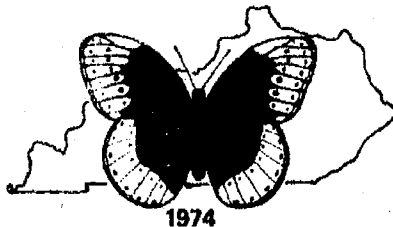


KENTUCKY LEPIDOPTERIST

QUARTERLY NEWSLETTER OF
*The Society of
 Kentucky Lepidopterists*



VOLUME 3, No. 4

C. V. COVELL JR., EDITOR

DECEMBER, 1977

ANNUAL MEETING A BIG SUCCESS

The 4th Annual Meeting of the Society of Kentucky Lepidopterists began with an informal get-together with a keg of Falls City Beer at the Covells' on Friday evening, Nov. 18. The guest of honor was Dr. Raymond White, butterfly ecologist from Old Dominion University in Norfolk, VA. who had come out to give a seminar to the Biology Dept. that day, and who graciously agreed to stay over another day to address our Annual Meeting. There was a lot of good fellowship and conversation at this session, with several out-of-town members arriving in time for the festivities.

The actual meeting got under way in Room 321 of the Life Sciences Bldg. at the University of Louisville at 1:00 P.M. on Sat., Nov. 19. A short BUSINESS MEETING was held in which the following officers for 1978 were elected by acclamation: C. V. Covell Jr., Pres./Editor; Blaine Early, Secretary/Treasurer; and Loran Gibson, Field Trip Coordinator. Plans for the 1978 field trips were tentatively made, with the FIRST TRIP SLATED FOR LATE APRIL IN THE BIG BLACK MOUNTAIN AREA (more details in the next issue of the *Ky. Lepid.*) The Treasurer's Report by Al Brownell revealed a balance of \$285.00 after meeting expenses. SOME MEMBERS HAVE STILL NOT PAID 1977 DUES (If this is you, please remit!).

Next, Dr. White gave his talk, with slides to illustrate his studies of *Melitaea editha* under the supervision of Dr. Paul Ehrlich in California. Afterwards there were questions and discussion. Next, Dr. David Hess gave a well-illustrated talk on "Glacial and Drainage History and Man's Intervention in Illinois: Effects on Distribution of *Rhopal-*"
 (to page 2)

MEADOW FRITILLARY EXPLODING TO THE SOUTHWESTWARD OF "OLD" RANGE

There is growing evidence that the Meadow Fritillary, *Boloria bellona* (Fabricius) is dramatically expanding its range to the lower elevations in the area west of the Appalachians where it has not been taken before. In Kentucky, there are no early records, although the species has long been known to occur in the mountain meadows of Virginia and N. Carolina. The earliest Kentucky record as far as I know is a single specimen from Boyd Co. (probably around Ashland) taken by a student at Morehead State Univ. on Apr. 26, 1971. Later, Leroy Koehn told me he had taken it at Cumberland Falls State Park, Whitley Co., on 29 May, 1970, and found it common. I suspect it was overlooked in the mountains in earlier years, but it was probably not common or widespread in recent memory even there.

By 1973 we had numerous records from eastern Ky., including Clark, Fayette, Harrison, Bourbon, Bath, Robertson, Mason, and, on Oct. 3, Jefferson, counties. The Jefferson County record, a worn specimen knocked down on the Crescent Hill Golf Course by me while doing non-lepidopterological things, seems significant in that I had been monitoring Jefferson County pretty thoroughly since Aug., 1964, and Burt Monroe and Jim Merritt collected quite a bit in the Louisville area in the '40s and '50s. I do not yet know, however, how far this butterfly has spread into counties west of Jefferson. We found it common in places in Oldham and Jefferson counties in 1977.

But there is other important evidence (pg.2)

ANNUAL MEETING (CONTINUED)

ocera." Patterns of butterfly distribution in Illinois were shown in relation to past glacial advances and retreats, and to other geological factors. A similar study in Ky. would be most interesting, too, although glacial deposits are very limited. Next Amos Showalter spoke on "Some Observations on Erora laeta in Kentucky," telling of his past collection of the species in April and July on Big Black Mountain. He was unable to get captive females to oviposit on plant materials he suspected of being the food-plant. Covell then showed some slides of E. laeta on a daisy blossom, and other shots from the July 8 - 10 field trip to Harlan County. An additional note on E. laeta: Mike McInnis collected 1 specimen in Kingdom Come State Park at Cumberland, also in Harlan Co., but some miles from the crest of Big Black Mountain where the others were collected. His was taken on July 10, 1977. A fine slide show on Ky. moths was given by John MacGregor; and several other members gave "show and tell" presentations of some of their interesting captures (Gibson, Showalter, Barrett, Eric Levine, Kirk Williams, and Leroy Koehn). Finally, Mrs. Yin Rei Hicks showed us some of her oriental-style prints of butterflies and flowers which she has for sale, the originals made (in part) from specimens in our entomology lab. She is working on another set now.

After the meeting adjourned at about 4:30, a WORKSHOP ON GENITALIA DISSECTION was presented for several interested members by Al Brownell. Others studied specimens brought by others, identified species using the U. of Louisville collection as reference, and just talked. We reluctantly left at about 6:00 P.M.

There were 31 members present from 5 states as follows: KY.: Robt. Gregg, L. Gibson, R. Henderson, E. Levine, K. Williams, Brett Barrett, Al Brownell, Blaine Early, Sue Ann Hirschy, Susan Heady, C. Cornett, M. McInnis, Canterbury, Gene Mancini, Carl Kaster, C. Sundquist, R. Cassell, C. Covell Jr., J. MacGregor, Bill Black, and James R. Merritt ILLINOIS: Dave Hess. OHIO: Carl Albrecht, Leland Martin, Eric Metzler, Rick and son Brian Ruggles & Mrs. Ruggles; Denny Currutt TENNESSEE: Amos Showalter. VIRGINIA: Leroy Koehn, and Raymond White.

THE SPREAD OF BOLORIA BELLONA (cont.)

of this spread into the Ohio-Mississippi valleys. Letters from colleagues this year go as follows: John A. Hyatt reported it from Lee Co., Va., at a site where it was "unknown in the mid 1960's" (May 31, Oct. 18). He also took it in Hawkins Co., TENNESSEE, on 27 Aug., 1977 (but without comment that he had or had not taken it there before). Dave Hess reported "April 15 (1977): First sighting of B. bellona in westcentral Illinois (Cass Co.) (reported as mostly restricted to northeastern Illinois in Irwin & Downey, 1973). Finally, Richard Heitzman wrote me on 4 Nov., 1977: "One of the St. Louis collectors took a nice series of Boloria bellona this September in St. Charles County so this species must really be spreading into Missouri."

I would like to hear from any of you who have comments or data on this apparent extension of range.

My tentative theory is that bellona is successfully following the interstate highway system southward and westward from the Appalachians. WHAT DO YOU THINK? -CVC

KENTUCKY LEPIDOPTERA SURVEY REPORT

The trip to Big Black Mountain and vicinity July 8 - 10, 1977, yielded a number of new state moth records, some of which I can now report after recent determination of the specimens by Dr. Douglas C. Ferguson and Dr. E. L. Todd in the National Museum. I was there for some work on Dec. 27 - 30. These moths include: NOCTUIDAE: Heptagrotis phyllophora Grt., Diarsia jucunda Wlk., Anaplectoides brunneomedia McD., A. prasina (F.), Euretagrotis sigmoides Guen., Eu. attanta Grt. Rhynchagrotis cupida Grt., Polia nimbose Gn., P. imbrifera Gn., Lacinipolia olivacea Morr., and Amphipoa americana Speyer. New records from other areas include: Battaristis vittella Busck (Gelechiidae), Bernheim Forest, Al Brownell; Zanclognatha protumnusalis Wlk. from Horner Bird Sanct. (Covell), and Plusia purpurigera Wlk. (Noct.) from Booneville, Owsley Co. (L. Gibson).

THE STATE FAUNAL LIST AS OF THIS DATE IS a total of 1,786 species known from Ky.

THERE ARE MANY, MANY MORE OUT THERE TO FIND!

NEWS NOTES, ETC.

REMEMBER: The Annual Meeting of the Lepidopterists' Society will be held here at the University of Louisville. Dates are: July 7 - 9, 1978. PLEASE MAKE PLANS TO ATTEND.

Dr. Herb Kulman, Entomology Dept. at Univ. of Minnesota, St. Paul, MINN. 55108, has published an interesting paper on Butterfly Production Management. The general idea is to increase desirable butterfly populations in areas where they have been decreasing by manipulation of habitats. This is a rather new field, and I am sure Herb would welcome correspondence on this topic. I think he would be happy to send a copy of his article to you if you asked for one.

* * *

The Moths of America N. of Mexico project is alive and well. D. C. Ferguson's fascicle treating the family Lymantriidae will be mailed in the next few months to subscribers. Also, a new checklist of the Lepidoptera of N. America, including butterflies, is nearing readiness for submission to the printer; it should be ready some time in 1978.

A gift of 1,260 moths was given to the University of Louisville insect collection by Leroy Koehn in November, 1977. The specimens are mostly from Ohio, Kentucky, Virginia, North Carolina, and Florida. Dr. Robert Gregg donated a series of 50 pinned butterflies at that time, also. Other members have given specimens from time to time, and I am very grateful to all of you for your contributions.

* * *

One of the best catches for Covell in 1977 was a Catocala micronympha form "griseola" with completely black hindwings. According to T. D. Sargent in his book Legion of Night: The Underwing Moths, pp. 112 and 113 the hindwing aberrations are extremely rare. Read these pages of a heartbreaking story of Sargent's experience with such. Mine was taken at the Horner Bird Sanctuary in Oldham Co., June 15, 1977, at light. I know of no other such specimen of this species. Do any of you know of one?

Robert S. Bryant, of Baltimore, MD, wrote in October, and the letter came in a beautiful envelope featuring Euphydryas phaeton, the Maryland state insect. He told of the activities of the Maryland Entomological Society, and invites any of you to write him for information. They hold monthly meetings, and publish the Maryland Entomologist.

While the Society is not restricted to those interested in Lepidoptera, there are several avid lepidopterists active in it, including staff members at the U.S. National Museum. His address: 522 Old Orchard Rd., Baltimore, MD. 21229.

John Hyatt sent a copy of his Field Season Summary report for 1977. His records for Tenn. and Va. include some very good catches, in addition to the B. bellona information cited on pg. 2. A good faunal study for Tenn. is long overdue; I hope one will be worked up before too long. Some people think that published faunal information is a waste of time; but whenever a researcher wants to know the range, flight periods, and other information about any given species, they usually refer first to such works. John took E. laeta in Hawkins Co., Tenn., on 17 Apr., and another in a SPIDER WEB on 30 Apr.! His other records will be in the Lepid. Soc. Field Season Summary.

NOTE: TIME TO SEND YOUR FIELD SEASON NOTES TO YOUR ZONE COORDINATOR. I WILL SEND RECORDS TO MO NIELSEN ONLY FOR MY OWN COLLECTING THIS YEAR, TO AVOID CONFUSION. Please follow directions included in the Lepid. Soc. NEWS.

*

You might wish to join TIEG (Teen International Entomology Group, which has been revitalized at its new address at Dept. of Entomology, Michigan State Univ., East Lansing, MI, 48824. New editor of the TIEG NEWSLETTER did a superb job on the recently mailed issue. Roger Hoopingarner is the new Professor in charge (TIEG Advisor). If you are a student or teen, dues are \$2 yearly; it is \$4 for adults. I highly recommend it to your attention!

YOUR 1977 MEMBERSHIP LIST IS ATTACHED. Please let me know of any corrections.

Dave Baggett of Jacksonville, Fla., wrote on Dec. 6 of the season in Florida. He said that the severe winter of 1977 hurt populations of Heliconius charitonius, Battus polydamas, Anartia jatrophae, Phoebis philea, and Calpodus ethlius in Duval Co. He also said Nathalis iole, Phoebis sennae eubule, and Pieris protodice were down from usual abundance. However, Hyalophora cecropia and Actias luna were common in March and April (and cecropia was also unusually common in the Louisville, Ky. area later in 1977). -(COULD EXTRA COLD WEATHER IN MORE SOUTHERN PART OF THE RANGE INCREASE SURVIVORSHIP OF CECROPIA?)- He even took one cecropia in Flagler Co. He did well with Catocala, collecting 28 species, and reported that Rick Gilmore had added C. miranda (as well as Polygonia comma) to the Florida state faunal record. Another addition - and range extension - was taken by Steve Roman, another Florida collector: Mitoura hesseli in the Appalachian National Forest "in June."

Dave also reported a new, big colony of Phyciodes texana seminole found in Sept. in Alachua Co., and that his old one near Icheetucknee Springs, Suwannee Co., was bulldozed and cleared this year. Dave went to south Florida in Nov. with a visiting friend, Jeff Slotten of Illinois, and took a number of good species including Siproeta stelenes, Eurema dina, Chlorostrymon simaethis, Strymon marialis, Precis zonalis, Anaea floridalis, Hesperia mepkel, Polygonus leo, Phocides pigmalion, and others (plus some fine Sphingidae).

Bill Sicker wrote that he has finished his manuscript of his work on the Sphingidae of Wisconsin. He hopes it will be published soon. He reported light trapping very good in the Bailey's Harbor area of NE Wisconsin in 1977.

* *

Another Wisconsin member, Les Ferge, wrote of his season. He took new county records of Boloria eunomia dawsoni and Erebia discoidalis, and found colonies of Boloria frigga and Freija doing well. He found a colony of Oeneis jutta "near Wisconsin Rapids." Moth collecting was "Very good in May and June," and he got some Hyalophora columbia males at light and attracted to H. cecropia females set out in traps. He reared some columbia-cecropia hybrids and plans to do some back-crossing in 1978.



Mo Nielsen wrote that he had had a good season with Catocala, collecting 37 species in 1977 - "my best ever in one season." He took Atrytone delaware and Lethe anthedon in early Sept., indicating a second brood, which is unusual.

** ** *

We now have a tentative record of Euphyes dukesi from Webster County in western Kentucky. It was a student-caught specimen from 1972, found by Covell while attending the Kentucky Academy of Science meeting at Western Kentucky University, Bowling Green. More on this as the data are corroborated.

*

Covell stopped for a visit with Carl Cook at his home in Center, Ky. on Nov. 12. Carl is a contractor who has given over some of his office space to housing a modest collection of butterflies (mostly Papilionidae) along with a magnificent, worldwide collection of dragonflies (Odonata) - his first interest. Carl filled me in on details of his first capture of Erora laeta nearby back in 1947.

Brett Barrett sent some butterfly records for Metcalf County - an area we need more from.

PLEASE SEND: News items, changes of address, notices, and short articles. Happy 1978!

- CVC

NEW MEMBERS

- BALOGH, George 3607 N. 98th St., Milwaukee, WISCONSIN 53222. George is specializing in Geometridae.
- CASELL, Richard L. 4003 Poplar Level Rd., Louisville, KY. 40213. "My interest is the Giant Silk Moths."
- HOPKINS, Cliff Monarch Life, 2149 Electric Rd. SW, Roanoke, VIRGINIA 24018. Interests: Butterflies, moths, and other insects; especially interested in getting material for use in Roanoke Valley Science Museum and local schools; asks for any material you may not need; he'll pay postage; will want to exchange in 1978.
- LEVINE, Eric 2401 Medbury Ct., Louisville, KY. 40222. Interests: Papilio, Morpho, other tropicals, and giant silk moths.
- WILLIAMS, Kirk 2405 Medbury Ct., Louisville, KY. 40222. Interest: Tropicals

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