KENTUCKY LEPIDOPTERIST

Newsletter of the Society of Kentucky Lepidopterists

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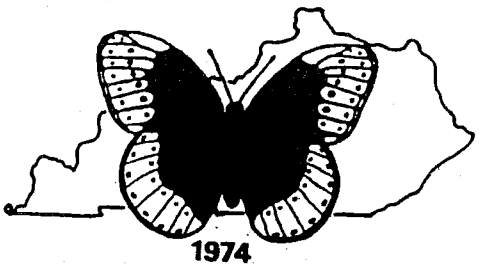

EDITORS' NOTES

When it rains it pours. Covell is continuing to have computer problems so the membership list is not yet ready. This also has bumped some field trip reports to the next issue or two as well as they are also on his computer. The good thing is we'll have enough for an issue (maybe two) when the problems are resolved.

I too have had computer problems and like Covell, have had to buy a new computer. I dread the lengthy period of file transfer and system setup but, once finished I'll be better off (er...well....maybe not financially!).

The Secretary, John Enz, also had a major overhaul on his system last week. What is it with the computer systems of the officers?! John had to undergo the upgrade to run the new software and transfer the membership list into a new database on the secretary's system.

I hope to see many of you at the upcoming meeting. Covell's meeting update immediately follows this spot. Be sure to look for the poem by Katherine Covell.

An Update on the 1996 Annual Meeting of the Society of Kentucky Lepidopterists

by Charles V. Covell, Jr.
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The 1996 Annual Meeting will be at the University of Louisville, Room 321 of Life Sciences Building, Saturday, November 9, 1996 (10 AM to 6 PM). The annual party will be at the Covell's (2333 Brighton Drive, Louisville, Kentucky) from 8-11 P.M. on Friday, November 8, 1996.

This year's special guest speaker will be Dr. Richard Brown, Curator of the Mississippi Entomological Museum. His presentation will be entitled "Moths in the Grasslands of the mid-South."

Dr. Irving Finkelstein will make a presentation on rearing Diana Fritillaries and he also plans to bring live larvae and pupae.

If you have further questions, please contact me via any of the following:
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AN ARTICLE ON THE SCARCITY OF ARTICLES

by Jim Taylor
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James and Kathy Adams visited us last week and gave me, I suppose as a house gift, a head cold of awesome proportions. Since my box of tissues is in the same room as my file of Kentucky Lepidopterist , I decided to review the file between sneezes to see why we seem unable to get out a timely newsletter. During my reading my quick draw from the tissue box frequently wasn't swift enough, so this may be the last time the file is reviewable.

Prior to 1987 Charlie Covell was Editor, and the depth of his involvement is apparent from the most casual reading. The first issue in 1986, for example, contains a report on the 1985 meeting, a reminiscence entitled "Aunt Annie's Cigar Box" , a Treasurer's update (reported through CVC), the column "News and Notes", and a listing of new members and changed addresses - all by Charlie. Mike McInnis wrote about a page and a half, bringing the total text to five pages - one page short of an even number. The way the newsletter is reproduced an even number of pages is inevitable..

With nothing for page 6, Charlie then wrote an editorial beginning, "Since I have a little extra space..." We all know that Nature abhors a vacuum - and so does Charlie. The newsletter in those days was published with embarrassing regularity because Charlie, while welcoming articles from others, did not rely on them to fill the space.

In the page 6 editorial Charlie shows a little of the discouragement which Barry Nichols must feel; indeed, he almost seems to be writing the KYLEPS off as having outlived its usefulness. He said (in part), "I would like to thank all of you who have supported our Society so royally these past 11 years...aims of ...[the] organization have certainly been met...I had felt that perhaps the lifetime of this club had about run its course. However, with Mike McInnis joining me in putting out this newsletter ..I think we are doing just fine." Mike McInnis taking over as Editor may have saved the organization. Had Charlie abandoned ship, which was the flavor of the early part of the editorial, there would be no KYLEPS today.

In that same issue of the newsletter, Charlie stated, "We recently began to solicit articles for this newsletter, and have been encouraged by preliminary response." This is the first mention in the file of a dearth of material for the newsletter, but from here on they multiply.

In January, 1987, Editor McInnis stated the "...newsletter has suffered from a lack of member contributions. Charlie Covell has occasionally served both as Editor and as Author during the past twelve years..." Mike McInnis carried on the tradition by writing the lion's share of the newsletter while he was Editor. He was helped by reports and articles by John Calhoun, Loran Gibson, and several others - including, of course, Charlie Covell. A membership list took up four pages each year, and some Far Side cartoons provided humorous filler.

Our current editor, Barry Nichols, took over the newsletter in 1990. The first Kentucky Lepidopterist under his aegis was dated March, 1990, a month or so late. As Barry said in that issue, "The main reason for its tardy arrival was the lack of membership contributions. I finally received enough to put this issue together as of the last week of February." In the next issue, dated June 1990, Barry said, "...received nothing by the deadline of April 21 set in the last issue. This has caused a four week delay for this issue. Unfortunately, there is no back-log of articles..."

In the next issue, dated October 1990, Barry reported he had, "...received nothing for inclusion in this issue...finally had enough...as of October 11. This has caused a 10 week delay...This has happened with every issue in volume 16...We need to be more timely..." The following issue dated December 1990 but postmarked January 30, 1991, reported, "Again there was a problem in meeting the deadline ..lack of submissions...makes scheduling impossible...If by each ... deadline I don't have enough copy to produce an issue, I will hold the copy over for the next issue and combine the two issues..."

Six months later, in the June 91 issue, Barry stated, "...We are starting to receive some input for the newsletter...We still don't have a

backlog but we haven't had to combine issues yet..." However, gloom descends again in the August 1991 issue: "If it were not for the field trip announcement in this issue, there would not have been an issue..." This warning seemed to have helped. The October 1991 issue: "...thank those of you who sent in items for the newsletter. A couple of articles must wait for the next issue..."

The first 1992 issue was put together without delay. Then, the June 1992 issue reported, "...another 5 week delay in getting copy...We have nearly used up what little backlog we had...desperately need your articles..." An heroic effort by Paul Grey in finishing a continuing series on genitalia preparation supplied an anchor for issues dated September and October 1992.

Then came the first combined issues. There was no first quarter issue. The May 1993 issue was Volume 19, Numbers 1 and 2. As the issue stated, "...As there were no contributions ... by the deadline...there was no newsletter...I have NOTHING in my hold file ...The newsletter is what you make it." The next issue is dated November 1993 and is again a combined issue: "...no contributions....by the deadline...My article file is EMPTY...need your submissions...What kind of articles ...ANYTHING..."

At the 1993 annual meeting the need for a timely newsletter received serious attention from the floor. Barry reported this in the issue dated March 1994: "...Newsletter topic of much discussion during the meeting in November ...need to get the newsletter out on time is important as it is the main method of communicating with the membership...after this issue, the newsletter will be printed immediately after each deadline regardless of input. Rather than cancel an issue and combining it...the issue will contain whatever information I have on file by the deadline."

There was a timely issue dated June 1994. The September 1994 issue reported, "...we have now exhausted the article file." Then an issue dated December 1994 (but postmarked June 16, 1995) reported, "...At this time we are two issues behind..." The next issue, dated February 1995 (but postmarked August 26, 1995) glumly stated, "...article file is empty..." The last issue I have is dated June 1995 (postmarked November 1), is only four pages and pleads for articles.

Are we unique? Hardly. The front page of the latest issue of ***Tropical Lepidoptera News*** contains a large blank space with the quote: "YOUR NEWS? Sorry, this could have been your news or published note on an interesting Lepidoptera item, but the space is blank because no news was received." Leroy Koehn has just been named Editor of ***The Southern Lepidopterists' Society*** newsletter, and he, in a note to me about another matter, said he is "...always looking for articles..."

All organizations of our sort have this problem. If we value KYLEPS, we all need to participate in the care and feeding of our newsletter because no one will do it for us. As Barry has said, articles can be on any subject. Indeed, in the last issue of the LEPSOC news, the aforementioned Leroy Koehn authored a short piece about mistaking chicken feathers for moths.

Reports on field trips - both taken and upcoming - with target species, accommodations, etc., should be fairly easy to write and informative. Book reviews would be welcome. Comments on prior articles - similar experiences, different opinions - would be gladly received. After all, if you read an article in a prior issue and were not moved to think to some degree, why in the world did you waste your time?

Barry needs the articles. Just think: if everyone would send in just a paragraph or two, we wouldn't have to listen to him beg for at least a year. Further, if you try it, you might like it. His address is at the top.

FOURTH OF JULY BUTTERFLY COUNT

by Katherine Covell
2333 Brighton Drive
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A long gravel road winds around the edge
where my father and I would collect
butterflies, the Star-Spangled Fritillary,
the Red Spotted Purple.
Sometimes I would get so tired, I'd
just fold up my net and sit in the car,
which smelled of
killing jars and bug spray
Somehow, though, I would
always become restless, and
find my way to the
small enclosed
patch of overgrowth,
surrounded on all sides
by a low, crumbling wall
Gravestones were broken and fallen
and my father would come over
and speculate about the
family buried there
I wondered about the
young children who slept beneath the
soft pine needles,
I wondered about their
favorite jokes
Sun rays smacked the damp rocks
(a butterfly's haven in this quiet place)
moss hugged the ground
with gentle trace of evergreens in the air.

This poem was originally printed in THE LOUISVILLE REVIEW (1996, nos. 39/40). It is used here with the poet's permission.

High Flying Moths

by Roy W. Rings
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Perhaps you have often wondered where the best place is to operate your MVL and sheet or a blacklight trap to capture the most moths in the least amount of time. Is the summit of a hill better than a deep river valley? How high should you mount your MVL?

This same question popped into the minds of two USDA entomologists, Paul Stewart and Jesse Lam, who were conducting applied research on the tobacco hornworm and the tomato hornworm. Both species are serious pests of tobacco in North Carolina. They wanted to know at what height to mount their blacklight traps to catch the largest number of moths. Since these moths come so readily to blacklight they designed experiments to test the hypothesis that damage to tobacco could be reduced by trapping a large percentage of the moths in the area around a tobacco field.

In the first experiment these investigators mounted nine Ellisco type blacklight traps on a fire lookout tower at intervals of 11 feet. The lowest was at ground level and the highest at 55 feet. The traps were omnidirectional and consisted of a 15 watt blacklight fluorescent lamp with a peak emission of near 3600 A. A dichlorvos insect strip was placed in the collecting basket to assure a fast kill. This made the identification of moths much easier. They emptied the baskets each week and identified selected moths and beetles. The traps were operated from June 2 to October 13.

The results of their experiment showed that there is a wide variation in the height at which various species are trapped. For example about 64% of the May beetles (*Phyllophaga crenulata*) were trapped in the lowest trap while 56% of another species (*Phyllophaga luctuosa*) were caught in a trap 22 feet above ground. No May beetles were captured in traps placed above 44 feet. This would be a good way to get rid of those pesky beetles but somewhat impractical.

The results of the moths collections are summarized below by family:

Arctiidae - The maximum (57%) catch of the salt marsh caterpillar moths (*Estigmene acrea*) was at 22 feet. Twenty-one percent of these moths were trapped at heights of 11 feet and the same results were obtained at 33 feet. No moths were caught in traps higher than 33 feet. Apparently this is a low-flying moth.

Sphingidae - In the course of this investigation 3,268 tobacco hornworm moths (*Manduca sexta*) were trapped. The catches in the traps at various heights varied from 7.4 to 13.9% of the total catch. These results indicate that these sphingids do not normally fly at a preferred height but that they may fly at any height. It may be that a preferred height may be determined by other factors such as shrub or tree height. The trapping results with the tomato hornworm (*Manduca quinquemaculata*) were quite similar with the exception that 20% of the total catch was recorded for the 88 foot trap. In general it appears that these two species may fly at any height and may even fly above 99 feet.

Noctuidae - The cabbage looper (*Trichoplusia ni*) was the only species captured at high levels. No looper moths were trapped in the lower trap heights of 11 to 44 feet. The maximum height recorded for this species was at 55 feet. A substantial number of moths were caught at heights of 66 to 99 feet. Perhaps this may explain why we get so few individuals of this species at our sheet and also why blacklight traps are ineffective in monitoring populations of the cabbage looper.

The size of the catch of the armyworm (*Pseudaletia unipuncta*) generally increased with the height of the traps. More armyworms (20% of the total) were caught at 88 feet than at any other height although some were trapped at all levels.

Three species of owlet moths, the black cutworm (*Agrotis ipsilon*), the yellow-striped armyworm (*Spodoptera ornithogalli*) , and the corn earworm (*Helicoverpa zea*) showed no consistent increase or decrease in catch with height.

In the second experiment five blacklight traps were mounted on a telephone pole at five foot intervals from ground level up to 20 high. The specifications of the blacklight traps were the same as those described in the first experiment. This set-up was surrounded by tobacco fields. The traps were operated from July 7 to September 29.

The results of the second experiment are summarized below:

The armyworm (*Pseudaletia unipuncta*) was the only species with the largest catch in the upper trap. Nearly 28% of the total catch was trapped at a height of 20 feet.

The catches of the other species, *Helicoverpa zea, Manduca sexta* and *Manduca quinquemaculata* were largest in the ground level trap.

Discussion -The design of the above experiments gave the moths and beetles a choice of which trap to enter at various heights. In practice when a moth collector is operating a light source six feet above ground level the moths have no choice and once they enter the region of influence of the light source they usually find their way to that source. The information in my last article answers the question about hills and valleys. A light trap on the summit of a hill should collect more moths than one in a valley since the region of influence is increased. by the hill.

Reference

Stewart , Paul A. and Jesse J. Lam Jr. 1968. Catch of insects at different heights in traps equipped with blacklight lamps. J. Econ.. Entomol.. 61:1227-1230.

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MEMBER'S NOTICES

WANTED: Small series (5-6 per species) of Geometridae from your area. Offering in trade Lepidoptera or other insects from Naples, Florida. Please contact Robert A. Belmont, 3210 27th Avenue, SW, Naples, Florida 34117

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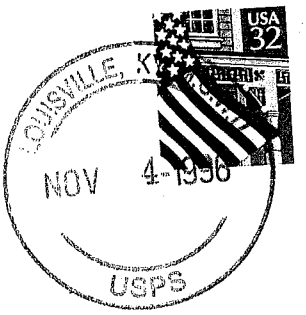

FIRST CLASS

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