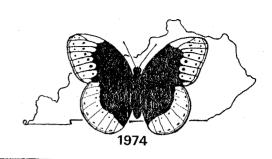
# KENTUGKY LEPIDOPTERIST

NEWSLETTER OF

### The Society of Kentucky Lepidopterists



VOL. 7, NO. 1

C. V. COVELL JR., EDITOR

MARCH, 1981

R. A. HENDERSON, ASSOC. EDITOR

#### SPRING FIELD MEETING APRIL 24-26

PLAN NOW TO ATTEND OUR SPRING FIELD MEETING, which will be at Big Black Mountain in Harlan County, eastern Kentucky. Some of the species we expect to find include Anthocharis midea, Pieris virginiensis, Celastrina ebenina, Glaucopsyche lygdamus, Erora laeta, the early Papilios and Graphium marcellus, Incisalia henrici, augustinus, and niphon (possibly irus), and Pyrgus centaurae wyandot.

To find more about the plans, and make arrangements, contact our Field Trip Coordinator, Loran Gibson, 30 Russell St., Florence, KY 41042 - Phone (606) 371-3455. He will provide you with directions and housing information, plus exact plans for our activities. Usually some of us camp at nearby Kingdom Come State Park in Cumberland, or at the motel in that town.

LET'S PRAY FOR RAIN BEFORE APRIL 24, BUT WARM, DRY WEATHER THAT WEEKEND. WE'RE DUE!

## ALLYN MUSEUM BUTTERFLIES TO MOVE TO UNIVERSITY OF FLORIDA

News has just reached us of the official donation of the Allyn Museum of Entomology to the Zoology Department, University of Florida. Date of physical movement not yet know, but a new building at UF may be in the works to house the collection, which, with what they now have will comprise over 1.5 million specimens, representing over 90% of the 16,000 known butterfly species in the world.

### EVIDENCE OF A PARTIAL SECOND BROOD OF CELESTRINA EBENINA IN THE WILD

by Richard A. Henderson

During the late morning of August 10, 1980, Loran Gibson and I were collecting in the general area of our campsite at Kingdom Come State Park, Harlan Co., KY, when I collected a specimen of a Lycaenid, which to our amazement was identified by Gibson as a male Celastrina ebenina Clench.

Without any further waste of time we started to search the area for more specimens. Gibson began his search about 200 ft. up the gravel road where, on a previous excursion, he saw a patch of the foodplant of C. ebenina, Aruncus dioicus (Walt.) (Wagner & Mellichamp, 1978), growing. I began to search the location where I had found the previous specimen, and sighted another on the embankment of the gravel road. However, I lost track of it when I stepped on some dry leaves on the embankment and a flurry of Bomolocha sp. (Noctuidae) distracted me for an instant. When I saw it again it was flying toward the treetops on the downwind slope of the road.

With thunder approaching and clouds obscuring the sun, we decided to head down to some of the places where we had collected <u>C. ebenina</u> in abundance in the spring at Big Black Mountain. By the time we reached the base of the mountain at Kingdom Come State Park, the storm broke; so we decided to head for home.

#### CONCLUSIONS

The collected specimen and sighted second specimen of <u>C. ebenina</u>, both males, are evidence of a partial second brood in the wild. This partial brood, however, is a late summer one, and seems temporally very distant from the spring population (Wagner & Mellichamp, 1978). Also, the habitat of

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the late-summer specimens observed may be somewhat different from the spring brood as described by Wagner & Mellichamp, since they were seen at a higher elevation on a slope where conditions are drier than the moist streamside hill or ravine. Foodplant at this elevation may be sparce and may account for the rarity of the individuals of this brood. However, some foodplant was still to be seen a little farther down the trail where it has been observed before.

On our way home Gibson and I stopped by the spot in Red River Gorge, Powell Co., KY, where C. ebenina was found by Wagner several years ago, and where others have taken it since. No specimens of C. ebenina were seen. However, weather conditions were not favorable, and the locality was not similar to that described above for the 2 individuals seen.

#### **ACKNOWLEDGMENTS**

I would like to thank Dr. C. V. Covell, Jr. for editing this article and Loran Gibson for identifications of butterfly and foodplant in the field.

#### LITERATURE CITED

Wagner, W. H., Jr. & T. L. Mellichamp 1978. Foodplant, habitat, and range of Celestrina ebenina (Lycaenidae). J. Lepid. Soc. 32(1): 20-36.

Editor's Note: A pencil sketch of the locality of this capture was submitted but left out due to shortage of space. Copies may be requested of this map from the author.

#### RESEARCH REQUESTS

Needed: Viable ova or pupae of P. glaucus, Call. promethea, C. angulifera, C. securifera, and Hyalophora spp. Precise geographical locations and local host plant information is necessary. Correspondence welcome. Mark H. Evans and J. Mark Scriber, Dept. of Entomology, Univ. of Wisconsin, Madison, WISCONSIN 53706.

Needed: Records of moths and butterflies in Kentucky for Kentucky Lepidoptera Survey. Help will be acknowledged. C. V. Covell, Jr., Dept. of Biology, Univ. of Louisville, Louisville, KY 40292.

NOTES ON AN UNUSUAL COLONY OF LETHE CREOLA IN KENTUCKY, WITH SOME THOUGHTS ON THE DISTRIBUTION OF THE SPECIES

by Loran D. Gibson

When someone mentions <u>Lethe creola</u> (Skinner) most collectors who have seen this elusive species in nature will conjure up images of canebrakes and steamy southern swamps. Kentucky collectors are no exception, for in the southwestern corner of the state, we too have our small share of swamps and cane, and though not extensive, these areas still have a few localized colonies of creola.

There is, however, another habitat for creola in Kentucky. This is in Powell and Menifee counties in the area known as Red River Gorge. The first Kentucky records of the species are from this area, collected 2 June 1962 by Jack Dempwolf (C. V. Covell, Jr., pers. comm.). While like the Fulton Co. habitat, this eastern Kentucky area has creola inhabiting wooded riparian places with some cane; but the similarity of habitats ends there. Instead of flying in southern coastal plain sites where P. sennae, Poanes yehl, and Euphyes dion may also be found, the eastern Kentucky localities feature such species as S. diana, C. ebenina, and Pieris virginiensis.

Cane, Arundinaria gigantea (Walt.), the food plant of the Creole Pearly-eye, occurs in eastern Kentucky in what must also be termed an unusual situation. One normally finds cane along meandering streams with broad floodplains, or in swampy and marshy areas. Here it grows on narrow stream banks, and even up the steep ravine slopes where it is associated with such trees as Tsuga canadensis, Pinus strobus, P. virginiensis, and other northern Appalachian plants.

Why is it then that a butterfly of southern swamps should occur here in a habitat so far removed from the norm? Some documentation on the history of Arundinaria in Kentucky provides a probable answer. According to Wharton & Barbour (1973), accounts written during pioneer days in Kentucky describe extensive canebrakes. Some early maps located thousands of acres of "good cane lands" which were taken as indicating rich soil. Cane grew so thick as to be almost impenetrable, especially in central Kentucky.



#### (Lethe creola in Kentucky, continued)

With foodplant so common, no doubt creola was more widespread then than now. In those days the Creole Pearly-eye may have occurred with its host from the Mississippi and Ohio rivers through central Kentucky to the Cumberland Plateau and possibly beyond. Since central Kentucky was settled first, cane and creola must disappeared early from that general separating the eastern populations from those in timber cutting As west. agriculturalization of cane lands increased. populations of cane and the butterfly shrunk to their current distributions. Similar reduction of overall general abundance probably occurred as well in the coastal plains habitats as more and . more land was taken under cultivation in the period since 1776. If the butterfly occurred as widely as the host plant, the drastic decrease in distribution of Arundinaria tends to explain why creola is now found in well-separated, highly localized colonies throughout its range. It also sheds some light on the existence of the unusual colony in Red River Gorge, near the northern limit of its range, and in mountain habitats.

#### LITERATURE CITED

Wharton, M. E. & R. W. Barbour 1973. Trees and shrubs of Kentucky. Univ. Press of Ky., Lexington

Editor's Note: Besides known records from Fulton and Graves counties in coastal plain Kentucky, and Powell and Menifee counties in eastern Kentucky, the species was collected in Nelson Co. (Cox's Creek) on Aug. 17, 1974, by the late Greg Florence (male in U. of Louisville collection). One therefore should seek out relict patches of cane between the eastern and western colonies with good hopes of turning up L. creola. Known dates of capture in Kentucky include June 2, August 10, 17, 18, and September 13. -CVC-

#### NEW MEMBERS

David M. Bigelow, 9795 Larkin Road, Eden, NY 14057. Dave and your Editor got to know each other in the field during the Ecuador trip, 1980. Dave works at the Buffalo Museum, and is interested in butterflies and other things naturally scientific.

John M. Coffman, Rt. 1, Box 331, Timberville, VA 22853. Phone (703) 896-8149. John's interests include nearctic micros, macros, and butterflies, life history and distribution. He welcomes exchanges and writes on royal walnut stationery!

Dr. Thomas C. Emmel, Chairman, Dept. of Zoology, Univ. of Florida, Gainesville, FL 32611. Tom specializes in the ecology, genetics, chromosome characteristics, biology, and other aspects of Nearctic and Neotropical butterflies, esp. Satyridae, Riodinidae, and some Nymphalidae and Papilionidae. He is an accomplished author, and leader of fine field trips to the Neotropics.

Joel M. Johnson, 59 East 400 North, Payson, UTAH 84651. Joel edits the new newsletter of the Utah Lepidopterists' Soc., UTAHENSIS.

Carl H. Kaster, Dept. of Biology, Univ. of Louisville, Louisville, KY 40292. Carl is a graduate student in Biology, with research interests mainly in Diptera (Sciomyzidae) who joins us in many Ky. Leps. activities from time to time.

Col. Stanley S. Nicolay, 1500 Wakefield Drive, Virginia Beach, VA 23455. Stan is a leading authority on Hesperiidae and Lycaenidae, particularly of the American tropics, and was our Guest of Honor at the 1980 Annual Meeting. He is, however, first and foremost, a dedicated field collector, friend of the Lepidopterists' Society (former Treasurer, President, and veritable Savior from Bankruptcy in 1970) and, most of all, the lepidopterists who know him.

#### **NEW ADDRESSES**

Dave Baggett, 14406 North 22nd Street, Apt. 169, Lutz (pronounced "Loots"), FL 33549.

Kenneth A. Bloem, Dept. of Entomology, Univ. of California, Davis, CA 95616.

#### **NEWS AND NOTES**

Leland Martin writes of his discovery in June, 1980, or a "healthy colony of Euphyes dukesi within the boundaries of Findlay State Park, which is about 2 miles south of Wellington, where I live" in Ohio. Good to know there is a protected colony, Leland.

The UTAH LEPIDOPTERISTS' SOCIETY published its first issue of <u>UTAHENSIS</u> (Vol. 1, no. 1) which will appear quarterly. It is 12 pages long, and chock full of interesting information. I highly recomment it, and suggest you write the Secretary, Mary F. Fors, 5616 S. Allendale Drive, Murray, UTAH 84107, and enclose your \$7 membership and become a member. News for <u>UTAHENSIS</u> goes to Joel M. Johnson, Editor (see address above). GOOD LUCK to the ULS, a history of which is on the first page of this fine newsletter.

Phil Kean sent a copy of Vol. 1, no. 2, of Phaeton, official newsletter of the Maryland Entomological Society. This Society is not restricted to lepidopterists, but is heavily laden with them - and an active bunch they are. Membership is \$5 yearly, Active, \$3 for Students for Phaeton and the journal, Maryland Entomologist. Incidentally, they recently honored 90-year-old Dr. George Rawson to Honorary Life Membership. To join, write: Membership Comm., Md. Ent. Soc., c/o Dept. of Biological Sciences, Univ. of Md.-Baltimore Co., 5401 Wilkens Ave., Baltimore, MD 21228.

Molly Monica writes of progress in the formation of the NEW JERSEY LEPIDOPTERISTS, which will soon begin publishing a newsletter and have planned field and other activities for 1981. Write her for information at 11 Putnam Avenue, Berkeley Heights, NJ 07922.

KENTUCKY LEPIDOPTERA SURVEY NEWS: The Editor returned from a Christmas season visit to the U. S. National Museum with 42 new state records of Lepidoptera, many in the Tortricidae. but other scattered among other families. Special thanks are due Jack Clarke, Don Davis, Doug Ferguson, Bob Poole, and Ron Hodges for their assistance. Since the end of 1980, several other species have been added, notably winter-flying Noctuidae taken by John Nordin at bait traps, and identified by Dr. Dale Schweitzer at Yale University. The total number of Kentucky Lepidoptera is now 1,983, of which 538 are Noctuidae. We should cross the 2,000-species mark soon.

KENTUCKY LEPIDOPTERIST
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IMPORTANT: If you plan to collect in Kentucky state parks, you need a permit. Write for one to Mr. Ed Henson, Kentucky Department of Parks, Capitol Plaza, Frankfort, KY 40601, and state your research association with the Ky. Lepid. Survey.

Dave Baggett reports a generally poor year in Florida last year, but an early spring gathering steam this year. Callophrys henrici margaretae, C. gryneus sweadneri, and other spp. are already on the wing (eat your hearts out, Yankees!!). March 6-7 he went blacklighting at Collier Seminole State Park (your Editor's old stomping grounds in the late '60s) with Terry Dickel and Lee Adair, and did well with moths of Sphingidae, Noctuidae, Geometridae, and Pyralidae. They also worked the Fakahatchee area, and saw a red-shouldered hawk feast on a T. polyphemus left over from blacklighting.

NOTE: BACK ISSUES OF KY. LEPID., \$2 per volume.

WHERE ARE THE BOOKS? The new Moths of America Checklist of N. A. Lepidoptera is being proofread, and should be available in another 2-3 months. Memoirs #2 of the Lepid. Soc. is in about the same stage of publication and will be mailed to those who ordered it as soon as it arrives in Louisville. -Ed-

The Editor would like to thank Dr. Varley E. Wiedeman of the University of Louisville Biology Department for the composition and typesetting of this issue.



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