in Sarasota, so diversity and numbers of insects were both way down, but there were still plenty of things for him to ask me about. A few weeks later, Joanne and I visited some friends in Dallas, Texas. On a sunny Saturday afternoon, they took us to the Ray Nasher Sculpture Garden. In the outdoor exhibition space, between the Picasso, the Hepworth, and the Calder, was a *Polygonia comma*. Somehow, the unexpected presence of the butterfly helped me appreciate the other beautiful things even more.

When I'm not out wandering looking for living examples, I keep busy preparing and identifying specimens, sorting through my Lepidoptera image collection, and entering data into the society database. I've mounted a number of my images in the photography section of our web site (but I bet some

of you have photos of species I'm missing, and better images of some of the ones that I do have!), and I'm working with our programmer so that our database will be searchable come springtime—so that the data that you all have worked for so many years to collect will be available to everyone who is interested. In case you forgot, our web site is: <http://bioweb.wku.edu/faculty/Marcus/KYLeps.html>

Finally, I'm also beginning preparations for the summer field meeting that I will be leading in South Central Kentucky in late June or early July. I know that others are busy making preparations for the spring field meeting, the Oldham County Butterfly Count on July 1 (rain date July 2), and the fall field meeting in the Jackson Purchase. Warm will soon be arriving. Come join us and "Let's get among them!"

Best regards,
Jeff Marcus

Constitution of The Society of Kentucky Lepidopterists

ARTICLE 1: Name

This society shall be known as The Society of Kentucky Lepidopterists.

ARTICLE 2: Purpose

a. The purpose of this Society is directed to efforts and activities that shall enhance, supplement and advance the growth of scientific knowledge pertaining to the lepidopteran fauna of the Commonwealth of Kentucky and surrounding areas.

b. As an ancillary function the Society shall strive to further communication and other means of social interaction between individuals that share a common interest in the Lepidoptera.

ARTICLE 3: Membership

a. Membership in this society shall be open to any person or organization having an interest in the purpose of the society. Membership will be terminated upon (1) death, (2) receipt by the Secretary/Treasurer of a written resignation, or (3) failure to pay dues within six months of the due date.

(Continued on pg. #4)

b. Applications for membership should be made to the Secretary/Treasurer and should be accompanied by dues for one calendar year.

ARTICLE 4: Organization

a. The elected officers of this Society shall include a President, a Secretary/Treasurer, an Editor and a Field Research Coordinator. These officers as a group shall constitute the Board of Directors.

b. The President shall annually appoint a nominating committee of three (3) members of the Society. Said committee shall nominate at least one (1) candidate for each office, obtain a written statement from the candidate of willingness to serve, if elected; and submit a report of its activities to the President not less than sixty (6) days prior to each annual meeting.

c. The officers shall be elected by written ballot of the members present at the annual meeting, and shall serve from the following January 1 for a period of one (1) year.

d. The duties of each officer shall be those normally pertaining to the respective office.

e. Officers shall serve without compensation.

f. The Board of Directors shall meet annually and at such other times as deemed necessary by the President. Should a special meeting be called by the President, at least fifteen (15) days notice shall be provided to all other Directors.

g. A quorum shall be constituted by presence of three (3) Directors.

h. Vacancies in the membership of the Board of Directors that occur between annual meetings may be filled by majority vote of the remaining Directors.

ARTICLE 5: Meetings

The Society shall hold meetings at times and places selected by the Board of Directors. All meetings will be announced in the Kentucky Lepidopterist and will be held not sooner than 30 days after the notice is mailed. There shall be an annual meeting at which officers are elected. The Society's fiscal year will coincide with the calendar year.

ARTICLE 6: Awards

a. Awards including grants of Society funds may be awarded to members for outstanding accomplishment as it related to the Society's purpose.

b. Awards shall be issued pursuant to recommendation by the Board of Directors and majority vote of the entire membership.

ARTICLE 7: Publications

The Society shall publish and distribute a newsletter, the Kentucky Lepidopterist, to the members four (4) times annually.

ARTICLE 8: Dues

a. The dues for each year will be set by the Board for each class of membership.

b. Dues notices will be distributed with the last issue of each volume of the Kentucky Lepidopterist for each calendar year.

ARTICLE 9: Policies

The Society and its members, in carrying out activities in the support of its purpose, shall be guided by these policies:

(1) The Society will cooperate with the Lepidopterists' Society.

(2) The Society will encourage scientific publication by its members.

(3) The Society will function as a non-profit, non-political, educational organization.

(4) The Society will encourage activity by members who are not professional entomologists.

(5) Members of the Society are expected to follow ethical guidelines relative to collection as developed by the Lepidopterists' Society.

(6) Members are encouraged to develop information on Lepidoptera and forward this to the zone coordinator for compilation and publication.

(7) Members are encouraged to establish affiliations with museums and educational institutions for the deposit and preservation of specimens.

ARTICLE 10: Amendments

This constitution may be amended by motion made, seconded, and passed by a majority vote of the members present at an annual meeting, and concurred in by a $\frac{3}{4}$ affirmative vote of the Board of Directors.

ARTICLE 11: Dissolution

In the event that this Society should cease exist, all of its assets shall be liquidated as follows: (Continued on pg. #5)

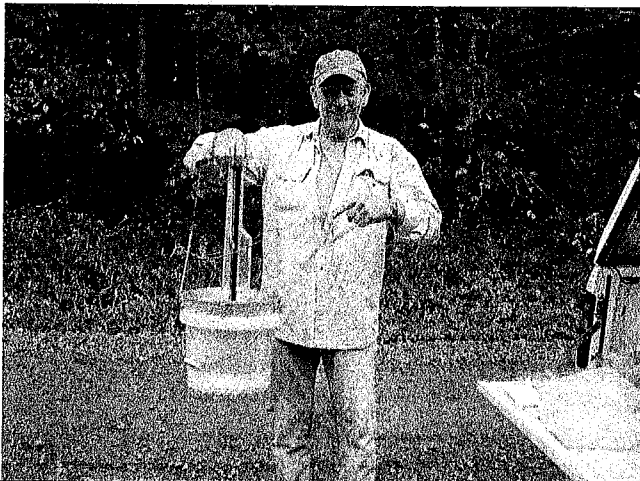
- (1) All outstanding debts shall be paid promptly.
- (2) All remaining assets shall be given to the Lepidopterists' Society.

(Adopted unanimously at the 12th Annual Meeting,
November 16, 1985)

AMENDMENT 1:

The President of the Society of Kentucky Lepidopterists is empowered to nominate "board members ex officio" or board members who serve entirely in an advisory capacity without voting rights and who are not counted towards a quorum in board meetings. Nominees to the position of board member ex officio will take office upon majority vote by the board of the Society and ratification by the majority of the membership at the annual meeting. Once in office, board members ex officio are not term limited and may serve indefinitely until they either chose to resign or until a majority of the board votes to terminate their service.

(The Great Papaipema Chase, continued from pg. #2)



Loran Gibson with 2 *P.n.s.* #5 in a light trap

On the half hour drive from Burkley to the new Mayfield Creek sites, Black told Gibson the story of getting lost at night in the Blood River Bottoms of Henry Co., TN in OCT 2003. He described how it became difficult to distinguish between reality and illusion. Especially how the mind can fool the hiker into full self confidence, believing he is maintaining a consistent direction of march. Also, the mind can fool one into believing the gravel road through the woods, where the truck is parked, is just ahead. Since the line of march is perpendicular to the road, the hiker can't

miss. Forty five minutes into the ten minute hike, Black explained, he had spotted the unmistakable glow of blue light in the dark woods. Surely not another moth collector way down here! He was right, there was not another. He had hiked through the woods in a giant circle until arriving back at his own light trap! He started again, very carefully. This time he improved. It only took twenty minutes to double around and arrive back to his own light trap! His navigational self-confidence had finally dissipated. In reshuffling the contents of his shoulder bag, he had inadvertently left his compass at home. He had lost all this time! He fought off a momentary impulse to run wildly through the woods. He was conscious of winning the internal struggle against panic. He could, at worst, spend the night in the woods, even if it was a bit chilly. He unbuttoned his shirt, pulled out his map, and pulled the maglight out of his shoulder bag to figure the surest way out. The power line crosses Blood River Bottoms. The light trap was close to the river. He could follow the river until it passed under the power line. He could then follow the power line out of the bottoms, even if it would be a mile further down into Tennessee. Or, perhaps not that far; the power line would cross the back edges of farms, and the farm house lights would lead him back to civilization. Off he went. He got tangled in a blackberry thicket, but that meant he was close to the opening cut through the woods for the power line. He nearly fell into a small tributary creek. He could see the hilarity of his predicament. "Aha! The power line cut." He would stay under the power line. "Whoa! What's all that commotion?" He had spooked a whole flock of buzzards off of their roost on a power line derrick. At least he could see the power line. "Just stay steady, and watch out for blackberry briars. Man, this grass is thick. It's really pretty enjoyable being out here." It's what he'd always known through moth collecting, there's an interesting world with considerable beauty out there in the night. "Hey! There's a light." He knew it. But it still took another fifteen minutes to reach the barn, the yard, the security light, the house. No one there. But across the road, a dog was barking. The owner had come out to see who was coming out of the bottoms. "I'm a butterfly collector", Black explained to the owner, "We also collect moths". He was offered a glass of water, and a ride back to his truck. Only three-quarters of a mile away. He thought it would have been at least a mile and a half. "See, the butterfly on the license plate. Thanks. I appreciate your help more than you can know. And I do know the way from here back to Paducah!" Black claimed to have learned a lot since then.

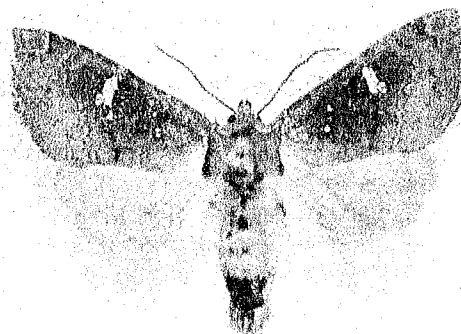
They arrived in late afternoon at the newly discovered cane complex on Mayfield Creek, first tried by Black and Ian Segebarth on 5-6 OCT 05.

(Continued on pg. #6)

This area is bounded on the North by the present, straight, dredged ditch channel and on the South by the vestige meandering natural channel of the original Mayfield Creek. It is an inveterate wet land, now under the canopy of a deciduous woods, defended from the plow by obstacle creek channels, old and new. It is a good prospective home for remnant plants. Among them are more than thirty stands of cane, scattered under the wooded canopy which is 200-400 yards wide and extends along Mayfield Creek for about a mile. The lower half of the woods seems too wet for cane, and all the stands exist in the upper half. The collectors used a sampling tactic of cane hopping – setting three or four traps apiece, in different stands each night. In the six seasons of trapping *Papaipema* moths in Western KY and Southern IL, cane stands "sites" tend to show consistent individual profiles of tenant moths. One stand may yield a certain species of *Papaipema* season after season, while a neighboring stand consistently lacks the same species. Segebarth and Black had already tried three stands of cane in this new complex without catching a "Number Five". Night fell before Gibson and Black finished setting their traps. On the way out of the woods, Gibson monitored Black's navigation. Black asserted there was nothing to worry about. As long as they walked with the creek on their left 30 yards away like it is now. Black wondered if he should have waited to tell Gibson about having been lost in Blood River Bottoms. To reassure Gibson, Black walked over to the creek. Oops! The Creek was 100 yards away. They adjusted their bearing, and got back without incident. On the night of 10 OCT 05, in one of his traps, Black caught two *P.n.s.* # 5 males, proving their presence in this new complex. The other trap had one *P.n.s.* #4. Since 2004, when trapping in cane, Black has used light traps rigged to catch moths alive in hopes of catching live females of *P.n.s.* #5, for Eric Quinter and Richard Henderson to rear the larva.

Gibson and Black shuffled their light traps among stands of cane for an additional night (11 OCT 05) in the new Mayfield Creek complex. Gibson collected six *P.n.s.* #4, two *P. impecuniosa*, and one *P. furcata* from his three traps. Black had set traps in two untried stands which he had called cane site # 8 and cane site # 9. They are separated by a distance of 150 yards. To get from #8 to #9, one must cross a deep ditch with steep muddy banks. He must descend a slippery bank to the water's edge, jump across, and without stopping scramble up the other slippery bank. There is enough water in the bottom to make jumping across with light trap and battery somewhat stressful. The hiker then passes through trees, punctuated by thick brush, and small open areas before arriving at the oasis of cane site #9. Here the site feels dryer, and slightly higher – perhaps a foot or two - and much more sandy. The cane stalks at #9 are the largest in

the complex: 1" diameter x 18' tall vs. ¾" x 12' at #8. The cane at site #9 stands right on the edge of the bank of the main dredged Mayfield Creek. The cane of site #8 is 50 yards away from the bank. The trap at cane site # 8 caught no *Papaipema* at all. The trap at Cane Site #9 caught four *P.n.s.* #5, two *P.n.s.* #4, one *P. furcata*, and one *P. inquesita*.



Papaipema New Species # 4



Papaipema New Species #5

Black was heard muttering that after six seasons, he must be arriving back at his original search paradigm (the bigger the cane the better the chances) for this mysterious *P. n.s.* #5. Large, beautiful cane hosted this moth at Sandy Branch, Carlisle Co. KY in 1999. But none was found there the following season. Nor the next. Some *P.n.s.* #4 were found at Terrapin Creek, Calloway Co. KY, but no *P.n.s.* #5 at this champion cane, 1 1/8" dia. x 20' tall. Ditto for a dramatic cane brake on the Mississippi River bank in Carlisle Co., KY. Craig and Ian Segebarth collected one cane stalk that measured 1 3/8" x 24' (probably the present day state record for KY). But there were no *P.n.s.* #5 and relatively few *P.n.s.* #4. (Continued on pg. #7)

Ditto for cane *Papaipemas* at Alcorn Creek, Pope Co., IL. Its cane might rank as the present day IL state record (7/8" x 18'), but no *P.n.s.* #5. Two specimens of *P.n.s.* #4 on the last day of aggressive collecting, delivered this site from recording zeros in both species. Then at several non-descript cane sites in Fulton Co., KY, lone *P.n.s.* #5 specimens were taken. By 2003, when Jeff Slotten took a world record seventeen *P.n.s.* #5 in one UV light trap at unnamed creek in Burkley, Carlisle Co., KY, Black began to focus on smaller, uglier, outright scraggly cane. And now this! Four *P.n.s.* #5 in one trap in big beautiful cane at Cane Site #9 Mayfield Creek, Ballard Co., KY.

Others searched simultaneously at different cane sites in this virtual rendezvous. Craig, Ian, and Kevin Segebarth trapped on 11 OCT 05 at the East Fork Clark's River, in Marshall Co., KY; Ellis Laudermilk trapped on 12 OCT 05 at Three Ponds, near the Mississippi River, in Hickman Co. These expeditions bagged several *P.n.s.* #4 and represented the only coverage for these two counties for the season.

Jim Vargo, well known as an Iron Man among Lepidopterists, had been collecting in deserts of the Southwest, and, was driving home to Mishawaka, IN, at the time of The Great *Papaipema* Chase 2005. On 11 OCT 05 he stopped in SE Arkansas, at a large cane brake in the White River NWR, to trap *Papaipemas*. He set up an MV/UV sheet and two UV light traps. He communicated by cell phone with the rest of the *Papaipema* Chasers, who were setting traps in remote sites of the Jackson Purchase area of Western Kentucky. They compared notes, and told Vargo that both *P.n.s.* #4 and *P.n.s.* #5 were flying in Kentucky, and that they had taken specimens of each. They planned a rendezvous for the next day in Kentucky. The vastly larger cane brake in Arkansas, further to the South, and nearer to the Mississippi River, seemed surely to have a more abundant *Papaipema* population than the scattered remnant stands of cane in Kentucky. Surprisingly, Vargo's effort only turned up one *P.n.s.* #4, and no *P.n.s.* #5. Disappointing data, too, can contribute to science. Assuming that both cane *Papaipema* species do exist in the White River NWR, comparison with the contemporary Kentucky experience could help interpolate relative flight times. Another factor may be at work here. Eric Quinter has said that vast areas of food plant can be more difficult to survey than small remnant stands. If a moth population exists in a huge habitat, it is difficult to know where to search. Whereas in a small habitat, light from one trap has a very good chance of reaching the inevitably concentrated population.

Jim Vargo arrived in Paducah on 12 OCT 05. He joined Loran Gibson, Bill Black, Craig, Ian, and Kevin Segebarth who were heading for one last light trap

blitz of the cane stands in Kaler Bottoms of the West Fork Clark's River in Graves Co., KY. In the back of everyone's mind was the hope of flushing out a "Number Five". This six man team of *Papaipema* Chasers set out a total of eleven UV light traps and one MV/UV sheet that evening. Checking all traps the next morning revealed twenty-one *P.n.s.* #4, five *P. impecuniosa*, and one *P. furcata*. There was no *P.n.s.* #5. But there was a serendipitous prize of the night: one *P. nepheleptena* in a trap set by C., I., and K. Segebarth! A subsequent search of the area turned up several Turtlehead plants, with purple blooms, (*Chelone obliqua*) beside a creek 100 yards across an open field from the trap.



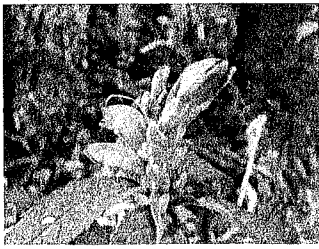
The new Kaler Bottoms cane site.

The gathering of six collectors (eleven traps and one sheet) on 12 OCT 05 in Kaler Bottoms probably represents the maximum size of an effective team for a Great *Papaipema* Chase. There are only a few complexes of food plant habitats large enough to accommodate a dozen traps at a time. A one-night saturation blitz could be a useful survey. But one could imagine injuring the population of a colony of moths if this intense collecting were repeated in the same complex. Worse would be to focus such intense collecting on a small habitat, with a small colony of moths. A team collecting *Papaipema* moths differs fundamentally from the larger Ky Lep weekend field collecting trips. These groups are larger (up to twenty collectors), of shorter duration, and more general in Lepidoptera targeted. The Great *Papaipema* Chase is highly specific and highly focused. The more mobile and dispersed the *Papaipema* Chase, the better.

Lepidopterists who are also knowledgeable botanists tend to be the most efficient collectors. Ellis Laudermilk and Loran Gibson could be prototypes of the sophisticated collector who wastes little effort wandering randomly in the field.

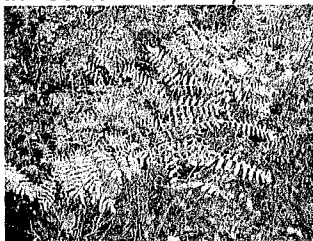
(Continued on pg. #8)

They link up Lepidoptera with food plants, food plants with habitats, and target those habitats, for streamlined field collecting trips. This seems to hold especially true for collecting *Papaipema*. Almost every site listed in the enclosed copy of the "Aggregated



Data from The Great Papaipema Chase 2005" can be explained by the presence of a food plant. Gibson and Laudermilk arrived in Paducah asking about unusual plants few others know about – such as Turtlehead (below left) and *Osmunda* ferns. They had been collecting intelligently in Eastern Kentucky, and had come up with an amazing total of nineteen *P.nepheleptena* on 27 SEP 05 in Letcher Co. KY. This was the follow up effort inspired by Laudermilk's discovery of them at Turtlehead, with white blooms, (*Chelone glabra*) on Pine Mountain, Harlan Co., KY., 23 SEP 03. As of 1999, Charlie Covell noted in his widely acclaimed The Butterflies and Moths (Lepidoptera) of Kentucky: An Annotated Checklist, only once had *P.nepheleptena* been collected in Kentucky - in Bell Co., at Pine Mountain State Resort Park, on 16 OCT 1973, by the late Carl Cornett. (A day after the Segebarths' catch, Ellis Laudermilk and Richard Henderson discovered a specimen of *P. nepheleptena* in one of Bill Black's Cornell drawers. It had been collected at Terrapin Creek State Nature Preserve, Graves, Co., KY, on 2 SEP 2000).

On 8 OCT 2003 Ellis Laudermilk placed a UV light trap in *Osmunda* ferns, in Pulaski Co., KY. What he collected, characterized as "Astonishing!" by Eric Quinter, were two specimens of *P. speciosissima*. The range map of this species had looked like a backwards



capital letter "C" on a map of the Eastern U.S. It stretched across the Great Lakes to the Atlantic, down the East Coast, and along the Gulf Coast. None had ever been recorded in the interior of the U.S. Laudermilk and Gibson branched out in their search for sites with Royal Ferns (*Osmunda regalis*), (top left), and

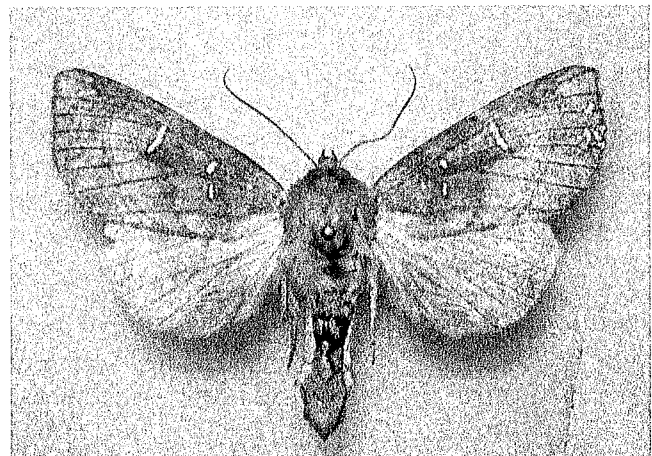


Cinnamon Ferns (*Osmunda cinnamomea*), (bottom

left). On 27 SEP 05 they collected four specimens of *P. speciosissima* in Letcher Co., KY., and on 5 OCT 05, thirteen specimens in Bath Co., KY. They had heard that the renowned botanist Julian Campbell of the Nature Conservancy of Kentucky had seen notable fern beds in his June 2005 hike along the Blood River Seeps in Calloway Co., KY.

To report data from The Great Papaipema Chase 2005, Kentucky Lepidopterists used a format developed by Loran Gibson in Microsoft Excel Worksheet. This versatile medium allows aggregation (without aggravation!) of data from many collectors, as well as disaggregation for analyses. Future Great Papaipema Chases could actually operate as several two-member teams (or even as lone individuals) who might never see each other. They would be unified by their parallel collecting in far-flung places, and by their concurrent contribution of data to a central repository. Perhaps the Kentucky Lep Website (<http://asm.wku.edu/faculty/Marcus/KYLeps.html>) could receive this data from the field, and aggregate it into one continuing log that approaches "real time". The field collectors themselves could log in to check the state-wide status of the Chase.

The Great Papaipema Chase will still need local collectors who will host the various parts of a Chase. They must scout habitats ahead of time, and plan the logistics and efficient sequence of collecting sites. Searching for sites with battery and trap in hand is usually not efficient. Lepidopterists need to spend the rest of the year finding sites, and the flying season collecting sites.



Papaipema speciosissima

Camaraderie alone justifies Lepidopterists' congregating, and mutual education becomes a valuable fringe benefit. Laudermilk and Gibson, for example, educated other '05 participants on finding *Osmunda* ferns to check for *P. speciosissima*, and Turtlehead for *P. nepheleptena*. (Continued on pg. #9)

The team of collectors, who carried out The Great *Papaipema* Chase 2005, was fluid. The target moths' flight periods dictated the general block of time (first three weeks of October). Weather, especially temperature, dictated day to day effectiveness (night time lows need to be above 50° F for enough moths to fly, making trapping worthwhile). *Papaipema* chasing does not stop during rain. Gibson and Black set traps in a six-inch rain at Sandy Branch in 1999 and still collected good moths. The world outside Lepidoptery also dictates limits – most collectors have to take vacations from work to get to the Chase. And families fare better with limits on Lepidoptery. So the team of *Papaipema* Chasers substituted themselves in and out of the game. On the 13th, Vargo, Gibson, and the Segebarths headed home, while Laudermilk and Henderson linked up with the team.

Richard Henderson, co-founder with Charlie Covell of the Society of Kentucky Lepidopterists, has a long memory. He also has a long practice of thinking creatively, of synthesizing traditional ideas with current hypotheses, to frame new experiments of his own. Black has reflected that while he himself does not agree with Henderson's theory of the dominance of moth flyways, he almost never sets a trap without aligning it with likely flyways – just in case. Henderson experimented to find a universal food for rearing *Papaipema* larvae. He hoped to overcome the alternative problems of obtaining fresh natural food, or becoming a gourmet cook to prepare expensive artificial food (manufactured to sustain the tenant larvae in laboratories of pesticide companies). Henderson's list of foods he tried for caterpillars might rival Edison's for the light bulb filament. With an electric drill and a quarter inch bit, he'd create a *Papaipema* tunnel in a carrot, and nudge the larva in. The larvae liked carrots. Eventually, he discovered something even better - the supermarket sweet potato. Most Lepidopterists have adopted Henderson's sweet potato as the ideal substitute larval food to make *Papaipema* rearing effortless.

Laudermilk and Henderson set two UV light traps each at the canopied cane sites at Mayfield Creek, west of the US 62 bridge in Ballard Co. and Carlisle Co. Black headed East to set traps in two stands of cane recently discovered at Bissell Creek, Livingston Co., KY. Black's exploratory tangent over to Livingston Co. required driving an extra 250 miles, and hiking with battery and trap an extra four miles, to set and retrieve the two traps. Black struck out on the cane *Papaipemas*. Only two specimens of *P. furcata* delivered him from a *Papaipema* shutout. To compound the price, the overextension retrieving traps from Livingston Co., would cause Black to be two hours late in the rendezvous with Laudermilk and Henderson at Blood River, to set traps in the afternoon

of the 14th. Meanwhile, moth fortunes were going better in the Mayfield Creek Bottoms. Henderson's two traps (sites #7 and #8) had nabbed one *P.n.s.* #4 and two *P. cataphracta* specimens. Laudermilk got no *Papaipema* at cane site #6, but at cane site #9 (requiring arduousness to access) he struck gold. There, on 13 OCT 05, he caught eight *P.n.s.* #5, two *P.n.s.* #4, and one *P.cataphracta*! His eight *P.n.s.* #5 in one trap make him Runner-up for the World Record. His is surpassed only by Jeff Slotten's 2003 World Record of seventeen in one trap at Burkley, Carlisle Co., KY.

Black, Laudermilk, and Henderson hurried to set light traps at Blood River before dark. Henderson set a trap at cane site #4, and cane site #8, Calloway Co., KY. He would then wait for Black and Laudermilk who had decided to gamble on a hike with batteries and light traps into the ever darkening woods. They hoped to find a seep site with abundant ferns which Black had seen on a Nature Conservancy hike that Spring. They hoped the ferns would be the *Osmunda* species that *P. speciosissima* larvae feed on. He had seen even more dramatic fern concentrations (counting, but not remembering the identity of, six different fern species at one site) during the June hike with Julian Campbell and the Segebarths. But Black was unsure of being able to find those sites quickly. Black had no image of what Cinnamon or Royal Ferns looked like. They hiked for half an hour, each carrying a battery and light trap, exploring the darkening woods for the fern bed. Finally, with just enough light left to see the site clearly, they found the abundant fern site Black knew they could reach. That was the good news. The bad news was that these were all Christmas Ferns (*Polystichum aristichoides*), not *Osmunda* species. They turned and trudged on the half hour hike back to the road, with batteries and traps still in hand.

They drove back to rendezvous with Henderson; to set his third trap at cane site #P2, also on Blood River, just over the State Line in Henry Co., TN. Black related, as he had to Gibson earlier, his experience of getting lost at night in the woods of Blood River Bottoms in OCT 2003. They laughed, and the three headed into the woods with flashlights and Henderson's battery and light trap, toward cane site #P2. This would be a ten minute hike, five in the daytime. Black reassured them that setting this trap would be no sweat. Besides, where he'd gotten lost two years earlier was across the river in a larger part of the woods. Just keep a steady bearing. When you hit the river, turn right and follow the river bank fifty yards to the thick cane in the 90 degree bend. That's cane site #P2. A pretty reliable site for "Number Fives". They hiked for ten minutes, but they had not hit the river. Then it was fifteen.

(Continued on pg. #10)

Telling Lauder milk and Henderson the story of getting lost down there at night in the Blood River Bottoms probably wasn't a good idea, on the way in. It didn't exactly inspire confidence in Black's night navigation. Then it was twenty minutes. Better bear right, the river's over there. When the hikers hit the river, a turn to the right to hike up stream would surely take them to cane site #P2. Ah! The river! But it didn't look familiar, the bend wasn't right. And the deep tributary drainage ditch. Where did it come from? Then it was thirty minutes. Lauder milk, ever the gentleman, pulled out his GPS, and offered a suggestion. The team backtracked, and reached cane site #P2 in ten minutes. "Good to be here! Good cane, a tested site, and Gibson caught a 'Number Five' here just five days ago." Henderson's trap was set in a good intersection of flyways. They connected the leads to the battery. "Good! Light! Uh Oh! It's getting dimmer by the second! The battery's down. Can't believe it!" They left the trap in place, and hiked back to the truck with the dead battery. Henderson was discouraged. Black spotted a white Turtlehead flower just off the shoulder of the road near the bridge. Lauder milk offered to carry Henderson's new battery, as they hiked back to the trap to get it going. Black stayed to set a trap of opportunity at the Turtlehead plant, in hopes there were more around that couldn't be seen in the night. The trap had a dark black light and might not be seen, even if someone drove by in the remainder of the night. Maybe a *P.nepheleptena* could be rustled out of the brush by the light and into the trap. Lauder milk and Henderson were late getting back. They'd gotten familiar enough with Blood River by then, they were able to get lost without Black's help. They made it back to the truck, but Lauder milk was still carrying the new battery. They had taken a wrong turn, and couldn't get reoriented to find the trap. Black offered to lead Henderson back to the trap, but Henderson was wiped out. They headed home to Paducah. Saturday morning, the 15th, Lauder milk headed back home to Frankfort. Black and Henderson drove back to Blood River to collect their traps. Eureka! Henderson's trap at cane site #4, Blood River, Calloway County, KY had two *P.n.s* #5, one *P. cerussata*, and one *P. cataphracta*. His trap at cane site #8 had one *P. furcata*. Down at Blood River, Henry County, TN, Black's trap at Turtlehead, set in the dark, turned out to be at the only plant in the area, and it had no *Papaipema* of any species. A good try anyway. They retrieved Henderson's batteryless trap from cane site #P2, without getting lost on either leg of the round trip from truck to trap. A cold front was moving in, and a low of 41° F had been predicted for the night of 15 OCT 05. Each was tired. They shook hands, and headed home, Henderson to Louisville, and Black to Paducah.

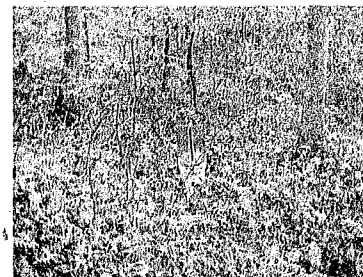
Saturday afternoon (15 OCT 05) Black decided not to try to reset his light traps. It was a full moon, a low temperature of 41 degrees was predicted, and he was tired. Without trap or battery, he took a long exploratory hike, and found the seeps and ferns along Blood River, which he and Lauder milk had hoped to find the previous night. He couldn't resist the temptation! He hiked back to the truck, got a trap and battery, and set them in the middle of the *Osmunda* ferns. Sunday he found, among the dozen moths in his trap, three male specimens of *Papaipema speciosissima*!

On Tuesday (18 OCT 05), a friend guided Black to a stand of *Osmunda* ferns in Pope Co., IL, and there he set a light trap. But he caught no *Papaipema*. He scouted the area but could not find any other stands of *Osmunda* ferns. If *P. speciosissima* had ever been there, perhaps the population had fallen victim to "islandization".



The author, Bill Black, at fern site #4 in the Blood River seeps.

On Thursday (20 OCT 05) Black and Ian Segebarth drove to Blood River for one last stand. They set four traps in *Osmunda* ferns along the series of seeps, one trap in wet, open bottomland at Joe Pye Weed, and one at cane in Henry Co., TN. It was a good night. The next morning Segebarth had one *P. speciosissima* at fern site #2. At fern site #3 (right) he had an amazing catch of five *P. speciosissima*, one *P. nepheleptena*, and one *P. impecuniosa*! Black's trap at fern site #4 (set in *Osmunda* ferns, and Turtlehead, with cane only twenty yards away) had a disappointing catch of only one *P. cataphracta*. (Cont. on pg. #11)



In the open bottoms at Joe Pye weed, Segebarth's trap had caught four *P. eupatorii*, two *P. cerussata*, and two *P. impecuniosa*. Finally, at cane site P2 on the Blood River, Henry Co., TN, Black's trap had caught two *P.n.s.* #5. (Black also found a *Leucania calidior* caterpillar in a cane leaf sheath, and reared it.) It seemed as though this would be the last foray to collect *Papaipemas* in the 2005 season – but then one must stay flexible.

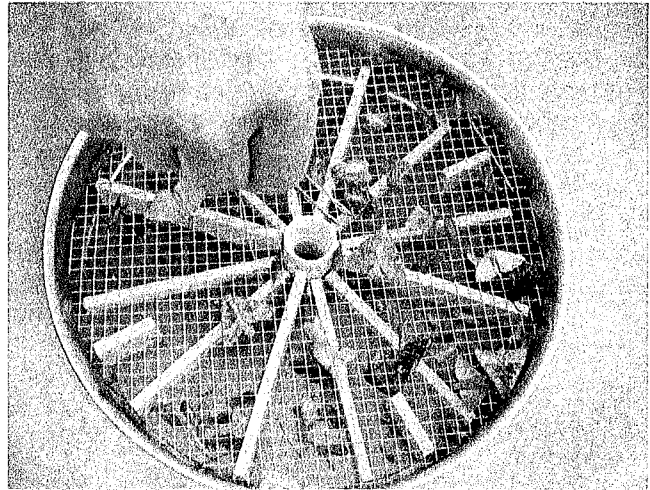
Black remembered a spring and a seep several hundred yards apart, in the Mayfield Creek Bottoms of McCracken Co., KY.

On 31 OCT 05 he explored them, and found Cinnamon Ferns and Royal Ferns at both. In the effort, he managed to get himself photographed, along with other denizens of the bottoms, by a deer hunter's robot camera.

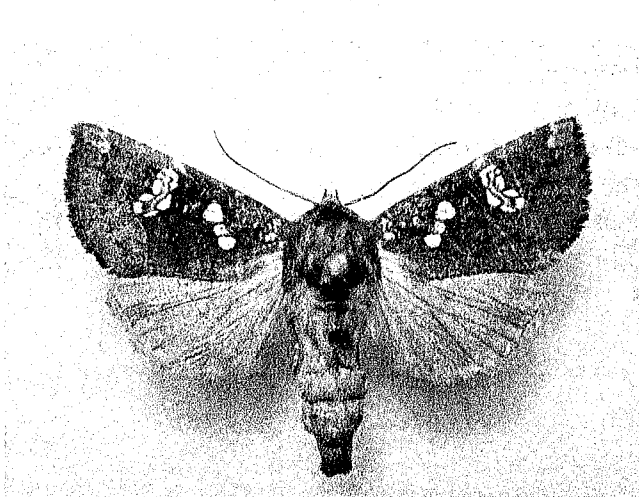
He set two light traps at the seep; but collected only a worn *P. araliae*, inspiring the belated discovery of a Devil's Walking Stick nearby. This site probably had a low yield because of lateness in the season, rather than because of islandization. It should be further explored, in the next Great Papaipema Chase.



Papaipema chasers taking a break to catalog the night's catch.



Papaipema New Species #5 in Loran Gibson's trap.



Papaipema nepheleptena



Retrieving a light trap from Kaler Bottoms.

(Continued on back, pg. #12)

Note From The Editor

This newsletter is a very large one, and I would like to thank everyone who contributed to it. I would again like to ask the members of the Kentucky Lepidopterists Society to consider submitting something to be included in the newsletter, whether it be an article, a picture or an interesting discovery. As I said before if there isn't room in the upcoming newsletter then your contribution will be put into the next one.

Dr. Covell asked that I remind everyone about the LepSoc meeting this year. The 2006 meeting of The Lepidopterists' Society will be held on June 14 through 18 at the recently opened McGuire Center for Lepidoptera and Biodiversity, in Gainesville, Florida. For more information and registration materials go to their website: <http://lepsoc.org>

I am looking forward to seeing those of you who will be able to attend the Spring Meeting in Otter Creek Park, and I wish everyone the best of collecting and studying of the Lepidoptera we enjoy.

Craig Segebarth, Editor

Dues Reminder

A significant number of members have not yet paid their dues for 2006. The year that dues are paid through appears after your name on the address label of this newsletter, which was current until March 15. Your prompt attention will be most appreciated.

Les Ferge, Treasurer

The Society of Kentucky Lepidopterists
Craig Segebarth, Editor
250 Riverside Drive
Paducah, KY 42003

Upcoming Article

In the upcoming newsletter there will be pictures and an article about The Black's and Dr. Covell's trip to see the Monarchs (*Danus plexipus*) in Mexico.



(Left to right, front to back)
Kirby Black, Charlie Covell,
Chris Black, Suzette Slocomb, Alice Covell
Tom Myers, Bill Black, Marcia Jumblatt
Waynetta Myers, Nancy Black, Jim Jumblatt

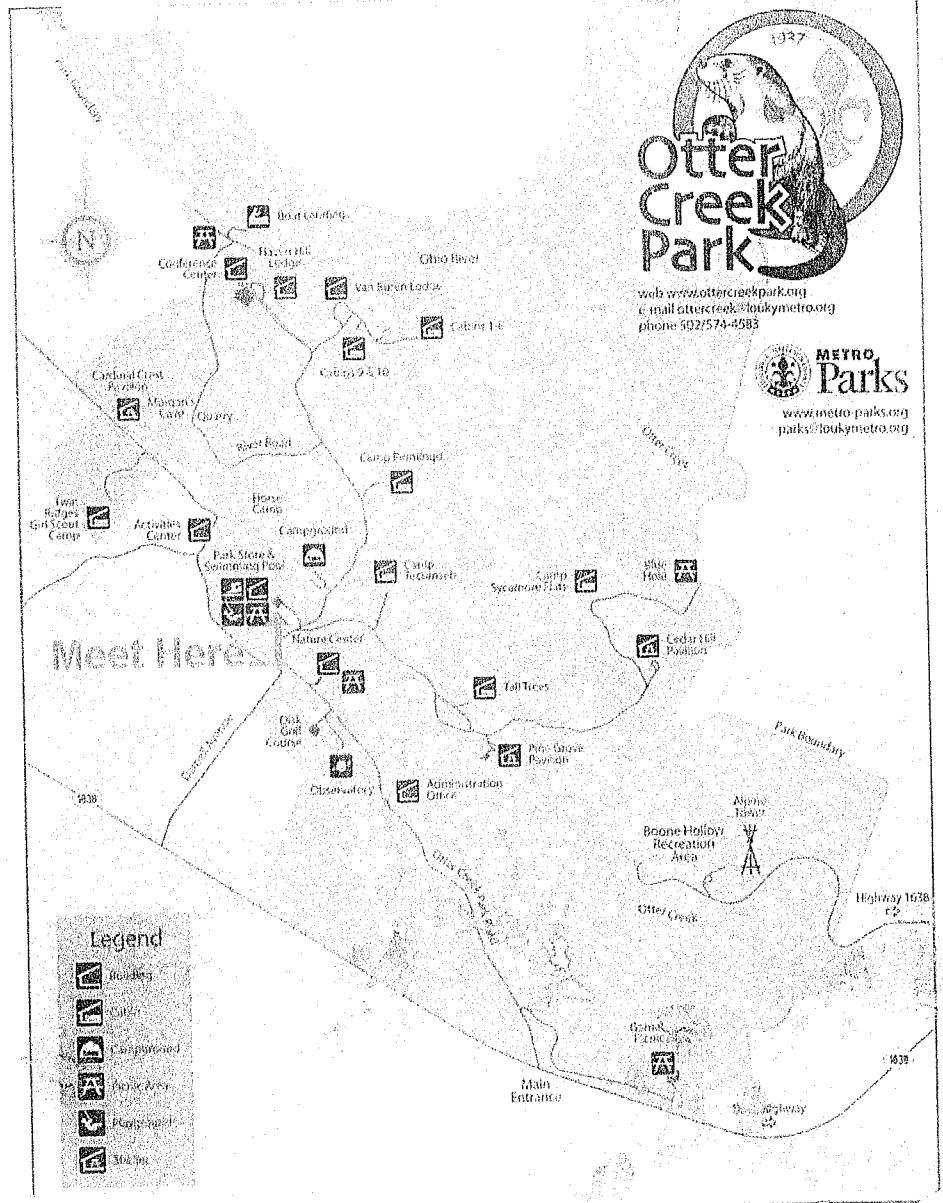
The Kentucky Lepidopterist is published four times a year, and dues are \$12.00 annually. The organization is open to anyone with an interest in the Lepidoptera of the State of Kentucky. Information can be obtained from, and dues sent to the Treasurer: Les Ferge, 7119 Hubbard Avenue , Middleton, WI 53562



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Legend

| | |
|--|------------------------------|
| | Building |
| | Cabin |
| | Campground |
| | Trails |
| | Park Store |
| | Nature Center |
| | Deer Golf Course |
| | Crowsnest |
| | Administration Office |
| | Boone Hollow Recreation Area |
| | Game Field |
| | Main Entrance |

Aggregated Data from The Great Papaipema Chase 2005

| MONA | Genus | Species | # | St. | County | Location | D | M | Year | Collectors | Det. By | Collection | Comments |
|------|-----------|---------------|----|-----|------------|------------------------------------|----|-----|------|-----------------------|--------------|------------|--|
| 9466 | Papaipema | cataphracta | 2 | KY | Rowan | Minor E. Clarke Fish Hatchery | 5 | OCT | 05 | Laudermilk & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9466 | Papaipema | cataphracta | 2 | KY | Calloway | Blood River | 9 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | |
| 9466 | Papaipema | cataphracta | 1 | TN | Henry | Blood River | 9 | OCT | 05 | Loran Gibson | Gibson | Gibson | Cane site # P2 |
| 9466 | Papaipema | cataphracta | 1 | KY | Ballard | Mayfield Creek W US 62 bridge | 13 | OCT | 05 | Ellis Laudermilk | Laudermilk | Laudermilk | cane site #9 |
| 9466 | Papaipema | cataphracta | 2 | KY | Ballard | Mayfield Creek W US 62 bridge | 14 | OCT | 05 | R Henderson | R Henderson | Henderson | 1 male & 1 female |
| 9466 | Papaipema | cataphracta | 1 | KY | Calloway | Beechy Creek WMA | 17 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9466 | Papaipema | cataphracta | 1 | KY | Calloway | Blood River | 20 | OCT | 05 | W.R.Black, Jr. | Black | Black | |
| 9469 | Papaipema | polymniae | 4 | KY | Owsley | McIntosh Farm | 30 | SEP | 05 | L. Gibson | L. Gibson | Gibson | |
| 9469 | Papaipema | polymniae | 1 | KY | Rowan | Rt. 1274 | 5 | OCT | 05 | Laudermilk & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9470 | Papaipema | araliae | 1 | KY | Calloway | Blood River | 1 | SEP | 05 | Ian Segebarth | I. Segebarth | Segebarth | Larva in Aralia spinosa on 21 Jun 2005 |
| 9470 | Papaipema | araliae | 3 | KY | Livingston | Bissel Bluff | 9 | SEP | 05 | Jeff Marcus | Marcus | Marcus | UV Lt Tp in woods |
| 9470 | Papaipema | araliae | 1 | KY | Livingston | Land Between the Lakes | 10 | SEP | 05 | Ian Segebarth | I. Segebarth | Gibson | 1st. Co. Record |
| 9470 | Papaipema | araliae | 1 | KY | Livingston | Bissel Bluff, Tomehawk Rd | 10 | SEP | 05 | Ian, Kevin Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9470 | Papaipema | araliae | 3 | KY | Livingston | Bissel Bluff | 16 | SEP | 05 | W.R.Black, Jr. | Black | Black | Woods @Devil's Walking Stick |
| 9470 | Papaipema | araliae | 1 | KY | Calloway | Blood River | 25 | SEP | 05 | Ian Segebarth | I. Segebarth | Segebarth | |
| 9470 | Papaipema | araliae | 1 | KY | Calloway | Blood River | 31 | OCT | 05 | W.R.Black, Jr. | Black | Black | Larva in Aralia spinosa on 21 Jun 2005 |
| 9473 | Papaipema | impecuniosa | 5 | KY | Owsley | Ky. River Bottoms | 1 | OCT | 05 | L. Gibson | L. Gibson | Gibson | Fern site #1; " " present |
| 9473 | Papaipema | impecuniosa | 1 | KY | Rowan | Minor E. Clarke Fish Hatchery | 5 | OCT | 05 | Laudermilk & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9473 | Papaipema | impecuniosa | 1 | KY | Graves | Kaler Bot.; Old W fk of Clarks Rvr | 5 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9473 | Papaipema | impecuniosa | 1 | KY | Ballard | Mayfield Creek W US 62 bridge | 11 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | |
| 9473 | Papaipema | impecuniosa | 1 | KY | Ballard | Mayfield Creek W US 62 bridge | 11 | OCT | 05 | W.R.Black, Jr. | Black | Black | Cane site #9 |
| 9473 | Papaipema | impecuniosa | 6 | KY | Graves | Kaler Bot.; Old W fk of Clarks Rvr | 12 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9473 | Papaipema | impecuniosa | 1 | KY | Graves | Kaler Bot.; Old W fk of Clarks Rvr | 17 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9473 | Papaipema | impecuniosa | 2 | KY | Calloway | Blood River; Grubbs Rd | 20 | OCT | 05 | Ian Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9473 | Papaipema | impecuniosa | 1 | KY | Calloway | Blood River; Fern site #3 | 20 | OCT | 05 | Ian Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9479 | Papaipema | lysimachiae | 1 | KY | Rowan | Rt. 1274 | 5 | OCT | 05 | Laudermilk & Gibson | L. Gibson | Gibson | |
| 9482 | Papaipema | speciosissima | 4 | KY | Letcher | Poor Fork of Cumberland River | 27 | SEP | 05 | Laudermilk & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9482 | Papaipema | speciosissima | 13 | KY | Bath | Near Cave Run Lake | 5 | OCT | 05 | Laudermilk & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9482 | Papaipema | speciosissima | 3 | KY | Calloway | Blood River Fern site #1 | 15 | OCT | 05 | W.R.Black, Jr. | Black | Black | County Record |
| 9482 | Papaipema | speciosissima | 1 | KY | Calloway | Blood River; Fern site #2 | 20 | OCT | 05 | Ian Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9482 | Papaipema | speciosissima | 1 | KY | Calloway | Blood River; Fern site #3 | 20 | OCT | 05 | Ian Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9483 | Papaipema | inquaesita | 1 | KY | Calloway | Blood River | 9 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | |
| 9485 | Papaipema | baptisiae | 1 | KY | Livingston | Bissel Bluff | 9 | SEP | 05 | Black & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9485 | Papaipema | baptisiae | 1 | KY | Livingston | Bissel Bluff | 9 | SEP | 05 | Jeff Marcus | Marcus | Marcus | UV Lt Tp in woods |
| 9485 | Papaipema | baptisiae | 1 | KY | Livingston | Bissel Bluff | 9 | SEP | 05 | Charlie Covell | Covell | Covell | UV Lt Tp bluff base @powerline cut |
| 9485 | Papaipema | baptisiae | 2 | KY | Livingston | Bissel Bluff; Tomehawk Rd | 10 | SEP | 05 | Ian, Kevin Segebarth | Segebarths | Segebarth | UV Light Trap |

Aggregated Data from The Great Papaipema Chase 2005

| MONA | Genus | Species | # | St. County | Location | D | M | Year | Collectors | Det. By | Collection | Comments |
|------|-----------|--------------|----|---------------|------------------------------------|----|-----|------|-----------------------|--------------|------------|-------------------------------------|
| 9486 | Papaipema | birdi | 1 | KY McCracken | Paducah; Ullrich Property | 2 | SEP | 05 | Ian, Craig Segebarth | Segebarth | Segebarth | UV Light Trap |
| 9486 | Papaipema | birdi | 1 | KY Lyon | LB; near Dickerson Cemetery | 10 | SEP | 05 | Ian, Kevin Segebarth | Segebarth | Segebarth | MV Sheet |
| 9490 | Papaipema | nepheleptena | 19 | KY Letcher | Poor Fork of Cumberland River | 27 | SEP | 05 | Laudermilk & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9490 | Papaipema | nepheleptena | 1 | KY Graves | Kaler Bot.; Old W Fk of Clarks Rvr | 12 | OCT | 05 | I, C, and K Segebarth | Segebarth | Segebarth | UV Light Trap |
| 9490 | Papaipema | nepheleptena | 1 | KY Calloway | Blood River; Fern site #3 | 20 | OCT | 05 | Ian Segebarth | Segebarth | Segebarth | UV Light Trap |
| 9492 | Papaipema | marginidens | 1 | KY Letcher | Poor Fork of Cumberland River | 27 | SEP | 05 | Laudermilk & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9492 | Papaipema | marginidens | 2 | KY Owsley | McIntosh Farm | 30 | SEP | 05 | L. Gibson | L. Gibson | Gibson | |
| 9492 | Papaipema | marginidens | 1 | KY Bath | Near Cave Run Lake | 5 | OCT | 05 | Laudermilk & Gibson | L. Gibson | Gibson | |
| 9492 | Papaipema | marginidens | 1 | KY Rowan | Rt. 1274 | 5 | OCT | 05 | Laudermilk & Gibson | L. Gibson | Gibson | |
| 9495 | Papaipema | furcata | 2 | KY Calloway | Blood River | 9 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | |
| 9495 | Papaipema | furcata | 3 | KY Carlisle | Unnamed creek | 10 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | |
| 9495 | Papaipema | furcata | 1 | KY Ballard | Rt. 62 & Mayfield Creek | 11 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | |
| 9495 | Papaipema | furcata | 2 | KY Marshall | East fork of Clarks Rvr; Tucker Rd | 11 | OCT | 05 | I, C, and K Segebarth | Segebarth | Segebarth | UV Light Trap |
| 9495 | Papaipema | furcata | 1 | KY Ballard | Mayfield Creek W US 62 bridge | 11 | OCT | 05 | W.R.Black, Jr. | Black | Black | Cane site #9 |
| 9495 | Papaipema | furcata | 2 | KY Livingston | Bissell Creek | 13 | OCT | 05 | W.R.Black, Jr. | Black | Black | Cane site #1 |
| 9495 | Papaipema | furcata | 1 | KY Graves | Kaler Bot. old W Fk Clark Rv | 15 | OCT | 05 | W.R.Black, Jr. | Black | Black | |
| 9495 | Papaipema | furcata | 1 | KY Calloway | Grubbs Road near Blood River | 15 | OCT | 05 | R. Henderson | R. Henderson | Henderson | 1 male |
| 9496 | Papaipema | nebris | 1 | KY Livingston | Bissell Bluff | 16 | SEP | 05 | W.R.Black, Jr. | Black | Black | dark form; Powerline cut @pole #101 |
| 9496 | Papaipema | nebris | 2 | KY Graves | Kaler Bot.; Old W Fk of Clarks Rvr | 5 | OCT | 05 | I, C, and K Segebarth | Segebarth | Segebarth | UV Light Trap |
| 9496 | Papaipema | nebris | 7 | KY Ballard | Old Mayfield Creek; Cane site #5 | 5 | OCT | 05 | I, C, and K Segebarth | Segebarth | Segebarth | UV Light Trap |
| 9496 | Papaipema | nebris | 1 | KY Graves | Kaler Bot.; Old W Fk of Clarks Rvr | 6 | OCT | 05 | I, C, and K Segebarth | Segebarth | Segebarth | UV Light Trap |
| 9496 | Papaipema | nebris | 1 | KY Ballard | Mayfield Creek W US 62 bridge | 10 | OCT | 05 | W.R.Black, Jr. | Black | Black | dark form, cane site 5A |
| 9497 | Papaipema | necopina | 3 | KY Owsley | Ky. River Bottoms | 1 | OCT | 05 | L. Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9497 | Papaipema | necopina | 1 | KY Calloway | McCullough Fork | 9 | OCT | 05 | W.R.Black, Jr. | L. Gibson | Black | |
| 9499 | Papaipema | duplicata | 5 | KY Owsley | McIntosh Farm | 30 | SEP | 05 | L. Gibson | L. Gibson | Gibson | |
| 9501 | Papaipema | eupatoriil | 4 | KY Calloway | Blood River; Grubbs Rd | 20 | OCT | 05 | Ian Segebarth | Segebarth | Segebarth | UV Light Trap |
| 9505 | Papaipema | cerussata | 4 | KY Letcher | Poor Fork of Cumberland River | 27 | SEP | 05 | Laudermilk & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9505 | Papaipema | cerussata | 4 | KY Owsley | McIntosh Farm | 30 | SEP | 05 | L. Gibson | L. Gibson | Gibson | |
| 9505 | Papaipema | cerussata | 2 | KY Owsley | Ky. River Bottoms | 1 | OCT | 05 | L. Gibson | L. Gibson | Gibson | |
| 9505 | Papaipema | cerussata | 1 | KY Bath | Near Cave Run Lake | 5 | OCT | 05 | Laudermilk & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9505 | Papaipema | cerussata | 3 | TN Henry | Blood River | 9 | OCT | 05 | Loran Gibson | Gibson | Gibson | Cane site # P2 |
| 9505 | Papaipema | cerussata | 1 | KY Graves | Kaler Bot.; Old W Fk of Clarks Rvr | 12 | OCT | 05 | I, C, and K Segebarth | Segebarth | Segebarth | UV Light Trap |
| 9505 | Papaipema | cerussata | 1 | KY Hickman | Three Ponds | 12 | OCT | 05 | Ellis Laudermilk | Laudermilk | Laudermilk | |
| 9505 | Papaipema | cerussata | 2 | KY Ballard | Mayfield Creek W US 62 bridge | 13 | OCT | 05 | Ellis Laudermilk | Laudermilk | Laudermilk | Cane site #9 |
| 9505 | Papaipema | cerussata | 1 | KY Calloway | Grubbs Road near Blood River | 15 | OCT | 05 | R. Henderson | R. Henderson | Henderson | 1 male |
| 9505 | Papaipema | cerussata | 1 | KY Calloway | Beechy Creek WMA | 17 | OCT | 05 | I, C, and K Segebarth | Segebarth | Segebarth | UV Light Trap |

Aggregated Data from The Great Papalipema Chase 2005

| MONA | Genus | Species | # | St. County | Location | D | M | Year | Collectors | Det. By | Collection | Comments | |
|--------|------------|-------------|----|------------|----------|--------------------------------------|----|------|------------|-----------------------|-------------|------------|-------------------------------|
| 9505 | Papalipema | cerussata | 2 | KY | Calloway | Blood River; Grubbs Rd | 20 | OCT | 05 | Ian Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9509 | Papalipema | unimoda | 1 | KY | Rowan | Rt. 1274 | 5 | OCT | 05 | Laudermilk & Gibson | L. Gibson | Laudermilk | |
| 9509.4 | Papalipema | new sp. # 4 | 12 | KY | Graves | Kaler Bot.; Old W. Fk. of Clarks Rvr | 4 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9509.4 | Papalipema | new sp. # 4 | 4 | KY | Graves | Kaler Bot.; Old W. Fk. of Clarks Rvr | 5 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9509.4 | Papalipema | new sp. # 4 | 7 | KY | Ballard | Old Mayfield Creek; Cane site #5 | 5 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9509.4 | Papalipema | new sp. # 4 | 3 | KY | Graves | Kaler Bot.; Old W. Fork, Clark's Rv | 5 | OCT | 05 | W.R.Black, Jr. | Black | Black | Cane site # 5 |
| 9509.4 | Papalipema | new sp. # 4 | 1 | KY | Carlisle | Mayfield Creek W US 62 bridge | 5 | OCT | 05 | W.R.Black, Jr. | Black | Black | Cane site # 3 |
| 9509.4 | Papalipema | new sp. # 4 | 1 | KY | Rowan | Minor E. Clarke Fish Hatchery | 5 | OCT | 05 | Laudermilk & Gibson | L. Gibson | Gibson | 1st. Co. Record |
| 9509.4 | Papalipema | new sp. # 4 | 1 | KY | Graves | Kaler Bot.; Old W. Fk. of Clarks Rvr | 6 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9509.4 | Papalipema | new sp. # 4 | 1 | TN | Henry | Blood River | 9 | OCT | 05 | Loran Gibson | Gibson | Gibson | Cane site # P2 |
| 9509.4 | Papalipema | new sp. # 4 | 3 | KY | Calloway | Blood River | 9 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | |
| 9509.4 | Papalipema | new sp. # 4 | 1 | KY | Carlisle | Unnamed creek | 10 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | |
| 9509.4 | Papalipema | new sp. # 4 | 1 | KY | Ballard | Mayfield Creek W US 62 bridge | 10 | OCT | 05 | W.R.Black, Jr. | Black | Black | Cane site # 5A |
| 9509.4 | Papalipema | new sp. # 4 | 2 | KY | Marshall | East fork of Clarks Rvr; Tucker Rd | 11 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9509.4 | Papalipema | new sp. # 4 | 2 | KY | Ballard | Mayfield Creek W US 62 bridge | 11 | OCT | 05 | W.R.Black, Jr. | Black | Black | Cane site # 9 |
| 9509.4 | Papalipema | new sp. # 4 | 1 | AR | Monroe | White River NWR | 11 | OCT | 05 | Jim Vargo | Vargo | Vargo | (1)MV/UV sheet (2) 7 w Lt tps |
| 9509.4 | Papalipema | new sp. # 4 | 3 | KY | Ballard | Mayfield Creek W US 62 bridge | 11 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | |
| 9509.4 | Papalipema | new sp. # 4 | 1 | KY | Graves | Casey Bottoms | 12 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | |
| 9509.4 | Papalipema | new sp. # 4 | 3 | KY | Hickman | Three Ponds | 12 | OCT | 05 | Ellis Laudermilk | Laudermilk | Laudermilk | |
| 9509.4 | Papalipema | new sp. # 4 | 14 | KY | Graves | Kaler Bot.; Old W. Fk. of Clarks Rvr | 12 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9509.4 | Papalipema | new sp. # 4 | 2 | KY | Graves | Kaler Bot. W Fk. Clark Rv | 12 | OCT | 05 | W.R.Black, Jr. | Black | Black | Cane site # 7 |
| 9509.4 | Papalipema | new sp. # 4 | 1 | KY | Graves | Kaler Bot. Old W. Fk. Clark's river | 12 | OCT | 05 | Jim Vargo | Vargo | Vargo | (1)MV/UV sheet (3) 7 w Lt tps |
| 9509.4 | Papalipema | new sp. # 4 | 2 | KY | Ballard | Mayfield Creek W US 62 bridge | 13 | OCT | 05 | Ellis Laudermilk | Laudermilk | Laudermilk | |
| 9509.4 | Papalipema | new sp. # 4 | 1 | KY | Ballard | US Hwy. 62 @ Mayfield Creek | 14 | OCT | 05 | R Henderson | R Henderson | Henderson | 1 male |
| 9509.4 | Papalipema | new sp. # 4 | 1 | KY | Ballard | Kaler Bot.; Old W. Fk. of Clarks Rvr | 17 | OCT | 05 | I, C, and K Segebarth | Segebarths | Segebarth | UV Light Trap |
| 9509.5 | Papalipema | new sp. # 5 | 1 | KY | Calloway | Blood River | 9 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | cane site # 4 |
| 9509.5 | Papalipema | new sp. # 5 | 1 | KY | Calloway | Blood River | 9 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | cane site # 6 |
| 9509.5 | Papalipema | new sp. # 5 | 1 | TN | Henry | Blood River | 9 | OCT | 05 | Loran Gibson | Gibson | Gibson | Cane site # P2 |
| 9509.5 | Papalipema | new sp. # 5 | 2 | KY | Carlisle | Mayfield Creek W US 62 bridge | 10 | OCT | 05 | W.R.Black, Jr. | Black | Black | cane site # 6 |
| 9509.5 | Papalipema | new sp. # 5 | 1 | KY | Carlisle | Unnamed creek | 10 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | cane site # 4 |
| 9509.5 | Papalipema | new sp. # 5 | 3 | KY | Carlisle | Unnamed creek | 10 | OCT | 05 | Black & Gibson | L. Gibson | Gibson | cane site # 5 |
| 9509.5 | Papalipema | new sp. # 5 | 4 | KY | Ballard | Mayfield Creek W US 62 bridge | 11 | OCT | 05 | W.R.Black, Jr. | Black | Black | cane site # 9; County Record |
| 9509.5 | Papalipema | new sp. # 5 | 8 | KY | Ballard | Mayfield Creek W US 62 bridge | 13 | OCT | 05 | Ellis Laudermilk | Laudermilk | Laudermilk | |
| 9509.5 | Papalipema | new sp. # 5 | 2 | KY | Calloway | Grubbs Road near Blood River | 15 | OCT | 05 | R Henderson | R Henderson | Henderson | both specimens are males |
| 9509.5 | Papalipema | new sp. # 5 | 2 | TN | Henry | Blood River | 20 | OCT | 05 | W.R.Black, Jr. | Black | Black | Cane site # P2 |