

ABSTRACTS

The Lepidopterists' Society

35th ANNUAL MEETING



Fairview Community College

Fairview, Alberta

July 5-8, 1984

Co-sponsored by:

University of Alberta,
Department of Entomology

TITLE: Status of Knowledge of the Geometridae Subfamily Sterrhinae of the Neotropical Region

AUTHOR(S): Charles V. Covell Jr., University of Louisville, Louisville, Kentucky

ABSTRACT: Work on the neotropical Sterrhinae (Geometridae) has been almost nonexistent since the death of British systematist Louis B. Prout in 1943. His publications on this group included incomplete Vol. 8 of Seitz's Macrolepidoptera of the World, and coverage of the group in Lepidopterorum Catalogus. At present, the known fauna of neotropical Sterrhinae includes 44 genera and 918 species. This makes up 44% of the world genera and 38% of the world species in the subfamily. Life history information is virtually unknown.

The present author has begun to collect literature and material for a revision of the neotropical Sterrhinae, and has visited several Latin American countries (Ecuador, Peru, Brasil, and the Dominican Republic) to collect fresh specimens. He hopes to provide a fascicle on this group for the Atlas of Neotropical Lepidoptera project headed by Dr. John Heppner.

TITLE: An Expedition to the Mountain of the Mist

AUTHOR(S): Donald R. Davis, Smithsonian Institution, Washington, D.C.

ABSTRACT: Cerro de la Neblina (Mountain of the Mist) is the highest, most isolated, and least known of the extensive tepui system which constitutes the ancient Guayana Plateau of Venezuela and Guyana. This particular tepui, or table mountain, was discovered as recently as 1953. It arises from lowland Amazonian rainforest at 100 m, with one peak reaching to 3045 m. The exploration of Cerro de la Neblina is currently the focus of a year long expedition by a multinational, multidisciplinary team of scientists, of which the author was privileged to be a member.

Having recently returned from the first phase of this expedition, the author will review the general objectives and operations of this unique project, as well as the major characteristics of the flora, fauna, and physiography of the region.

TITLE: Classification and Distribution of the Holarctic Arctiini (Arctiidae)

AUTHOR(S): Douglas C. Ferguson, Systematic Entomology Laboratory, U.S.D.A., Washington, D.C.

ABSTRACT: Moths of the tribe Arctiini worldwide fall into 6 recognized groups, of which 3 are restricted to the Northern Hemisphere and have many northern, holarctic elements. The 6 groups are characterized, and one of them, consisting of the genera Holarctia Fgn., Neoarctia Neum. & Dyar, Palaearctia Fgn., Hyperborea Grun-Grshimailo, Chelis Rambur, Grammia Rambur, Notarctia M.E. Smith, and Apantesis Wlk., is revised at the generic and in part the specific level, with emphasis on distribution, morphology, and a reevaluation of the phylogenetic importance of wing pattern.

TITLE: Does the False Head Hypothesis Apply Also to Papilionids?

AUTHOR(S): Benjamin H. Landing, University of Southern California, California

ABSTRACT: The association of an "eye-spot" at the anal angle of the under surface of the hind wing with tail(s) on the hind wing to form a "false head," which serves as a diversionary target for predators, is frequently mentioned in the literature as regards lycaenids, but very rarely (e.g., Goodden, 1977) as regards tailed papilionids. Statistical analysis of presence of such eye-spots versus absence, of tails versus absence, and of toxic (protected) status (= aristolochia-feeding) for 441 papilionid species from North and South America, Africa, the Australian region, and the southeast Asian islands shows significant association of eye-spots with tails, and of both with non-protected status. Analysis of presence of tails versus absence as regards being a mimic of protected papilionid, danaid, pierid, etc., species, for 52 African and 58 South American species of genus *Papilio* shows significant association of tailed with non-mimetic, and of non-tailed with mimetic status. The data thus suggest that the false head hypothesis does apply also to tailed papilionids, and that the association of anal-angle eye-spots with tails (the false head) is an alternative protective strategy for papilionids to that of unpalatability due to larval feeding on aristolochias. The data also raise the issue of whether all non-tailed papilionids should be considered either protected species or mimics of such.



TITLE: Enigmatic Colias From Idaho

AUTHOR(S): Clifford D. Ferris, University of Wyoming, Laramie, Wyoming

ABSTRACT: Idaho is unique in the United States because of its topography and the associated river, valley and mountain systems which converge in the state. This situation has produced some curious butterfly populations in several families, including the Pieridae, Lycaenidae and Nymphalidae. The genus Colias produces some particularly interesting populations among the groups that use the Leguminosae and Ericaceae as larval hosts. Specific species include the Colias alexandra complex, Colias interior, and an enigmatic population from central Idaho that appears to be either a new species or a stable hybrid between C. pelidne skinneri and C. interior. There is also a distinct, and presumed to be relict, population of Colias meadii. These entities will be discussed and slides presented showing adults and habitat areas.

TITLE: Alpine Melanism in Parnassius phoebus (Papilionidae)

AUTHOR(S): Crispin S. Guppy, University of B.C., Vancouver, British Columbia

ABSTRACT: Many species of butterflies exhibit 'alpine melanism', a tendency to increase in wing darkness with increased elevation or latitude. Parnassius phoebus is one of the more prominent species in which alpine melanism occurs. The changes in melanism are in part due to thermoregulatory requirements, but other selective forces must also be invoked to explain the observed patterns. The thermoregulatory effects of differences in melanism are somewhat different from those which occur in Colias nastes. The interaction of the various selection agents result in the extreme variability of Parnassius phoebus wing patterns.

TITLE: Erebia magdalena in Alberta, Natural History and Biogeography (Satyridae)

AUTHOR(S): Gerald J. Hilchie, University of Alberta, Edmonton, Alberta

ABSTRACT: Erebia magdalena was discovered in 1981 on a front range mountain in Alberta. Eggs were obtained from captive females in 1982, larvae were reared and one pupated then emerged as an adult. Comparisons with adults of E. magdalena from the U.S.A. and E. mackinleyensis from the Yukon suggest that the Albertan population descended from populations which dispersed north from southern refugia following deglaciation.

TITLE: Current research on Lepidoptera in Alberta, Canada

AUTHOR(S): Edward M. Pike, Fairview, Alberta

ABSTRACT: Currently, research on Lepidoptera is being conducted at the Agriculture Canada Research Station in Lethbridge, Alberta Environmental Centre in Vegreville, Provincial Museum in Edmonton, Department of Entomology, University of Alberta, Edmonton, and by various amateurs.

Drs. D. Struble and J. Byers in Lethbridge are developing a pheromone based monitoring system for Noctuids in southern Alberta. Dr. H. Liu at Vegreville is developing sampling procedures for the Berth Armyworm (*Mamestra configurata*). A number of amateurs and the Provincial Museum are clarifying distributions throughout the province. G. Hilchie, F. Sperling, J-F. Landry and E. Pike are working on systematics and biogeography of selected lepidoptera found in Alberta. N. Kondla and Dr. C.D. Bird are working on a handbook of Alberta butterflies.

TITLE: Butterfly legs and Phylogeny

AUTHOR(S): Robert K. Robbins, Smithsonian Institution, Washington, D.C.

ABSTRACT: Higher classification of the butterflies has been largely based for over a century on the structure and function of butterfly legs. I review and correct previously published information on leg morphology and function, and present some new behavioural and morphological data. I then compare these data with proposed phylogenies to the "families" of butterflies, and comment briefly on those groups which are likely to be more stable and thus most deserving of family rank.

TITLE: The Lepidoptera Fauna at the Queen Charlotte Islands, B.C.

AUTHOR(S): Jon H. Shepard, Northwest Community College, Terrace, B.C.

ABSTRACT: The Queen Charlotte Islands have generated considerable interest in the last two decades as a possible Wisconsin age glacial refugium. Recent geological investigation indicates ice free conditions back at least to 18,000 B.P. Plant species show little evidence of refugium. Carabid beetles indicate a refugium. To date 113 species of Lepidoptera have been found on the Islands. The Geometridae predominate (66%). Most species are very widely distributed being Circumpolar, Nearctic Boreal or West Coast Coniferous Forest in distribution. None are unique to the Islands. Also most Lepidopterous species are polyphagous and common on the mainland. Thus it appears that the Queen Charlotte Islands were not a refugium for Lepidoptera. The few species with a restricted range are found from the Olympic Peninsula north to the Alaska Panhandle. A more acceptable refugium for these species is that area of coastal Washington immediately south of the maximum Wisconsin Ice. Geological evidence of this area shows a tree species assemblage similar to that of the Northern B.C. coast and the Alaska panhandle.

TITLE: A Tribute to the Amateur (Presidential Address)

AUTHOR(S): Lee D. Miller, Allyn Museum of Entomology, Sarasota, Florida

ABSTRACT: The contributions of the amateur lepidopterists to the field are discussed in historical and contemporary contexts. A plea is made for the cessation of the schism between amateur and professional lepidopterists since each has an important contribution to make.

TITLE: Subspeciation and the Niche Concept in Lepidoptera

AUTHOR(S): Lee D. Miller, Allyn Museum of Entomology, Sarasota, Florida

ABSTRACT: This paper discusses subspeciation in Lepidoptera based on extension of the allopatric subspecies and possible exceptions when allopatry is defined strictly on a two-dimensional concept. Allochrony is shown to be a special case (an added dimension) of allopatry, and the possibility of two subspecies being in the same geographical area yet never meeting is discussed.

TITLE: Seasonality in African Junonia (Nymphalidae): Observations on U-V Reflectance Patterns and Associated Wing Scale Ultrastructure.

AUTHOR(S): Jacqueline Y. Miller and A.C. Allyn, Allyn Museum of Entomology, Sarasota, Florida

ABSTRACT: Seasonality or a marked change in wing colouration, maculation, and/or shape concomitant with the onset of the wet or dry season, has been observed in Lepidopteran populations of different faunistic regions (Owen, 1971, Dickson and Kroon, 1978, and Young, 1982), but it is perhaps most markedly developed in the African representatives of the genus Junonia (=Precis). While several theories have been proposed as to the physiological and environmental basis for these changes, the variation in temperature and humidity are thought to be prime factors involved in the genetic expression of a particular phenotype. Recent investigations have shown that there are also differences in the U-V reflectance patterns in addition to the resultant changes in the structure of the wing scales. The results of these investigations will be reported and various hypotheses concerning these results will be discussed.

TITLE: The Genetic Basis of Color Dimorphism and Aberrant Butterflies in the Papilio glaucus complex: Evidence from Hybridization Studies

AUTHOR(S): J. Mark Scriber and Mark H. Evans, University of Wisconsin, Madison, Wisconsin

ABSTRACT: We present data from four years of field captures, laboratory hybridization studies, and mass-rearing of thousands of individual butterflies which contribute significantly to our understanding of the genetic basis of dark/yellow morph inheritance in females of Papilio glaucus L. Interspecific and inter-population hybrids have enabled us to generate yellow morph females from a dark morph mother, dark morph females from yellow morph mother, and split broods with both dark morph and yellow morph siblings from either a yellow morph or dark morph mother.

The significance of these laboratory hybrid studies extends beyond color morph inheritance to include many other life history traits such as diapause biology, size determination, and proper taxonomic classification. We have been particularly concerned with the natural zones of potential hybrid interaction and geographic variation in foodplant utilization abilities across North America and Canada. In these studies of the three putative subspecies of Papilio glaucus (i.e. P. g. canadensis, P. g. glaucus and P. g. australis) we have also employed hybridization with western species P. rutulus, P. eurymedon and P. multicaudatus. Relevant data from these crosses will also be presented.

TITLE: The Papilio machaon group in western Canada: genetic relationships, biogeography and taxonomy

AUTHOR(S): Felix A.H. Sperl, University of Alberta, Edmonton, Alberta

ABSTRACT: A multivariate analysis of electrophoretic and morphometric characters in Papilio machaon group populations in western Canada has shown that there are three major clusters. Despite evidence of hybridization between each of the pairwise combinations of clusters, it is suggested that they be recognized taxonomically as species - P. machaon, P. zelicaon and P. polyxenes. Major allopatric populations included in P. machaon in western Canada are P. m. alaska, hudsonianus, dodi, oregonius and an interesting Artemisia dracunculus feeder along the Peace River. Interactions between species vary from sympatric coexistence with little or no gene flow, to the formation of small hybrid swarms in some regions. The names "avinoffi, kahli, and nitra" refer to individuals in a few of the wide variety of population interactions in post-pleistocene hybrid zones and will not be used as subspecific epithets. Papilio polyxenes asterias and P. zelicaon will be the only formal taxonomic names used for these two species in the study area.

TITLE: Differential Survival of Artificial Mimics in Urban Environments

AUTHOR(S): Michael E. Toliver, Eureka College, Eureka, Illinois

ABSTRACT: Day-flying males of *Callosamia promethea*, hand painted to resemble both palatable and noxious species of butterflies, were released over a period of two summers in an urban habitat (Urbana, Illinois). These males were then recaptured and the number of each type recaptured, length of time before recapture and extent of wing damage was recorded. No clear advantage of mimetic resemblance could be demonstrated, although results varied seasonally. These results were contrasted with a similar experiment performed in a rural habitat, where a clear mimetic advantage existed throughout the season. The difference between the two habitats was ascribed to differences in the bird faunas in the two habitats.

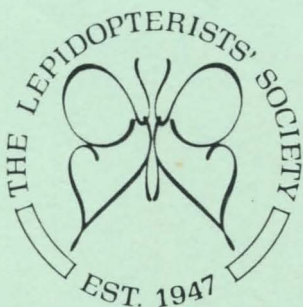
TITLE: The Lepidoptera of Sable Island

AUTHOR(S): Barry Wright, Halifax, Nova Scotia

ABSTRACT: Sable Island lies at the edge of the Continental Shelf. 160 km from the closest mainland, and is the last remnant of the coastal plain which was exposed during the Wisconsin glaciation. It is of interest to biologists in that many endemic species and subspecies survive. In the last 200 years the island has shrunk to one half of its former area. The discovery of commercial quantities of natural gas and possibly also oil in the vicinity brings the threat of industrial encroachment on an already shrinking habitat. The unique fauna is thus in danger of extinction.

The Lepidopteran fauna consists of 165 species, 121 of which are considered to be endemic. There are two endemic species, one described subspecies and 15 others which are distinct from mainland populations. Approximately 40 slides of Sable Island and its Lepidoptera will be presented and discussed.

36th ANNUAL MEETING



THE LEPIDOPTERISTS' SOCIETY

18-21 July 1985

University of Illinois
Urbana-Champaign, Illinois

Sponsored By
Illinois Natural History Survey (Champaign)
Dr. Paul G. Risser, Chief
and
Illinois State Museum (Springfield)
Dr. R. Bruce McMillan, Director

Divisions of the Illinois Department
of Energy and Natural Resources
Dr. Don Etchison, Director

In Cooperation With
Department of Entomology
Dr. Stanley Friedman, Head
University of Illinois-UC, Urbana

PROGRAM & ORGANIZATIONAL COMMITTEE

E. D. Cashatt (Co-chairperson), G. L. Godfrey (Co-chairperson), W. H. Allen, J. E. Appleby, D. F. Hess, M. R. Berenbaum, E. G. MacLeod, J. G. Sternburg, and M. E. Toliver.

ACKNOWLEDGMENTS

The Program Committee thanks all who helped with this meeting. Robert Korb, Lloyd LeMere, Richard Rosentreter, and John Sherrod provided assistance with various aspects of graphics. Special thanks go to Linda Cashatt for her generous hospitality in connection with the Springfield tour. Our colleagues and students graciously helped in many ways, and the members of the Illinois Field Entomologists Club rendered aid when and where it was needed. The cooperation of the University of Illinois' Office of Conference Services, Office of Space Utilization, and staff of the Krannert Center for the Performing Arts is greatly appreciated.

We thank the members of the Murray O. Glenn family for their warm reception and permission to collect on the Glenn farm, and appreciate the cooperation of the Illinois Department of Conservation and the U.S. Forest Service for permitting the Society to collect on sites that they respectively regulate.

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Cover: Lacinipolia implicata green.

PROGRAM
Thursday - 18 July 1985

- Noon** **Registration:** Townsend/Wardall Halls
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(Illinois Street Residence Halls).
- 5:00 pm** (After registering, enjoy a 15-minute walk
from the Illinois Street Residence Halls to
the Illinois Natural History Survey. If you
need to drive, limited metered parking is
available near the Survey.)
- 1:00 pm** **Open House:** Illinois Natural History Sur-
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vey, Natural Resources Building (6th Street
5:00 pm and Peabody Drive).
Insect Collection - Room 296
Fish Collection - Room 87
Geographic Information System - Room 272
Herbarium - Room 396
IFWIS Demonstration - Room 296
Library - Room 96
- 1:30 pm** **Executive Council Meeting:** Illinois Natural
History Survey, 187 Natural Resources
Building (6th Street and Peabody Drive).
- 5:00 pm** **Dinner Hour:** Open.
- 7:00 pm** **"Evening Puddling":** 2nd Floor Levis Fac-
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ulty Center, 919 West Illinois Street
10:00 pm (immediately south of Illinois Street Resi-
dence Halls) (parking available). Cash Bar.

Friday - 19 July 1985

- 8:00 am **Registration:** Townsend/Wardall Halls (Illinois Street Residence Halls).
- SESSION I - 228 Natural History Building**
(2.5 blocks west of Townsend/Wardall Halls, next to Illini Union)
- John C. Downey, Chairperson
University of Northern Iowa, Cedar Falls,
Iowa
- 8:15 am **Announcements:** E. D. Cashatt, Co-host, Illinois State Museum, Springfield, Illinois.
- 8:30 am **Welcome to Illinois, "Land of Lincoln."**
Samuel Kaplan, Director, School of Life Sciences, University of Illinois-UC, Urbana, Illinois.
R. Bruce McMillan, Director, Illinois State Museum, Springfield, Illinois.
Paul G. Risser, Chief, Illinois Natural History Survey, Champaign, Illinois.
- 8:45 am **Presidential Address:** In Search of Missing Links. Donald R. Davis, U.S. National Museum of Natural History, Washington DC.
- 9:15 am **Geologic-Biotic History of West Central Illinois Prairies.** David F. Hess, Western Illinois University, Macomb, Illinois.
- 9:30 am **Collecting *Asterope* (= *Callithea*) and *Agrias* in the Tropical Forest Canopy.** Dale W. Jenkins, Sarasota, Florida.
- 9:45 am **A Synchronized Mass-Emergence of a Yucca Moth, *Prodoxus y-inversus*, After 16 Years in Diapause.** Jerry A. Powell, University of California, Berkeley, California.
- 10:05 am **Coffee Break.**

SESSION II - 228 Natural History Building

E. D. Cashatt, Chairperson
Illinois State Museum, Springfield, Illinois

- 10:20 am **Recent Interspecific Hybridization Studies Involving Maryland Strains of *Limenitis*.** Austin P. Platt, University of Maryland-BC, Catonsville, Maryland.
- 10:40 am **Mechanisms of Insect Response to Host Plant Dispersion.** William Capman, University of Illinois-UC, Urbana, Illinois.
- 10:55 am **Evidence that *Pieris rapae* is a Better Name Than *Artogeia rapae*.** Robert K. Robbins & Pamela M. Henson, U.S. National Museum of Natural History, Washington, DC.
- 11:15 am **Additional Data on *Boloria napaea halli*.** June & Floyd Preston, Lawrence, Kansas.
- 11:30 am **The Effects of Temperature and Group Size on Larval Development in the Buck Moth, *Hemileuca lucina* (Saturniidae).** M. Deane Bowers, Harvard University, Cambridge, Massachusetts & Nancy E. Stamp, State University of New York, Binghamton, New York.
- 11:50 am **Lunch: Open.**

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MINI SESSION A

Michael E. Toliver, Chairperson
Eureka College, Eureka, Illinois

- 1:15 pm **False Head Patterns of Tailed Nymphalid Butterflies.** Benjamin H. Landing, Los Angeles, California.
- 1:30 pm **Comparative Studies of Butterfly Fauna on Sand, Loess Hill, Acid Upland, and Limestone-Till Prairies in West Central Illinois.**
- 1:45 pm **David F. Hess, Yale Sedman, Patrick J. Conway, George Balogh, and Irwin Leeuw, Western Illinois University, Macomb, Illinois.**

2:00 pm **Group Photograph:** Go to Greek Amphitheater, west side of Krannert Center for the Performing Arts.

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SESSION III - 228 Natural History Building

SYMPOSIUM: A Tribute to Edna Mosher and Stanley B. Fracker — Lepidopterous Larvae and Pupae

Frederick W. Stehr, Chairperson
Michigan State University, East Lansing, Michigan

2:30 pm **Notes on the Contributions of Edna Mosher and Stanley B. Fracker.** Frederick W. Stehr.

2:35 pm **Phylogeny and Ontogeny in Lepidoptera: Caterpillars as Indicators of Relationships in Noctuoidea.** John E. Rawlins, Carnegie Museum of Natural History, Pittsburg, Pennsylvania.

3:05 pm **Biotic Hay Balers: Noctuids and Notodontids — A Contrast in Larval Feeding Structures.** George L. Godfrey, Illinois Natural History Survey, Champaign, Illinois.

3:25 pm **Larval Hypermetamorphosis in Gracilariidae and Its Phylogenetic Implications.** Donald R. Davis, U.S. National Museum of Natural History, Washington, DC.

3:55 pm **Passive and Active Antipredator Defenses of Caterpillars.** Robert C. Lederhouse, Rutgers University, Newark, New Jersey.

4:25 pm **A Woollybear Family Tree — Why They Do the Things They Do!** Nancy L. Jacobson, University of Texas, Austin, Texas.

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6:30 pm **PICNIC — (Tickets required) Illini Grove - NW Corner of Pennsylvania Ave. & Lincoln Ave. 15-minute walk from Illinois Street Residence Halls (Parking available for those needing to drive)**

SHOW'N TELL

228 Natural History Building

James G. Sternburg, Chairperson
University of Illinois-UC

- 9:00 pm **Mountains of Mist – Part 2.** Richard L. Brown, Mississippi State University, Mississippi State, Mississippi.
- 9:20 pm **Open Carousel.**
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- 10:30 pm

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Saturday - 20 July 1985

SESSION IV - 228 Natural History Building

Jerry A. Powell, Chairperson
University of California, Berkeley, California

- 8:30 am **Status of Revision of 12 Genera of Neotropical Nymphalids.** Dale W. Jenkins, Sarasota, Florida.
- 8:45 am **A Phylogenetic Analysis of the Genus *Oneida* Hulst (Lepidoptera: Pyralidae) With Comments on Wing Scale Color Coding.** Maria Alma Solis, University of Maryland, College Park, Maryland.
- 9:05 am **The Biology of Hackberry Butterflies.** Tim Friedlander, Texas A&M University, College Station, Texas.
- 9:25 am **Description of the Life Stages of a New Nearctic *Glyphidocera* (Lepidoptera: Blastobasidae).** David Adamski & Richard L. Brown, Mississippi State University, Mississippi State, Mississippi.
- 9:40 am **Species in Confusion: *Wallegrenia otho* and *W. egermet* (Hesperiidae).** John M. Burns, U.S. National Museum of Natural History, Washington, DC.
- 10:00 am **Break.**

SESSION V - 228 Natural History Building

Jacqueline Miller, Chairperson
Allyn Museum of Entomology/Florida State Museum
Sarasota, Florida

- 10:20 am **Studies of the Comparative Protection of Male and Female Black Swallowtails (*Papilio polyxenes* Fabricius) as Batesian Mimics.** Sylvio G. Codella & Robert C. Lederhouse, Rutgers University, Newark, New Jersey.
- 10:40 am **A Batesian Polymorphic Swallowtail Without Sexual Dimorphism.** David A. West, Virginia Polytechnic Institute & State University, Blacksburg, Virginia.
- 11:00 am **Morphological Diversity and Classification of Larval and Pupal Pyralidae.** Steven Passoa, University of Illinois-UC, Urbana, Illinois.
- 11:20 am **Characters and Classification of the Gelechioidea.** Ronald W. Hodges, Systematic Entomology Laboratory, USDA, Washington, DC.
- 11:40 am **Using University of Illinois Computers to Print and Maintain a Catalogue of the North American Butterflies.** Charles A. Bridges, University of Illinois-UC, Urbana, Illinois.
- 12:00 **Lunch: Open.**

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SESSION VI - 228 Natural History Building

**SYMPOSIUM: Lepidoptera Gene Flow, Hybridization,
and Species Distribution**

May R. Berenbaum, Chairperson
University of Illinois-UC, Urbana, Illinois

- 1:30 pm** Opening remarks: May R. Berenbaum.
- 1:35 pm** **Hybrid Zones in *Papilio glaucus*.** J. Mark Scriber, University of Wisconsin, Madison, Wisconsin.
- 1:55 pm** **Selective Forces and Phenotypic Divergence Among Admiral Butterflies.** Austin P. Platt, University of Maryland-BC, Catonsville, Maryland.
- 2:25 pm** **The Hybrid Theory Associated With *Colias boothi* and *C. thula*.** Clifford D. Ferris, University of Wyoming, Laramie, Wyoming.
- 2:45 pm** **The Tiger Moths of Gondwanaland (Arctiidae, Arctiini).** Douglas C. Ferguson, Systematic Entomology Laboratory, USDA, Washington, DC.
- 3:05 pm** **Maintaining Species Integrity Between Sympatric Populations of *Hyalophora cecropia* and *H. columbia* (Saturniidae).** James P. Tuttle, Troy, Michigan.
- 3:25 pm** Break.

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MINI SESSION B

George L. Godfrey, Chairperson
Illinois Natural History Survey, Champaign, Illinois

- 3:40 pm** **The Late Winter Olethreutines With Emphasis on Their Pupae.** Richard L. Brown, Mississippi State University, Mississippi State, Mississippi.
- 3:55 pm** **Field Guide to the Moths Story: The Pains and Pleasures.** Charles V. Covell, Jr. University of Louisville, Louisville, Kentucky.



UNIVERSITY OF ILLINOIS
URBANA - CHAMPAIGN CAMPUS

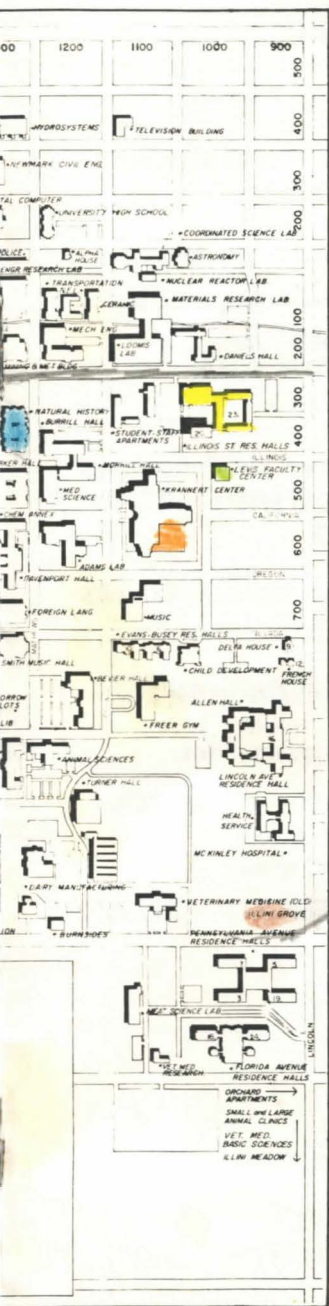


UNIVERSITY RESIDENCE HALLS








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|-----------------|-------------|
| 1 ALLEN | 16 LINCOLN |
| 2 ALPHA HOUSE | RESIDEN |
| 3 BARCOCK | 17 LUNDGREN |
| 4 BARTON | 18 OGLESBY |
| 5 BLAISDELL | 19 SAUNDERS |
| 6 BUSEY | 20 SCOTT |
| 7 CARR | 21 SNYDER |
| 8 CLARK | 22 TAYLOR |
| 9 DELTA HOUSE | 23 TOWNSEN |
| 10 EVANS | 24 TRELEAD |
| 11 FORBES | 25 VAN DORE |
| 12 FRENCH HOUSE | 26 WARDALL |
| 13 GAMMA HOUSE | 27 WESTON |
| 14 GARNER | |
| 15 HOPKINS | |



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RETIREMENT CENTER
STATE REGIONAL OFFICES



COLOR CODE

-  ILLINOIS ST RESIDENCE HALLS (Registration & Dorms)
-  NATURAL HISTORY BLDG (Main Meeting Site)
-  LEVINS FACULTY CTR (Thrs. Mixer)
-  KRANNERT CTR. (Sat. Banquet)
-  NATURAL RESOURCES BLDG (Natural History Survey Thrs. Open House & Exec. Council Meeting)
-  ILLINI GROVE (Fri. Picnic)
-  MOTEL AREAS

**ILLINOIS STATE MUSEUM &
LINCOLN HISTORICAL SITES TOUR**

Saturday - 20 July 1985

8:00 am Depart from Illinois Street Residence Halls for Springfield, Illinois (2 hours and 15 minutes travel time).

- Tour of Illinois State Museum Exhibits and Facilities.
- Lunch at E. D. Cashatt Residence.
- Visit the Lincoln Historical Sites.

3:00 pm Depart for Urbana.

BANQUET
(Tickets Required)
Saturday – 20 July 1985

Krannert Center for the Performing Arts
Southeast Patio
(In case of rain, the meal will be served on stage
of the Foellinger Great Hall)

6:00 pm – Cash Bar

7:00 pm – Banquet

8:00 pm – Migrate to 228 Natural History Building

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THE KARL JORDAN PROGRAM
(Open Attendance)

Donald R. Davis
President of The Lepidopterists' Society

- 8:15 pm **Arthur C. Allyn — A Remembrance.** Lee D. Miller, Allyn Museum of Entomology/ Florida State Collection, Sarasota, Florida.
- 8:25 pm **Presentation of the Karl Jordan Medal to Lt. Col. J. N. Eliot, Somerset, England, by President Davis.**
- 8:35 pm **The Karl Jordan Address by Lt. Col. J. N. Eliot**

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DOOR PRIZES
(Keep your banquet ticket stubs)

Charles V. Covell, Jr.
Venerable Master of Ceremonies

Sunday - 21 July 1985

SESSION VII - 228 Natural History Building

Charles V. Covell, Jr., University of Louisville,
Louisville, Kentucky, Chairperson

- 9:00 am **Distribution and Habitat of the Rocky Mountain Butterfly, *Euphydryas gillettii*.** Ernest H. Williams, Hamilton College, Clinton, New York.
- 9:20 am **Anthocharinae: New Species and Range Extensions in Old and New Mexico.** Richard Holland, Albuquerque, New Mexico.
- 9:35 am **Preliminary Notes on the Life History of *Coenonympha hadeni*.** Michael E. Toliver, Eureka College, Eureka, Illinois.
- 9:50 am **Life History and Laboratory Culture of the Parsnip Webworm, *Depressaria pastinacella* (DuPonchel) (Oecophoridae).** James K. Nitao, University of Illinois-UC, Urbana, Illinois.
- 10:05 am **Break.**
- 10:20 am **Annual Business Meeting and Installation of New President.**
- 11:20am **Adjournment.**

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Brunch at Wardell Hall Cafeteria
11:00 am - 1:00 pm

Organization of Field Trips to Follow Adjournment
1:30 pm - Depart for Field Trips

Murray O. Glenn Farm and Environs
Sandridge State Forest
Shawnee Hills

HOUSING

University Dorms. Comfortable, air-conditioned dorm rooms may be reserved in Townsend/Wardell Halls (Illinois Street Residence Halls) on the eastern edge of the University of Illinois Campus, just a short walk east of the main meeting site (Natural History Building). Rates (tax included): single - \$16.70/night; shared - \$11.15/person/night; family - \$27.85/night (3-4 beds/room; extra cots at nominal charge). Prices also include pre-made bed (make your own on subsequent days), soap, drinking glass, towel and washcloth (changed daily). Check in time no earlier than 2:00 pm. Check out time is 12:00 noon.

Motels. Numerous motels are situated in Champaign-Urbana, but most are approximately 1-2 miles from the main meeting site next to the Illini Union (guest rooms at the Union are already booked). Therefore, you may want to plan on driving to campus if you stay in a motel. Closest possibilities include:

Chancellor Hotel, 1501 S. Neil, C. (1-800-257-6667)
Chief Illini Motel, 520 N. Cunningham, U. (217-367-8377)
Howard Johnson's, Rte. 45 N., U. (217-367-8331)
Jumers Castle Lodge, Lincoln Sq., U. (217-384-8800)
Lincoln Lodge Motel, 403 W. University, U. (217-367-1111)
Manor Motel, 1102 N. Cunningham, U. (217-367-5427)
Motel 6, 1906 N. Cunningham, U. (217-344-8660)
Regency Inn, 2408 N. Cunningham, U. (217-344-8000)
Travel Lodge, 409 W. University, U. (217-328-3521)
University Inn, 3rd. & John, C. (217-384-2100)

CAMPING

The closest camping facilities are D & W Lake Camping & Fishing, 4 mi. N Champaign, I-57 & Leverett Exit 240. Address: RR 4, Champaign, IL 61820. Phone: 217-356-3732.

Tincup Campers Park, Inc., ca. 10 mi. NW Champaign, off I-74. Address: RR 3, Mahomet, IL. Phone: 217-586-3011.

Others are 23-30 miles distant

Lodge Park, 23 mi. SWW Champaign off I-72. Primitive. Contact: Tom Streigle, Piatt County Forest Preserve, RR 1 Box 138, Monticello, IL 61856.

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Sangamon Park Resort (commercial), 5 mi. W, 2.5 mi. S Monticello (25 + mi. SWW Champaign). Address: RR 2 Box 146, Monticello, IL 61856. Phone: 217-669-2322.

Middlefork Forest Preserve, 5 mi. N Penfield, IL (30 mi. NE Urbana). Nice facilities. Phone: 217-595-5432.

MEALS

All meeting guests may take advantage of a special rate for dining at the Illinois Street Residence Halls Cafeteria: Friday (breakfast and lunch) + Saturday (breakfast and lunch) + Sunday (brunch) = \$19.41 (tax included). Individual meals also available on first come first served basis. All meals include two entrees, a large variety of beverages and seconds on all items. Complete soup and salad also are provided for lunch.

Thursday night you are on your own. Costs of Friday picnic and Saturday banquet will be extra. A variety of other dining options are available in "College Town" which is in easy walking distance of the meeting room and dorm complex, at the Illini Union, and at the many fine restaurants in Champaign-Urbana.

SPOUSES/FAMILIES

Friday. Visit the many interesting spots on the University of Illinois Campus, including the acclaimed facilities of the Krannert Center for the Performing Arts (take in a musical Friday night), stroll through the World Heritage Museum and the Krannert Art Museum, and swim, relax or work out in the recreational facilities of IMPE (daily recreational passes available at \$2/day for dorm guests). You may get complete information on campus activities and points of interest in the front lobby of the Illini Union.

Saturday. A special day has been planned that will allow you to visit and tour the Illinois State Museum and the Abraham Lincoln Historical sites in Springfield. You will be accompanied by an experienced guide. Indicate on the registration form if you plan to take this tour.

- Baby sitting services will be available.

PARKING

Limited parking is available for guests staying at the Illinois Street Residence Halls. Other conference guests may use metered street parking during the days. There is ample free parking after 5:00 pm.

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REGISTRATION & RESERVATIONS

The deadline for reserving campus dormitory accommodations is June 21. Please use the enclosed pre-registration and reservation form.

For additional information call 217-333-6846.

— NOTES —