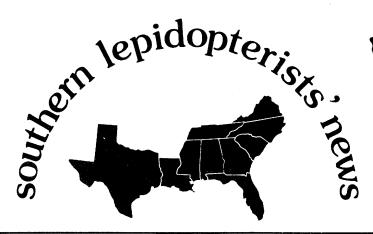


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THE OFFICIAL PUBLICATION OF THE SOUTHERN LEPIDOPTERISTS' SOCIETY, ORGANIZED TO PROMOTE SCIENTIFIC INTEREST AND KNOWLEDGE RELATED TO UNDERSTANDING THE LEPIDOPTERA FAUNA OF THE SOUTHERN REGION OF THE UNITED STATES.

CHAIRMAN-EDITOR : DAVE BAGGETT

SECRETARY-TREASURER: TOM NEAL

As we begin our second season, you'll notice the new group logo, which is a combination of old and new ideas, developed with the aid of Mr. John Coffman of Virginia, who is also at work developing a stationery letterhead for group correspondence needs in the near future; hope to have the information on this soon. A moth (Amphion nessus) and a butterfly (Papilio aristodemus ponceanus) were chosen initially to represent the goal of studying both groups of Lepidoptera. The selection of P. a. ponceanus is two-fold in that it also demonstrates our concern for species which are threatened by habitat destruction and the accompanying desire to insure the survival of species such as this. Butterflies in particular represent a special aesthetic value to all nature-loving people, and for those sharing a real appreciation for nature, our world would be a dull place without them. The bending of the newsletter title around the states involved indicates the sharing of a common goal to seek a better understanding of our Lepidoptera in terms of distribution, life histories, and flight periods. I am also pleased to mention that both Kentucky and Ohio have developed programs equally dedicated to better understanding the species found in those respective states, and we share a number of joint memberships. We support and encourage this sort of development throughout the United States, which not only demonstrates the desire to learn about these insects, but offers the opportunity to learn from others more experienced in order to gain an informed point of view.

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Changes in the newsletter include continuous pagination of each volume (at the suggestion of Charles Kimball) and the inclusion of submitted photographs involving group activities or supporting articles submitted to the newsletter. We will run alternating short articles on the life histories of moths and butterflies, and hope to inaugurate a periodic "How-to" feature as well, which will deal with new or little-known techniques dealing with field collection or curatorial endeavors. If you have something to share with the membership, send it to the Editor - you don't need to type. If you have some worthwhile comments to contribute, send them on : they can be informative, philosophical, humorous, inventive, or controversial. You have the opportunity to voice your opinions here, as well as the chance to get first page attention when you get tired of hearing me blab. I can assure you of equal time. While at it, I need to stress the need to have information sent in prior to the first of March, June, September, and December, either through the regional coordinators or directly to the Editor, since it takes approximately two weeks to adequately prepare the News without rushing things. The publishing deadline I aim for is the 15th of those months, which allows the week following to stamp and mail. Another good point was brought out by other readers : we should present the newsletter in a way that both the novice and the layman can benefit from information presented concerning collecting techniques,

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attitudes, and practices in a way in which we can help develop the amateur potential in hopes of benefitting the scientific community. We recognize the value in developing the amateur, regardless of their individual reasons for beginning a collection, whether for aesthetic or scientific purposes. Now meet some of the members:



Front row, L-R: Debbie McSwain, Tom Neal, Rick Gilmore, Jeff Slotten, Ernie Martin, Lee Adair. Second row, L-R: Chuck Zeiger, Dave Baggett, Charlie Stevens, Woody Dow, John Watts, and Hermann Flaschka. Last row: Steve Roman, Dale Habeck. Present but not pictured were Jack McSwain and Hanna Flaschka, who took the photo as the group assembled prior to the nature trail walks on the UNF campus in Jacksonville.

NOTES ON THE GIANT YUCCA SKIPPERS IN FLORIDA

Both Megathymus yuccae and Megathymus cofaqui are very unusual butterflies in that both are relatively common insects, but the adults are seldom seen even by many experienced collectors. These require special techniques to locate, and the first step is to become familiar with the host plants, which include all members of the plant genus Yuccae here in Florida. The common coastal plant known as Spanish Bayonets (Y. aloifolia) and the dry highground plant known as Beargrass (Y. filamentosa) seem the preferred hosts. M. yuccae is the more common and widespread species, and is single-brooded, appearing on the wing between February and May, with the peak during late March and early April. On the other hand, M. cofaqui has at least two broods and perhaps three, with adults on the wing spring, summer, and fall. The lack of apparent peaks in the records suggests that someone should carefully monitor a known colony to determine this aspect in depth. It may simply have a much broader emergence period than expected. It is doubtful that either species feeds as adults, rather they exist on stored fats in the abdomen until the life cycle is completed; these fats will cause extreme greasing of preserved specimens unless precautions are taken to remove the fat prior to decomposition. The ova are deposited on either surface of the leaves, usually one or two per plant, but

occasionally more than a dozen can be found. Both are pale aqua-green when first deposited, with those of M. yuccae turning white on development and those of M. cofaqui turning a pinkish-tan. Both are between 2-3 mm in diameter; ova of M. cofaqui are more conical in shape when compared with eggs of M. yuccae, which are hemispherical. The larvae tunnel into the roots and stems of the Yuccae plants, and remain there until the larvae are full-grown. In my experience (with the exception of the newly emerged first instars, which will nibble on the leaves before boring in) cofaqui larvae always seem to utilize the root system for nutrition, while yuccae larvae will use either the stem (preferred) or root, depending on the size of the plant. Both seem to prefer the younger plants, seldom using plants over two feet high (Y. aloifolia).

The larvae of M. yuccae have black heads, and in the final instar are covered with a white waxy powder they use to line the tents ; cofaqui larvae are shiny white with red heads until the last instar, when the head capsule becomes a very dark brown. Full size larvae are between 4-6 cm in length, and 7-11 mm in body diameter, both grub-like in general appearance. Each species overwinters as larvae, but the larvae of M. yuccae are mature by November and have already constructed their emergence tents by that time, but M. cofaqui overwinters as mid-instar larvae between 2-3 cm in length, and does not begin tent construction until it is ready to pupate. The latter builds its tent in the ground near the base of the host plant (especially near Y. filamentosa) or along prostrate stems of older plants (near Y. aloifolia), occasionally in the crown of small plants. Yuccae tents are constructed of plant fibers and silk, and generally are dark brown in color and 4-8 cm in height (about the size and shape of your little finger) ; those of cofaqui are constructed of silk, sand, and ground debris, but extend only 1-3 cm in height. The latter are very carefully camoflaged and require very diligent searching to locate, since you only have about a two-week time frame in which to successfully find them before emergence. It is useful to rake pine straw, grass, leaves etc. away from the base of plants some two-three weeks prior to the time you actually intend to conduct a search for them.

The spring emergence of M. cofaqui seems behind that of M. yuccae in north Florida, but appears more synchronized farther south. Both seem to be more common near the coast in general, but any native or planted stands of Yuccae plants can harbor these unusual butterflies. Females of M. yuccae have been observed ovipositing in mid-day, and males are seen patrolling sandy paths or clearings during the same period. M. cofaqui spends much of the day perched on tree trunks, and is thought to be most active late in the afternoon. They can be flushed from tree trunks, but they really take off when disturbed and are very difficult to catch! Pupae or larvae are very mobile in their tents, and drop immediately back into the stem or root when the tent is touched; the tubes may extend for two feet or more, and both often go well underground.

We are all anxiously waiting for spring to arrive, but have had a few reports of early activities, and look forward to the May-June reports from across the region, the peak period of many species of both butterflies and moths in the south. We will also have a complete report of the local collecting activity during the Lepidopterists' Society Annual Meeting (I'll be leading parties before, during, and after the meeting....)

CURRENT ZONE REPORTS AND PLANNED ACTIVITIES

ZONE I : TEXAS.... Coordinator, Ed Knudson, 804 Woodstock, Bellaire, TX 77401

Ed mentions he will be developing an information sheet of sorts in conjunction with Mike Ricard dealing with collecting sites, flight periods, permit information, and other general information which will be made available to members planning to visit the

Lone Star State: it will deal mainly with species found east of the N-S line through Austin and the Rio Grande Valley. Rickard & Knudsen found Apodemia mormo mejicana on Sept. 2, 1979 at Sam Mays Park in the Franklin Mts. near El Paso, the colony located by Greg Forbes of Las Cruces. A. m. duryi also occurs in Texas at Big Bend National Park. Phyciodes t. texana and P. t. seminole were common at Lake Houston throughout summer and fall of 1979. Good Rio Grande valley catches included Grias stigmaticus, Aguna asander, and Polythrix octomaculata on October 28 in Bentsen Rio Grande Valley State Park by Ricard & Knudson, during which time a total of 81 species were recorded. Andre Blanchard & Knudson ran light traps on North Padre Island on October 12 and at Santa Ana Wildlife Refuge on October 27 (Knudson), plus a trip November 10-11 to Santa Ana WR & Laguna Atascosa WR (Blanchard & Knudson) to record the following moths: on North Padre, they found 13 species of Schinia, including one unknown to them and possibly undescribed; at Santa Ana, some of the more interesting species included Drautia morsa, Focillidia texana, Selenis agna, Glympis concors, and Anomis illita (all Noctuidae, the latter a possible state record); Lineodes vulnifica, Crambus bolterus, & Gonocausta sabinalis (Pyralidae) during the visit on the 27th.; the later visit offerred Mimophisma ablumaris, Melipotis nigrobasis, Anomis exacta, Mursa subrufa, Dyspyralis noloides (Noctuidae); Itame grossbecki, Tornos punctatus (Geometridae); Bicilia iarchasalis, Maracayia chlorisalis, Ascoides anormalis, Lineodes integra, L. interrupta, L. vulnifica, & L. fontella (Pyralidae, the latter also a possible state record). At Laguna Atascosa they recorded Oncocnemis occata, Euthermisa absumens, Litoprosopus futilis, Anomis editrix (Noctuidae); Synclora irregularia, Arcobara siculodaria, Percnoptilota obstipata, Semiothisia pallidata (Geometridae); Condylorrhiza sublutalis, Macalla glastionalis, Lascellina caneus (Pyraloidea) Eucosoma atascosana, (Tortricidae); Deltophora sella, Chionodes mariona, & Anacampis fullonella (Gelechioidea). Palaeacrita vernata & P. merriccata were out in force in mid-January, indicating the possibility of an early spring.

ZONE II: ALABAMA, LOUISIANA, MISSISSIPPI, & TENNESSEE Coordinators, Vernon Brou (LA), Bryant Mather (MS), Charles Watson (TN), and John Hyatt (TN-AL).

We welcome the new coordinator-contributors in Charles & John, both of whom are also interested in the possibilities of the Lep. Soc. Ecuador expedition this June - might get a good report from them on that, along with other members planning on making the trip. Both will soon be scouting new areas for <u>Celastrina ebenina</u> in TN this spring. We look forward to hearing from both during the new season, and this will provide a blend of butterfly reports to go along with the moth-dominated reports to balance the Zone II information.

Vernon has been hitting the books in science and math at LSU during the winter, but will soon be operating again as the end of March brings the new season into full swing. He should have the info on the moths he had sent off for determination before too long, and we'll include the results in the next issue.

Bryant sent in an article he found dealing with the cyclical effects of weather and some of the results on the fauna thus affected. He commented it would be interesting to have someone attempt to document the effect of drought and heavy storms, etc. on the Lep fauna. Perhaps the abundance or scarcity of certain species during many years as reflected by fluctuations in populations may be tied more dramatically to weather than we would expect. One would have to carefully evaluate data gathered over a period of years to get some answers. Other factors also come into play to complicate things, such as competion during peak years, heavy parasitism, conditions of humidity which could adversely affect larval growth by increasing disease or fungal infections on a local basis, etc. Interesting food for thought....

ZONE III : GEORGIA Coordinators, Abner Towers and Irving Finkelstein

The Georgia members are getting field gear ready to seek out the possibility for finding

the elusive state record for Celastrina ebenina and to look for Callophrys hesseli; it would not be too surprising if someone turns up Pyrgus centuarae wyandoti in the mountains of north Georgia, either. As we learn more about the habitat and host plant requirements for individual species, the chances for new discoveries in new localities improve. Apparently the site for the 1980 annual meeting will be Vogel State Park in Union County, which has good campsites and facilities, not to mention being a great place to visit with the family. Someone should check Vogel for the occurance of Satyrium kingi in mid-July, as this spot may well prove to be one of the best colonies in the mountain region of Georgia. The timing for the meeting has not been set firmly, but will be held in August. This time should be prime for Speyeria diana females, should you want to try your hand at raising some, and the possibility exists for the partial fall brood of Erora laeta. The Park is in close proximity to Cooper Creek, making this very attractive, and there are several small towns nearby which have motels for the non-campers. The mothing potential of this area has not been explored in depth, and the timing should be excellent for the Catocala moths. If you are interested, begin to reserve a weekend during August in the back of your mind now. You will have the opportunity to view some excellent scenic spots, and the chance to meet some of the regulars and staff and be able to voice opinions at the brief business meeting.

ZONE IV: FLORIDA Coordinators, Steve Roman, Jeff Slotten, and Lee Adair

In spite of a lot of spring rain and a very late freeze, things are happening already: Lee Adair reported that he had found a male Protambulyx strigilis on Sanibel Island in January, and commented that it made an audible noise; the members of this genus are known to produce a squeaking sound when they are picked up, but the origin of this sound is not clear. He received confirmation on a specimen of Erynnis funeralis taken during November on Stock Island; this apparently has become established in the extreme southern Keys of Florida, and normally is considered a southwestern species. During early March he visited Bayport and observed two males and a female Callosamia securifera in morning flight; the female daytime flights continue to intrigue me. Linwood Dow provided another fine report from the Ocoee area: Paratrea plebeia, 11 March; Palthis asopialis, 10 March; Neocataclysma magnificalis, 12 March; and Glyphodes sibillalis, 8 January. Ernie Martin picked up Sphecodina abbotti and a female C. securifera (saved for ova) on 14 March at Walt Disney World. The S. abbotti is a new county record and perhaps a new southward extension. Frank Fee showed me a male specimen of E. brizo brizo taken in mid-March near Mule Creek in Liberty County, a possible new state record. He also found a pair of C. niphon in the vicinity, the female saved for rearing purposes. Roman, Gilmore, Watts, Baggett, & Fee visited Torreya State Park the weekend of 15-16 March and discovered that the Redbud trees had been damaged by the late freeze, thwarting efforts to seek C. henrici; two were found by Roman & Fee in the tops of large Ilex opaca trees, tending to confirm Gatrelle's observations for the southeast. One egg was found on the Ilex by Roman. Phyciodes t. seminole was found on the wing, and mothing was good : C. angulifera was common, with several females saved for ova. Watts found three S. abbotti at a baited tree before dusk, while Gilmore & Baggett were retrieving parasitized cocoons of C. promethea from a Sweetgum tree (new host plant record ?); Deidamia inscriptum came in swarms to MV light, the result of last year's outbreak, and many were very tiny as a result of the competition for food plant last spring. Other good moths found were Eurythra phasma and Euthyatira pudens. Zeiger reported having seen a Battus polydamas in Jacksonville on 20 March, the same day he had one emerge from a batch he had reared last fall. Watts & Baggett surveyed Yucca plants in Duval & St. Johns Counties on 24 March, and found that the Yucca Weevils apparently had not harmed the population of Giant Skippers in those Counties, for we found a number of tents of M. yuccae. The mild winter should prove to be favorable

for the more tropical species.

ZONE V: SOUTH CAROLINA, NORTH CAROLINA, AND VIRGINIA Coordinators, Leroy Koehn (VA,NC), Ron Gatrelle (SC), and John Coffman (VA).

Leroy and John are also welcomed to the organization in a new role of support, and John can help balance the reports with some moth information. Leroy reported finding tents of M. yuccae in the vicinity of Virginia Beach, and that he needed to have some stitches taken for being a bit careless around the plants. Not only are the tips of Spanish Bayonets very sharp, but the edges of the leaves are as sharp as razor blades. He reported that cocoons of C. promethea were very abundant this winter in Virginia along roadsides and fencelines. We need the support from other members in this region, so don't hesitate to contact the coordinators. A trip is being planned to the Charleston area in late May by several Florida members to search for Satyrium kingi, Euphyes dukesi, and others. If you are interested in visiting coastal SC or Georgia, you will find it useful to contact Ron. John Watts may be doing research at the Mountain Lake Biological Station in Virginia this summer.

NOTICES:

Linwood Dow (803 Sullivan St., Ocoee, FL 32761) is interested in obtaining information on reprints of articles and books dealing with the Microheterocera. If you can provide him with information, or have them to loan or send, he'll be grateful for your assistance. (Send specimens on to Mr. Kimball for determination, Woody!)

Molly Monica (11 Putnam Avenue, Berkeley Heights, NJ $\,0.7922$) is interested in exchanging information and live material concerning the Heliconian butterflies in Florida for study.

Katsami Ishizuka of Japan is interested in obtaining specimens of <u>Catocala</u> moths from across the US, and would appreciate assistance. You can write to him at 1-2-4 Kurosu, Iruma-Shi, Saitama-Ken 358, Japan.

Our Secretary, Tom Neal, has a new address: 3820 NW 16th Place, Gainesville, FL 32601. There should be no problem if you forwarded 1980 dues to the old address, as the mail has been re-routed through the post office. Dues should be made out to the Southern Lepidopterists (\$3.00) and mailed directly to TOM, not the EDITOR! Since we live some 80 miles away from each other, it creates additional problems. The Editor has enough correspondence to keep up with as it is. Tom handles all back issues and requests for information concerning the group; information for the newsletter goes to the Editor. Thanks....

The SOUTHERN LEPIDOPTERISTS' NEWS c/o the Editor, Dave Baggett 8442 Thor Street Jacksonville, Florida 32216