

The Lepidopterists' Society

31st ANNUAL MEETING

Featuring Symposia on:
Tropical Lepidoptera
and
The Migration of Lepidoptera
and
A Field Trip to Ecuador



THE UNIVERSITY OF FLORIDA
Gainesville, Florida

June 19-23, 1980

The public is cordially invited.

Thursday Afternoon, June 19

Museum Lounge

- 1:00-5:00 **Registration.** Reitz Union, 2nd Floor Lobby Area.
- 1:30-6:00 **Executive Council Meeting.** Reitz Union, Room 357.

Thursday Evening, June 19

- 7:00-10:00 **Brooks Range Reunion.** Florida State Museum. Reception, Evening Program and Slide Fest.
- 8:30-10:00 **Open House, Neotropical Butterfly Collections in Department of Zoology.** Bartram Hall, 1st Floor, Room 115.



Mature Larva. Light Type.
Enlarged X-6.



Program

(All sessions in the Reitz Union Auditorium,
2nd Floor)

Friday Morning, June 20

8:30-9:00 **Late Registration.** Coffee and doughnuts. Reitz Union, 2nd Floor Lobby Area.

9:00 **Opening Session:** Thomas C. Emmel, presiding.

Welcome Message: Dr. Robert A. Bryan, Vice President for Academic Affairs, University of Florida.

Announcements and Introductions: Dale H. Habeck, presiding.

CONTRIBUTED PAPERS: OPENING SESSION

(Charles V. Covell, presiding)

9:30 **Collecting in the Florida Keys: The Past 20 Years.** Charles V. Covell, University of Louisville, Kentucky.

9:45 **Relict Butterflies in Southwestern Desert Mountains.** Clifford D. Ferris, University of Wyoming, Laramie, Wyoming.

10:00 **The Butterfly Fauna of the Tunica Hill Region of Louisiana.** Michael L. Israel, Louisiana State University, Baton Rouge, Louisiana.

10:10 **Taxonomic Notes on Certain Rocky Mountain Skippers (Hesperiidae).** Ray E. Stanford, Denver, Colorado.

10:30 **Coffee Break.**

SYMPOSIUM ON NEOTROPICAL LEPIDOPTERA

(Boyce A. Drummond, presiding)

10:45 **Historical and Ecological Factors in Biogeographical Patterns of Neotropical Lepidoptera.** Keith S. Brown, Jr., Universidade Estadual de Campinas, Sao Paulo, Brasil, and Cornell University, Ithaca, New York. KARL JORDAN LECTURE.

11:30 **The Affinities of the Neotropical Satyridae.** Lee D. Miller, Allyn Museum of Entomology, Sarasota, Florida.

11:55 **Taxonomy and Biology of the Genus Hamadryas.** Dale W. Jenkins, Sarasota, Florida.

12:10 **Group Photograph**

12:15-1:30 **Luncheon Recess**

Friday Afternoon, June 20

SYMPOSIUM ON NEOTROPICAL LEPIDOPTERA continued

(Boyce A. Drummond, presiding)

- 1:30 **Evolution of Reproductive Isolation between *Anartia amathea* and *A. fatima* (Nymphalidae).** Robert E. Silberglied, Harvard University and Smithsonian Tropical Research Institute, Panama.
- 2:00 **Community Ecology of Rain Forest Butterflies.** Boyce A. Drummond III, Illinois State University, Normal, Illinois.
- 2:30 **The Effect of Environmental Disturbance Upon a Tropical Butterfly Population.** William S. Blau, North Carolina State University, Raleigh, North Carolina.
- 2:45 **Neotropical Arctiid and Ctenuchid Moths Attracted to Flowers and Withered Foliage: Some Examples and a Plea for Additional Records.** Julian P. Donahue, Natural History Museum, Los Angeles, California.
- 3:00 **Coffee Break.**
- 3:15 **Convergent Evolution of Cabbage Butterflies in North and South America.** Arthur M. Shapiro, University of California at Davis, California.
- 3:45 **Disruptive Coloration: Field Experiments Using High-resolution Mark-recapture and Wing-damage Data.** Robert E. Silberglied, Harvard University and Smithsonian Tropical Research Institute, Panama.
- 4:00 **Population Ecology and Laboratory Culture Techniques for Neotropical Parides Swallowtails: an Introduction to a Useful and Novel Experimental System of Forest Aposematic Butterflies.** Keith S. Brown Jr., A.J. Damman and P.P. Feeny, Cornell University, Ithaca, New York.
- 4:20 **Chromosomal and Phenetic Evolution in Galapagos Butterflies.** Thomas C. Emmel, University of Florida, Gainesville, Florida.
- 4:40 **Ecology of Saturnid Moths in Mexico City.** Dale W. Jenkins, Sarasota, Florida.
- 4:55 **Collecting Localities in Ecuador.** Stanley S. Nicolay, Virginia Beach, Virginia.
- 5:10 **Summary.**

Friday Evening, June 20

- 6:00 **Social Hour.** Chi Phi House, 1 Fraternity Row (across from Hume Dormitory).
- 7:00 **Group Dinner.** Reitz Union Ballroom.
After Dinner:
The Pursuit of Butterflies and Moths: A Photographic Tour Around the World. Slides and Music arranged by Thomas C. Emmel, University of Florida
- 8:30 **Open House at Florida State Collection of Arthropods.** Division of Plant Industry Building, S.W. 34th Street.



Saturday Morning, June 21

SYMPOSIUM ON THE MIGRATION OF LEPIDOPTERA

(Lincoln P. Brower, presiding)

- 8:30 **Coffee and doughnuts.**
- 9:00 **Overwintering Ecology of the Monarch Butterfly. I. Environmental Characteristics of the Overwintering Sites and Their Relationships to the Monarchs' Behavior.** William H. Calvert, Amherst College, Amherst, Massachusetts, and University of Florida, Gainesville, Florida.
- 9:45 **Overwintering Ecology of the Monarch Butterfly. II. Perils to Survival during the Overwintering Period.** Lincoln Pierson Brower, Amherst College, Amherst, Massachusetts, and University of Florida, Gainesville, Florida.
- 10:30 **Coffee Break.**
- 10:45 **Butterfly Migrations through Northern Florida.** Thomas J. Walker, University of Florida, Gainesville, Florida.
- 11:15 **Mediterranean Climate and Butterfly Migration: An Overview of the California Fauna.** Arthur M. Shapiro, University of California at Davis, California.
- 11:45 **Hilltopping in Southern Arizona Butterflies.** Michael J. Plagens, University of Arizona, Tucson, Arizona.
- 12:00 **Summary.**
- 12:15-1:30 **Luncheon Recess.**

Saturday Afternoon, June 21

CONTRIBUTED PAPERS: GENERAL SESSION AND WORKSHOPS

(Julian P. Donahue, presiding)

- 1:30 **Analysis of Immature Survivorship for a Monarch Population in Wisconsin.** Susan Sullivan Borkin, Milwaukee Public Museum, Milwaukee, Wisconsin.
- 1:45 **Some Factors Influencing Voltinism in Temperate Zone Lepidoptera.** Dale F. Schweitzer, Hamden, Connecticut.
- 2:00 **Development of Lepidoptera in Altitude Chambers.** William E. Miller, North Central Forest Experiment Station, St. Paul, Minnesota.
- 2:15 **Interspecific Hybridization between the *Limenitis arthemis-astyanax* Complex X *L. lorquini*.** Austin P. Platt, University of Maryland, Catonsville, Maryland.
- 2:30 **A Survey of the Chrysauginae (Pyrilidae) of North America North of Mexico.** Everett D. Cashatt, Illinois State Museum, Springfield, Illinois.
- 3:00 **Coffee Break.**
- 3:15 **Twenty-five Years Collecting Colorado Butterflies: Time Clock of Colorado Species.** Raymond J. Jablonski, Tampa, Florida.
- 3:30 **Important New Lepidoptera Records in Colorado and Wyoming.** Karolis Bagdonas, University of Wyoming, Laramie, Wyoming.
- 3:45 **Invited Paper.** David Gifford, Brasilia, Brazil.
- 4:00- **WORKSHOP ON REARING OF LEPIDOPTERA: 346**
Reitz Union
The Larvae of *Catocala* Moths. Dave Baggett, Jacksonville, Florida (With Rick Gilmore and Steve Roman)
Breeding and Hybridization Work with Lepidoptera, including Hand-pairing Techniques. Charles G. Oliver, Edward C. Trax Laboratory, Scottdale, Pennsylvania.
Freeze-drying of Lepidoptera Larvae. Jiles P. Harrell II, North Carolina Freeze-dry Company, Jackson, North Carolina.
- 4:00- **WORKSHOP ON MICROLEPIDOPTERA: 347** Reitz Union
Techniques for Working with Microlepidoptera. Ronald W. Hodges, U.S.D.A. Systematic Entomology Laboratory, Beltsville, Maryland.

Saturday Evening, June 21

- 6:30 **Social Hour.** Holiday Inn West at I-75 and Hwy 26. Cash bar.
- 7:30 **Annual Banquet.** Poolside Luau at the Holiday Inn West.
- After Dinner:**
- Awarding of the Karl Jordan Medal** to Dr. Keith S. Brown, Jr., Universidade Estadual de Campinas, Sao Paulo, Brasil.
- Presidential Address: "On the Futile Pursuit of Order."** Theodore D. Sargent, University of Massachusetts, Amherst, Massachusetts.
- Drawing for Door Prizes.** Charles V. Covell, Jr., presiding.

Sunday Morning, June 22

CONTRIBUTED PAPERS GENERAL SESSION

(Stanley S. Nicolay, presiding)

- 8:45 **Coffee and doughnuts.**
- 9:15 **Altering Catocala Hindwings: A Field Experiment.** Theodore D. Sargent, University of Massachusetts, Amherst, Massachusetts.
- 9:30 **Lycaenid "False-head" Hypothesis and Wing Pattern Variation.** Robert Robbins, Smithsonian Tropical Research Institute, Panama, and East Rockaway, New York.
- 9:45 **Entomologists' Visual Illusions.** George O. Krizek, Washington, D.C.
- 10:00 **An Elaboration of the General Scheme of the Distribution of Butterfly Behavioral Patterns over the World: the Properties of Nine Intergrade or "Blend Zone" Groups.** Benjamin H. Landing, Los Angeles, California.
- 10:15 **Break.**
- 10:30 **Territorial Behavior in Brown Elfin Butterflies: Individual Variation.** Robert Robbins, East Rockaway New York.
- 10:45 **Do Skippers Belong to the Same System of Behavioral Class Distributions as the Other Butterflies?** Benjamin H. Landing, Los Angeles, California.
- 11:00 **Lepidoptera and the Biological Control of Weeds.** Gary R. Buckingham, U.S.D.A., Gainesville, Florida.
- 11:15 **Annual Society Business Meeting.** Theodore D. Sargent, President of The Lepidopterists' Society, presiding.
- 12:00 **Adjournment.**

Sunday Afternoon, June 22

- 1:00-8:00 **Outdoor Florida Barbeque.** Lake Wauberg, south of Gainesville on Highway 441. Swimming, canoeing, fishing, volleyball, sleeping, collecting, relaxing. Barbeque served at 5:00 p.m.
- 1:00-4:00 **Optional Local Field Trip** to Newnan's Lake east of Gainesville. Dave Baggett, leader.
- 6:00 Departure of ECUADOR EXPEDITION GROUPS III & IV from Gainesville and Lake Wauberg via chartered bus to Miami International Airport.

Monday, June 23

- 9:00-4:00 **Group Field Trip**, to several northern Florida collecting localities south of Palatka (led by Dave Baggett).
- 6:00 Departure of ECUADOR EXPEDITION GROUPS I & II from Gainesville via chartered bus to Miami International Airport.

1980 MEETING COMMITTEES

- Planning Coordinator Dale Habeck
- Program Chairman Thomas C. Emmel
- Local Arrangements Howard V. Weems, Jr.
Camilla B. Weems
Benjamin Gregory
- Local Field Trips H. David Baggett
- Ecuador Expedition Thomas C. Emmel
Peter J. Eliazar
- Exhibits Frank W. Mead
Allan J. Wilkening
- Door Prizes Charles V. Covell, Jr.

IMPORTANT TELEPHONE NUMBERS

- Department of Entomology & Nematology (Dale H. Habeck): (904) 392-4901. Home: (904) 376-0985.
- Florida State Collection of Arthropods (Howard V. Weems, Jr.): (904) 372-3505, ext. 188. Home: (904) 372-1130.
- Department of Zoology (Thomas C. Emmel): (904) 392-1107. Home (904) 376-8421.
- J. Wayne Reitz Student Union: Guest Rooms Desk: (904) 392-2151. Guest Area Office: Room G-20.