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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 (WEBSITE: www.southernlepsoc.org/)

J. BARRY LOMBARDINI: EDITOR

A NEW LEPIDOPTERAN HABITAT FOR WEST TEXAS - MAYBE? BY J. BARRY LOMBARDINI

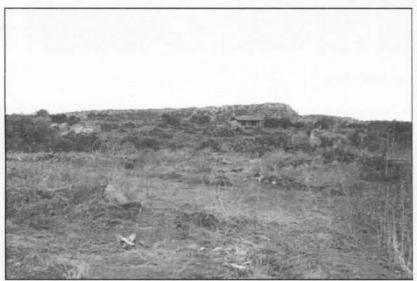


Fig. 1. Before the bulldozing one could not see the house in the background because of the extensive vegetation (Boy Scout Camp, Post, Texas).

For the past few years since my interest in moths has increased, I try to do some moth collecting (blacklight trap) one night a week near Post, Texas, on a Boy Scout Camp. This is an ideal location for a number of reasons: many species of Schinia moths, I know the caretaker of the Camp, it is close to Lubbock (~38 miles southeast of Lubbock) but off the flat caprock in rolling hills with lots of vegetation, and a safe location (no vandals) for my traps. So middle of July I arrive at the Camp in the evening about an hour before sundown and immediately panic that I made a wrong turn somewhere in my travels from Lubbock to Post. Much of the camp is bulldozed (Fig. 1) (well 165 acres out of ~500 acres)!!! Trees and shrubs are uprooted and piled up all over (Fig. 2)!!! Looks like a war zone!!! (My pheromone trap is under one of these piles.)

I then meet a Wildlife Biologist from the State Wildlife Management Department who is surveying the scene, and he explains that the administrators of the Boy Scout Camp have contracted with the Wildlife Management Department to return the area to its native habitat. That is minus the mesquite, Juniper trees and other shrubs that are either not native to the area or have overtaken the area (Fig. 3 and 4) out of proportion to what it was 100 years ago. The biologist suggested various factors that have contributed to the decline

in the native grasses and the increase in the shrubs: heavy grazing of cattle, changes in climate, suppression of grassland fires, both long and short drought periods, plant competition, and erosion of topsoil where vegetation has been removed. So the game plan is to remove all the non-indigenous vegetation and then plant native prairie grasses which will return the area to its original state approximately 2-3 years from now. We shall see? Looking at the positive side of a destroyed area maybe, hopefully only temporarily (actually not as bad on second visit in early August) - different species of moths may come into the area.

<u>Note:</u> As of October 1st the uprooted trees and brush on the Boy Scout Camp have not been cleared away. I wonder how many years this area



cleared away. I wonder how many years this area Fig. 2. Piles of uprooted trees and brush (Boy Scout Camp, will stay as a mess before further renovations take Post, Texas). place?



Fig. 3 and 4. Vegetation on Boy Scout Camp prior to July, 2005 (Post, Texas)

STATE INSECTS:

Louisiana -- Honey Bee <u>North Carolina</u> -- Honey Bee <u>South Carolina</u> -- Carolina Mantid and Eastern Tiger Swallowtail Butterfly <u>Tennessee</u> -- Firefly Beetle, Ladybug Beetle, Honey Bee, and Zebra Swallowtail Butterfly <u>Texas</u> -- Monarch Butterfly <u>Virginia</u> -- Tiger Swallowtail Butterfly

WELCOME TO NEW MEMBERS

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The Southern Lepidopterists' Society is open to anyone with an interest in the Lepidoptera of the southern region of the United States. Annual membership dues:

| Regular | \$15.00 |
|-------------|---------|
| Student | \$12.00 |
| Sustaining | \$25.00 |
| Contributor | \$50.00 |
| | |

A newsletter, The News of the Southern Lepidopterists' Society is published four times annually.

Information about the Society may be obtained from the Membership Coordinator or the Society Website: www.southernlepsoc.org/

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JOHN ABBOT AWARD WINNERS FOR 2005

It is with great pleasure to announce that Jackie and Lee Miller have been jointly voted the John Abbot award by the membership of the Southern Lepidopterists' Society for 2005. The award will be presented at the joint meeting of the Southern Lepidopterists' Society/Association for Tropical Lepidoptera in Gainesville, Florida, September 29 - October 2, 2005. By the time this issue of the SLS News reaches the membership the meeting will be history. Hopefully, there will be some pictures in the December issue of the presentation of the Award to Jackie and Lee Miller. The Millers are researchers at the McGuire Center for Lepidoptera Research in Gainesville, Florida, and were the curators of the Allyn Museum Collection in Sarasota, Florida, for many years. Lee and Jackie Miller have been interested in and are currently studying the lepidoptera of the West Indies. Congratulations to the Millers!!!

BUTTERFLY QUOTATION

We are like butterflies who flutter for a day and think it is forever.

(Carl Sagan - an American astronomer, educator and author. Dr. Sagan was the David Duncan Professor of Astronomy and Space Sciences and Director of the Laboratory for Planetary Studies, Cornell University [born 1934, died 1996]).

NEOCATACLYSTA MAGNIFICALIS (HBN.) IN LOUISIANA BY VERNON ANTOINE BROU JR.



The small pyralid moth *Neocataclysta magnificalis* (Hbn.) (Fig. 1) is known in Louisiana from a series of 21 specimens captured in ultraviolet light traps at sec.24T6SR12E, 4.2 mi. NE of Abita Springs, Louisiana. This species appears to have a single annual brood peaking early April at the Abita Springs study site (Fig. 2). Only one species of the genus is known. Munroe (1972) states *magnificalis* is common ranging from Nova Scotia and Quebec to Florida. Usually six black spots occur along the outer margin of the hindwing within a yellow marginal band. Five of the six black spots usually have tiny light blue center spots. The adult is pictured by Munroe (1973).

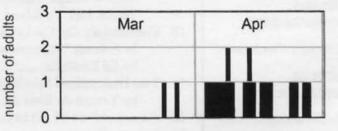


Fig. 1. Neocataclysta magnificalis (Hnb.).

Fig. 2. Dates of capture. n = 21.

Literature Cited

Munroe, E., in Dominick, R. B., et al., 1972, The Moths of America North of Mexico, fasc. 13.1A, Pyraloidea (in part). Munroe, E., in Dominick, R. B., et al., 1973, The Moths of America North of Mexico, fasc. 13.1C, Pyraloidea (in part).

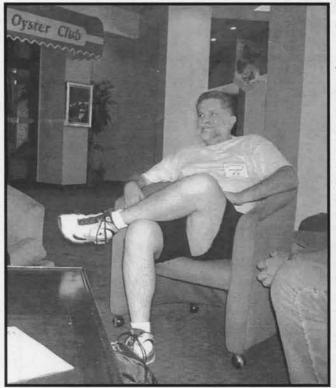
(Vernon Antoine Brou Jr., 74320 Jack Loyd Road, Abita Springs, Louisiana 70420 USA; E-mail: vabrou@bellsouth.net)

ANNOUNCEMENTS

FIELD GUIDE TO EASTERN MOTHS: This widely popular book on the moths of the eastern US has been recently *"slightly revised"* by Charles Covell. The book is available from Charles directly for \$40 postpaid and ascribed to the recipient. Orders can be negotiated by using the following E-mail address: <u>covell@louisville.edu</u>, or by sending a check to Charles Covell at 206 NE 9th Ave., Gainesville, FL 32601- 4378.

McGUIRE CENTER: The McGuire Center for Lepidoptera and Biodiversity in Gainesville is about to mark its first anniversary. Two new research and curatorial positions were filled early this year: Dr. Paul Goldstein (Noctuoidea), Dr. John Heppner (microlepidoptera; actually still a DPI employee but moving to McGuire Hall), and Dr. Keith Wilmott (Ithomiinae). Staff and students have gone far and wide this year on collecting trips to Guatemala, Costa Rica, Taiwan and Nepal. Some of us have attended meetings such as the Entomological Society of America meetings, the First Neotropical Encounter on Lepidoptera at Unicamp, Brazil; the Lepidopterists' Society annual meeting in Sierra Vista, AZ; and the Societas Europaea Lepidopterologica meeting in Rome, Italy. We have had many visits from lepidopterists and welcome you whenever you can visit us. Our biggest job now is to curate the huge collection and bring the many parts of it together in appropriate order in time for next June 14-18 annual meeting of the Lepidopterists' Society - Charlie Covell, Curator.

RON GATRELLE 1946 - 2005



Ron Gatrelle relaxing in the hotel lobby on 4 August 2005, at The Lepidopterists' Society/SEABA joint meeting 2-7 August 2005, in Sierra Vista, Arizona (Photo by Todd Stout/Utah Lepidopterists' Society).

The Following obituary was published in the Charleston Post & Courier on 8/15/2005:

GATRELLE, Ronald. Entered into eternal rest on August 14, 2005. Pastor Ronald Richard Gatrelle, husband of Marilyn Riggins Gatrelle. Residence: Goose Creek, South Carolina. The relatives and friends of Pastor and Mrs. Ronald Richard Gatrelle are invited to attend the Funeral services of the former at Emmanuel Christian Fellowship on Thursday, August 18, 2005, at eleven o'clock. Interment will be private. Friends may call at J. Henry Stuhr Inc., Greenridge Road Chapel on Wednesday evening from six until eight o'clock. In lieu of flowers memorials may be made to Emmanuel Christian Fellowship, PO Box 208, Goose Creek, SC 29445. Pastor Gatrelle was born in Marshalltown, Iowa, on January 27, 1946, the son of Donald C. Gatrelle and Arlene Rash Gatrelle. He was a veteran of the US Navy and the Pastor of Emmanuel Christian Fellowship, an International Pentecostal Holiness Church. He was the Co-Founder and President of The International Lepidoptera Survey (TILS) which is devoted to the worldwide collection of Lepidoptera for the purpose of scientific discovery, determination, and documentation. He was the Editor and a contributing writer for The Taxonomic Report, a publication of TILS. He was also member of the International Lepidoptera Society.

Surviving are his wife of Goose Creek, one son Ben Gatrelle

of Goose Creek, two daughters: Tammra Mueller and Katie Gatrelle of Goose Creek, two grandchildren Shauna Mueller and Nicholas Mueller. A memorial message may be written to the family by visiting our website at jhenrystuhr.com. Visit our guest book at www.charleston.net/deaths.

Additional information that the SLSociety received is that Ron Gatrelle passed away unexpectedly due to a blood clot. It was perhaps a pulmonary embolism due to a deep vein thrombosis. His inactivity during the plane flight to and from Arizona for the Lepidopterists' Society meeting probably caused a clot to form, which traveled to his lungs.

The members of the Southern Lepidopterists' Society wish to extend their condolences to the family of Ron.

| DEFINITIONS: | Bog - Wetland characterized by saturated, acidic soil and often by the thick growth of sphagnum |
|---------------------|---|
| | moss; usually treeless except for clumps of spruce, larch, or cedar. |

Quaking Bog - A bog consisting of soil and vegetation that floats on ground water.

- Salt Marsh Tidal wetland, often with brackish water and salt-loving plants.
- Sphagnum A genus of mosses commonly found in bogs; highly absorbent, spongelike, grayish mosses found in bogs; peat moss.

MACRUROCAMPA MARTHESIA (CRAM.) IN LOUISIANA BY VERNON ANTOINE BROU JR.

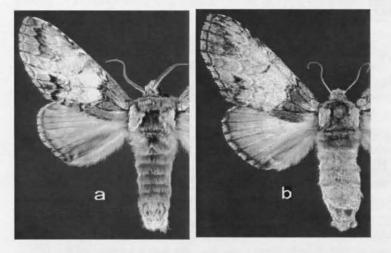


Fig.1. Macrurocampa marthesia: a. male, b. female.

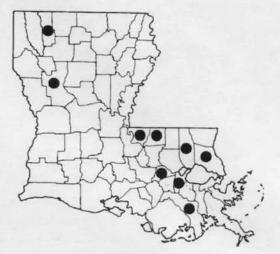


Fig. 2. Parish records by this author.

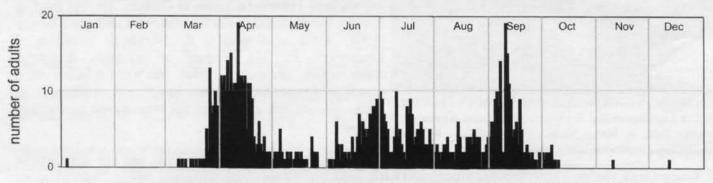


Fig. 3. Macrurocampa marthesia captured at sec.24T6SR12E, 4.2 mi NE Abita Springs, Louisiana. n = 887.

The large notodontid moth *Macrurocampa marthesia* (Cram.) (Fig. 1.) described in 1779 is listed to be common throughout eastern North America occurring April through September (Covell 1984). Packard (1895) indicated *marthesia* occurs from Maine to Florida and Texas, south to Mexico, Surinam and Brazil. The forewing coloration of live and fresh specimens can exhibit a pastel bluish or greenish overall suffusion. The hindwing is mousy-gray with a slightly darker narrow band from basal area to anal angle. This species is quite common in Louisiana wherever oaks (*Quercus* sp.) are abundant. Fig. 2 illustrates the Louisiana parish records by this author. In Louisiana, *marthesia* is on the wing continuously from March to October (Fig. 3), with at least three broods occurring. Wagner *et al.* (1997) reported *marthesia* has two broods.

Literature Cited

- Covell, Jr., C.V. 1984. A Field Guide to the Moths of Eastern North America. The Peterson Field Guide Series No. 30. Houghton Mifflin Co., Boston. xv + 469pp., 64 plates.
- Packard, A.S. 1895. Monograph of the Bombycine Moths of America North of Mexico, including their Transformations and Origin of the Larval Markings and armature. Pt.1. Family 1. Notodontidae. Nat. Acad. Sci. vol. VII. First Memoir on the Bombycine Moths.
- Wagner, D. L., V. Giles, R. C. Reardon, M. L. McManus, 1997. Caterpillars of Eastern Forests. USDA, Forest Health Technology Enterprise Team, 113 pp.

ERRATUM: In the article "Late Appearances of the Early Hairstreak: *Erora laeta* in Tennessee" (Vol. 27, NO.2, pg. 31) by John A Hyatt, the date in paragraph 2 had digits transposed. It should read April 13, not April 31. "*That would be a rare date for a rare butterfly indeed*!"

CAMPING AND COLLECTING IN THE WEMINUCHE WILDERNESS: RIDING THE NARROW GAUGE, COAL - FIRED, STEAM - POWERED TRAIN FROM DURANGO TO ELK PARK TO SILVERTON, COLORADO BY

J. BARRY LOMBARDINI



Fig. 1. Barry, Gwynne and Chuck (Animas Museum archives)

Wednesday, July 13th: Colleagues (Fig. 1) pull into my home driveway at 4:20am on Wednesday, July 13, 2005, for the start of our annual camping trip to the mountains. This event has been taking place for the last 25 years. Camping gear and butterfly/moth equipment are loaded into the van in about 5 minutes - one last check - do we have the tent and stakes? - and off we go. This year we (Chuck Garner, SLS member, Gwynne Little, colleague from work, and myself) decided once again to take the narrow gauge train - our 3rd trip - from Durango, Colorado, to Silverton, Colorado, and get off the train in the Weminuche Wilderness at the meadow in Elk Park which is approximately 6 miles south of Silverton. Starting point is Lubbock, Texas, and thus we have about a 575 mile drive to Durango, Colorado. Not the speediest of travelers, this journey takes us almost 12 hours as we stop in Santa Rosa, New Mexico, at the Silver Moon for breakfast (tradition for some 20 years) and than another meal break in Española, New Mexico (25 miles north of Sante Fe), at Angelinas for a fantastic Mexican lunch. A must stop in Cline's Corners, New Mexico, which is a rest stop and travelers' trap with a restaurant, gift shops, and gas station (\$2.50 per gallon - much higher than Lubbock which was \$2.24 this date) in the middle of nowhere. In years past I have collected 5 Elsa sphinx moths (Sagenosoma elsa) on the stone walls of these buildings. No luck this year - aside from 3 parasitized Morning Cloak (Nymphalis antiopa) chrysalides - there is nothing - not even a June bug which in years past have been piled up by the thousands along side the buildings.

Arriving in Durango at around 4:00pm (after a few more necessary breaks), we first pick up our reserved train tickets at the train station and then head to one of the local camp grounds 4 miles north of town to set up the tent (home away from home) for the night as there are no late afternoon trains to Elk Park. Our train [the Durango & Silverton Narrow Gauge (D&SNG) railroad] leaves at 8:15am on Thursday morning rain or shine and it looks more like rain than shine. No blacklighting tonight!!!



Fig. 2. Durango (Animas Museum archives)

Durango - elevation 6512 ft (Fig. 2): By 1860, people had located in the area of the San Juan Mountains known as the Animas Valley, and founded Animas City (on the banks of the Animas River) approximately 14 miles north of present day Durango (named after Durango, Mexico) which, however, did not turn out to be a permanent settlement lasting for only one year. Farming was established in this region in 1875 to provide provisions for the mining camps to the north towards Silverton. A second Animas City was established one mile north of the present city of Durango and then incorporated on December 24, 1878. Durango, as other communities in these mountains, did not really begin to prosper until the arrival of the railroad (Denver and Rio Grande railroad) on August 5, 1881, which brought in people and supplies, and transported ore from the mines to the processing facilities. In the town at this time there were approximately 1000 people, one church, and 59

establishments where liquor could be purchased.

Durango almost immediately from its inception became a wild town with numerous gunfights and other forms of violence. In one point in time, acting Deputy Sheriff, James Sullivan, was overwhelmed by the lawlessness, and some establishments (saloons) tried to remedy this problem by having guns checked at the door (didn't always work). In the 1880's shootouts were common in the streets and when the local townspeople had enough of the crime and violence there were lynchings without trial. The City elected John Taylor, the local druggist, as Mayor and along with a new City Council new ordinances were passed which taxed the establishments where the greatest problems (violence) occurred. The red light district while frowned upon was impossible to control and the best the City Council could do was to issue fines on the *"houses"* and then enjoy the profits for the City's coffers.

In 1889, fire destroyed seven blocks in the downtown area of Durango and troops had to be deployed to protect property. The buildings were rebuilt out of stone and brick and many survive to this day. The Depression of 1893 brought about by a series of economic problems such as bank failures, financial collapses, depletion of the treasury's gold reserves exacerbated by the Silver Purchase Act of 1890 (see under Silverton) and natural disasters such as droughts which plunged agricultural markets inflicted severe hardships on the town as it did on the entire country. However, by 1910 Durango recovered and had a population of 4500.

In 1947, Animas City was incorporated into Durango. Present day Durango which is home of the present Durango & Silverton Narrow Gauge railroad has a population of ~15,000.

Silverton (elevation 9318 ft) is located 45 miles north of Durango. Silverton, originally named Baker's Park after Charles Baker, an early gold prospector in the area, got its present name when a silver miner made the comment: "We may not have any gold, but we have silver by the ton!". While this statement was true perhaps in the early years of prospecting in the Silverton area because of only limited gold strikes, there really were vast undiscovered amounts of gold in these hills of the San Juan Mountains.



By 1875, the people living in the Silverton area were not only the miners but many others worked in the post office, sawmill, blacksmith shop, mercantile store, newspaper, smelter and, of course - most important, the liquor store. The settlement of Silverton was incorporated as a city 2 years before Durango (November 15, 1876) and was already a "booming" town of over a 1000 people. In 1883, The La Plata Miner (local newspaper) listed all the stores, trades, professions, and number of houses in Silverton: "There are in Silverton 5 hotels, 10 restaurants, 34 saloons, 5 blacksmith shops, 8 laundries, 6 tobacco, fruit and candy stores, 4 livery stables, 2 bakeries, 2 theaters, 3 dance halls, 1 photograph gallery, 5 assay offices, 3 newspapers, 1 bank, 4 doctors, 2 dentists, 3 milling offices, 9 mining engineers, 18 lawyers, 294 dwellings, 2 hardware stores, 7 general stores, 2 clothing stores, 2 furniture stores, 2 harness shops,

Fig. 3. Ore processing plant (Animas Museum archives)

4 meat markets, 3 drug stores, 3 jewelry stores, and 4 millinery and ladies stores" (Osterwald, 1988).

The railroad arrived in Silverton on July 8?, 1882. The economic advantage of the railroad can be easily calculated from the following figures for shipping ore from Silverton to Durango: by train - \$12.00/ton vs. \$40.00/ton by pack train in 1878. A first class passenger ticket from Denver to Silverton cost \$37.30 and an extra \$4.00 for a sleeping compartment (Pullman car). The trip took 29 hours and 50 minutes.

The population of Silverton reached ~ 2000 residents in 1885 and ~ 5000 in 1900 (its peak). As were many other contemporary towns in this area, Silverton was known as "*sin city*" with 40 brothels and saloons on one of its main streets, Blair Street.

Large quantities of gold and silver were extracted from the mountains around Silverton by "hard rock" mining techniques.

"Hard rock" mining is quite different than "placer mining" which is the process of obtaining gold in the form of dust, flakes, grains, and/or nuggets by washing or dredging earth material such rocks, boulders, sand, and clay.

Hard Rock mining or more appropriately named "*lode mining*" is the process of digging out gold bearing veins found in exposed bedrock or in an ore. The ore must be pulverized and then the gold extracted by chemicals in a processing plant (Fig. 3). The method that was commonly used was called the cyanide process or cyanidation. Briefly, the gold or silver ore is first finely ground and then a dilute solution of sodium cyanide is allowed to leach through the mixture along with bubbled air (oxygen). An oxidation of the gold and/or silver takes place and water-soluble sodium-silver-gold complexes are formed. The cyanide reaction with gold is as follows (silver forms a similar reaction with cyanide):

 $4Au + 8NaCN + O_2 + 2H_2O ---> 4NaAu(CN)_2 + 4NaOH$

The gold (or silver) is then precipitated with powdered zinc. The precipitate is filtered, collected, and finally melted and cast into bullion bars.

<u>NOTE</u>: One important consideration is to maintain the ore-chemical mixture at an alkaline pH during the extraction procedure for if hydrogen ions are generated (in an acid environment) hydrogen cyanide gas will be produced which will make for an all around bad day and end the process prematurely, *i.e.*, the workers will die!!! Cyanidation is controversial, as should be obvious, as the process releases cyanide into the environment.

Some of the more productive mines in the Silverton area were named: Silver Lake, Iowa, Gold King, Royal Tiger, and Sunnyside. Once the ore was mined the ore had to be processed and thus mills and smelters were built. The Mayflower Mill, one of the last ore processing plants to be established in the region operated from 1930 to 1991 and produced almost 2 million ounces of gold and 30 million ounces of silver.

As earlier stated silver was king in the 1880's in Silverton but an unexpected and disastrous demise for a United States silver economy was on the horizon. Coinage in the early days of the United States was based on a system referred to as *"bimetallism"* which meant that both gold and silver were used in our money system, *i.e.*, in our coins. Gold was 16 times more valuable than silver and therefore in a silver dollar there was 16 times more silver than there was gold in a gold dollar. However, gold become less valuable after 1849 because of the enormous quantities being found in various other parts of the US, such as California. Then in 1873 the US Congress passed a bill that put the country on a *"gold standard"* and silver coins were no longer minted. As more silver became available because of increased mining activity, *e.g., "silver strikes in Colorado"*, the price of silver started to decline. The government under President Benjamin Harrison in 1890 started purchasing 4.5 million ounces of silver (*"Sherman Silver Purchase Act"*) a month which almost immediately drove up the price of silver from \$0.84 an ounce to \$1.50 an ounce. However, the increased supply of silver then drove down



Fig. 4. Animas Museum archives



Fig. 5. Animas Museum archives

the price. This worried the eastern business establishment that gold would be replaced by less valuable silver and in 1893 the Sherman Silver Purchase Act was repealed and the price of silver dropped to 0.62 in a few days. The consequence was that thousands of miners in Colorado who were producing ~60% of the silver in the nation became unemployed. The country was thrown into Depression. Fortunately for Silverton there was plenty of gold in the hills and mining continued until 1991 when finally the Mayflower Mill shut down.

One of the more colorful figures that lived in Silverton for a short period of time was Wyatt Earp (1883). He was hired to establish order in one of the local saloons. His two good friends Bat Masterson and John Henry "Doc" Holliday joined him periodically to play cards and "*lift a few*".

After 1900 the size of the town started to decline to its present day population of \sim 545. Bootlegging became profitable during Prohibition (1920's) and for a brief period of time put Silverton back on the map. Today tourism is the prime source of revenue in Silverton.

The Durango & Silverton Narrow Gauge Railroad (Fig. 4 and 5): The primary function of the D&SNG railroad was to connect the mining town of Silverton with Durango where coal mines and smelting operations were located. Transport of people (workers) and farming commodities were also a necessary function of the railroad.

The D&SNG trains are powered by steam engines burning coal to convert water to steam in the boiler that then expands in the cylinders which in turn pushes the pistons which through connections drives the wheels. The tender which is coupled to the locomotive carries between 5000 and 6000 gallons of water and 8 to 9.5 tons of coal depending upon the make of the engine. It is the fireman's job to shovel coal from the tender into the firebox. The fireman also makes sure that the boiler has sufficient water to prevent damage to the engine.

The tracks are "*narrow gauge*" with a distance between the rails of 3 feet which is quite different than modern locomotives which have a distance of 4 ft 8.5 in. between the rails.



Fig. 6. Animas River (Animas Museum archives)

The braking system of the narrow gauge trains is interesting in that it is quite different than the brakes on your automobile. An air line runs under each car and is connected from car to car by hoses such that there is a continuous air line from the engine to the end car with a pressure of 70 to 90 psi generated by the air compressor on the engine. When the signal is given to slow or stop the train (one toot on the whistle) the engineer releases the air pressure causing cylinders to push the brake shoes against the wheels. Thus, if there is a break or leak in the air line through damage, the train will stop automatically.

Train whistle: "A whistle is not just a noisemaker; it is used by the engineer to give signals of movements the train is about to make. In general, these signals announce starting, stopping, backing up, approaching road crossings and stations, serve as warnings to persons or livestock on or near the track and inform trainmen protecting the front or rear of stopped trains to reboard" (Osterwald, 1988).

Animas River (Fig. 6): The discovery of gold in Colorado in 1858 eventually brought prospectors to the upper Animas watershed. Due to the need of moving large quantities of supplies for the miners a railroad was planned and finally arrived July 8 (? some controversy over the exact date), 1882.

The narrow gauge train from Durango to Silverton follows the Animas River (River of Souls). The River was named by Fray

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(Brother) Francisco Silvestre Vélez de Escalante in 1776 who was exploring the area along with Fray Francisco Atanasio Domínguez (two Franciscan priests) and 12 other companions for a route from Sante Fe, New Mexico, to the newly established Missions in California. The full name of the River originally was "El Rio De los Animas Perdidas en Purgatorio" meaning "River of the Souls Lost in Purgatory". The name of the River has subsequently been shortened to "Animas River" meaning

Fig. 7. Animas Museum archives

Fig. 8. Animas Museum archives

"River of Souls". As the story goes Father Escalante named the River after the Indians who did not want to be converted to Catholicism and hence they were the "lost souls and this was their river". The sought after inland route was not found and these early explorers had to return to Sante Fe because of the approaching winter.

The Animas River has its headwaters in the mountains above Silverton and flows through deep gorges south to Durango, through the center of town, and then flows further south into New Mexico where it eventually joins the San Juan river near Aztec, New Mexico. Many of the rapids in the Animas River are considered to be Class IV-V and should be tested by only experienced kayakers and rafters. It has been stated that the Animas River is "no place to learn whitewater river skills". This river is also well known for its excellent fishing. The record is an impressive 30 pound brown trout (that is either a typo or a monster!!!). However, most brown, rainbow and cutthroat trout are in the quarter - half pound, 12-16 in., range.

Hardship Conditions Endured by the Early Miners/Settlers: Trouble and hardships in the Silverton area were always present in the early days. Weather conditions were (and still are) quite severe with many feet of snow during the winter which always delayed or many times completely stopped the trains (Fig. 7 and 8). Perhaps the worst winter on record was in 1884 when snow started accumulating in February and continued for 20 days. The train was blocked for a total of 73 days from February 4th to April 16th imposing serious problems in shipping supplies to the townspeople. This particular snowslide was measured to be 200 ft wide and 30 to 40 ft deep.

In the Spring there were floods produced by heavy rains plus snow melt and consequent runoff into the Animas River causing the River to rise above the normal river bed and damage the track roadbed. In some years in which there were severe weather conditions (floods of 1900, 1911, 1927, 1970), sections of track would be washed into the River itself. Rock slides were always a problem. Tributary streams that flowed into the Animas River flooded and caused damage to small bridges from the piled up debris. In the fall heavy rains could again return and cause extensive damage to the track.

Accidents with dynamite (mine accidents), snowslides, train derailings, and river flooding in the Spring and Fall all contributed to a hard life in the Silverton region. Pneumonia, influenza (especially in the 1918 Spanish Flu epidemic) and miner's consumption also took its toll. Within 3 months in 1918 12% of the population died due to the flu.

To complicate matters and these early pioneers' lives, the U.S. Government had deeded the San Juan Mountains to the Ute Indians (Fig. 9 and 10) in 1868, and now since so many prospectors and settlers were coming into the area there was inevitable friction between the Indians and the white trespassers. To remedy this situation the U.S. Government first considered sending troops to the territory to prevent the miners from entering Indian territory but then opted not, and finally settling for a less violent solution negotiated a treaty with Chief Ouray and bought back some 3.5 million acres of land form the Utes in 1874 (Brunot Treaty, April, 1874). The Utes received \$25,000 annually from the US Government plus the right to hunt in the area.

While the Brunot Treaty kept the peace for a number of years, serious trouble erupted on September 30, 1879, when the

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Fig. 9. Emma Buck & Buckskin Charlie - Ute Indians (Animas Museum archives)



Fig. 10. Ute Indians (Animas Museum archives)

White River Tribe of the Ute Nation rose up against Nathan C. Meeker, the government agent for the Indians. Meeker had tried to force the Indians to abandon their culture and language, to change their lifestyle, and in effect become "Anglos". The Indians revolted killing Meeker and 10 of his colleagues and taking a number of hostages. This incident became known as the "Meeker Massacre".

Chief Ouray was instrumental

in soothing the relationship between the Indians and the settlers/miners in the region. Chief Ouray (1833-1880) was born in New Mexico of a Ute father and an Apache mother. He spoke Spanish and English before he learned Ute and Apache. After moving to Colorado at the age of 18 he became a Ute leader and was considered a great problem solver by both Indians and Whites. President Hayes called him *"the most intellectual man I've ever conversed with"*. When he died in 1880 the Denver Tribune obituary read: *"in the death of Ouray, one of the historical characters passes away. He has figured quite prominently. Ouray is in many respects...a remarkable Indian...pure instincts and keen perception. A*

friend to the white man and protector to the Indians."

In October of 1879, U.S. troops finally did move into the region because of further potential conflicts between the Indians and the settlers after the "Meeker Massacre" and occupied Ft. Flagler in Animas City. There were no serious incidents and the troops stayed less than one year leaving in 1880. However, by 1881 the Utes were removed from the San Juan area to reservations in Utah.

Thursday, July 14th: Break camp early (very early), pack our gear, and head to McDonald's in Durango for breakfast around 6:30am. We are on the train in our assigned car [open air gondola (fortunately it does not rain)] and seats by 7:45am after stowing our camping gear plus my butterfly/moth gear in the cargo car. What always commands some attention from fellow passengers is my carrying of a bowling ball bag plus a butterfly net into the high country. The net gets the anticipated comment "catching butterflies?", but the bowling ball bag gets many curious looks from the train personnel and the again anticipated remark "what's in the bag?". My usual curt answer is "a bowling ball"!!! I have always wondered how many of the railroad conductors opened the bowling ball bag in the storage compartment after we left. Now you may ask "well, what is in the bowling ball bag?". "A 12 volt battery, of course, for running a black light in the wilderness".

As stated earlier this was our 3rd trip on this train and it is always a fantastic journey following the Animas River through the mountain gorges and rugged terrain of the Rockies. Steam engines, which are coal fueled, produce both cinders and smoke so it can be a bit hard on your eyes and clothes since we are riding in an open air train car. Especially bad on a steep incline as the cinders and smoke pour out of the engine under the strain of climbing. (I am surprised that the air quality control police have not cited the railroad management for air pollution.)(Please See Color Plate 2.)

While riding the train I struck up a conversation with an Amish gentleman about my age who was traveling with his family and a second Amish family - a total of 8 - who were on vacation. In the course of the conversation with this very articulate and pleasant individual, he said that they lived in Indiana in a family group, were on vacation, and had traveled by van to Colorado with their driver. Trying not to push my luck with improper questions I still had to ask: "*If you can ride in a car, why can't you drive the car?*" A big smile and a laugh and the Amish gentleman answered: "*that's a very good question!*" He went on to say that the reason was primarily "tradition". He asked what we did for a living and I in turn

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Fig. 11. Backpackers in the San Juan Mountains - Barry, Gwynne, and Elk Park is a very large meadow in the Chuck (Animas Museum archives)

asked him what his occupation was. His answer was interesting. He said that he owned 80 acres of land on which he grew hay and soybeans, was a cabinet maker working in town for a company, ran a quilt sale two weekends a year (in April and September) and gave "buggy rides" to tourists. A man of all trades.

The train ride from Durango to Elk Park, according to the train schedule, is 3 hours and 3 minutes (39 miles) which means that we should arrive at 11:18am (New Mexico time, however, we always leave our watches on Texas time -God's time). And we did arrive right on time.

Weminuche Wilderness (located in the San Juan and Rio Grande National Forests) of the

Colorado Rockies, and is situated ~6 miles to the south of Silverton and ~4.5 miles to the east of Molas Lake along a hiking trail. From the meadow at Elk Park one can continue further east on this trail into the Needle Mountains: 4 miles to the beaver ponds, 1 additional mile to the meadows, and finally a few more miles (3-4 miles) to the continental divide and beyond. Elk Park is not a regular passenger stop from Durango to Silverton but only for campers and backpackers who want to spend some time in the Weminuche Wilderness. The train will make an ~30 second stop, just long enough for one to get his gear off the train and then you are on your own.

We arrive at Elk Park at 11:18am (elevation 8883 ft) - and get off the train with all our gear. In one of our previous train trips we (Fig. 11) have hiked up (straight up) with all our gear to the meadows, approximately 5 miles (and as I remember we thought we were going to die). This year we walked some 75 yards, almost, but not completely, out of direct sight of the train, and set up camp. No more carrying camping equipment any significant distance. Did some minor collecting in Elk Park meadow [One Parnassian (Parnassium phoebus - very worn), some blues , and a few ringlets (Coenonympha tullia)] in the afternoon, however, the weather turns bad and it rains, becoming a storm when we are cooking dinner lightening, thunder, and rain - the whole kit and caboodle. Rain is usually not a serious problem unless it never stops and/or is a downpour, but lightening in the mountains is never pleasant, especially since our tent is sitting under a clump of trees. Tent also has a 7 foot metal center pole, and of course my butterfly net has an aluminum handle - great for an electrical storm in the mountains.



Fig. 12. Railroad Vista (Animas Museum archives)

Anyone for playing cards - gin (card game, not the drink) - in the tent. No black lighting tonight as it is raining (including the usual thunder and lightening) plus high winds much of the night. One last chore before calling it a night - must hang up our food on a tree branch high off the ground. There are bears in the wilderness!!! Plus other small creatures which would love to get into our food supply. Tie a rock to the end of a rope, throw the rock over a tree branch, and hoist up the food. Food is safe for the night!

Friday, July 15th (Fig. 12): What a beautiful morning! After breakfast we decide to hike the Molas trail to Molas Lake. I, naturally, take my butterfly net. As stated before, Molas Lake is ~4.5 miles west of Elk Park where we are camping. There are approximately 30 switchbacks on this trail otherwise it would be too steep to negotiate and even then it was still a fairly steep climb. Caught a

Parnassian (*Parnassium phoebus*) at approximately a mile from Molas Lake on the trail and ~10,000 ft elevation. The scenery is fantastic on the trial. We can see the snow capped mountains in the distance and the train tracks in the valley below. While on one of the switch backs we notice that the train is coming up the valley and we stop for a few minutes to take some pictures (also to catch our breath). The Grenadier mountain range is to our south with several 13,000 ft peaks (Mt. Garfield, 13,065 ft; Graystone Peak, 13,489 ft; Electric Peak 13,206 ft) looming in the distance.

Finally arrive at Molas Lake (elevation 10,400 ft) 4 hours plus later. Not a very good walking time but at least we did make it. Molas Lake is small and not very impressive. The highway comes to this Lake from the West and we noticed that there was a small store on the far side of the Lake. Gwynne suggests that we walk over and see if we can purchase a cold drink. All I can think about is *if we walk over we have to walk back*! When we got there the store was closed, but fortunately the proprietor opened the store for us and we had a soft drink which was well enjoyed. And then back to reality - the realization that we had a 4.5 mile hike back to Elk Park to our camping area. Going downhill is much easier than uphill. However, knees and hips hurt - must be getting old - rather than excessive heart rate which occurs when going uphill. We walked back to Elk park (our new home away from home) in a little over 2 hours. Very glad to see the tent as we (I) were (was) exhausted. Some more collecting in the meadow after a lengthy rest, and then it's time to cook dinner. Doesn't look like it is going to rain tonight so I will put out a sheet with a blacklight powered by the 12 volt battery (remember - stored in the bowling ball bag). Checked the sheet around midnight and was disappointed as there were only a few noctuids, mainly the Black-rimmed Prominent (*Pheosia rimosa*).



Fig. 13. Here we are again all cleaned up! (Animas Museum archives)

Saturday, July 16th: Up early to check the sheet (5:00am Texas time) with a flashlight and again mostly noctuids, numerous Tortricids (leaf rollers), a few Western Tent Caterpillar Moths (*Malacosoma californicum*), and one sphingid [One-eyed Sphinx (*Smerinthus cerisyi*)]. Perhaps too cold last night for good collecting as the temperature was in the low 40ties. More collecting in the meadow when the sun comes up. Caught another *Parnassium phoebus* - this makes three. Some of the other butterfly species that were collected and/or observed were the following: Weidemeyer's Admiral (*Limenitis weidemeyerii*), Common Ringlet (*Coenonympha tullia*), Ruddy Copper (*Lycaena rubidus*), Purplish Copper (*Lycaena helloides*), Common Alpine (*Erebia epipsodea*), Checkered White (*Pieris protodice*), Primrose blue (*Plebejus glandon*) or Lupine Blue (*Plebejus icarioides*), Western Tiger Swallowtail (*Papilio rutulus*), Orange Sulphur "Alfalfa Butterfly" (*Colias eurytheme*), Painted Lady (*Vanessa cardui*), and the Western Skipperling (*Oarisma garita*). The day flying moth *Syngrapha alticola* was common in the meadow.

Time to break camp as the train from Durango will arrive at Elk Park at 11:28am to take us to Silverton. In Silverton we ate lunch and a bunch of ice cream plus

walked around the town and did a little bit of sightseeing. Then on the train again for the 3.5 hour ride back to Durango.

Again we will spend the night in the local campground. Looking forward to a shower (bath, that is), and dinner with Margarita (drink, that is) in Durango (Fig. 13).

Appears that it will not rain tonight, however, extremely high winds. Still worth a try to put a light trap out in the field adjacent to the campground.

Sunday, July 17th: Up early Sunday morning -- always up early -tired of sleeping on the ground. Check the trap - only a few noctuids and arctiids (*Hypercompe permaculata, Heminyalea labecula*) -- not very interesting, at least to me -- one unidentified *Catacola*.



Fig. 14. Wives in Lubbock are waiting our return (Animas Museum archives)

Time to pack up gear, load up van, breakfast at McDonald's, and head back to Lubbock (Fig. 14).

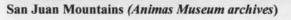
Lunch in Española again but this time not a fancy restaurant. While waiting for our hamburgers in a fast food restaurant a large caterpillar is quickly trucking across the floor, heading towards the counter. *Wait your turn buddy!* Appears to be a tiger swallowtail larva - 5th instar - will take it home to Lubbock. Make it back to Lubbock around 7:00pm after a long, long drive.

While the butterfly/moth collecting was not the best we did have a good time. I won most of the gin card games – great company, great scenery, and a great train ride.

Note: Caterpillar started to pupate by the time we arrived back in Lubbock (July 17th) and emerged from the chrysalis on August 5th; it is a Western Tiger Swallowtail (*Papilio rutulus*) - female.

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Flood on the Animas River - 1927 (Animas Museum archives)



Train Wreck (Animas Museum archives)

Train Wreck (Animas Museum archives)

[The Membership and Editor of the Southern Lepidopterists' Society wish to thank Mr. Robert McDaniel, Director of the Animas Museum located in Durango, Colorado (3065 West 2nd Ave, Durango, CO; Mailing Address: P.O. Box 3384, Durango, CO 81302; Telephone: 970 - 259-2402), for allowing us to reprint these historic photographs of the Durango - Silverton area in our newsletter.]

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COMMENTARY ON THE LEPIDOPTERISTS' SOCIETY - SEABA MEETING IN ARIZONA "EXPERIENCES BEFORE AND AFTERWARD" BY ED KNUDSON

Charles Bordelon & I drove to AZ, stopping first in the eastern portion of the White Mts., in Greenlee and Apache Co's, during July 31-August 1. We were fortunate to have an excellent guide, Mark Walker, who took us to some good spots in Apache Co., near Big Lake and Lee Valley, along FR 113. Here, despite cloudy and cool weather, late in the day of July 31, we found many *Lyacena ferrisi*, *Speyeria mormonia luski*, and *Euphydryas anicia magdalena*, sitting on yellow composites in the meadow. No nets were needed, as they could easily be picked up by the fingers. That night in Alpine, AZ, we set a few lights behind the motel and got a few nice moths, the best being Lophocampa ingens. We also collected at various spots in the mountains between Hannagan Meadow and Clifton on July 31 and August 1.

Many butterflies were out, the best (for us) being Colias alexandra, Neophasia menapia, Speyeria aphrodite byblis, S. atlantis nausicaa, Apodemia nais, Erora quaderna, Callophrys spinetorum, and Atrytonopsis lunus. There were some interesting day-flying moths as well, such as Gnophaela discreta, Ctenucha cressoni, Alypiodes bimacula, and an unusual day flying geometrid (blue black, with a red patch at the wing bases below).

We arrived at Sierra Vista on August 2 and had no sooner checked in at the hotel, than we set off to Copper Canyon in the southern end of the Huachucas for a night of collecting with Bruce Walsh and others. Sphingids such as *Sphinx istar, S. separata, Manduca muscosa, M. florestan*, and *Eumorpha typhon* were present but not abundant. There were also many Notodontids, Arctiids, and Noctuids which we have not seen before. The next night we went to Carr Canyon, but were rained out by 10 PM.

On August 4, we went to Harshaw Creek in the Patagonia Mts, along with Bob Nuelle III, and met Bill Mooney, Dave Winkle, and others there. Collecting was very good (for us). Many more noctuids (*Phoenicophanta bicolor* the best), Notodontids (*Cargida pyrrha* was abundant), and Arctiids (*Euchaetes fusca* and *E. antica*), and our first *Automeris iris*.

The meeting concluded for most on August 5, with the banquet, hosted by Charlie Covell, with awards given to Floyd Preston and to the student presentations.

The next day we left for the Pena Blanca area, staying at a very nice (and reasonable) hotel called Rio Rico Resort, north of Nogales. We spent the next three nights collecting at different locations in the Pena Blanca area, which are basically along Ruby Rd. between Pena Blanca Lake and Sycamore Creek. This provided us with the best collecting of the trip and we were quite lucky to avoid the many thunderstorms that were in the area. Bob Nuelle joined us for the last two nights. Although the usual moth abundance here was, allegedly down, since the monsoon was early and erratic this year, we found it quite spectacular. The usual Saturniids, such as *Sphinicampa montana, Automeris pamina, Citheronia splendens, Eacles oslari, Antheraea oculea*, and *Anisota oslari* were present in moderate numbers, many more than we needed. Sphingids included the much sought after *Proserpinus terlooi* (we got two), *Sphinx smithi* (one), *S. asella* (Two), *Smerinthus saliceti, Ceratomia sonorensis,* and *Xylophanes tersa* (Rare in AZ!). The large Notodontids, *Lirimiris truncata*, and *Pseudhapygia brunnea*, were also thrilling to see. Many other Noctuoids, including several that may be new records (not yet recognized).

We also found some of the more interesting things at Rio Rico, including the rare agaristine noctuid, Alypiodes geronimo, and the Zygaenid, Triprocris yampai, as well as a nice series of the small notodontid, Praeschausia zapata. During a brief stop at the Sonoita Creek rest area, Charles caught a nice specimen of the zygaenid, Triprocris cyanea, and Ed got the best butterfly during this part of the trip, Amblyscirtes elissa.

After Pena Blanca, we drove through an huge thunderstorm to Portal, at the base of the Chiricahua Mts. We did not get much at our lights there, but Charles got a few very nice things, including a new AZ State record for the Sphingid, *Ceratomia amyntor*, a nice female *Dysschema howardi*, and a nice beetle, *Dynastes granti*.

We then proceeded the next day to the Davis Mts, again through large storms, ending up in Ft. Davis. The next day we collected briefly along the southeast loop road on our way to visit the Davis Mts. Resort. Here, we got the only significant TX record for the trip, and apparently new zygaenid in the genus *Neoilliberus*. Six males were collected nectaring on *Calliandra* sp.

Then on to Del Rio, where we had another big storm, that ruined our collecting attempts at the Lakeview Inn. A beautiful snake (Texas Longnosed) was found.

We did not attend much of the formal parts of the meetings, but met many new people and renewed many old friendships. We were very sad and upset about the death of Ron Gatrelle, shortly after he got back from Arizona. We spent much time with him during the meeting, but now wish we had spent more.

The highlight of recent south Texas sightings was an influx of the uraniid moth Urania fulgens (many sightings between August 15-18) (none seen by us). The usual suspects were also reported, but no new US species, so far.

INTERESTING FACTS ABOUT TEXAS:

The entire state of Rhode Island is smaller in area than the King Ranch in south Texas.

The Texas flag is allowed to be flown at the same height as the US flag because Texas is the only State to enter the US by treaty rather than by annexation.

(The above statement is controversial as one source states that this is a legend. All state flags may fly at the same height as the U.S. flag. The U.S. flag must be on its right (the viewer's left), however. Texas' laws are consistent with those of the other states.)

"Houston" was the first word spoken from the moon on July 20, 1969.

Six flags have flown over Texas: Republic of Mexico, Spain, France, Republic of Texas, Confederate States of America, United States of America.

A hotel in Galveston named the "Flagship Hotel" proudly boasts to be the only hotel in North America that is built over water. "Is this a good idea?"

For all those football fans: John William Heisman was the first coach at Rice University in Houston and to whom the Heisman trophy is named.

The Aransas Wildlife Refuge claims to be the winter home of the Whooping cranes. My colleagues when out hunting Sandhill Cranes in West Texas have seen up to 9 Whooping cranes flying with the Sandhills. They better not get mixed up - [The Editor]!!!

For all you soft drink fans did you know that Dr Pepper hails from Waco - formulated and first sold in 1885. That's a long "a" in Waco.

RATTLESNAKES

Anybody willing to write an article about snakes as a potential hazard for those who collect in the field? Poisonous snakes are certainly plentiful in Texas and I assume in some of the other states that our Society covers.

TWO UNDESCRIBED SPECIES OF NOTODONTIDAE FROM LOUISIANA BY VERNON ANTOINE BROU JR.



Two long known and undescribed *notodontidae* species occur across some southeastern states. A *Litodonta* species (Fig. 1a,b) has been captured in three southeast Louisiana parishes (Fig. 2). A *Schizura* species (Fig. 1c,d) has been captured in three parishes across the state (Fig. 2). Both species appear to have three or four broods based on a quite small sample size for both (Fig. 3). The *Schizura* species is pictured by Knudson and Bordelon (1999) for Texas and they indicate both species have been found in eastern Texas, pers. comm.

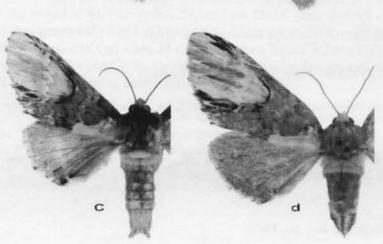


Fig. 1. *Litodonta* new species: a. male, b. female, *Schizura* new species: c. male, d. female.

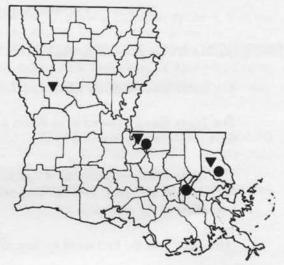


Fig. 2. *Litodonta* new species ●, *Schizura* new species ▼.

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Fig. 3b. Schizura new species captured in Louisiana. n = 34.

Heppner (per. comm.) indicates a single female of the *Schizura new species*, Florida, Pensacola, May 18, 1962, is located in the Florida State Collection of Arthropods as well as two Florida specimens of the *Litodonta new species*, one from Tall Timbers Res. Sta., 22-24 Sept. 1986, and one from Fla. Caverns St. Pk. 21-23 Aug. 1984. The *Schizura* species was noted to be on the wing one to two hours before sunrise in Louisiana.

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Knudson, E. and C. Bordelon 1999. Texas Lepidoptera Survey, Checklist of the Lepidoptera of Texas 2000 edit.

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PARASA CHLORIS (H.-S.) IN LOUISIANA BY VERNON ANTOINE BROU JR.

The small and pretty emerald-green and chestnut-brown *Parasa chloris* (H.-S.) (Fig. 1) reported to occur over much of the eastern US from New York to Florida and west to Mississippi, from May to August (Covell 1984) is quite a common species in some locations in SE Louisiana (Fig. 2). Wagner *et al.*, 1997, reports *chloris* having one brood, larvae occurring August to October. In Louisiana, this author has captured adults in all months except January and there are clearly two primary broods and evidence of a minor third brood emergence at the Louisiana study site (Fig. 3). The initial brood is more populated than the second.

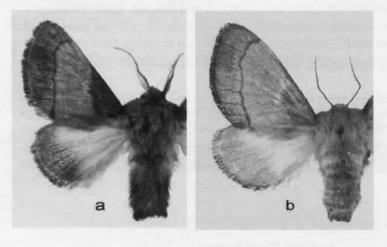


Fig. 1. Parasa chloris, a. male, b. female

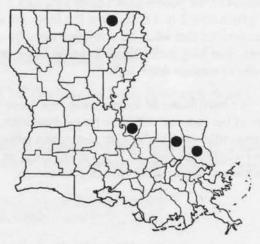


Fig. 2. Parasa chloris parish records.

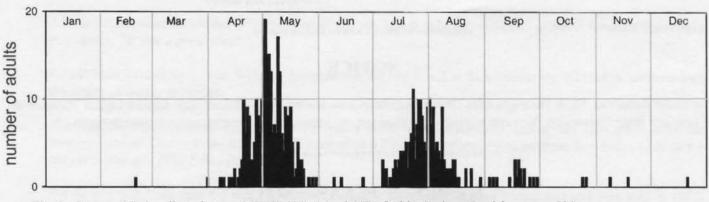


Fig. 3. Parasa chloris collected at sec.24T6SR12E, 4.2 mi. NE of Abita Springs, Louisiana. n = 504.

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- Covell, Jr., C.V. 1984. A Field Guide to the Moths of Eastern North America. The Peterson Field Guide Series No. 30. Houghton Mifflin Co., Boston. xv + 469pp., 64 plates.
- Wagner, D. L., V. Giles, R. C. Reardon, M. L. McManus, 1997. Caterpillars of Eastern Forests. USDA, Forest Health Technology Enterprise Team, 113 pp.

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LETTERS - COMMENTS

April 27, 2005

Dear Barry:

It was with great interest that we read your item in the Southern Lepidopterists' News [Vol. 27 NO.1 (2005), pgs. 15-16] about being unable to *find M. Streckeri texanus* in your many years of searching. *Megathymus* colonies are known to move when the parasites become too devastating. We've been on the lookout for *Megathymus* and *Agathymus* for over 20 years and have looked at over thousands of yucca plants and still don't have representatives of all the named subspecies. It is much easier to find the "tents" of *M. Coloradensis*, since they bore into the central caudex of the yucca plant and usually kill the plant. The *M. streckeri* complex is a different matter, however. The "tents" are about 6 to 12 inches away from the central yucca stalk off of runners or rhizomes. The "tents" are in among the detritus around the plans. It is necessary to clear away all the detritus around the central stalk to find the "tents" as they stick up barely above the surface of the ground.

There are occasionally several different yucca species in an area and only *Y. glauca* is host to the *M. s. texanus*. Your photos of the yuccas didn't quite look like *Y. glauca* which in Texas can grow to 6 to 8 feet tall. In the Dakotas, *Y. glauca* grows only 3 to 4 ft high and the Megs are easier to catch on the plants by putting one's net over the whole plant. We have noticed that when *M. s. texanus* does fly off, it invariably lights on a dead stalk (not always a dead yucca stalk, however). The Meg looks for all he world like a dead yucca pod which the Meg's head hanging downward, so as to take off rapidly to another dead stalk.

We have found *M. s. texanus* in Palo Duro Canyon State Park (with a permit), up on the rim, that is, not down on the floor of the canyon. We have found them also about 10 miles south of Crosbyton, in Crosby Co., TX. We also saw the biggest rattlesnake we've ever seen at this latter place. We haven't looked for *M. s. texanus* in any other yucca stands. We have caught all our *M. s. texanus* flying or sitting on dead stalks. They usually fly in mid-May at the two aforementioned sites. Good luck in your search.

Sincerely,

June and Floyd Preston 832 Sunset Drive Lawrence, KS 66044

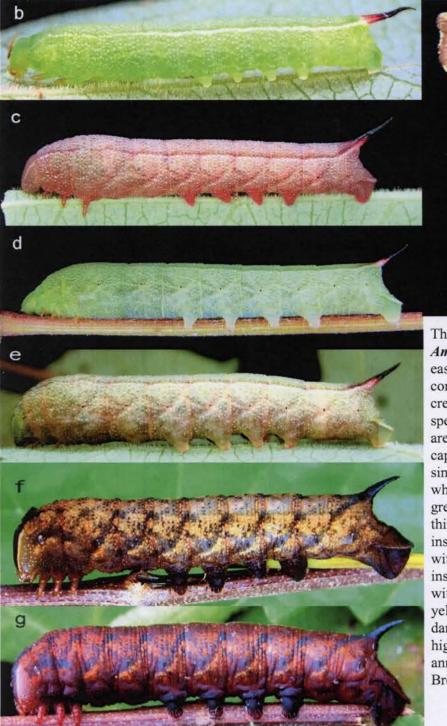
NOTICE

The North American Moth Photographers Group website is now hosted by the Mississippi Entomological Museum at Mississippi State University. You can visit the upgraded site at: http://mothphotographersgroup.msstate.edu.

MEMBERS PLEASE NOTE

- 1) Please send me articles, book reports, photographs anything to do with butterflies/moths, your experiences in the field, observations, food plants, rearing experiences, etc.
- 2) If you change your address please notify Jeff Slotten.
- 3) If you receive a Newsletter that is damaged or missing plates please contact Jeff Slotten.
- Please check your mailing label to determine if you have paid your current dues. Label should read 2005. Please check with Jeff Slotten if any questions.

SPOTLIGHT ON REARING AMPHION FLORIDENSIS B. P. CLARK BY VERNON ANTOINE BROU JR.



a. adult *Amphion floridensis*, b. second instar, c. third instar,
d. fourth instar, e. fifth instar, f. sixth instar early, g. sixth instar late

The common Louisiana sphingid species Amphion floridensis B.P. Clark is very easy to rear in desktop containers. The common foodplants grape and virginia creeper were utilized in rearing the specimens illustrated. Ova of floridensis are difficult to obtain, as most females in captivity expire without producing a single egg. Larvae start out translucent white with a purple tail turning to light green in second instar, then pinkish in third instar. then light green in fourth instar, in fourth instar pale light green with pinkish markings, then in ultimate instar a mottled yellowish ground color with blackish markings in which the yellowish color gradually turns to a very dark brown color with pale orange highlights. A. floridensis usually has six annual broods in Louisiana (Brou & Brou, 1997).

a

Literature Cited

Brou, Vernon A. Jr. and C.D. Brou 1997. Distribution and phenologies of Louisiana Sphingidae. *Jour. Lepid. Soc.* 51:156-175.



Common Alpine (*Erebia epipsodea*) (Photo by G. Little)



Parnassium phoebus - near Molas Lake (Photo by J.B. Lombardini)



Plebejus icarioides or Plebejus glandon (Photo by G. Little)



Purplish Copper (*Lycaena helloides*) (Photo by G. Little)



Durango & Silverton Narrow Gauge railroad (Photo by G. Little)



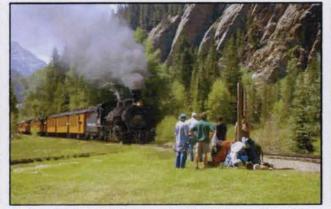
B. Lombardini talking with one of the passengers on the gondola car of the train (Photo by G. Little)



Weminuche Wilderness: Chuck Garner and Barry Lombardini (Photo by G. Little)



Molas Lake (elevation 10,400 ft) in the Weminuche Wilderness (Photo by G. Little)



Train arriving at Elk Park; Backpackers waiting for ride to Silverton (Photo by G. Little)



Train entering the town of Silverton (Photo by G. Little)





Fig. 2. Eumorpha host plants



Fig. 4. Eumorpha achemon



Fig. 5. E. achemon larvae



Fig. 6. Eumorpha fasciata

and pupa



Fig. 7. E. fasciata larvae on Ludwigia peruviana



Fig. 9. Eumorpha labruscae

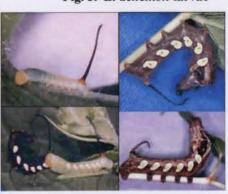


Fig. 10. E. labruscae young larvae



Fig. 14. Eumorpha satellitia



Fig. 15. E. satellitia larvae



Fig. 16. Eumorpha typhon



Fig. 17. E. typhon larvae

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WHO WENT WHERE?

Some of the Members of the Southern Lepidopterists' Society who attended The Lepidopterists' Society/SEABA joint meeting in Sierra Vista, Arizona, August 2-7, 2005 (photographs by Jeff Slotten).



HAZARDS ENCOUNTERED BY COLLECTORS

I thought that the following article by Dr. John A. Jackman might be of interest to our readers in that there are certain hazards when collecting in the field. Scorpions being one of them. I have encountered scorpions at the base of my light traps so I always look very carefully when picking up the traps. In the previous issue of the SLS News [Vol. 27 NO. 2 (2005), pg. 39] a story on chiggers was published. The ante is upped a bit in that scorpions are a more serious problem – The Editor.

SCORPIONS BY JOHN A. JACKMAN Professor and Extension Entomologist The Texas A&M University System.

Scorpions are arachnids, close relatives of ticks, mites and spiders. They are easily recognized by their characteristic shape. Scorpions prefer dryland habitats but they do occur throughout Texas. They can be a nuisance when they interact with humans because they will sting when disturbed.

Description

All scorpions have a long, slender body with a five-segmented tail that can be arched over the back. The tail ends in a bulb-like poison gland or stinger. Scorpions have four pairs of legs and two large pincer-bearing arms (pedipalps) in front. Scorpions are well equipped to defend themselves or attack prey with their pincers and stinger. Between the last pair of legs is a comblike structure (pectines) that is used to identify surface textures and to detect prey.

Scorpions have two eyes on the top of the head, and usually two to five pairs of eyes along the front corners of the head. They do not see well, however, and must rely on the sense of touch, using their pectines and other organs for navigation and hunting. Their bodies are flat, which allows them to hide in small cracks, under rocks and under bark.

Worldwide, scorpions range in size from $\frac{1}{2}$ inch to 7 1/4 inches long (including the tail) depending on the species. The most common species in Texas is the striped bark scorpion, *Centruroides vittatus*. The adult scorpion is about 2 $\frac{1}{2}$ inches long, which is typical of the size of all species found in the state.

Pincer Pedipalp Walking legs Tail Stinger Dorsal view of a scorpion,

Biology

Scorpions hide during the day and become active at night. This behavior helps scorpions manage temperature and water balance, important functions for survival in dry habitats. Many species dig burrows in the soil. They detect and capture prey by the sense of touch. They also have a well-developed sense of hearing.

Scorpions hide under stones, bark, wood or other objects on the ground where they wait or search for prey. Chief foods are small insects, spiders, centipedes, earthworms, and other scorpions. Once they capture their prey, they use the large pincers to crush and draw it toward the mouth. The body juices of the prey are eaten by the scorpion.

Some species may live for 20 to 25 years, but longevity of the typical scorpion is between 3 and 8 years.

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Adult scorpions may have several broods of young. Following an elaborate mating process, which lasts from 24 to 36 hours, the female undergoes a gestation period ranging from 5 months to more than 1 year. The young are born alive in semi-transparent sacs. As soon as the young scorpions free themselves from these thin wrappers, they climb onto their mother's back. Already capable of stinging, the young scorpions leave the mother after several days and begin to fend for themselves. Scorpions reach maturity in a year or more, depending on availability of food.

The sting of scorpions may be painful, or even deadly, depending on the species. Of 1,500 species of scorpions worldwide, only about 20 to 25 are regarded as dangerous. Stings from such species may cause paralysis, severe convulsions, cardiac irregularities, or breathing difficulties that may lead to death. Antivenins are available in areas where dangerous scorpions live.

A scorpion's venom is a mixture of compounds including neurotoxins that affect the victim's nervous system. Fortunately, none of the species in Texas are considered deadly. Stings from most of these species are about as painful as a bee or wasp sting, but the severity of the sting is dependent upon the individual scorpion and the person's reaction to the venom. As with any arthropod venom, allergic reactions are possible. In these situations, immediate medical attention would be required.

Habitat

Scorpions may be found in many types of habitats in the United States, including desert flats, sand dunes, desert and mesic mountains, grasslands, pine forests, deciduous forests, and chaparral. Species are most diverse in desert areas.

Taxonomic Status

About 90 species of scorpions have been identified in the United States. Texas has 18 species and only one species, *Centruroides vittatus*, occurs throughout the state. It is the only species of scorpion found in the eastern part of Texas. The number of species found in the state increases moving west and south. One species has been recorded in the Dallas area, two recorded near Austin, four near Amarillo, three near Abilene, five near Ft. Stockton, eight in the Ft. Davis region, eight near Langtry, and 14 in Big Bend National Park.

Striped Bark Scorpion

The common, striped bark scorpion has two broad, black stripes running the length of its back. Populations in the Big Bend may be only faintly marked or completely pale. The basic color of the scorpion varies from yellow to tan in adults. Immature scorpions may be lighter in color. There is a dark triangular mark on the front of the head above the eyes. In young scorpions, the base of the pedipalps and the last segment behind the abdomen is dark brown or black. This species can be easily identified by slender pedipalps (pincer-bearing arms) and the long, slender tail. The tail is longer on males than females.

The striped bark scorpion apparently mates in the fall, spring or early summer. Gestation requires about 8 months. Litter size varies from 13 to 47. The average is about 31 young per litter.

Immature scorpions molt within 3 to 7 days after birth and remain on the mother for another 3 to 7 days after that. There are five or six molts to maturity. A striped bark scorpion probably lives for approximately 4 years.

The sting of this species causes local pain and swelling. Deaths attributed to this species have not been substantiated.

The striped bark scorpion is often found under rocks, under boards and in debris. It can be found indoors or outdoors in a wide variety of habitats (pine forests in East Texas; rocky slopes, grasslands, juniper breaks in other parts of the state). *Centruroides* are active foragers that do not burrow. They are distinctly associated with dead vegetation, fallen logs and human dwellings. It is common for them to climb trees and walls, and many times have been found in the attics of homes. During periods of hot weather, scorpions may move into living areas to escape the high temperatures in attics.

Scorpion Stings

When handled or disturbed, scorpions can inflict a painful sting using the poison gland at the end of the tail. Avoiding their

habitats helps prevent stings. The stings from Texas scorpions produce only moderate reactions in most people because the poison has little affect on the nervous system. However, a person who is stung by a scorpion should be watched closely for adverse reactions. An ice pack applied to the affected area will relieve some pain. If swelling and/or pain persists or if breathing difficulties occur, immediate medical attention is necessary.

Acknowledgments

The previous edition of this manuscript was prepared by J. W. Stewart, former Extension entomologist, and forms the core of this version.

[The Editor and the membership of the Southern Lepidopterists' Society wish to thank Dr. John A. Jackman and the Texas Cooperative Extension, The Texas A&M University System for permission to reprint his article on Scorpions (Address: Dr. John A. Jackman, Professor and Extension Entomologist, 412 Heep Center, Department of Entomology, Texas A&M University, College Station, TX 77843-2475; E-mail: j-jackman@tamu.edu; Telephone: 979 - 845-7026).

Additional information contained in the original article by Dr. Jackman on scorpions as pets, the control of scorpions around the house, and chemicals used for their control (http://insects.tamu.edu/extension/bulletins/1-1678.html) has not been re-printed by the Editor as this information was not considered necessary for the Lepidopterist in the field.]

- COLOR PLATE 1: Stand alone Color Plate. "Spotlight On Rearing Amphion floridensis B.P. Clark" by Vernon A. Brou Jr.
- **COLOR PLATE 2:** Accompanies the article: "Camping And Collecting In The Weminuche Wilderness: Riding The Narrow Gauge, Coal-Fired, Steam-Powered Train From Durango To Elk Park To Silverton, Colorado" by J. Barry Lombardini (pgs. 71-79).

COLOR PLATE 3: Accompanies the article: "Eumorpha, Eumorpha, and More Eumorpha" by Jeff Slotten (pgs. 87-89).

EUMORPHA, EUMORPHA, AND MORE EUMORPHA BY JEFFREY R. SLOTTEN

In North America, north of Mexico, there are at least 8 recorded species in the genus *Eumorpha*. These are *E. achemon* (Drury, 1773), *E. fasciata* (Sulzer, 1776), *E. intermedia* (B.P. Clark, 1917), *E. labruscae* (Linnaeus, 1758), *E. pandorus* (Hbn., 1821), *E. satellitia* (Linnaeus, 1771), and *E. vitis* (Linnaeus, 1758). Two additional species, *E. anchemola* (Cramer, 1780), and *E. eacus* (Cramer, 1780) have been recorded as rare strays from Mexico and southward (Hodges, 1971).

As noted in Hodges(1971), "the characters that separate this genus from others of the Family Sphingidae include distinctive genitalia of males and females. The saccus is very broad and well developed. Adults have a rectangular bar on the posterior margin of the forewing almost to the middle of the thorax. The eggs are green and are laid singly on the host plant leaves and tendrils. The larvae are heavy bodied with the caudal horn often being replaced with a button in the last instar. The third thoracic segment is very large, and the head and first two thoracic segments are withdrawn into it when the larva is resting or disturbed. The pupa is large, shining and dark brown. Pupation occurs in a chamber in the soil. The larvae feed on members of the grape (Vitaceae), Dogbane (Apocynaceae), and evening-primrose (Onagraceae) families. Adults are attracted to lights and flowers."

<u>Note:</u> Selected color photographs of the various species and the life cycles of the genus *Eumorpha* are depicted in Color Plate 3 (separate page) and are numbered as listed below. Some black and white photographs of the genus *Eumorpha* are also shown below:

- Fig. 1. shows a typical egg and pupa representative of the genus.
- Fig. 2. shows host plants of the genus Vitaceae (grape family). These include Vitis, Ampelopsis, Parthenoscissus, and Cissus.
- Fig. 3. shows Ludwigia, the hostplant of *E. fasciata*. *E. fasciata* is the only member of the genus *Eumorpha* in the United States and Canada that does not feed on a *Vitaceae*.
- Fig. 4. shows an adult *E. achemon*.
- Fig. 5. shows a final instar larva of *E. achemon*.
- Fig. 6. shows an adult *E. fasciata*.
- Fig. 7. shows two color forms of final instar larvae of *E. fasciata*.
- Fig. 8. shows an adult E. intermedia.
- Fig. 9. shows an adult E. labruscae.
- Fig. 10. shows early instar larvae of E. labruscae.
- Fig. 11. shows last instar larvae of E. labruscae.
- Fig. 12. shows an adult E. pandorus.
- Fig. 13. shows final instar larvae of *E. pandorus*.
- Fig. 14. shows an adult *E. satellitia*.
- Fig. 15. shows two color forms of final instar larvae of *E. satellitia*.
- Fig. 16. shows an adult E. typhon.
- Fig. 17. shows final instar larvae of E. typhon.
- Fig. 18. shows an adult E. vitis.
- Fig. 19. shows a final instar larva of E. vitis.

Ova and larvae of all the above species of *Eumorpha* can be found by searching leaves, tendrils, flowers and stems of the host plants. The

ova and larvae are often parasitized by various



Fig. 3. Eumorpha host plant

diptera and hymenoptera. The author has purposely left out photos of larvae of *E. intermedia* until the life history is published.

Literature Cited

Hodges, R.W. 1971. The Moths of America North of Mexico. Fascicle 21 SPHINGOIDEA. E. W. Classey Limited and R. B. D. Publications Inc. 158 pp. London.



Fig. 8. Eumorpha intermedia



Fig. 11. *E. labruscae* mature larvae



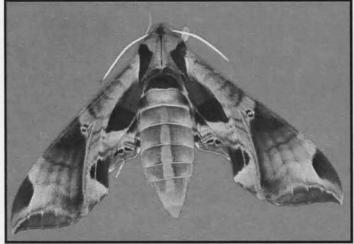


Fig. 12. Eumorpha pandorus

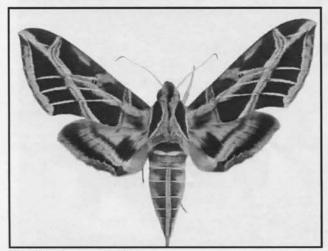


Fig. 18. Eumorpha vitis

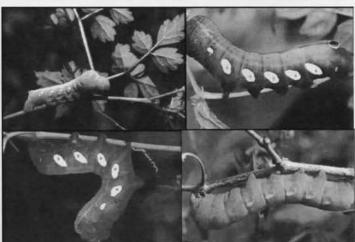


Fig. 13. E. pandorus larvae



Fig. 19. E. vitis larva



KATRINA - AUGUST 29, 2005

All hurricanes are considered dangerous, especially if you, your family, house, etc. are in its potential path. Our Southern Lepidopterists' Society has a number of its member states in the path of these hurricanes. In recent years hurricanes have struck Florida and Alabama and have caused extensive damage and loss of life but fortunately our members residing in these states have faired reasonably well. However, Katrina was, to say the obvious, exceptional. The death and destruction caused by this category 4-5 hurricane is perhaps the greatest natural disaster to hit the US in its history.

The following e-mail from one of our members who was in the middle of Hell:

From: Vernon Brou Sent: Friday, September 02, 2005 11:17 PM To: Mike Quinn Subject: RE: Dear Friends

Mike,

The collection survived, but no electricity and consequently the heat may cause me to have some damage. I just moments ago got my land line working, made a few phone calls to family members and was unable to reach anyone in other parishes and other states. I checked my e-mail 127 of them since Sunday when Charlotte and I left for Jackson Miss., and then

Monroe, La., then Shreveport, La., then Alexandria back to Baton Rouge and to Mandeville 36 hours later and 800 miles. Was unable to get past Abita Springs due to flood waters, spent a night in Fountainbleau High School on the floor with Fire and Rescue Dept. then got home the following late evening. Was turned around by state and local police several places near home, but I always have my La. hwy map and was able to go around via smaller roads. We arrived home to find utter devastation on my 10 acres. My home was untouched and my garages were untouched, my 45 year old flimsy mobile home housing the 50 year La. insect collection was untouched, and my pump house sustained very minor damage. This is amazing as there are 3000 feet of fencing crushed by huge trees and more than 1000 of the very largest downed trees on my place all around my structures and thousands of smaller tress. I have lost every huge nice looking Oak, cherry, Maple, Pine, not to mention most of the 120 gourmet variety pear trees and apple trees. I am struck here running my generator for the past 3 days, my neighbor who had a large tree through his roof, made a run for gas and water to near St. Francisville, West Feliciana, so I am ok for the next 2-3 days. Haven't taken a bath since Sunday. No AC or electricity or water well, quite miserable and I have spent 2 days cutting trees just to get my front driveway clear, ought to have this done in a week, if I keep at it. St. Tammany Parish is locked down. Some electricity has been restored to Hammond yesterday and small area in Covington business district today, gas available for the first time now that some elec restored. The electric lines are ripped to the ground throughout Tangipahoa and St. Tammany Parish. The electric companies will have to bring in thousands of new poles and transformer and elec lines before I will get elec back. Not sure how long I will be able to hold out here. Then, I have no job - I worked in New Orleans, being unable to cross the causeway or the Slidell route and not sure if 55 is open yet either. No gas, elec or anything available in Slidell which was in the center of the eye. No communication via cell phones for 4 days now for emergency crews or anyone, 3D cell system knocked out in SE Louisiana.

Best wishes, Vernon Antoine Brou Jr. & Charlotte Dozar Brou 74320 Jack Loyd Road Abita Springs, Louisiana 70420 USA

Other SL Society members in the path of Katrina who responded to the Editor that they were O.K:

Sent: Thursday, September 08, 2005 9:48 AM

Good Morning Barry,

Thanks for the e-mail, and for caring. We were lucky. Only some wind and a little rain hit Huntsville. The bugs are fine.

Best regards, Howard Grisham 573 Ohatchee Road Huntsville, AL 35811

Sent: Thursday, September 08, 2005 10:16 AM

Barry:

Thanks for asking. Yes, I came through fine with only a loss of power for about a week. Lost a few things from the refrigerator, but a generator kept the freezer cold enough. I am far enough north and was on the western side of Katrina, so we were spared the worst of it.

Best wishes, Ricky Patterson 400 Winona Rd. Vicksburg, MS 39180

Sent: Thursday, September 08, 2005 1:06 PM

Yes for the most part. I have a report to send, but will need some time to put it together. Thank you for your concern.

Michael Lockwood 215 Hialeah Ave Houma, LA 70363

RITA - SEPTEMBER 24, 2005

As this Newsletter is being composed hurricane Rita is approaching the Texas coast and threatening Galveston and Houston along with potentially more serious damage in Louisiana, especially in New Orleans. Rita is like Katrina a major hurricane in the 3 - 5 category range. Hopefully, Ed Knudson and Charles Bordelon in Houston and all other members in this region will be safe and no damage to their property or even more important to their persons will result from this devastating storm.

Sent Saturday, September 24, 2005 5:57 PM

Barry,

No damage, no loss of power, not much rain.

Ed

REPORTS OF STATE COORDINATORS

Alabama: C. Howard Grisham, 573 Ohatchee Road, Huntsville, AL 35811, E-Mail: chgrisham@Comcast.net

Arkansas: Mack Shotts, 514 W. Main Street, Paragould, AR 72450, E-Mail: cshotts@grnco.net

Craig Marks (from Lafayette, LA) sent the following sighting report (for June 25, 2005) to Mack Shotts after his visit to Plough Park, Rick Evans/Grandview Prairie WMA, near Hope, Arkansas:

12 Pipevine Swallowtails; 2 Black Swallowtails; 1 Giant Swallowtail; 30 Tiger Swallowtails; 1 Spicebush Swallowtail; 4 Clouded Sulfurs; 1 Orange Sulfur; 30 Southern Dogfaces; 70 Cloudless Sulfurs; 57 Little Sulfurs; 3 Dainty Sulfurs; 7 "Olive" Juniper Hairstreaks; 11 Gray Hairstreaks; 32 Red-Banded Hairstreaks; 4 Reakirt's Blues; 4 Eastern Tailed Blues; 25 Summer Azures; 6 American Snouts; 1 Variegated Fritillary; 7 Dianas (a minimum of 5, may have counted two twice but they were seen in different parts of the Diana area at different times of the day); 4 Great Spangled Fritillary; 15 Silvery Checkers; 35 Pearl Cresents; 1 Question Mark; 2 American Ladies; 2 Buckeyes; 1 Red Spotted Admiral; 1 Viceroy; 4 Hackberry Emperors; 1 Tawny Emperor; 6 Gemmed Satyrs; 28 Carolina Satyrs; 16 Little Wood Nymphs; 45 Common Wood Nymphs; 4 Monarchs; 1 Silver-spotted Skipper; 1 Southern Cloudywing; 2 Horace's Duskywings; 7 Swarthy Skippers; 6 Clouded Skippers; 2 Fiery Skippers; 2 Byssus Skippers; 4 Zebulon Skippers; 3 Dunn Skippers.

Total of 44 species and over 500 butterflies .

Florida: Robert Beiriger, 16356 Trafalgar Drive, East, Loxahatchee, FL 33470, E-Mail: bostrichid@mail.ifas.ufl.edu

<u>Georgia:</u> James K. Adams, 346 Sunset Drive SE, Calhoun, GA 30701, E-Mail: jadams@em.daltonstate.edu (Please check out the GA leps website at: <u>http://www.daltonstate.edu/galeps/).</u>

Records are from James Adams (JA or no notation) Irving Finkelstein (IF), Jeff Slotten (JS), Lance Durden and Cecil Smith. Most records presented here represent new or interesting records (range extensions, unusual dates, uncommon species, county records, *etc.*) or records for newly investigated areas. Known County and State records are indicated. All dates listed below are 2005 unless otherwise specified.

Two trips were made to the Brasstown Bald area in Towns Co. (and surrounding areas) in July and early September. Many of these records are likely county records, and among the species collected were six STATE records: three in July (one common) and three in Sept. (again one of the three common). In addition Cecil Smith (from UGA) provided an additional expected STATE record from the observation tower on Brasstown Bald.

Brasstown Bald observation tower, July 23, 2005, Cecil Smith: GEOMETRIDAE: Rheumaptera hastata (STATE).

Brasstown Bald Area, Towns Co., alternate 180, 2.1 road miles up (N) of state hwy. 180, 4200': July 16-17, 2005:

NOCTUIDAE: Hypena humuli (COUNTY), Redectis vitrea, Catocala blandula (COUNTY), Acronicta innotata, A. fragilis, Polia nimbosa (most abundant moth, and STATE record!), Anaplectoides prasina (STATE), Xestia normaniana. GEOMETRIDAE: Macaria (formerly Semiothisa) ulsterata (STATE), Cepphis armataria (COUNTY), Eutrapela clemataria (yellow form), Hydrelia inornata. Sept. 3-5, 2005, with IF:

SATURNIIDAE: Actias luna. ARCTIIDAE: Clemensia albata. NOTODONTIDAE: Peridea angulosa, Heterocampa biundata, Nadata gibbosa. NOCTUIDAE: Idia americalis, I. aemula, I. rotundalis, Zanclognatha cruralis, Renia fraternalis, Tetanolita mynesalis, T. floridana, Lascoria ambigualis, Hypena baltimoralis, H. scabra, Pangrapta decoralis, Allotria elonympha, Catocala paleogama, C. cerogama, C. retecta, Allagrapha aerea, Autographa precationis, Thioptera nigrofimbria, Lithacodia muscosula, Acronicta ovata, Polygrammate hebraeicum, Charadra deridens, Apamea mixta (COUNTY), Papaipema sp. (possibly new species; STATE), Phlogophora periculosa, Condica vecors, Phosphila miselioides, Tricholita signata, Anathix ralla, Galgula partita, Elaphria versicolor, E. grata, Lacinipolia renigera, Spodoptera ornithogalli, S. dolichos, Anorthodes tarda, Pseudaletia unipuncta, Leucania adjuta, Agrotis ypsilon, Anicla infecta, Ochropleura implecta, Pseudohermonassa bicarnea, Xestia dolosa, X. smithi, X. normaniana. DREPANIDAE: Drepana arcuata. GEOMETRIDAE: Macaria aemulataria, M. promiscuata, M. minorata, M. bicolorata, M. bisignata, Iridopsis larvaria, Anavitrinella pampinaria, Ectropis crepuscularia, Biston betularia, Hypagyrtis unipunctata, Epimecis hortaria, Campaea perlata, Besma quecivoraria, Probole nepiasaria, Nemoria bistriaria, Xanthorhoe lacustrata, X. packardata (STATE, and quite common), Costaconvexa centrostrigaria, Pleuroprucha insulsaria, Cyclophora pendulinaria, C. packardaria, Horisme intestinata, Eupithecia sp. PYRALIDAE: Hymenia perspicalis, Desmia funeralis, Achyra rantalis, Palpita magniferalis, Scoparia sp., Nomophila nearctica. TORTRICIDAE: Choristoneura parallela. LIMACODIDAE: Tortricidea flexuosa (LATE). OECOPHORIDAE: Antaeotricha schlaegeri. ATTEVIDAE: Atteva punctella.

Hwy 180, just east of Brasstown Bald turn off, Towns Co., (JA and IF) Sept. 3-4, 2005:

ARCTIIDAE: Clemensia albata, Cisthene plumbea, Pyrrharctia isabella, Apantesis nais. **NOTODONTIDAE**: Heterocampa biundata. **LYMANTRIIDAE**: Dasychira manto. **NOCTUIDAE**: Zanlognatha dark sp. (**STATE**), Renia flavinpunctalis, Phalaenostola larentiodes, Rivula propinqualis, Hypenodes fractilinea, Parahypenodes quadralis (**COUNTY**, few records for **STATE**), Schrankia macula, Arugisa latiorella, Catocala paleogama, C. vidua, Hyperstrotia pervertens, Thioptera nigrofimbria, Phlogophora periculosa, Anathix ralla, Leucania adjuta, L. inermis, Ochropleura implecta, Pseudohermonassa bicarnea, Xestia badicollis, X. normaniana. **DREPANIDAE**: Drepana arcuata. **GEOMETRIDAE**: Macaria aemulataria, M. granitata, M. bicolorata, M. fissinotata, Proboarmia porcellaria, Hypagyrtis esther, Epimecis hortaria, Campaea perlata, Caripeta divisata, Tetracis crocalata, Eusarca confusaria, Xanthorhoe packardata (**STATE**; see Brasstown Bald above). **PYRALIDAE**: Desmia fumeralis, Herpetogramma thestialis, Pyrausta sp., **TORTRICIDAE**: Choristoneura rosaceana, C. parallela.

GA Hwy 348 (Richard Russell Scenic Hwy.) 3 miles NW of White Co. Line in Union Co., Sept. 4, 2005, JA & IF: <u>ARCTIIDAE</u>: Clemensia albata. <u>LYMANTRIIDAE</u>: Dasychira dorsipennata. <u>NOCTUIDAE</u>: Zanclognatha cruralis, Renia flavipunctalis, Bleptina caradrinalis, Tetanolita mynesalis, Phalaenophana pyramusalis, Hypenodes fractilinea, Schrankia macula, Macrochilo hypocritalis, Hypena scabra, Thioptera nigrofimbria, Ogdoconta cinereola, Cirrhophanus

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triangulifer, Phlogophora periculosa, Perigea xanthoides, Galgula partita, Leucania adjuta, Leucania scirpicola, Pseudaletia unipuncta, Feltia herilis, Ochropleura implecta, Xestia dolosa, X. badicollis. <u>DREPANIDAE</u>: Drepana arcuata. <u>GEOMETRIDAE</u>: Hypagyrtis esther, H. unipunctata, Eusarca confusaria, Eubaphe mendica, Lophosis labeculata, Euphyia unangulata, Hydrelia inornata, Horsime intestinata. <u>PYRALIDAE</u>: Pyrausta rubicalis, Fumibotys fumalis, Desmia funeralis, Ostrinia nubilalis, Urola nivalis.

GA Hwy. 515, 6 mi. S. of Jasper, Pickens Co., August 25, 2005 (IF):

<u>SPHINGIDAE</u>: Paonias asylus, Manduca jasminearum, Lapara nr. bombycoides, Darapsa versicolor. <u>NOCTUIDAE</u>: Cucullia asteroides (COUNTY), Melanchra adjuncta (COUNTY).

Gates Chapel Road, 8 miles NW of Ellijay, Gilmer Co. (IF): <u>Aug. 7, 2005</u>: ARCTIIDAE: Crambidia nr. casta (abundant!). SESSIIDAE: Synanthedon scitula, at light (unusual for this sp.).

Aug. 25 - 27, 2005:

<u>PAPILIONIDAE</u>: Papilio glaucus (extremely abundant!). <u>NYMPHALIDAE</u>: Enodia creola (first encounter there in several years). <u>NOCTUIDAE</u>: Panthea acronyctoides. <u>GEOMETRIDAE</u>: Caripeta divisata (common), Anagoga occiduaria (late), Probole nepiasaria. <u>PYRALIDAE</u>: Homoeosoma deceptorium (STATE).

Carbondale, Whitfield Co. (Exit 326 off I-75):

<u>SATURNIIDAE</u>: Citheronia sepulcralis (first in a couple of years), August 24. <u>SPHINGIDAE</u>: Sphinx kalmiae, August 23; Paonias astylus, August 29; Eumorpha fasciata, Sept. 1. <u>NOCTUIDAE</u>: Catocala obscura, Aug. 24 and Sept. 6; Cucullia convexipennis, July 15; Cirrhophanus triangulifer, Sept. 1.

Calhoun, Gordon Co.:

<u>SPHINGIDAE</u>: Dolba hyloeus, August 22; Eumorpha pandora, August 22. <u>NOCTUIDAE</u>: Plagiomimmicus pityochromus, August 29.

Dalton, Whitfield Co.: <u>NOCTUIDAE</u>: Anathix ralla, Sept. 19. <u>GEOMETRIDAE</u>: Caripeta aretaria, Sept. 13 - 16.

Crest of Rocky Face Ridgeline along Dug Gap Battle Rd., just SW of Dalton, Whitfield Co., Sept. 12, 2005: SESSIIDAE: Alcathoe caudata (LATE), Synanthedon rubrofascia.

5 miles ESE of Fairmount, NE corner of Bartow Co., Salacoa Creek (at Salacoa road), with IF, Sept. 17-18, 2005: <u>ARCTIIDAE</u>: Cisthene tenuifascia (second for COUNTY and STATE). <u>NOCTUIDAE</u>: Idia denticulata (uncommon in state), Spragueia apicalis (COUNTY, rare in state).

<u>Ohoopee Dunes, Tract 2, June 24-25, 2005; JA, IF, and JS</u>: <u>NOCTUIDAE</u>: Metria amella. <u>PYRALIDAE</u>: Eoparargyractis irroratalis

<u>Ohoopee Dunes, Tract 3, June 24-25, 2005; JA, IF, and JS</u>: <u>**PYRALIDAE**</u>: Diastictis sp. (nr. pseudargyralis), Mesolia incertella, Parapoynx allionealis

<u>Ohoopee Dunes, Tract 4, June 24-25, 2005; JA, IF, and JS</u>: <u>**PYRALIDAE**</u>: Diastictis sp. (nr. pseudargyralis), Pryonapteryx achatina

Griffin Ridge WMA, Long Co., June 25-26, 2005 (JA, JS, and IF): **PYRALIDAE**: Parapoynx allionealis

Horse Creek WMA, Telfair County, along Altamaha River, 20 miles S. of Mcrae, June 26-27 (JA and IF): NOCTUIDAE: Rivula propinqualis.

Liberty Co., US 17 near Riceboro, 24/26-Aug-2005: J. Hyatt found *Problema byssus* and *Oligora maculata* in numbers on Pontedaria flowers, and a single *Calpodes ethlius*.

McIntosh Co., US 17 near Darien, 27-Aug-2005: J. Hyatt found Problema bulenta, Poanes viator, and Oligora maculata on Pontedaria.

Louisiana: Michael Lockwood, 215 Hialeah Avenue, Houma, LA 70363, E-Mail: mikelock34@hotmail.com

Mississippi: Rick Patterson, 400 Winona Rd., Vicksburg, MS 39180, E-Mail: rpatte42@aol.com

<u>North Carolina</u>: Steve Hall, North Carolina Natural Heritage Program, Div. of Parks & Recreation, 1615 MSC, Raleigh, NC 27699-1615, E-Mail: <u>Stephen.Hall@ncmail.net</u>

The following selected butterfly records were submitted by Harry LeGrand. Place names refer to counties unless otherwise stated, and records are not new county reports unless indicated. WC = Will Cook, HL = Harry LeGrand, JP = Jeff Pippen, TW = Ted Wilcox.

The summer season was delayed at the beginning of the season, but as temperatures soared to normal and above normal levels, and rainfall averaged normal, the flight schedules of most species caught up midway through the season. Numbers of individuals were still below normal levels, and most Fourth of July counts had lackluster species and individual totals. This was a poor season for northbound immigrant species, but large numbers of *Vanessa cardui* partly made up for the scarcity of southern visitors. We received much more mountain data than usual, thanks mostly to excellent work in the northern counties by Ted Wilcox, who found and photographed many first county records.

Records are from June - August 2005.

PAPILIONIDAE:

Papilio appalachiensis, this common though newly described species, for which we are still gathering locality information, was reported several times in Alleghany (COUNTY) in early June by Jonathan Mays.

LYCAENIDAE:

Feniseca tarquinius, a very rare report from the central Coastal Plain was one seen at Merchants Millpond State Park in Gates (COUNTY) on July 8 by Floyd Williams. Most reports are from the mountains and Piedmont, though the only new county report there was from Yadkin (COUNTY), where two were seen on June 4 by Jim Nottke.

Satyrium caryaevorum, this poorly known species (in the South) was photographed at several sites by TW in Ashe (COUNTY). He found small numbers at Ashe Park in Jefferson on July 12, and up to 30 individuals from July 23-26 at Mount Jefferson State Natural Area. As *S. calanus* also is present at these sites, much confusion on population sizes is present, though it appears that *S. calanus* averages one or two weeks earlier in its flight there than does *S. caryaevorum*. (Ron Gatrelle provided assistance in identifying individuals in TW's photos.)

Satyrium kingi, HL observed one nectaring on Cyrilla, adjacent to a stand of Symplocos – its hostplant – in Sampson (COUNTY) on June 18.

NYMPHALIDAE:

Vanessa cardui, numbers were rather sparse during spring, but enough eggs were deposited that a good new brood was present during the summer, with an abundance of reports, though most involved single digit counts. The highest total was 30 on a butterfly count in the Wilmington area on August 27.

Anaea andria, perhaps just the third or fourth state record was an individual seen well in flight and perched, from both dorsal and ventral sides, in Macon (COUNTY) on July 6 by Jonathan Mays. The species is presumed to be a vagrant/migrant in the state, as *Croton* hostplants are essentially absent in the mountain region.

Satyrodes appalachia, one seen by Floyd Williams on August 28 at Merchants Millpond State Park in Gates (COUNTY) was one of the very few Coastal Plain reports (outside of the Sandhills region) for the species in North Carolina.

Neonympha helicta, WC and Randy Emmitt counted 20 in a powerline clearing on June 5 in Harnett.

HESPERIIDAE:

Pyrgus sp., JP and Parker Backstrom collected a male, and photographed several individuals, of what is believed to be a colony of *P. albescens*, near Castle Hayne in New Hanover. HL also spent time observing both males and females in this colony, which he had observed for several years but had assumed was *P. communis*. *P. albescens* is known (by dissection of male genitalia) from a number of counties in the South Carolina Coastal Plain, where it seems to have mostly replaced *P. communis* (Ron Gatrelle, pers. comm.). As the North Carolina site is just 40 miles from South Carolina and not far from the coast, and as visually the males appear to show hoary gray body and basal wing hairs with little if any trace of blue or aqua color, the observers believe these are *P. albescens*. We will report here later on the findings of dissection and perhaps review of photos.

Thymelicus lineola, Jonathan Mays observed one in a meadow-bog in Alleghany on June 6, the earliest date for the state by six days. This introduced species has been found in North Carolina only in the two northernmost mountain counties, and though the locale is a newly reported site, there is no evidence of any southward expansion of the range.

Hesperia meskei, HL found a colony of at least four individuals in sandhills habitat in Sampson (COUNTY) on June 18. This county lies east of the Sandhills region, where nearly all of the state's population now resides.

Polites peckius, we received many more reports – all from the mountains – than usual, perhaps because of more searching in meadows, such as along the Blue Ridge Parkway. The best total was a state record 25 noted by TW along the Parkway in Watauga on August 21.

Euphyes dion, HL observed single individuals at two sites in Person (COUNTY), on June 23 and July 7. This county is farther inland of other known locales and represents a slight northwestward range extension.

Euphyes berryi, at a known site in Croatan National Forest in Craven – one of just a few sites in the state for the species – two were seen by JP, WC, and Parker Backstrom on August 28.

Euphyes bimacula, one of the South's rarer butterflies, one was photographed by Floyd Williams at Merchants Millpond in Gates on July 23. Steve Hall and Bo Sullivan also observed one at a known site in Brunswick on August 2.

Amblyscirtes aesculapius, one was photographed by TW in his yard (!) in Ashe (COUNTY) on August 6. This species is very rare in the northern mountains of the state.

Amblyscirtes vialis, TW photographed one at Mount Jefferson State Natural Area in Ashe (COUNTY) on July 26.

South Carolina: Ron Gatrelle, the State Coordinator for South Carolina died on August 14th.

Ron Gatrelle reports: February 22, Sumter County, vicinity of Fulton Crossroads. Megathymus yuccae, 7 pupae.

Tennessee: John Hyatt, 5336 Foxfire Place, Kingsport, TN 37664, E-Mail: jkshyatt@aol.com

John Hyatt reports taking Erebus odora at bait in Kingsport, Sullivan Co., on July 29th.

The following sightings were forwarded to John Hyatt from Craig Marks (TN, Shelby Co., Plough Park, 25-March-2005):

Anthocaris midea Strymon melinus Parrhasius m-album Mitoura gryneus Anaea andria Polygonia comma Polygonia interrogationis

John also reports a possible county record for *Speyeria diana* from Kingsport, Sullivan Co. (8-July-2005). (May be a county record - first I've seen in town in my 30 years here... although they're pretty common at a site about 10 air miles away in VA).

Texas: Ed Knudson, 8517 Burkhart Road, Houston, TX 77055, E-Mail: eknudson@earthlink.net

In Harris Co., TX, Spring Valley, the following species were observed by C. Bordelon, September 3-11. None were collected, as they were not willing to alight, but were closely observed: *Phoebis philea* (seen about 9 or 10 times), *Aphrissa statira* (once, new county record for Harris Co), *Kricogonia lyside* (one), *Battus polydamas* (several sightings).

Virginia: Harry Pavulaan, 494 Fillmore Street, Herndon, VA 22070, E-Mail: pavulaan@aol.com

The Southern Lepidopterists' News is published four times annually. Membership dues are \$15.00 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 Paul Milner, Membership Coordinator, 272 Skye Drive, Pisgah Forest, NC 28768, and dues may be sent to Jeffrey R. Slotten, Treasurer, 5421 NW 69th Lane, Gainesville, FL 32653.

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