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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

DO-IT-YOURSELF 12 & 25 DRAWER CORNELL SPECIMEN CABINETS

VERNON A. BROU JR.

BASIC ENCLOSURE

For 25 drawer cabinet (Fig. 1) and 12 drawer cabinet (Fig. 2), begin by routing ½" wide grooves for drawer guides every 3¼" on the internal surfaces of both side panels (part A or H). Depth of grooves (usually 3/16") is dependent upon the combined screw head height and thickness of metal drawer guides (Fig. 5). Groove entire 17" panel width. The bottom edge of the first upper groove should be at least 3¼" measured from the top edge of the side panel. Lay out and mark all grooves before routing (Figs. 1,2,4, and 5). There is 1/8" added space below bottom of last groove so that bottom drawer is not resting on floor of cabinet. Install rear end of drawer guides in a line ½" from rear panel edge. Next, align parts (A and B) or (H and B) so that front edges are even, then glue and nail.

CORNER BRACING (Fig. 3)

Use similar dimension lumber in appropriate lengths for both 25 and 12 drawer cabinets (refer to Bill of Materials). First, frame in front cabinet face using part G (Fig. 3). Mitre corners 45°. Using part E, frame in back panel. Shorter corner boards (part E) are cut to fit snugly between front and rear framing.

FOOTING SUPPORT (Fig. 6)

Mitre cut ends 45° and install as shown.

DOOR INTERFACE (Fig. 7 & 8)

Two designs are offered. Both begin by installation of door frame (part E or F). Refer to figures for measurements. Allowance for weatherstripping should be made as shown. The amount of space allowance is dependent upon the thickness of the weatherstrip used (usually ±3/16"). Mitre corners 45° (part E or F). The door itself is made by using part G for the frame; mitre corners 45°. The precise door size is dependent on actual measurements of the fabricated basic enclosure. Option 2 requires allowance for hinges and 1/8" to 1/16" along all edges. Construct door by notching inner edge of part G , both internally and externally 3/16" x 3/8" as shown. After forming door frame using part G, allow glue to dry. Then install 3/16" thick plywood panel to precise opening measurements of both frame sides. Glue and nail using ½" brads.

DOOR LATCH (Fig. 9)

Door design is dependent on type of latch used and vice versa. A simple sliding bolt will work on both options presented here.

QUALITY TIPS

Make all cuts as precise as possible using good quality blades. Always apply glue to 100% of adjoining surfaces. When cabinets are filled with drawers there is considerable structural stress, especially in the 25 drawer unit. Proper gluing is important in order to achieve maximum strength. Various types of clamps are useful in aligning parts and in the gluing process.

Allowance for coatings are required for all internal component parts and inset door. These allowances have been made in the dimensions given in these instructions. Textured coatings can easily add 1/16" to 1/8" to measurements per surface. Usual good woodworking practices should be adhered to throughout fabrication. Proper sanding and attention to detail will be obvious in the finished product. Use of a natural wood finish should be avoided unless high quality woods are used for construction. Some woods do not accept varnish well; those that do will probably double the cost of less costly woods. A final coating of black, gray, or tan paint more closely matches those found on metal entomological cabinets.

Corner bracing and door framing lumber can be cut from less expensive 1"x 12" shelving. Be selective and avoid lumber with excessive knots. Ponderosa pine and other pines have worked well in this author's experience.

BILL OF MATERIALS

ITEM	QUANTITY drawer 12	24	DESCRIPTION	DIMENSIONS
A.	-	2	sides, B-C plywood	$^3/_4$"x 81$^3/_8$"x 17"
B.	2	2	top & bottom, B-C plywood	$^3/_4$"x 17$^1/_2$"x 20$^3/_4$"
C.	-	1	back, B-C plywood	$^1/_2$"x 81$^3/_8$"x 20$^3/_4$"

D.	24	50	drawer guides, 18 or 20ga. sheetmetal	1"x 16"
E.	50'	55'	corner bracing, door frame & footing	$^3/_4$"x $1^3/_4$"x ___
F.	12'	18'	door frame face for door option 2	$1^3/_{16}$"x $1^3/_4$"x ___
G.	22'	36'	door frame bracing and door assembly	$^3/_4$"x $2^3/_4$"x ___
H.	2	-	sides, B-C plywood	$^3/_4$"x $39^1/_8$"x 17"
K.	1	-	back, B-C plywood	$^1/_2$"x $39^1/_8$"x $20^3/_4$"
	1	lb.	finishing nails	$1^1/_2$"
	1	lb.	finishing nails	2"
	1	box	wire brads	$^1/_2$"
	72	150	sheet metal screws	#6 x $^1/_2$"
	11'	17'	weatherstrip	$^1/_2$" or $^5/_8$" width
	1	gal.	paint, texture type latex	
	1	gal.	wood glue	
	1	can	nail hole filler	
	1	2	door latch	
	2	2	brass plated hinges	3"

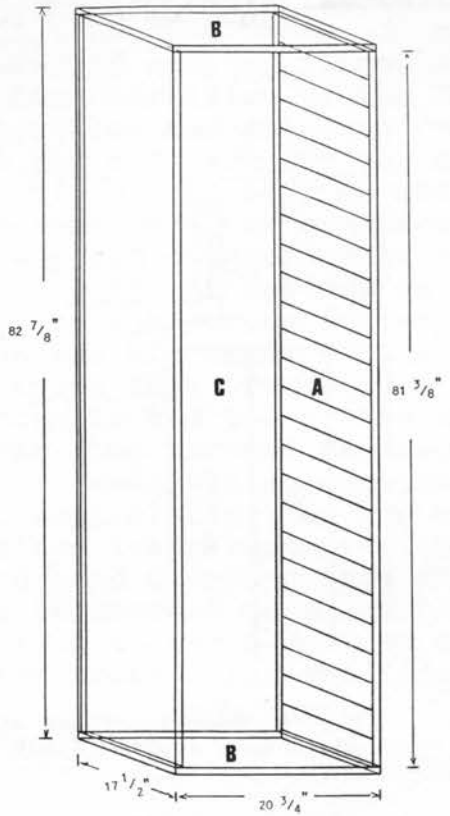


Fig. 1 Basic enclosure for 25 drawer cabinet, front view

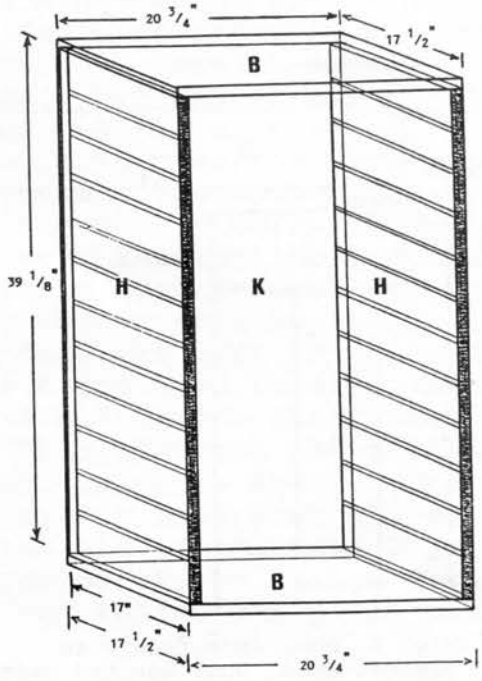


Fig. 2 Basic enclosure for 12 drawer cabinet, front view

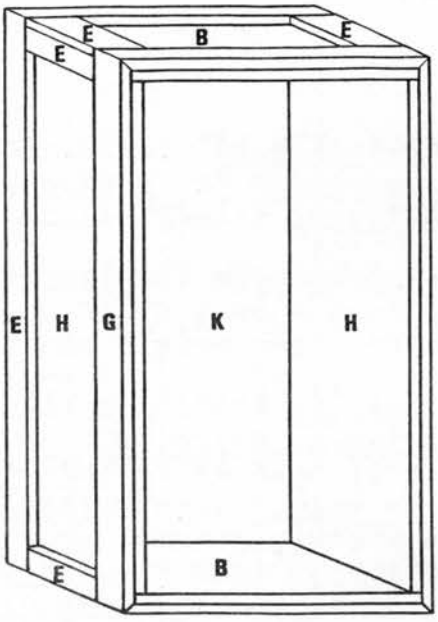


Fig. 3 Basic enclosure showing added corner bracing, without door frame face or door

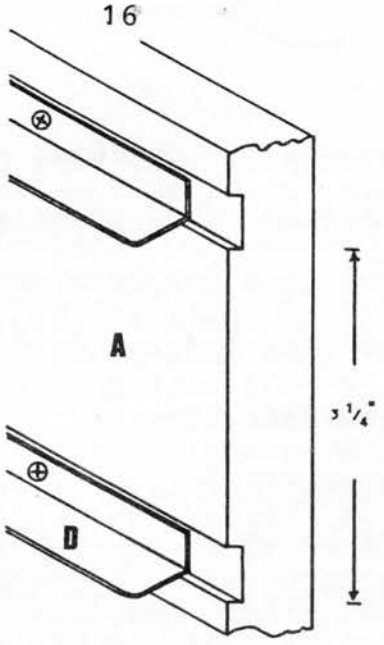


Fig. 4 Drawer guide placement

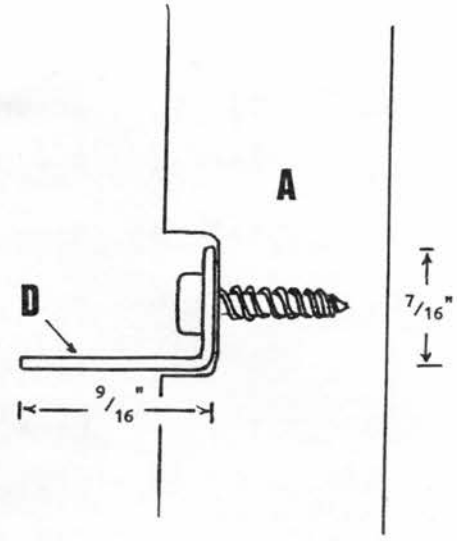


Fig. 5 Drawer guide installation expanded view

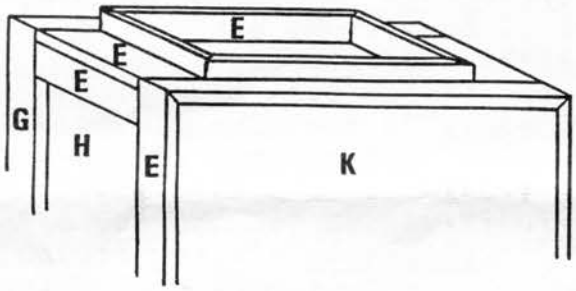


Fig. 6 Cabinet bottom footing support view inverted from rear

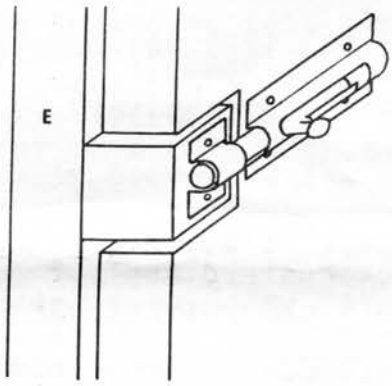


Fig. 9 Sliding bolt door latch, see Fig. 7

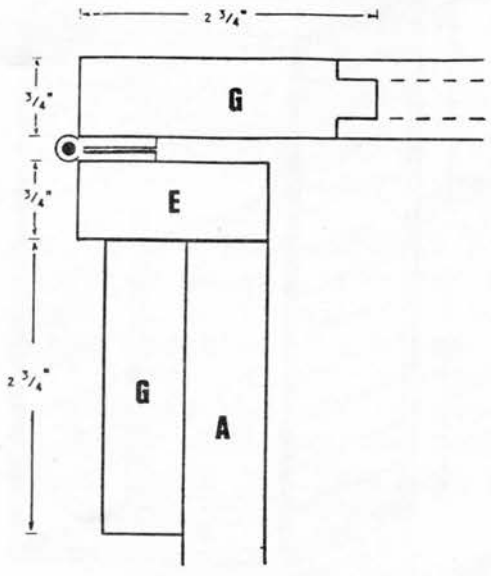


Fig. 7 Door interface with cabinet edge, door mounted over entire cabinet face Option 1

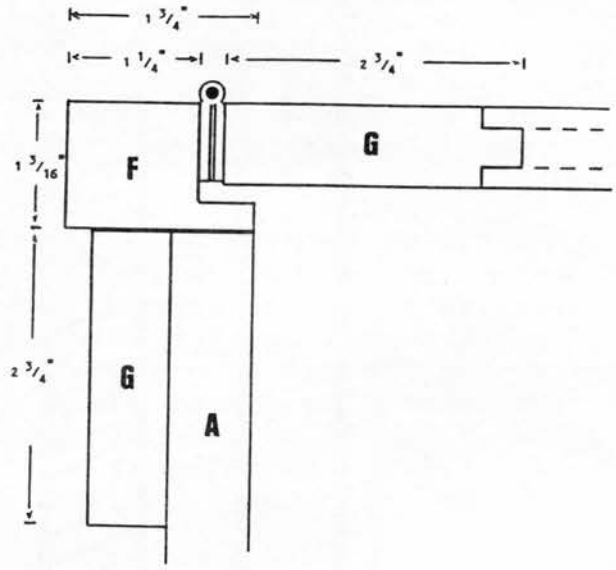
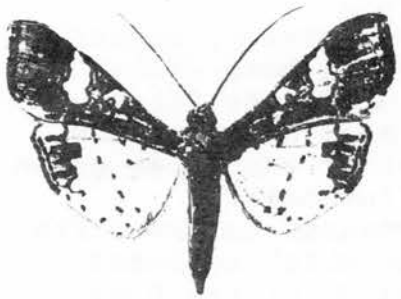


Fig. 8 Door interface with cabinet edge, door mounted flush with frame Option 2

ANOTHER NEW RECORD OF A GLOBAL AGRICULTURAL PEST **VERNON A. BROU JR.**



Maruca testulatis (Geyer)

A fresh specimen of the bean pod borer Maruca testulatis (Geyer) was collected at sec. 24, T6, SR12E, 4.2 mi. NE Abita Springs, La. in a light trap on 23-II-1991. This attractive pyralid is one of the most destructive pests of cultivated beans and peas in Hawaii and Africa. It occurs in scores of countries in tropical areas of the world, especially island nations located in the Indo-Australian, Oriental, Pacific, and Atlantic regions. The species has previously been recorded in the U.S. only twice; once from string beans in southern Texas (1943) and also from Key Largo, Monroe Co. FL, 1 Mar. 1980.

The wing expanse is 20-28 mm. Dark areas of the wing are rufous-brown to yellowish-brown; light areas are opaque pearly white.

I thank Douglas Ferguson and Steve Passoa for the determination and other information synopsized here.

Ed. note: The following article was submitted by **John Calhoun** and is presented here for its historical interest. This article appeared in 1933 as the second of only two volumes of The Lepidopterists' News, a publication of the Florida Society of Lepidopterists.

AMERICA'S LARGEST HAWKMOTH **J. HAROLD MATTESON**

There it is! Right there on the underside of that new leaf of the sugar or custard apple tree (Anonaceae). Yes, it is an egg, and what a large one. Why it measures one-eighth of an inch in length and not quite so wide and the color is such a beautiful yellow-green. In shape it is nearly round.

I gathered the egg after this conversation and brought it home and for eight days nothing happened, and then on the sixth of March at 8:45PM the larva emerged and, by jingo, it was that of a hawkmoth. The horn and all other characteristics of the family Sphingidae were present. The larva was grayish-yellow and measured one-fourth of an inch when it emerged. This fellow did not care for the shell of the egg, but went right to work and ate the tip of the leaf on which the egg had been laid.

Within four days, or on March 10, 1933 the larva measured five-eighth of an inch and had changed color to a greenish-brown. The horn-tail measured one-eighth of an inch in length and was brown in color. Down the back ran a light brown stripe. However the most interesting feature of the larva was his head. This was triangular, the apex formed the top of the triangle. This presented a most striking characteristic.

On March 11, the tip of the vertex of the head was dark brown, and for the first time assumed an erect position with the head forward, a sharp point to meet all enemies and a protective coloration that exactly resembled a part of the leaf and rib of plant. This position was gained by grasping the leafy support with its four rear claspers, then it drooped its body and head downward from the leaf and drew its head down close to the body it assumed an erect position with the tip of the head forward.

March 12th showed a decided change in the color of the stripe down the back, the brown color was fading and green was taking its place with

light shadings of yellow on each side. The green stripe extended from the tip of head to the tip of tail, so it seemed. The size had increased to three-fourths of an inch.

From the point at which the horn-tail left the body proper, slanting forward from this point to the rear of the last proleg, on both sides, there was a narrow yellow stripe which first appeared after the first moult on March 15th. The larva ate the cast skin. The anal horn was now green on the sides and brown on the top. The general color was a pea green as in the first stage, and the body was covered with fine hairs.

On March 18 the larva moulted again. Now there appeared on the fifth, sixth, seventh, and eighth segments a pale green stripe which extended laterally forward from the central stripe to the underside of the body. The tail, spiked like a cave-man's big stick, measured one-half inch in length and one-half inch in diameter at the base. The head still had the triangular shape and the yellow stripe from the anal horn to the last of the prolegs still appeared. The brown-green stripe from anal horn to the last of the prolegs still existed, and the yellow tint on both sides was more prominent.

On March 19, the larva measured five-sixteenths of an inch in diameter and one and three-fourths inches in length. The general color was still pea-green. The anal horn was now brown in color and white papillae covered the whole body.

On March 22, the larva rested for another little moult, and hanging amid the green leaves it was barely discernible. It now measured three-eighths of an inch in diameter and two and one-fourths inches from tip to tip. The spike of a tail was brown, the papillae on the rear claspers were brown. The central stripe was now brown in center with yellow shadings on the side and this was beginning to fade at the thoracic segments and toward the anal horn. On March 23, the larva completed the moult and ate the skin.

On March 24, the head appeared longer and to be about the same size as the second segment. Instead of the white papillae over the body, there was a multitude of fine bronze hairs. Each breathing pore had a brown center with yellow moons on the upper and lower sides. The anal horn was violet colored with white knobs. The stripe which ran down the back was violet-brown with yellow rays on each side, both fade toward the thoracic area and anal horn. The anal proleg clasper is large. The length overall was two and one-half inches by one-half inch in diameter. Color pea-green. Claspers all violet colored at the tip.

On March 26, the size had increased to three and three-fourths inches. It ate voraciously. On March 30, the length was about the same and the diameter was three-fourths of an inch. The resting position is with the head and first proleg in the air, the remainder on the branch. On April 1, the larva measured four inches by one inch. The color of the dots on the anal prolegs was now dark purple to black.

On April 4, the larva stopped eating and bored under the ground. There it hollowed out a cavity in the sandy soil about three and one-half inches long by two inches wide and lined it with a few silken threads. Here it waited to change into a pupa. On April 8 at 10:30AM it changed into a pupa three and one-fourths inches long. The pupa resembled a jar with the proboscis in a sheath separated from the body like a handle.

On May 3, the adult emerged at 12:20AM, a gorgeous female of Cocytius antaeus.

RESEARCH REQUESTS AND MEMBER NOTICES
(Ed. note: It is the stated policy of the Southern Lepidopterists' Society not to accept any notices for the sale or exchange of specimens. We will, however, run requests for material for bona fide research purposes. Please keep in mind that federal laws governing the collecting and interstate transport of specimens are currently subject to draconian enforcement measures.)

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

FOR SALE: Light traps; 12 volt DC or 110 volt AC with 15 watt or 8 watt blacklights. The traps are portable and easy to use. Flow-through rain drains and beetle screens protect specimens from damage. For a free brochure and price list contact Leroy Koehn, 207 Quail Trail, Greenwood, MS 38930-7315 ph. (601) 455-5498.

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

WE OPERATE PERSONALIZED ENTOMOLOGICAL, NATURALIST, AND BIRDER TOUR PROGRAMS Latest illustrated 12-page Lepidoptera catalogue including South America, Europe, and Far East. Latest catalogue $1.00 or one year's monthly list via airmail $6.00. Transworld Butterfly Co. Apartado 6951, 100 S San Jose, Costa Rica, Central America.

CURRENT ZONE REPORTS

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

No Report.

ZONE II ALABAMA, LOUISIANA, MISSISSIPPI, TENNESSEE: Vernon Brou, 74320 Jack Loyd Rd., Abita Springs, LA 70420; Bryant Mather, 213 MT. Salus Drive, Clinton, MS 39056

No Report.

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

James Adams provided the informative report below, which includes new species records for NW Georgia as well as uncommon or unusual species. Records are from the Dalton/Rocky Face area (Whitfield Co.) unless otherwise specified. "Coh." refers to Cohutta Overlook on Fort Mountain, 2 km. E of the Murray/Gilmer Co. line (Gilmer Co.); "Vil." refers to Villanow, Walker Co.; "Mur." refers to Murray Co., 6 km. W of Chatsworth (on Hwy. 76/52); "Car." refers to Carbondale (at I-75 exit 134), Whitfield Co.; "Pig." refers to Pigeon Mountain area, Walker Co.. All material

NYMPHALIDAE: Speyeria diana, 16 June (Tay.). LYCAENIDAE: Incisalia augustinus and Glaucopsyche lygdamus, 23 April (Tay.); Atlides halesus, 23 April (Pig.); Satyrium edwardsii and liparops, 16 June (Tay.).

SATURNIIDAE: Male Anisota peigleri came to virgin female, 2:30 and 3:00 PM on 18-19 June and also to light, 26 June. SPHINGIDAE: Sphinx kalmiae started flying early this year, from 2 June to 28 June; Ceratomia hageni, 6 June (Vil.); Darapsa versicolor, 19 June (Coh.); Paonis astylus, 26 June. NOCTUIDAE: Feralia major had another excellent year, 2 Jan. to 30 March. Callopistria mollissima, several specimens, May - June. Callopistria cordata, 15 May and 19 June (Coh.); Eutloype electilis, Feb.; Eutolype rolandi, Feb.; Copivaleria grotei, late March - early April; Chrysanympha formosa (common), May - June; Autographa ampla, 19 June (Coh.); Dysgonia smithii, 29 May; Calyptra canadensis, 24 May; Celiptra frustulum, 1 May; Colocasia propiquilinea, early April and also 15 May (Coh.); Panthea sp. (not furcilla or acronyctoides), 19 May (Coh.); Nola pustulata, late May; Baileya doubledayi, 12 April; Orthodes cynica, 15 May (Coh.); Morrisonia evicta, common, many months. THYATIRIDAE: Habrosyne scripta, 19 June (Coh., STATE RECORD?); Euthyatira pudens, common, (both Dalton and Vil.), March. GEOMETRIDAE: Spargania magnoliata, several records including fall 1992 (STATE RECORD?); Ceratonyx satanaria, 25 March (Vil.); Neptyia semiclusaria, 19 June (Mur.) and 26 June (Vil.); Semiothisa quadrinotaria, 1 May; Trichodezia albovittata, 23 April (Pig.); the extremely rare Lytrosis permagnaria (two males), 24 and 29 May (STATE RECORD). There was an incredible outbreak of Itame pustularia this year, particularly noticeable at the Cohutta Overlook locality on 19 June; where the blacklight sheets (and the ground!) were probably 20% covered by these small white geometrids. COSSIDAE: Givera anna (two specimens), 5 June (Vil. & Car.); Cossula magnifica, 19 June (Mur.). ZYGAENIDAE: Pyromorpha dimidiata, 5 June (Tay.).

Ron Gatrelle visited Georgia on several occasions and provided the following report.

Rabun Co.: 25 August 1992, along Hwy 28. one female Speyeria diana, one male Enodia creola (COUNTY), and Cyllopsis gemma. 20 April 1993, along Hwy 28 and Burrell's Ford Rd.. Incisalia niphon, I. augustinus, one female Panthides m-album, Celastrina violacea, Atlides halesus, Erynnis martialis, E. icelus, E. brizo, and Phyciodes tharos. 10 June 1993, Burrell's Ford Rd.. P. tharos, one female (albino) Colias eurytheme, Polites origines, Erynnis juvenalis, and E. icelus.

Burke Co.: Ron reports that his discovery of Chlosyne gorgone in coastal SC (reported below) provided him with valuable habitat and nectar source information. He immediately began a quick, but intense search of Screven and Burke counties which led to the rediscovery of gorgone (ismeria) on 27 April 1993, 183 years after its original discovery by Abbott! One colony was located in the oak barrens of Burke Co.. A few adults were taken 27 and 29 April with the the host plant and larvae located on 21 May. Phyciodes phaon and Thorybes confusis were also found on 24 April.

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

Dick Deuerling reported a sighting of Dryas julia cillene at Sandalwood Drive in Orlando on 5 Nov. 1992. He noted that this is the first one he has seen in 32 years of observation.

ZONE V VIRGINIA, NORTH & SOUTH CAROLINA: Bob Cavanaugh, P.O. Box 734 Morehead City, NC 28557; Ron Gatrelle, 126 Wells Road, Goose Creek, SC 29445

Ron provided the following report.

NORTH CAROLINA

Macon Co.: 25 August 1992. Speyeria were totally absent except for one female cybele observed on Scaly Mt.. As a whole 1992 was a terrible year for Speyeria in western NC.; in fact all species of butterflies except Epargyreus clarus were in very low numbers.

On 4 June 1993 the following species were found in the area between Highlands and Franklin: Phyciodes batesi ssp., Erynnis icelus, Poanes hobomok, Celastrina neglecta-major (probable), one worn female Pieris virginiensis. In the same area on 9-10 June: P. batesi ssp., E. icelus (many still suprisingly fresh), Chlosyne nycteis (just coming out), Limenitis arthemis astaynax, Colias eurytheme, Polygonia interrogationis. Several species of bright day flying moths were present especially the tropical metalmark-like Heliomata infulata.

SOUTH CAROLINA

January through March were the wettest in history, but by mid-June SC was in a drought. First species seen were Colias eurytheme and Danaus plexippus at Edisto Beach Charleston Co. The plexippus were migrating northward at a rate of approx. one individual every 30 seconds. Twelve were tagged and released.

Oconee Co.: 10 June, Burrell's Ford Rd. off Hwy. 107. One fresh female Boloria bellona (STATE RECORD, SOUTHERN RANGE RECORD). The early date and fresh condition of the specimen indicate that it is breeding in this area..

Pickens Co.: 19-21 April, Lake Issaqueena area. Mitoura grynea, Phyciodes tharos, Erynnis brizo, Atlides halesus, one female Incisalia irus, Celastrina violacea, Colias eurytheme, Cyllopsis gemma, Graphium marcellus, and Hesperia metea "licinus". Ron took a fairly long series of the metea and reports that they are identical in size and phenotype to licinus from TX, AR,and MO.
They are certainly not nominate metea.

3 June, same area. Celastrina neglecta-major (probably), Everes comyntas, Lethe anthedon, L. portlandia, Satyrodes appalachia, Megisto cymela, Hermeuptychia sosybia, one worn male Amblyscirtes sp., probably hegon.

Orangeburg Co.: 9 March, along Hwy. 172 E of N. Incisalia niphon had a

repeat of 1992 with an above normal flight at this spot.

24 April, along Hwy. 394 E of N. While stopping to fix a flat tire, I netted the first confirmed coastal SC specimens of Chlosyne gorgone gorgone (COUNTY). I visited the area again on 27 April, 7 May, 1 June and 8 June. Adults taken or observed on 24, 27 April and 7 May. First thru third instar larvae were easily located on the host a sunflower, Helianthus divaricatus, 150+ ova obtained from a single female collected on 24 April. These were oviposited on a non-host Arnica acaulis. A total of over 400 larvae were obtained and all but two entered diapause in the third instar. All diapausing larvae were returned to the wild. Two females emerged 7 and 9 June or 42 days from ova to adult. Apparently all "wild" third instar larvae entered diapause also. Apparently shortening photoperiod is not the main trigger to induce diapause in this area, which is very arid scrub oak sandhills with no adult nectar source in June.

1 and 3 June, Bull Swamp, 1 mile E of N. Poanes yehl, a freshwater population of P. aaroni nearest howardi. Biogeographically, this is a very old population - older than the coastal SC populations of howardi.

Berkley Co.: 12 April, pine flatwoods behind St. James Estates. One Incisalia irus arsace. This species remains very rare at this site (which is the only known existent site in SC) despite thick stands of Baptisia. Nearly annual burning is the biggest enemy of irus at this location A major road is now planned through this area as well!

26 April, same area. One I. niphon female. Acceptable host for C. gorgone. No larvae of irus could be located.

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

THE SOUTHERN LEPIDOPTERISTS' NEWSLETTER
c/o Thomas M. Neal
1705 NW 23rd Street
Gainesville, FL. 32605

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