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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

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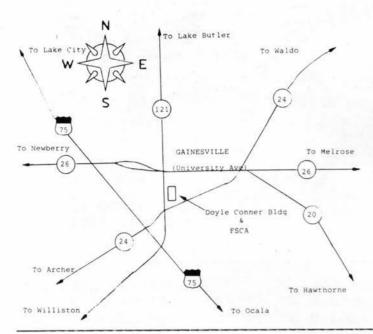
SOUTHERN LEPIDOPTERISTS' SOCIETY ANNUAL MEETING GAINESVILLE, FL OCT. 9-11

The 1993 Annual Meeting of the Southern Lepidopterists' Society will be held the weekend of 9-10 October, 1993 at the DPI Auditorium in the Doyle Connor Building in Gainesville, Florida. This is the same site as the 1992 meeting and the Florida State Collection of Arthropods is housed there. The meeting will begin at 9:00 AM Saturday and there will be a hour-long informal lunch period at noon. Depending on interest, a group dinner will begin at 5:30. This should be early enough to allow time for moth collectors to set up. A field trip for those interested in butterflies will be held on Sunday.

The insect collection will be open at 9 AM Saturday. You are encouraged to bring along specimens that you are having difficulty identifying. You should also bring along any other material that may be of interest. If you wish to make a presentation or need further information please contact the Chairman, John Calhoun at 1731 San Mateo Drive, Dunedin, FL 34698; ph. (813) 7363778. This promises to be an informative and exciting meeting and there is already considerable interest so don't delay in making plans to participate. A registration form is included in this newsletter; please return it to the Sec-Treas. Tom Neal as soon as possible.

Below is a map of Gainesville showing the location of the Doyle Connor Building in relation to all of the major thoroughfares leading through Gainesville. Should you need further directions to the meeting or information on local accommodations contact Jeff Slotten, 5421 NW 69th Lane Gainesville, FL 32606: ph. (904) 338-0721, evenings or Tom Neal, 1705 NW 23rd Street, Gainesville, FL 32605: ph. (904) 375-1916.





Directions to the Doyle Conner Building in Gainesville:

Gainesville is bordered on its western edge by Interstate 75, a major north-south thoroughfare. East of Gainesville, Highway 301 passes through the small towns of Waldo and Hawthorne, as well as crossing State Road 25 just west of Melrose. A quick study of the map should help you get your bearings, no matter which way you may be approaching from.

The Doyle Conner Building, which houses the Florida State Collection of Arthropods (FSCA), is located on the eastern side of State Road 121, which becomes 34th Street as you travel through the town of Gainesville. State Road 26 similarly becomes University Avenue in town, but at the edges is known as Melrose Road to the east and Newberry Road at the western edge of town. The Doyle Conner Building faces a traffic light at 20th Avenue, and a protected turn arrow is there to help if you're coming from the north. Ample parking is available at the Conner Building. The Southern Lepidopterists' signs with the group logo will also be placed conspicuously to help you.

There are numerous hotels and motels in the Gainesville area. Although this is a college town, there is no home football game that weekend. Should you need information on local accommodations or directions to the meeting, Jeffrey Slotten, a Gainesville resident, will help you: Jeffrey Slotten, 5421 N.W. 69th Lane, Gainesville, Florida 32606. Telephone (904) 338-0721, evenings.

HURRICANE ANDREW: A DAMAGE ASSESSMENT OF SOUTH FLA. HABITATS DAVE BAGGETT

On August 24, 1992 Hurricane Andrew struck the lower Floridian peninsula with a direct hit on the Homestead-Florida City area, with measured sustained winds above 145 mph and tornadic gusts estimated in excess of 200 mph. While most of us have seen TV coverage or newspaper accounts of the incredible damage to homes and businesses, there has been only limited coverage of the storm's brutal impact on the few remaining natural areas in southern Dade County, Everglades National Park, and the federal and state preserve areas in the upper Keys. The habitat damage to most of these areas will take years to fully evaluate. The visual damage reports given in the media accounts really do not give an accurate impression of the severity of the storm's true impact on these natural areas.

Ironically, there should be little doubt in anyone's mind that the impacts of tropical storms and hurricanes over time actually have contributed to the shaping of the unique subtropical ecosystems in the region. Such storms are in reality one of nature's tools for the establishment and maintenance of specialized plant communities which provide niches for many of the unusual biotic elements found nowhere else in the continental United States. These storms, without question, add much to the ecological dynamics of the region. Unfortunately, we have only about a hundred years' worth of information available to help us evaluate positive or negative aspects of these powerful storms, and the historical record is slanted by necessity toward human impacts rather than on ecological effects (Gentry, 1974).

These storms do not hit the precise same areas with the same intensity, nor with any measurable frequency. The effect of these events on things like highly localized populations of butterflies has been discussed only with regard to the Schaus' Swallowtail. The late Florence Grimshawe lamented the extirpation of this species from Matecumbe Key by the Great Labor Day Hurricane of 1935 (Grimshawe, 1940), but her own records from Matecumbe suggest otherwise, as she continued to supply specimens labeled "Matecumbe" until 1948. Richard Gillmore (pers. comm.) and others, including myself, strongly believe that Grimshawe deliberately

misled many lepidopterists to believe that the stronghold of the Schaus' Swallowtail was on Matecumbe rather than on Key Largo. Gillmore has been working on a paper discussing this probability, which has great credence. He, I, and many others have had the opportunity to speak to or correspond with a number of her contemporaries and we are left with serious reservations as to authenticity of ANY of the Matecumbe records.

Furthermore, one of the most important historical accounts of Schaus' Swallowtail has been largely overlooked by most researchers. This brief, but quite interesting, observation on the seasonal abundance of this butterfly made by W. H. Schoenherr was published in the very first Season Summary of the Lepidopterists' Society (1947). Mr. Schoenherr was the first to physically report the presence of this butterfly on Key Largo, and he also remarked that the butterfly was much scarcer (a situation that correlates well with its status today) than in the peak years of

1934-35 and again during 1944-45.

Curiously, Mrs. Grimshawe, who had reveled in the attention given her as THE authority on this highly localized species, suddenly and abruptly dropped from the lepidopterist scene. Her reputation had been tarnished, and despite the fact that she lived until 1982, others seeking to understand the situation found her to be extremely uncooperative and distant. Even Mr. Kimball was unable to obtain any information to confirm the validity of a number of "dubious" records originally reported by her. As Mrs. Grimshawe made considerable money from her specimen dealings many felt she lied about the locality to protect her business interests. H. L. King, Dean Berry, Lucien Harris, and others had unsuccessfully searched Matecumbe Key many times and King related a humorous tale about how he happened to find both the Schaus Swallowtail and Mrs. Grimshawe on Key Largo in 1944 - much to her displeasure!

As such, it will always represent an enigma to current researchers as to whether or not populations of Schaus' Swallowtail actually occurred on Matecumbe and did perish with the 1935 storm as she claimed (Grimshawe, 1940), despite many of us having "reasonable doubts" about the butterfly ever being present there. However, it is worth noting that severe hurricanes struck the lower peninsula during both 1926 and 1928. Schaus' Swallowtail had been described from Brickell Hammock (now a mere fragment in the Coconut Grove vicinity) in 1911 (Schaus) and the very last known mainland record supported by a specimen came in 1924. It is entirely possible - even very likely - that this fine butterfly's habitat at Brickell Hammock met the same fate that much of Homestead and the Biscayne National Monument islands suffered in August of 1992. It is my calculated opinion that the storms in the 1920's extirpated this butterfly from the mainland.

While these severe storms can prove to be detrimental if a direct hit on crucial habitat occurs, it is interesting to consider that glancing blows to the area, such as in 1926, 1928, 1935, and again with storms like Donna and Betsy in the 1960's (Gentry, 1974) may actually enhance habitats for species such as the Schaus Swallowtail by creating ideal favorable conditions. This is at least speculatively possible in view of Schoenherr's 1947 observations regarding peak population years and substantiated by the well-documented population "boom" of the late 1960's and early 1970's. The recorded peaks occur consistently about 8 to 10 years AFTER such storms, perhaps due to the plant succession process. We now have a unique opportunity to test this hypothesis for both positive and negative impact, as theories as to why Schaus' Swallowtail populations

have "declined" since the 1970's have been purely speculative at best. Here is a new chance to watch the process in action, and to begin understanding the unusual ecology of the Keys region by incorporating the storm dynamics as an important factor in the shaping and altering of plant communities and their associated insect assemblages as well. I remain convinced that hurricanes are the driving force behind these processes and that this feature has been ignored in attempts to explain the peculiar cyclical population fluctuations of specialized species such as Papilio aristodemus ponceanus.

Dr. Tom Emmel, member of and principal investigator for the Schaus' Swallowtail recovery project, was called into action immediately after Andrew struck, and was asked to survey damage to habitats of both the butterfly and the endangered tree snails. His observations have been published in The Florida Naturalist (1992, should you wish to track this

down in your library or you could request a copy from Tom.

Tom toured both the lower peninsula and the Biscayne National Monument islands and reported nearly total devastation of the Biscayne island habitats. Virtually all of the trees were downed and the hammocks obliterated by the force of winds and tidal surge. Tom noted that the islands remained covered with debris and that stagnating pools of salt water remained in all the low areas on the islands. There is no question that the Biscayne National Monument islands habitat suffered enormous long-term damage and it may prove that a hurricane can cause the extirpation of the Schaus' Swallowtail from one or more island habitats.

In addition, Tom also indicated to those present at the 1992 annual meeting that the northern terminus of Key Largo had also been hit very hard, with perhaps as much as 30 percent of the habitat there impacted by the storm. This is in contrast to the actual swath cut by the storm's eyewall, where an estimated 90 percent of all trees were destroyed — obvious to anyone who has seen the Homestead area. This represents a bleak forecast for the survivability of Schaus' Swallowtail in the wild. Volunteer teams to clear debris from habitat are badly needed. I would suggest to anyone wishing to visit Key Largo that they contact park personnel and ask to help out in the habitat restoration. It will take time to fully evaluate the storm's impact on both flora and fauna.

Those of us at the meeting got to hear from both Tom and Lee Adair, who provided a brief, but shocking assessment of damage in the Homestead area. Lee was absolutely correct in stating that one simply cannot get a true picture from news coverage reports - the area flattened by the storm is simply too wide to comprehend from localized pictures. Andrew was unquestionably one of the most damaging storms in decades. The eyewall-the area of greatest intensity - has been estimated to have streched from Key Biscayne to Elliot Key and it travelled inland directly over Homestead

and Florida City.

Lee visited the area several weeks after Tom and was left in awe of the extent of storm's wrath. He reported that the Homestead area was so badly torn apart that there were no familiar landmarks left, and he experienced difficulty just trying to navigate his way around there. Like Tom he noted that virtually all trees were either blown down or snapped off like toothpicks 6 to 8 feet above the ground. He also observed that many of the trunks had literally had their very BARK blown off or "sandblasted" away by the incessant barrage of detritus. He managed to wind his way through the devastation to the IFAS facility, as well as to the Bauer Hammock. The latter was being used as the headquarters for

the National Guard support group. Fuchs Hammock was being used by the Guard as an incineration site for burnable trash. Power was still out in the entire area and many residential areas had been vacated. He shared slides of the trip and later regretted that he was in such shock at what he witnessed that he failed to take many photos.

A later assessment of the damage to the Dade County parks was recently made by Nature Conservancy personnel (Boyle-Sprenkel, 1993). There is grave concern that invasive exotic plants will take advantage of the disturbance and loss of canopy trees. Many of the attractive plants brought into the region as ornamentals by nursery interests and the ladies' garden clubbers in less environmentally conscious times may "take over" and ultimately lead to a loss of crucial native habitat for butterflies, moths, and many other insects. We are just beginning to realize the immense problems, however unintentional, caused by exotic plants acting in combination with anthropomorphic disturbances and a favorable climate.

While most news has focused on the loss of housing, there are many other sides to the story. Most of southern Dade County is agricultural, and tree crops sustained enormous casualties. The lime crop was totally destroyed; the mango harvest had just been completed, but the trees were either uprooted or shattered and shorn of all their branches; fully 2/3 of the state's avocado crop was lost, again with most of the trees severely damaged or destroyed; in addition, more than 5000 acres of various nursery ornamentals were lost, with a value of \$150 million (FDACS, 1992). Also many of the fields west of the Florida City area were flooded by the storm surge, leaving behind pools of saltwater. While most row crops have been replanted, the tree crops will take much longer to re-establish and the flooded fields will no doubt suffer from reduced harvests until the excess salt problem is overcome.

Not mentioned in the newscasts was the fact that one of the two 500 thousand gallon fuel tanks at the Turkey Point power plant was ruptured with oil flowing into the bay as well as being blown onshore as the storm surge moved inland. Tens of thousands of boats and yachts were sunk, overturned at their docks, or severely damaged - with additional large amounts of fuel spilled into who-knows-where and, for that matter, think about the sheer amount of toxic materials spilled from homes and businesses.

Most homes were without power of running water for several months and over 3000 portable toilets were placed in the area. The residents refusing to leave the remains of their homes and trying to protect whatever possessions they had left, were told to prepare latrines in their backyards. Public health officials and the National Guard advised using household bleach as a disinfectant in the trenches, but did not mention that bleach itself is a serious contaminant of soil and both surface and ground water. With all the human misery few were concerned about the environmental impact of these activities. After the storm, mosquitoes and flies presented a demoralizing problem for those trying to get back on their feet. Planeload after planeload of aerial insecticide were dumped indiscriminately on the region, with DC-3's sometimes flying six abreast. What the effect on the ecosystem of this and the previously discussed activities actually is may take years to determine.

Matheson Hammock, Fairchild Tropical Gardens, and most of Key Biscayne were annihilated by Andrew in the same fashion as the outer Islands in Biscayne National Park had been. Also the storm cut a broad swath directly through the heart of Everglades National Park, scattering the

fast-germinating seeds of many invasive exotic plants throughout the lower peninsula. The native plant communities, especially the tropical hammock areas, had been in the direct path of one of the most destructive storms on record. With all of the ensuing disturbance, and without the protective tree canopy remaining to block out the sun, there necessarily much concern over what we will be left with. Certainly Everglades National Park and the Dade County Metro Park System were dealt the cruelest blow of all (Boyles-Sprenkel, 1993). The opening up of previously forested areas, coupled with all of the disturbances of both the storm and the cleanup process, will likely provide ideal conditions for undesirable exotics to dominate many areas.

Fully two months later Marc Minno and I had the opportunity to survey some of the damage ourselves. We had gone down to attend a benthic conference on Long Key and on the way down we traveled through the Homestead area at night - eerily dark, as power for most of the region was still off. The only lights we encountered were flickering fires or

from lights running on portable generators.

We had no chance to really appreciate Andrew's impact until we headed home on 24 October. We stopped at John Penncamp State Park and were relieved to find this part of Key Largo intact. Butterflies were scarce, only a total of four individuals of common butterflies being observed, but the hammocks looked to be in good shape. As we drove north on Key Largo increasing signs of damage became apparent, but even near the northern end the hammock appeared largely unscathed except for an occasional broken branch. Here again we observed few butterflies; only ten or so of the normally frequently encountered species being noted. This was unquestionably the poorest diversity and lowest numbers I had ever seen during a fall trip to the Keys. However, after the initial reports, we were relieved that the Key Largo Hammocks were largely spared.

As the Card Sound bridge was still closed, we left the Keys on US 1 and headed back toward the mainland. We began noticing severe storm damage - sheared off power poles and downed trees - about 10 miles from the mainland. We later found where the other side of the eyewall had passed - north of hwy 41 along hwy 27 as we headed home. This represents a swath

over 50 miles wide!

We noticed the damage increasing as we headed for Florida City and Homestead, but we were by no means prepared for what we were about to witness. We were stunned by the extent of the destruction: entire city blocks lay in rubble. Homes and businesses were simply GONE and everywhere we looked there were huge piles of debris still waiting to be cleaned up; estimates at that time indicated up to 8.3 million cubic yards if debris still had not been disposed of. The interior of both Florida City and Homestead were reminiscent of a war zone like Beirut. Furniture, damaged buildings, flattened vehicles, overturned boats, shattered trees and the like were strewn everywhere. Many of the homes or other structures still standing were boarded shut or had tarps covering gaping holes. Many dwellings had roofs missing and owners of some businesses were still guarding their property with shotguns. There were surprisingly few people outdoors and street traffic was minimal. The sounds of generators, power tools, and hammering were ubiquitous. Scrap dealers searched through the piles of trash for anything of value. Amazingly, this was two full months after the storm had hit!

We made our way through Homestead and wound our way past and through many devastated neighborhoods and agricultural areas. Our first stop was

made at the IFAS station northwest of Homestead. En route we passed many flattened avocado and mango groves and paused briefly to admire an old "Cracker" house still standing largely intact although a few of the tin sheets on the roof had been peeled back. Many of the newer concrete block homes had not fared nearly so well. At the station the hammock remnants and groves were destroyed - flattened beyond recognition. The trailers and barns had been blown away and a tractor still lay on its side. The main building structures, in contrast, fared well even though signs of repair were readily apparent. The beautiful ornamental trees in the front were either gone or mere limbless trunks. The cabbage palms were amazingly intact but the royal palms were shorn of all their fronds. The 8" diameter flagpole was bent over at a 45-degree angle. However, the facility is again operational despite the destruction of the groves.

We were not at all prepared for what we saw at Bauer and Costello hammocks. These once magnificent hammocks, familiar to many of us, were quite literally blown away. Even the accompanying photos do not begin to tell the story of destruction. ALL of the trees were downed, shattered and many had their bark stripped by the force of the wind. The entire tracts were jungles of tree remains and the understory buried in debris. Only bare trunks remained where many trees had formed a dense canopy. Both were closed to the public, gated at the entrance. At Bauer we spoke briefly with Bill Phillips' daughter, who had also just arrived from out-of-town to visit her father, who is the park manager. We were all simply

aghast at the damage scenes.

We drove westward from the park, stopping briefly to examine and photograph the remnant pineland tracts. No pines larger than about 5 inches in diameter still stood and these had been stripped of all but the uppermost branches, looking like "poodle tails". All of the larger trees had been broken off 6 to 8 feet above the ground and laid down all facing southward away from the roadside. The microwave tower, a familiar landmark to many of us, had been broken in half about 150 feet up. Oddly, we found the top portion had been blown several hundred yards away in precisely the opposite direction from the pines.

At Costello Hammock the damage was similar and equally extensive. Even the Dade County Metro Park office was still boarded up and the roof partially covered by a blue plastic tarp. We found no one present at the facility and it was more than obvious that very little manpower had been expended on trying to restore natural areas; there was simply much more to be concerned about as folks worked to try to get their homes back to

livable condition.

In the Homestead area we saw only 18-19 species of common butterflies with \underline{P} . $\underline{agarithe}$, \underline{L} . $\underline{cassius}$, \underline{A} . $\underline{vanillae}$, \underline{U} . $\underline{proteus}$, and \underline{A} . $\underline{jatrophe}$ the only species in any numbers. We searched Bauer and Costello for signs of either $\underline{Eumaeus}$ \underline{atala} or \underline{Eurema} \underline{dina} \underline{helios} , but saw no adults and the tracts were so covered by debris that it was impossible to search the understory for foodplants and larvae. I can only express the gravest concern for many of the highly localizes butterflies in the Homestead area.

Restoration efforts are just now beginning to take place, and these folks desperately need help in terms of manpower and financial aid. If you are interested in donating time to help restore the hammocks please contact me and I'll put you in touch with those coordinating the efforts. I'm sure that some of you donated to the American Red Cross or other relief agencies to help relieve human suffering. However, as naturalists we also

have another obligation here. The Dade County Metro Park system has always been very cooperative and helpful in the past. Here I suggest that as a group we join with the Native Plant Society and others to establish a group fund to help fund restoration efforts. I am setting forth a seed donation of \$100.00 with Tom Neal, and suggest that each of you consider making a special contribution towards this end. After all, many of us think little of spending \$20.00 in gas and another \$50.00 for food and lodging on a weekend trip. Give up ONE trip this year and help us raise funds to help restore these spots which have given so many of us fond memories in the past. We'll collect through the time of the annual meeting, and we'll have Tom make an announcement at the meeting as well as provide a report for the subsequent newsletter. It is our turn to give back something to nature this time around and I urge your strongest consideration of this unusual request.



UPPER KEY LARGO

BAUER HAMMOCK



PINELANDS HOMESTEAD AREA



ANOTHER VIEW OF BAUER HAMMOCK

Literature cited:

Boyles-Sprenkel, C. 1993. Storm warnings. Nature Conservancy 43: 8-9.

Emmel, T. C. 1992. Mother Nature reeks (sic!) havoc on endangered habitats. The Florida Naturalist 65: 12-13, 15, 21-22.

FDACS (Florida Dept. Agriculture and Consumer Services) 1992. Ag. takes a beating from Andrew. Florida Market Bulletin 35: 1-8.

FG&FWFC (Fla. Game & Fresh Water Fish Commission) 1982. Schaus Swallowtail Butterfly recovery plan. U.S. Fish and Wildlife Service, Region 4, Atlanta, Georgia. 57pp.

Gentry, R.C. 1974. Hurricanes in South Florida. <u>In</u> Gleason, P.J. (Ed.), Environments of South Florida: past and present. Memoir No. 2, Miami Geological Society, Coral Gables. pp. 53-60.

Grimshawe, Florence M. 1940. Place of sorrow: the world's rarest butterfly and Matecumbe Key. Nature Magazine 33:565-567, 611.

Kimball, C.P. 1965. Lepidoptera of Florida. Arthropods of Florida and neighboring land areas, Vol. 1. Fla. Div. of Plant Industry, Gainesville, Fla. 363 pp.

Schaus, W. 1911. A new <u>Papilio</u> from Florida, and one from Mexico (Lepidoptera). <u>Entomologists' News</u> 22:438-439.

Schoenherr, W. H. 1947. <u>In Field Summary of Lepidoptera - 1947 Season, Southeast report by Remington, C. L. and H. K. Clench, (Eds.). The Lepidopterists' News 1 (8):94</u>

A NEW CONTINENTAL RECORD OF AN EASTERN HEMISPHERE VERNON A. BROU JR. AGRICULTURAL PEST COLLECTED AT U. V. LIGHT



Fig. 1 Anticarsia irrorata F.

A female specimen of the noctuid Anticarsia irrorata Fabricius was collected in a light trap on 7 Feb. 1990 at a location 4.2 mi. NE Abita Springs, St. Tammany Parish, Louisiana USA. Fig. 1 shows condition of actual specimen. Somewhat geometrid-like in appearance, wings and body may be light brown, dark brown, or yellow-brown. Often there are varying degrees of reddish suffusion. There is an oblique line extending from the apex of the forewing to its inner margin, and continuing in a similar manner on the hind wing. Literature from

various countries indicates that this species feeds on cotton and

soybeans. The species has been reported from the Ethiopian region of

Africa, Asia, Malaysia, Australia, and Argentina.

In Louisiana, the similar-looking Anticarsia gemmatilis Hbn. is a major pest on soybeans, occurring May through December. It can be collected at times by the thousands of specimens in a single nightly light trap sample. This species is extremely variable, occurring in numerous color forms.

I thank Bob Poole for the determination and Steven Passoa for additional information.

RESEARCH REQUESTS AND MEMBER NOTICES

WANTED: Livestock (esp. females) of Cosmosoma myrodora and Syntomeida ipomoae for research. Becky Simmons, Dept. of Biology, Room 226, Wake Forest University, P. O. Box 7325, Winston-Salem, NC 27109. NOTE: please call before sending material. ph. (919) 759-5315.

FOR SALE: Light traps. 12 volt DC or 110 volt AC with 15 watt or 8 watt blacklights. The traps are portable and easy to use. Flow-through rain drains and beetle screens protect specimens from damage. For a free brochure and price list contact Leroy Koehn, 6058 Campbell Rd., Mentor on the Lake, OH 44060; ph. (216) 257-0796.

RESEARCH REQUEST: I would like to contact anyone who has experience with or is interested in raising Hemaris spp. in captivity. Also anyone doing videography of butterfly/general insect behavior. Brian Pasby, Biology Dept., Pace University, Pleasantville, NY 10588; ph. (914) 773-3563, Fax (914) 773-3541.

DO BUTTERFLY HIBERNATION BOXES WORK? Marc Minno would like to know. If you have any relevant information please contact him at 303-18 Diamond Village, Gainesville, FL 32603.

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CURRENT ZONE REPORTS

ZONE I TEXAS: Ed Knudson, 8517 Burkhardt, Houston, TX 77055

Ed reports a warm winter in the Houston area with one light freeze in March and he is looking forward to his first collecting trip of the year. He found Psychomorpha epimenis in his yard in mid-March; the first time he had ever seen it in Houston. He also mentioned that he was in error in reporting that the moth Euclystis guerini had never been taken in the US before (Vol. 14 no. 4) and is listed in the MONA checklist.

ZONE II ALABAMA, LOUISIANA, MISSISSIPPI, TENNESSEE: Vernon Brou, 74320 Jack Loyd Rd., Abita Springs, LA 70420; Bryant Mather, 213 Mt. Salus Drive, Clinton, MS 39056; Mecky Furr, 7926 Cross Pike, Germantown, TN 38138

Vernon reports the "usual" moths taken during the first few months of 1993 with nothing special to report. He also mentions that cold temperatures this spring have hampered collecting, producing the poorest results he's seen in the past 23 years.

John Hyatt provided the following report from Andrew Warren, Englewood CO. of his collecting trip to Tennessee during May 1992.

Knox Co., I. C. King Park, 10 May: <u>Calycopis</u> <u>cecrops</u>, <u>Vanessa</u> <u>cardui</u>, <u>Limenitis</u> arthemis astyanax.

Roane Co., Harriman, 10 May: <u>Erynnis juvenalis</u>, <u>Atalopedes campestris</u>, <u>Poanes zabulon</u>, <u>Chlosyne nycteis</u>, <u>Vanessa cardui</u>, and <u>Polygonia comma</u>.

Morgan Co., 1 mi. S Oakdale, 10 May: <u>Battus philenor</u>, <u>Calycopis cecrops</u>, <u>Megisto cymela</u>, <u>Chlosyne nycteis</u>, <u>Vanessa cardui</u>, and <u>V. virginiensis</u>.

Morgan Co., Oakdale town park, 10 May: Staphylus hayhurstii, Pholisora catullus, Poanes zabulon, Atalopedes campestris, Papilio glaucus, P. troilus, Everes comyntas, Hermeuptychia sosybius, Chlosyne nycteis, and Vanessa atalanta.

Wilson Co., Cedars of Lebanon State Park, 11 May: Thorybes pylades, T. bathyllus, T. confusis, Achlarus lyciades, Staphylus hayhurstii, Polites themistocles, Atrytonopsis hianna, Amblyscirtes vialis, A. hegon, Colias cesonia, Phoebis sennae, Papilio cresphontes, Battus philenor, Mitoura gryneus and Anaea andria. This appeared to be an excellent spot, especially for skippers. There were many natural open grassy areas with scattered oaks and cedars. This spot looked good for Hesperia later in the year.

Dickson Co. Montgomery Bell State Park, 14 May: Thorybes pylades, Pompeius verna, Poanes zabulon, P. hobomok, Amblyscirtes hegon, Ancyloxypha numitor, Phoebis sennae, Papilio polyxenes, Celastrina argiolus ladon, and Megisto cymela. This is a heavily forested area with large open meadows. Looks good for Speyeria later in the season.

ZONE III GEORGIA: Irving Finkelstein, 425 Springdale Dr. NE, Atlanta, GA 30305

No report.

Zone IV FLORIDA: Dave Baggett, 403 Oleander Drive, Palatka, FL 32077

Dave notes that there was very little activity in the field during the winter and early spring.

Tom Neal reports that he has seen little in his backyard bait trap in Gainesville except <u>Zale lunata</u> and <u>Zale minerea</u>. Exceptions include <u>Cyllopsis gemma</u>, 3 Jan.; <u>Phosphila turbulenta</u>, 12 Jan.; and <u>Lithophane sp</u>. (no. 2258,1 in Kimball, 1965) 15 March. Also taken in Gainesville were <u>Chaetaglaea tremula</u> and <u>Anacamptodes pergracilis</u>, both on 1 Jan.. <u>Gonodes liquida was recorded from Fairbanks</u>, Alachua Co. on 13 Jan..

ZONE V VIRGINIA, NORTH & SOUTH CAROLINA; Bob Cavanaugh, P.O. Box 734,

Morehead City, NC 28557; Ron Gatrelle, 126 Wells Road, Goose Creek, SC 29445.

Ron will provide a comprehensive report for the next newsletter.

The Southern Lepidopterists' News is published four times annually. Membership dues are \$10.00 annually. The organization is open to anyone with an interest in the Lepidoptera of the southern United States. Information about the Society may be obtained from the Secretary-Treasurer, Tom Neal, 1705 NW 23rd Street, Gainesville, FL 32605.

THE SOUTHERN LEPIDOPTERISTS' NEWSLETTER C/O Thomas M. Neal
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