



# NEWS

of the LEPIDOPTERISTS' SOCIETY

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Editorial Committee of the NEWS . . . . .

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## THE 1975 FIELD SEASON SUMMARY

ZONE 1: SOUTHWEST: ARIZONA, NEVADA, CALIFORNIA. Coordinator: R. L. Langston (RL). Contributors: R. A. Bailowitz (RB), J. P. Brock (JB), C. D. Ferris (CDF), K. C. Hansen (KH), C. Henne (CH), R. H. Leuschner (RHL), J. R. Mori (JM), F. & J. Preston (FP), Z. O. Richins (ZR), K. Roever (KR), P. & S. Russell (PR), C. A. Sekerman (CS), A. M. Shapiro (AS), R. E. Stanford (RS), F. T. Thorne (FT), P. M. Tuskes (PT), M. Van Buskirk (MV), J. B. Walsh (BW), R. E. Wells (REW) & R. S. Wielgus (RSW). COUNTY (in caps.) = New county records. NORTH, SOUTH = Northerly, southerly range extensions.

ARIZONA: Jan. & Feb. colder & drier than usual (MV), but some diurnals EARLY by 15 Jan. (RB), with several species thru Feb. (MV). Spring cool & wet (MV), with snow in higher mts. thru May (CDF). Normal bake-oven temps. not returning until mid-June (MV). Summer rains spotty as usual. July cool & wet in Chiricahuas (CDF), but generally low rainfall in Aug. (MV). Most 1975 Arizona records are repeats of previous Summaries!!

MIGRATORY SPECIES: Anteous clorinde nivifera & A. maerula lacordairei had light migration movement into Southern Arizona during Aug., Sept. & Oct. (KR). Nymphalis californica was taken 6 mi. W. of Prescott, Yavapai Co., 1 Mar. (RB), but no migrations reported.

MOTHS: Sagenosoma elsa, 11 at BL, Kansas Settlement Rd. nr. Rt. 666, Cochise Co., 30 July (MV). Sphinx libocedrus, asellus & dollii (unmarked form), vic. Prescott, 15, 16 June (MV). S. dollii, Cave Cr. area, Chiricahua Mts., Cochise Co., 11-15 Aug. (CDF). Eumorpha satellitia, Pena Blanca Lake area, Santa Cruz COUNTY & WEST, 3 Aug. (MV) (2nd. Ariz. record, 1st. in Cochise Co., J. Cadiou, 1970). E. typhon & Manduca occulta Pena Blanca L., 3950', 29 July (ZR) & the latter same loc. mid-July (RSW). Proserpinus terlooii 1 m, Pena Blanca L. at BL, 0415, 22 July (PT). Mature larvae of Hyalophora gloveri & Eupackardia calleta, both on sand bar willow, lower slope of Kitt Peak, Pima Co., 2 Sept. (KH). E. calleta & Citheronia splendens sinaloensis, Pena Blanca L., 21-25 July (PT) & 26-27 July (ZR). A. polyphemus oculatea, Miller Cyn., Huachuca Mts., Cochise Co., 26 July & Madera Cyn., Pima Co., 28 July (PT, MV). Automeris pamina very common, vic. Prescott, 15, 16 June (MV). 60+ larvae of Hemileuca electra clio on Eriogonum f. deserti, nr. Oatman, Mohave Co., 11 Mar. (KH). Small larvae of H. juno on Prosopis juliflora, mouth of Gardner Cyn., 5 mi. N. Sonoita, S. Cruz Co., 21 May (MV). Large larvae of H. burnsi on Dalea fremontii, 5-10 mi. S. Oatman, 11 Apr. (KH). Anisota oslari, Pena Blanca L., 21-25 July (PT), 29 July (ZR) & 3 Aug. (MV). A dozen Aemilia roseata, Upper Miller Cyn., 6100', Cochise Co., 26 July (MV). Palada scarletina, Cave Creek Wash, Phoenix, Maricopa Co., Sept.-Oct., adults assoc/w Stephanomeria pauciflora (RSW). Quadrina diazoma, Stewart Cpgd., Chiricahua Mts., Cochise Co., 20 July (ZR). Polingia quaestoralis in diurnal flight, Thirteen Mile Rock, 5000', E. of Camp Verde, Yavapai Co., 21 Jan. (RSW).

BUTTERFLIES: Amblyscirtes aenus & celia, Noon Cr., 5000', Pinaleno Mts., Graham Co., 9 Aug. (FP). A. cassus, aenus & fimbriata, Cave Cr. area, Cochise Co., 11-15 Aug. (CDF). A. eos, Patagonia Mts., S. Cruz Co.,

### IMPORTANT COMING EVENTS

LEP SOCIETY ANNUAL MEETING MADISON, WISC. 24-27 JUNE 1976

PACIFIC SLOPE SECTION MEETING CARSON CITY, NEV. 2-4 JULY 1976

Program will feature 1) Environmental physiology of Lepid.-diapause, polyphenism, adaption to extremes, and 2) Nevada Lepid.-faunal studies, geographic variation, collecting sites. Contact Jerry Powell by June 1 if you can submit a paper, but come in any case! Facilities at the Nevada State Museum will be available, and a field trip will be arranged for July 2, 4 or 5 depending on interests of those present. For local arrangements, contact Gloria Harjes, Biology Dept., Nevada State Museum, Carson City, Nev.

XERCES SOCIETY SECOND ANNUAL BUTTERFLY COUNT 1-7 JULY

Where-ever you are, pick one day in this week (make it a nice one), get out in the field with as many friends as possible, and record all butterfly species seen within a 7.5 mile radius (i.e. 15 mile maximum diameter circle). Indicate abundance or number of sightings. Collecting is optional as long as identifications are positive. Send report (with \$1 per participant for listing in summary report) to Sally Pyle by 1 Sept. Last year 60 participated, coast-to-coast.

MOTHS: Arctonotus lucidus 1 m, Placerville, El Dorado Co., lights of supermarket, 27 Feb. (REW). Proserpinus clarkiae, Butts Cyn., Napa Co., 12 Apr (RLL). Hyalophora euryalis, Cole Cyn., Yolo Co., 10 Apr. (PT). Larvae of Hemileuca eglanterina form shastaensis on Purshia tridentata 17 June, Mts. Shasta at 4600', Siskiyou Co., adults 20 Aug. (PT). Cisthene faustinula, Watsonville, S. Cruz Co., 27-29 May (RLL). Platyrepria guttata, Bodega Head (dunes), Sonoma Co., 27 July (RLL). Pronoctua pyrophiloides, Pinyon Crest, 4400', Riverside COUNTY & SOUTH (RHL) (Other recorded Anderson Springs, Lake Co.). Oncocnemis mirificalis, regina & melantho, Mt. Pinos, Kern/Ventura Co., 14 Sept. (RHL). Lithophane subtilis, Pinon Hills, S. Bdn. Co., 14 Nov. (RHL). L. georgii & Euxoa medialis, Big Pines, 7000', 14 Nov. (RHL). Fishea yosemite, Pearblossom, L.A. Co., 25 Oct. (CH, RHL). Homoglaea carbonaria & californica, Angeles Crest Hwy. at 4000', 26 Jan. (RHL). Annaphila evansi, Lime Kiln Cyn. 5 mi. W. Paicines, San Benito COUNTY & NORTH, 2 Apr. (RLL) (Type series in L.A. Co.), sympatric with A. decia, depicta & diva. A. lithosina abundant around Mimulus, N. Yuba R., 2500', 13 mi. W. Downieville, Sierra Co., 28 June (RLL, PR). Schinia mortua (? Ed.), Kirker Cr. at Nortonville, C. Costa Co., 6 Sept., many adults assoc/w Grindelia camporum (CH, RLL). Xystrota rubromarginaria, Chiles Cr. No. of Lake Hennessey, Napa Co., 27 Apr. (RLL). Hydriomena crockeri comstocki & Perizoma n. sp., 31 May, Mycterophora rubricans, geometriformis & Synaxis n. sp. 19 Sept. at Buckhorn Flats, 6400', L.A. Co. (RHL). Titanio immerens, Lime Kiln Cyn., San Benito Co., 2 Apr. (RLL). Polingia quaestoralis, SW of Valyermo, L.A. Co., 12 Jan. (CH, RHL). Plumipalpia martini, Dove Springs, Kern Co., 23 Feb. (CH, RHL). Palpita gracialis, Sonora, Tuolumne Co., 25 Aug. (RLL). Sparganthis senecionana, Frazier Mtn. Pk., Kern Co., 1 June (RHL). Acleris forbesana, Big Pines, 7000', San Bernardino COUNTY, 14 Nov. -- new So. Calif. record (RHL). Commophila umbrabasana, Stockton, San Joaquin Co., 2 July, assoc/w Quercus lobata, 2 July (RLL). Agonopterix sabulella, Pinon Hills, S. Bdn. Co., 14 Nov. (RHL).

BUTTERFLIES: "An immense increase in number of stations and pop'n. density for Amb. vialis & E. amyntula in (Sierra) foothills to about 5000 ft." (AS). O. agricola, Lang Crossing, 4500', Nevada Co., 8 July, HIGH ELEV. (AS). O. yuma, Mokelumne R. at U.S. 99, 11 July (RLL) & Mokel. R. 3 mi. E. Lodi, San Joaquin COUNTY & EAST for Central Calif., 11 July (Kirby Brown, RLL). A. campestris, Donner Pass, 7000', Placer/Nevada Cos., 30 Sept., high elevation immigrant & P. sabuleti, 25 Sept., LATE (AS) -- strays from Truckee or lower? H. columbia, 4 mi. S. Bodfish, Kern Co., 11 May (JB). N. julia, Blythe, Riverside Co., in alfalfa field, 28 Sept., 5 Oct. (CS). H. phyleus & E. funeralis, Dictionary Hill, San Diego Co., 25 Jan., very EARLY (FT). E. persius, S. Fork American R. at Mosquito Rd., El Dorado Co., 27 Apr. (AS) & 2 mi. SW. Camptonville, Yuba Co., 28 June (RLL). P. libya lena, Nine Mile Cyn., Tulare Co., 8 June (JB). P. alpheus oricus, Kelso Valley R. 17 mi. S. Weldon, Kern COUNTY. 15 June (JB). P. ruralis ssp., Laguna Mdns., S. D. Co., 19 July, LATE (FT). P. scriptura, Agnews State Hosp., Santa Clara COUNTY & SOUTH for Bay Area, 22 Sept. (RLL). E. clarus, N. 10 May (RB). Hesperia comma susanae (topotypical) very common, Hospital Flat, 9100', Pinaleno Mts., 7 Aug. (FP). H. pahaska nr. williamsi, Groom Cr., Yavapai Co., 2 Oct. (RB). Piruna polingi, Chiricahua Mts., 13 Aug. (RB) & Cave Cr. area, 11-15 Aug. (CDF). Pholisora libya, Turkey Flat, 7000', Graham Co., 7 Aug., HIGH ELEV. (FP). Celotes nessus, 9 mi. W. Prescott, 30 Apr. (RB) & U.S. 60, 10 mi. W. Globe, Gila Co., 27 Aug. (JB). Cogia hippalus & C. caicus moschus, Cave Cr. area, 11-15 Aug. (CDF). Thorybes drusus & Achalarus casica, Chiricahua Mts., 13 Aug. (RB) & Cave Cr. area, 11-15 Aug. (CDF). Autochton cellus, Cave Cr. area, 11-15 Aug. (CDF). A. pseudocellus, Arcadia Cpgd., 7000', Graham Co., 7 Aug. (FP). Zestusa dorus, 8 mi. S. Prescott, 3 May (RB). Papilio crespontes, Prescott, 31 Aug. (RB). C. argiolus cinerea, Cleator, Yavapai Co., 15 Jan.! EARLY (RB). C. cesonia, N. iole, Anthocaris pima, A. sara inghami & A. halesus corcorani, Tucson general area, late Jan. thru Feb., EARLY (MV). Phoebis agarithe, Tucson, Pima Co., 20 July (PT). Hypaurotis crysalus, Apodemia palmerii & Emesis zela, Wet Cyn., 6000', Graham Co., 7 Aug. (FP). E. zela abundant, Cave Cr. area, Cochise Co., 11-15 Aug. (CDF). A. nais & Callophrys apama, Rock Cr. Rgr. Stn., 1 mi. No. (near Whiteriver), 13 Aug. (FP). C. comstocki, Cerbat Mts. 25 mi. N. Kingman, Mohave Co., 7 Apr. (KR) (2nd. Ariz. record). Incisalia iroides annetteae, Miller Cyn., Huachuca Mts., Cochise Co., 24 Mar. (RB). S. enoptes dammersi, Slate Cr. Divide, Maricopa Co., 2 Sept., various locales No. of Cordes Jct., Yavapai Co. & W. of Williams, Coconino Co., 12 Sept. (RSW) -- all adults assoc/w Eriogonum wrightii. Anaea aidea, Sycamore Cyn., S. Cruz Co., 11 Oct. (RB). Phyciodes tharos, St. David, Cochise Co., 17 Aug. (CS). P. tharos pascoensis sympatric with P. campestris camillus & P. mylitta arizonensis, Silver Cr. nr. McNary, White Mts., Apache Co., 14 Aug. (CS). Thessalia theona thekla & T. fulvia, both very common, Noon Cr., 5000' & Wet Cyn., 6000', Graham Co., 7 Aug. (FP). T. fulvia common, 5 mi. SE. Springerville, Apache Co., 15 Aug. (CS). Poladryas nympa & arachne sympatric (!!!) at Snow Tank (rd. to Bootleg L., S. of McNary), Navajo Co., 5 Aug. (FP). P. arachne common & Speyeria electa nausicaa abundant, Hospital Flat, 9100', Graham Co., 7 Aug. (FP). Euptychia rubricata chenevorum, Noon Cr., Graham Co., 9 Aug. (FP). Paramecera allyni, Barefoot Park, Chiricahua Mts., 13 Aug. (CDF).

NEVADA: Anthocaris pima, Red Rock Cyn., Spring Mts., Clark Co., 23 Mar., NORTH for Nevada (JB). Road to Kyle Cyn., Spring Mts., 3, 4 May (RHL): Euchloe hyantis lotta, 3500'; Pholisora alpheus oricus & Chlosyne neumogeni, 5000'; Pieris beckerii & sisymbrii, 6000'; and Incisalia f. fotis, 6800' -- the latter was only species flying on a large sagebrush flat -- wind & clouds hampered collecting (RHL).

CALIFORNIA: Preceding winter very dry in So. Calif., Jan. turned warm with very early flights (FT). Warm days in most of Jan. & Feb. in No. Calif. with numerous moths & some diurnals (RLL). Spring wet & cool with many species late. Summer started off well, but set back by cold rains & even snow (24 June) in higher mts. (AS). In So. Calif. prolonged cold Mar.-early May retarded flights of all species by 4 weeks. Deserts very late, many species not emerging until late April, with numbers of species down. By late June the So. Calif. Mts. only about 1-2 weeks late (J. Emmel). Autumn fair & dry (AS), few rains Oct., Nov., but generally warm with some adults to end of year (RLL, AS).

MIGRATORY SPECIES: Cynthia cardui not observed AT ALL until a few in Sept.-Oct. (AS); Only 1, Santa Clara Co., 9 Sept. & 1, Contra Costa Co., 18 Nov. (RLL). Nymphalis californica very low all season (AS); few worn hibernants Alameda Co., 28 Feb., 28 Mar., San Benito Co., 2 Apr. & Napa Co., 12 Apr. (RLL); about a dozen fresh adults Sierra Co., 28 June (RLL, PR). Danaus plexippus a disaster in spring & summer -- hardly any breeding in Central Valley, however fall migration adequate (AS); somewhat below "normal" -- migrants late Aug.- early Nov., Bay Area (RLL).

Yuba R., 2500', 13 mi. W. Downieville, Sierra Co., 28 June (RLL, PR); rd. to Castle Lake, Siskiyou Co., 5 July (PR); & just E. of Kyburz, El Dorado Co., 6 July large numbers assoc/w Lotus crassifolius. \*\* P. Clodius baldur virgin f, Donner Pass, 7000', 13 Sept., LATE (AS). P. clodius sol abundant at 2500', N. Yuba R., 28 June, assoc/w Dicentra formosa (RLL, PR). P. clodius (large ssp.) common, Woodward Cr., 6800', Tulare Co., 3 July, assoc/w Dicentra nevadensis (JB, JM). B. p. philenor 1 m in good shape, Blythe, Riv. Co., in alfalfa field, 28 Sept. (CS). P. crespontes common, Ross Corners nr. Bard, Imperial Co., 19 Aug., also common outskirts of Blythe, 28 Sept., 5 Oct. (CS). P. multicaudatus, 24 larvae on Fraxinus, N. Fork Merced R. at Smith Cr., Mariposa Co., 3 Aug. (REW); larvae common on F. oregonus, NFMR 14 mi. E. Coulterville, 31 Aug. (JM); few larvae on Ptelea crenulata, Kirker Cr., C. Costa Co., 6 Sept. (RLL), reared to pupae on Prunus virginiana demissa (CH). P. occidentalis, Lang Crossing, 4500', Nevada Co., 13 Aug., LOW ELEV. on W. slope (AS). C. occidentalis chrysomelas, 6 mi. N. Hobergs, Lake Co., 8 June (PT). A. cethura & sara reaktitti, Dictionary Hill, S.D. Co., 25 Jan., EARLY (FT). E. hyantis lotta, arid pinyon-juniper area 10 mi. S. Kennedy Mdns., Tulare COUNTY, 8, 26 June, LATE (JB). E. ausonides common in high elev. meadows (7000' - 9000') of Tulare Co., June-July (JB, JM -- as large as low elev. spms. -- details IF requested) & Lime Kiln Cyn., 5 mi. W. Paicines, San Benito Co., 2 Apr., SOUTH for Central Coast Range (RLL). A. mormo, Loon L., 6300', El Dorado Co., absolutely thick in Sept. (REW) & Donner Pass, 7000', 25, 30 Sept., common & LATE (AS). A. m. virgulti, Dictionary Hill, S.D. Co., 25 Jan., very EARLY (FT). S. behrii, 10 mi. S. Kennedy Mdns., 27 June & Lloyd Mdns., 20 mi. N. Johnsondale, 20 July, both new Tulare COUNTY (JB). S. auretorum, N. Yuba, R., 2500', 13 mi. W. Downieville, Sierra Co., 28 June (PR) & 1 mi. S. Jct. Tassajara & Cachagua rds., 600', Monterey Co., 25 July, LATE (BW). S. Tetra abundant nr. Lodoga, Colusa Co., 20 June (CS). S. saepium (atypical pops.), dunes, Baywood Park - Los Osos areas, S.L.O. Co., 7 June, common by late June (JB, CS) -- LATE record: B.P. & L.O., 24 Aug. 73 (RLL). M. nelsoni muiri, Cuesta Ridge, S.L.O. Co., emgd. Mar.-Apr. ex f 14 June 74, Cupressus sargentii (CH). I. mossii dudoroffi, Arroyo Seco & Horse Pasture Trail, 1600-1800', Monterey Co., larvae on Dudleya sp., 17 June (BW). I. mossii windi, El Dorado Co. (AS, REW) Nevada Co. (AS), Sierra Co., (JM, REW) & Siskiyou Co. (PR) (details IF requested). I. eryphon, Garden Rd. nr. Monterey Airport & trail to Jack's Peak, 12 Apr. (BW). C. sheridanii lemberti, slopes above Castle Lake, Siskiyou Co., 5 July (PR). L. heteronea clara ovip. on Eriogonum heermanii, 1 mi. W. Frazier Park, Kern Co., 12 July (JB). L. cupreus, Sierra City, 6 mi. NE., 5600', 28 June (RLL, PR). B. exilis, Suisun Marsh, Solano Co., still going strong 16 Dec., LATE (AS). L. marina & E. amyntula, Dict. Hill, S.D. Co., 25 Jan., very EARLY (FT). L. argy. anna common, Freeman Cr. Redwood Grove, Tulare COUNTY & SOUTH, 30 June (JM). P. melissa inyoensis & P. emigdionis, Frazier Mtn. Pk., Kern Co., 1 June (RHL). P. emig., Kelso Valley Rd., 17 mi. S. Weldon, Kern Co., 15 June (JB). P. icar. moroensis very common, dunes Baywood Park, S.L.O. Co., 7 June (JB, CS). P. neurona, S. of Chimney Cr. (N. of Owen's Peak) & W. slope Lamont Peak (in Chimney Peak Rec. Area), Tulare COUNTY (3 mi. N. of Kern Co. line), 29 June (JB, JM). E. comyntas very common, Mokelumne R. 3 mi. E. Lodi, San Joaquin Co., 11 July (Kirby Brown, RLL). S. enoptes smithi, Vasquez Knob, 1800', WSW. of Carmel Valley, many adults 16 June assoc/w E. parvifolium, mature larva 17 Aug. (BW) (Inland record, others on coast). P. sonorensis larvae on Dudleya cymosa, ridge above Kanaka Cr., 1 mi. SW. Alleghany, 4400' (JM) & adults 3 mi. SW. Alleghany, Sierra COUNTY & NORTH, 24 May (JB, JM, REW). G. piasus, Frazier Mtn. Pk., 1 June (RHL). G. lygdamus australis ovip. on "garden Lupinus", Mt. Soledad, La Jolla, S.D. Co., 17 Apr (RS). C. argiolus echo fresh m, Gates Cyn., Vaca Hills, Solano Co., 24 Oct., very LATE (AS). P. faunus rusticus, Sierra City, 6 mi. NE., 5600', Sierra Co., 28 June (RLL). P. campestris, Hobo Camp-Miracle Hot Springs, 2400', Kern Co., 17 May, LOW ELEV. for So. Calif. (JB). P. orseis herlani, Donner Pass, 7000', 2, 30 July, scarce (AS). C. gabbi, Lime Kiln Cyn., San Benito Co., 2 Apr., NORTH for Central Coast Range (RLL): Baywood Park, S.L.O. Co., worn 7 June, fresh m 4 July (JB); & 1 m very fresh, Marina Beach Dunes, Monterey Co., 4 Sept., very LATE (BW) (Extended flight for a univoltine sp. on coastal dunes). C. hoffmanni, Little Walker R. Cyn., 9200', Mono Co., 3 Aug. (JM). E. chalcedona sierra, Woodward Cr. nr. jct. N. Fork Kaweah R., 6800', Tulare Co., 25 July & Niagara Cr., 6800', Tuolumne Co., 26 June (JM). E. e. editha, late inst. larvae on Penstemon, summit Walker Pass, 5250', 3 May (JB). E. e. rubicunda, Cosumnes R. 5 mi. SE. Somerses, El Dorado COUNTY & NORTH (REW). E. e. aurilacus (?), it's tiny), North Cr., 3 mi. N. Iron Mt. Rd., 5000', 5 July & 2 mi. W. of Brown Rock, 6600', 19 July, both El Dorado Co. (REW). P. arachne monache common & ovip. on Penstemon, summit above Big Pine Mdns., Tulare Co., 28 June (JM) & summit Nine Mile Cyn., adults & ova taken on Penstemon speciosus, 5 July (CS). S. c. coronis fresh female, E. base Mt. Hamilton, S. Clara Co., 9 Sept., LATE (CH). S. c. snyderi, Niagara Cr., 6800', 3 mi. S. Hwy. 108, Tuolumne COUNTY & SOUTH for W. slope Sierras, 26 June (JM). S. z. zerene, Freeman Cr. Redwood Grove, Tulare COUNTY & SOUTH, 30 June (JM). A. vanillae incarnata, San Mateo, 17 Sept. (RLL). O. chryxus stanislaus, Little Walker R. Cyn., 9200', Mono Co., 3 Aug. (JM).

ZONE 2: PACIFIC NORTHWEST: OREGON to BRITISH COLUMBIA to MONTANA. Coordinator: Jon H. Shepard (JC). Contributors: D. E. Collins (DC), P. J. Conway (PC), John Gordon (JG), Cris Guppy (CG), Richard Guppy (RG), Steve Kohler (SK), S. G. Jewett, Jr. (SJ), Dan Oosting (DO), D. K. Parshall (DP), Robert Pyle (RP), Sally Pyle (SP), Killian Roever (KR), N. G. Seaburg (NS), D. P. Shaw (DS), Ray Stanford (RS).

General Conditions: Spring was late with a corresponding late emergence of butterflies. May and June were unseasonably warm with excellent collecting. In late July and August more cool weather hindered high altitude collecting. \*\* Migratory Species: No report of Vanessa cardui (SJ) or Danaus plexippus. Nymphalis californica was down in numbers from the last several peak years but common in some localities. Common (May) at Trail and Rossland, B.C. (JS). Common (Aug. 2) Ward Creek, Mineral Co., Mont. (PC, DO, NS). Common (July 23-24) Cascade Pass, Skagit Co., Wash. (DC). Common (Sept. 7) Monte Cristo, Snohomish Co., Wash. (RP, SP, DS). Present in September at Sproule Cr., nr. Nelson, B.C. (JS).

MONTANA: Carbon Co., Beartooth Plateau, July 29-Aug. 4 (PC, DO, NS). Season late 3 weeks. P. centaureae loki, C. meadi, L. phlaeas (one), L. cupreus, B. eunomia ursadentis, B. freija browni, E. callias, E. theano ethela. O. taygete edwardsii was repeatedly observed (20 times) being captured by a small bird. Many had distinct beak marks. \*\* Custer Co., Powder River Bluffs, July 30 & Aug. 2 (KR) Atrytone delaware (State Record), Meg. streckeri texanus. \*\* Mineral Co., Ward Creek Canyon, 8.2 mi. E. DeBorgia, July 30 (PC, DO, NS)

Nineteen species recorded, including Pyrgus communis (Co. Record), Parn. clodius (Co. Record), Lyc. mariposa. Missoula Co., Miller Creek, July 2, 5 (SK), N. iole (Co. Record).

IDAHO: Kootenai Co., Miller Creek at Interstate 90, Aug. 2, (PC,DO,NS). Lim. weidemeyerii latifascia. OREGON: Benton Co., McDonald Forest, nr. Corvallis, June 20 (RS) Hesperia juba (Co. Record). \*\* Crook Co., Mark's Creek, Ochocos Mts., July 26-27. A Speyeria collector's heaven according to Stanley Jewett, Jr. S. hydaspe & zereue abundant, S. cybele leto, S. mormonia erinna, S. atlantis dodgei, & S. coronis were common, S. callippe scarce and worn. C. occidentalis common with possible hybridization with C. alexandra (SJ). \*\* Jefferson Co. Camp Sherman, Metolius R., May 24 (SJ) several P. indra at wet spots. Same locality, July 12-13 O. nevadensis scarce. \*\* Clackamas Co., Oregon City. First Hyal. euryalis in three years (SJ). Scattered BL collecting in the state turned up no records (SJ).

WASHINGTON: Asotin Co., Jct. Grande Ronde & Snake Rivers, July 31 (RP,SP,DS) N. iole (State Record). \*\* Clallam Co., Blue Mt. July 11-12 (RP,SP,DS) O. chryxus valerata; Mt. Angeles July 11-12 (RP,SP,DS) O. c. valerata (new localities); Bluffs above Dungeness Spit, Dungeness Recreation Area, July 13, Arctostaphylos/Holodisius heath (RP,SP,DS) C. occidentalis (Co. Record) and second known coastal record; Ahlstrom's prairie, Cape Alava Trail, July 23 (one of the few 100 acre natural openings in coastal Rain Forest) (RP,SP,DS) L. mariposa (Co. Record) and major range extension - only coastal Wash. locality. \*\* Clark Co., Fern Prairie, Sept 15 (SP) Stry. melinus (Co. Record). \*\* Ferry Co., 6 mi E. Republic, June 28 (RP,SP,DS) Bol. toddi. \*\* Garfield Co., Pataha Bunchgrass Research Natural Area, el. 4500 ft. July 30 (relict prairie bunchgrass) (RP,SP,DS) L. heteronea, C. pegala, C. sthenele silvestris, C. oetus. \*\* Grant Co., Dry Falls, May 14-15 (DC) Probably all county records: P. zelicaon, P. beckerii, P. sisymbrii, L. melissa, Pleb. acmon lutzi, and Scol. pius. \*\* Jefferson Co., 1 mi. W. Olympic Nat. Park boundary on Hoh R. Rd., July 22 (RP,SP,DS) All county records. S. hydaspe, P. rutulus, P. clodius, & P. napi. \*\* Pacific Co., Loomis Lake, Long Beach Peninsula, August 24 (RP,SP,DS) S. zereue hippolyta, Co. Record and only recent capture. Cel. argiolus, late fall record. \*\* Skagit Co., Buck Creek Cpgnd., 15 mi. E. Darrington, May 25 (DC) Pyr. ruralis, P. napi marginalis, Poly. faunus, Cel. argiolus echo; Cascade Pass, July 23-24 (DC) Lim. lorquini, Parn. clodius, S. hydaspe, Erebia vidleri; Marble Creek Cmpg., 15 mi. E. Marblemont, July 23 (DC) Callophrys nelsoni. \*\* Thurston Co., 12 mi. W. Olympia on Hwy. 8, May 29 (DC) C. dumetorum. \*\* Whatcom Co., Point Roberts (RP,SP,DS) only P. rapae and L. helloides (ovipositing on Rumex). \*\* Yakima Co., Bench Lake, Mt. Adams, August 3-4 (SJ) Satyrion fuliginosum (common).

BRITISH COLUMBIA: Vancouver Island, Bright Angel Park nr. Duncan (RG), Euph. editha taylori common, new locality. Coordinator's Note: The northern most locality is Deman Island, 60 miles north of Duncan.; Oeneis macounii, recorded for Buttle Lake in last year's SS, was a female of O. chryxus. \*\* Okanogan, Anarchist Mt., W. of Osoyoos, el. 3200, June 22 (CG,JG) L. nivalis, Sat. fuliginosa (first records in Province since 1930). \*\* Alaska Hwy., Mile 463.2, Muncho Lake, June 18 (DP) Erebia rossi (one). This rare species occurs here occasionally. \*\* Atlin and Vicinity, 1973 and 1975 (CG,JG,JS). This classic locality was collected in 1914 with 29 species recorded. The last two seasons have boosted the total to 47, extraordinary rich fauna for a northern locality. Cart. palaemon June 27 (scarce), Erynnis persius June 27, P. centurareae July 1 (rare), Hesperia manitoba June 27-July 10, P. phoebus June 27-July 4, P. evermanni June 30 (second record for Province), P. glaucus June 27-July 4, P. machaon June 27-July 4, P. rapae June 27 (one), P. napi June 24-July 4, P. occidentalis June 27-30, C. philodice June 27-July 10, C. hecla June 29, A. sara June 27-July 4 (scarce), E. creusa June 29-July 4, E. ausonides June 27-July 10, L. argyrognomon alaskensis July 10, P. saepiolus June 27 (Hot Springs only), P. optilete July 4 & July 22 (Province Record), Agr. aquilo June 27-July 4, E. comyntas June 27, G. lygdamus June 27-July 4, V. cardui July 4, 1973 (only one seen, JS), Phy. campestris June 27-29, B. selene astrocostalis June 27 (Hot Springs only), B. frigga June 27-29, B. improba July 22-28, B. freiya June 27-July 1, B. titania June 29-July 22, B. astarte distincta July 4-July 22, (Province Record), B. napea July 22-28, B. eunomia July 1, Spey. mormonia June 27-29, C. tullia mixturata June 29-July 4, Oeneis chryxus July 1, O. taygete, July 1, O. polixenes June 30, O. jutta June 29-July 1, O. melissa June 30-July 22, Erebia disa July 1, E. discoidalis July 1, E. epipsodea June 29-July 1. \*\* Kootenay, Sproule Cr., nr. Nelson (JS), Polites mystic.

ZONE 3: ALBERTA, WYOMING, UTAH, COLORADO and NEW MEXICO. Coordinator: J. Donald Eff (JDE). Contributors: K. Bagdonas (KB), J. Belicek, C. D. Bird, F. M. Brown (FMB), P. J. Conway (PJC), A. O. Detmar (AOD), P. L. Eades (PLE), S. L. Ellis (SLE), M. Epstein (ME), C. D. Ferris (CDF), M. S. Fisher (MSF), S. Fratello (SF), B. Griffin (BG), K. Hansen (KH), R. Hollister (RH), M. Howard (MH), R. R. Irwin (RRI), W. E. Knoshaug (WEK), J. A. Legge (JAL), L. McClair, S. Montford (SM), D. P. Oosting (DPO), D. Parshall, D. E. Phillipson (DEP), A. P. Platt, F. & J. Preston (F&JP), Bob Price (BP), R. M. Pyle (RMP), M. A. Rickard (MAR), K. Roever (KR), N. G. Seaborg (NGS), R. E. Stanford (RES), K. B. Tidwell (KBT), J. B. Vernon (JBV) and R. E. Wells.

For once all areas reported on weather conditions, the composite picture showing a rather mild and late arriving winter. In Alberta spring was early with no late freezes and gradual warming, resulting in a fairly normal season. In the States March came in like a lamb, but left like a lion, with sporadic snow and cold continuing thru much of April. May was wet, cold and windy with mountain snows. Six inches fell on Denver on 29 May. In mid-June the weather improved somewhat. Some species ran 4 weeks late, but often flew with others about on time. The weather feature with the biggest effect on our season was the wind, which at one point blew steadily for two weeks, mostly from the south and at rates of 30 to 50 mph, and up! These winds made one of the most unusual seasons ever, with southern species apparently transplanted northward. Most notable was Nathalis iole, found everywhere, from plains to timberline (above Alma, Park Co. (SF) and Mt. Audubon, Boulder Co. (KB)) and north into southern Wyo. (CDF). Eurema mexicana, nicippe and Euptoieta claudia are regular strays at 3 or 4 records per year, but this year they were "common". On 30 June, 40 E. mexicana and 30 nicippe were counted in the Brainerd Lake area of Boulder Co. (KB). E. claudia was common in Boulder (PLE) and Brainerd Lake areas (KB), and Dillon in Summit Co. (MAR-JBV). Hem. isola alce made it to Wyo. (CDF) and was common on Cameron Pass in Larimer Co. (KB) and Brainerd Lake with over 100 counted (KB). Brephidium e. exilis was taken in southern Colo. (Las Animas Co.) by MAR & JBV, and north to Boulder Canyon (Boulder Co.) where it established

itself. July specimens were worn but PLE found fresh specimens in Sept., Oct. and Nov.

ALBERTA: The 1973 report of Colias occidentalis was christina. The 1974 S. egleis and coronis reports are undoubted misidentifications. R. E. Wells on 27 July 1974 took Mitoura spinetorum near Banff Park entrance. Dave Parshall, enroute to Alaska, collected two northern localities. On 16 June, 6 mi. SE of the Jct. of Hwy 43 & 765 E. amyntula, G. lygdamus and P. saepiolus were scarce, but E. epipsodea freemani was common as it is all over Alta. Same day, 2 mi. SE of Whitecourt, E. disa (probably mancinus), common O. jutta and B. frigga saga scarce. Leslie McClair who moved to Lacombe from Ontario enjoyed collecting E. discoidalis, B. freija, I. polios and Euchloe ausonides, 1 June, Pepper's Lake CG, SW of Rocky Mtn. House. At Ram River Falls CG, 5-6 July, B. f. saga & freija (both worn) C. alexandra, meadi elis, O. chryxus and E. disa. N of entrance to Jasper Nat. Park, 19 July, 5 different "blues" at one location, plus P. macouni. Joseph Belicek noted Parn. phoebus in Waterton Lakes Nat. Pk. and at Prospect Mtn., in Mountain Park Refugium. He reported Spey. atlantis, edwardsii, m. eurynome, z. garretti, c. calgariana and Pap. zelicaon from the Cypress Hills of SE Alta. C. D. Bird took Lyc. snowi on Plateau Mtn., also many P.a. megalo and Euphydryas e. beani, plus B. astarte, alberta. A late record is C. pel. minisni from nearby Highwood Pass on Sept. 6th. Unusual, if correct, is Chlosyne damoetas, So. Willow Crk. in Porcupine Hills, 25 July (normally alpine species?). L. h. heteronea from Jct. Kananaskis Hwy and Highwood River (north); O.u. varuna from Pass on Johnson Crk. Road, 24 July (high altitude). A most exciting record is P.b. bairdi, 14 June, Yamnuska Area, 2 mi. NW of Seebe. J. Belicek notes moth collecting possible until November. Poly. moneta found feeding on Geranium viscosissimum and Gnop. latipennis on Mertensia paniculata. Pros. flavofasciatus larvae on Epilobium canadensis, Cameron Falls, near Yellowknife in NWT, a range extension.

#### WYOMING:

State records: P. cresphontes, 29 July, coll. A.P. Platt, HF Bar Ranch, Saddlestring, JOHNSON County. (12 mi. NW of Buffalo, foothills of Big Horn Mtns., 5300'). Also a northerly Western record. Meg. s. texanus, early July, 6 mi. SE of Newcastle, WESTON Co. (KR). First Wyo. Megathymus record? Lib. bachmanii, 2 July, Pole Mt. area ALBANY Co. (CDF) (evident migrant).

County records: C. gigantea harroweri, 28 July, vic. old Dead Indian Road, PARK Co. (PJC, DPO, RII, NGS) (3rd Wyo. locality). E. gillettii, 12 July, Slate Crk. & Sinks Canyon road, FREMONT Co. (WEK). B. f. browni, 12 July, Canyon Crk. & Sinks Cr. rd., FREMONT Co. (WEK). B. f. sagata same data (WEK). P. i. indra, 7 July, upper end of Shell Canyon, BIG HORN Co. (WEK) (also Rosie's Ridge, W. side of Togwotee Pass).

Ferris notes I. f. schryveri not seen, C. sheridani & polios scarce, P. z. gothica uncommon but still best year since 1969. CDF, 27 June, tried Sierra Madre Mtns. (Carbon Co.), found mostly snow with western portion of road impassible. Anthocaris sara julia and E. editha alebarki fresh, but wind hampered collecting. By end of June CDF had recorded 44 species, about 66% of normal. AOD, RH, and JDE were east of this area 3 weeks later and found good collecting in the sagebrush: Satyrium behrii, californica, Polydryas arachne, P. shasta minnehaha, and Minois o. charon all fairly common. S. behrii and Speyeria extremely common there 9-10 Aug. (WEK). On 26 July, Granite Crk., Teton Co. we found little except C. palla (fresh & common) and surprisingly a few fresh E. gillettii. The Conway safari explored the Canyon Crk. bog (Fremont Co.), had excellent collecting for C. g. harroweri, Boloria's, incl. B. titania (fresh) and 13 other species. Lycaeides a. longinus common on surrounding hills. On Beartooth Pass (Park Co.), they found O. t. edwardsii and E. e. hutchinsi form montanus fresh and common. B. kreimhild, 28 July, fresh and just emerging, was in full flight a week later. L. P. Grey collected nearby Clay Butte and said Erebia virtually swarmed! PJC, DPO, RII & NGS collected Beartooth Pass vic. Wyo.-Mont. border on 3-4 Aug. finding C. meadi fresh and B. e. ursadentis common and fresh. PJC notes that birds (lark buntings?) were busy catching O. t. edwardsii and many specimens bore beak markings. On 6 Aug., ridge S of Willow Lake, N of Pinedale, Sublette Co. L. heteronea and S. fuliginosum and in the sagebrush flats with Scol. piasus daunia an unexpected bonus. Togwotee Pass poor due to overgrazing, but on 8 Aug. Snowy Range had good collecting in the Lewis Lake bog. B. e. laddii fairly common, C. scudderii fresh but, as always, elusive! WEK there next day.

UTAH: KBT made an early April trip to St. George area, got A. pima and cold weather. May trips to the desert in Tooele Co. for I. f. fotis produced none, but some A. sara thoosa were taken. KH and BG collected Euphydryas ova on Pentstemon, 3 May, in the Pine Valley Mtns. and reared them through to an undetermined, very red species. SLE reports Pho. alpheus and C. leanira (alma?) taken mid-May in Canyonlands Nat. Park, San Juan Co. In early August AOD found a good colony of S. nokomis in a fenced park area (hence protected) near Vernal. Only males seen. KH found Hemileuca larvae common Snowberry 28 June, Buckboard Flats, Abajo Mtns., San Juan Co. Larvae have not yet emerged, probably H. nuttali uniformis. KR took larvae of a new Hemileuca closely related to H. chinatiensis. Adults of this taken by BG nr. Mexican Hat in 1974. They were found commonly in San Juan and Washington counties, wherever the primary foodplant Coleogyne ramosissima (Rosaceae) was examined. A Ephydra ssp. served as secondary host.

COLORADO: Extensive coverage - two dozen collectors reporting. RES and MSF came up with two new State and 113 County records. So if I miss someone, or overlook a worthwhile record ... my apologies!

State records: C. comstocki, 2 May, 1974, Paradox, MONTROSE Co., 5100' (RES) Limnitis a. astyanax, 30 July, Platte River nr. Julesburg airport, 3520' SEDGWICK Co. (ME) (finally proof!). G. lygdamus nr. jacki, 20 May, Black Wolf Crk. 2800', YUMA Co. (RES & MSF). Thorybes bathyllus, early June, Two Buttes Res., PROWERS Co. (KR & BG). E. e. hutchinsi, 7 July, S of Hot Sulphur Spgs., GRAND Co. (T. E. Dickel). Anaea aidea morrisonii, 13 Sept., Harvard Gulch Park, 5300', Denver, DENVER Co. (DEP), one good female.

County Records: (Only more notable ones): SLE, in the Piceance Basin, W of Meeker, all records from an almost unknown area. Hesperia pahaska, C. alexandra, E. mexicana, P. shasta (minnehaha?), aquilo rustica and

Neominois ridingsii, all July. C. sheridani (neoperplexa?), May. All vic. Cathedral Bluffs, 7-8000', RIO BLANCO Co. (SLE). Papilio indra ssp., a sight record but SLE very close (GARFIELD Co.). Long Ridge, N of E. Fk. of Parachute Crk., late June. Phyciodes phaon, 28 Sept., So. Platte River nr. Iliff, 2800' LOGAN Co. (RES). Only the second Colo. record! P. vesta, 3 July, Mt. Audubon, 12,000', (KB), 29 & 30 June, 2 July, Chautauqua Mesa, Boulder (PLE), all BOULDER Co. P. (Tritanassa) texana, 28 June, Gregory Canyon, Boulder, BOULDER Co. (SM) & 6 July, Wheat Ridge Park, JEFFERSON Co. (RES). P. g. glaucus, dimorphic female turnus, 25 July, Sunshine Canyon, Boulder, BOULDER Co. (PLE). P. g. glaucus, 23 July, Ft. Morgan, MORGAN Co. (RES) and 20 May, Bonny Res. Rec. Area, Yuma Co. (RES). P. cresphontes, late June, Ovid, SEDGWICK Co. (KR & BG), 5, 13 & 18 July, Ft. Collins, LARIMER Co. (KB), early July, Colorado Spgs., El Paso Co. (FMB), 3 July, Lafayette, (KB), 11 July, So. Boulder Crk. Canyon nr. Eldorado Spgs. (ME), and "fairly common, but worn" July, Sunshine Canyon, Boulder, (PLE & SM) all Boulder Co. PLE, SM & neighbor boy took 14 specimens! S. idalia, late June, Bonny Res. Rec Area, YUMA Co. (KR). A sight record, but Kilian says no question about identity! Battus philenor, same data & location, YUMA Co. (KR), 29 June, Two Buttes Res., Prowers Co. (JDE). Anaea a. andria, late June, Ovid, SEDGWICK Co. (KR), 28 Sept., So. Platte River nr. Iliff, LOGAN Co. (RES), 27 Sept., Sunshine Canyon, Boulder, Boulder Co. (PLE). Amblyscirtes eos and Poanes hobomok, late June, Smith Crk., nr. Wetmore, CUSTER Co. (KR, BG). A. eos, 29 June, Two Buttes Res., PROWERS Co. (JDE). C. fulvia, 27 June, 9 mi. S LaJunta, OTERO Co. (MH & JDE), 19 May, Two Buttes Res. BACA/PROWERS Co. (RES). B. t. toddi, 6 July, Bear River, W of Yampa, GARFIELD Co. (MSF). Danaus g. strigosus, 17 July, Cherry Crk. Dam, ARAPAHOE Co. (RES), 28 July, Rocky Mtn. Arsenal, ADAMS Co. (ME), 30 July, Julesburg, SEDGWICK Co. (ME), 30 Aug., Ft Morgan, MORGAN Co. (MSF), also "fairly common", Oct., Boulder, Boulder Co. (PLE). Zerene caesonia, 10 July, City Park, Denver, DENVER Co. (ME), sight record. P. agarithe maxima, 6 Sept. Sunshine Canyon, Boulder, BOULDER Co. (PLE). Kricognia lyside, 29 June, Golden Gate State Park, GILPIN Co. (MSF) & late June, Boulder, BOULDER Co. (PLE).

Choice Species: Tmolus azia, 26 July, Magnolia Road, Boulder Co. (ME) (second time in the state!). Mestra amymone, 4 July, Boulder Canyon, BOULDER Co. (PLE). Leptotes marina, 26 Sept., Ft. Collins, LARIMER Co. (ME). P. b. bairdi and b. brucei, July, Cathedral Bluffs, Rio Blanco Co. (SLE). P. nitra, 28 May, Jarre Canyon, Douglas Co. (RES), same locality, 24 May, 1974 (DEP). P. i. minori, 9-11 June, Black Ridge, Mesa Co. (JAL). P. m. barnesi, 12 June, Salt Canyon, Mesa Co. (JAL). P. picta, 16 July, nr. Brush, MORGAN Co. "common" (BP), 6 June, Highline Canal, Arapahoe Co. (RMP). P. beckeri, 9 Aug., 1974, Maroon Lake, PITKIN Co. (BP). O. uhleri, 11 June, Wolf Crk. Pass, MINERAL Co. (BP). P. polyxenes asterias, 28 June, Golden Gate Park, GILPIN Co. (RES). M. s. nr. leussleri, 17 May, Purgatoire River, 4500' Las Animas Co. (RES). Euphyes bimacula and Hesperia ottoe, late June, Bonny Res., Yuma Co. (KR-BG). A. aenus, 13 July, nr. Weston, Las Animas Co. (MAR-JBV), 19 June, Hardscrabble Canyon, Custer Co. (ME), 19 May, Two Buttes Res., PROWERS Co. (RES). A. campestris, common over the state this year. Best records for COSTILLA, CHAFFEE and ARCHULETA counties, (KR-BG). P. coras, 3 June, & 3 Aug., Wheat Ridge Park, Jefferson Co. (RES). P. sabuleti, 18 July, SE of Hooper, Alamosa Co. (MAR-JBV). Yretta rhesus, 31 May, S of Great Sand Dunes Nat. Mon., Alamosa Co. (F&JP), 17 May, Cottonwood Canyon, Baca Co. (RES) & 20 May, Black Wolf Crk, 3900', YUMA Co. (MSF). C. aurantiaca & A. numitor, 30 Aug., So. Platte River, 4100' nr. Messex, WASHINGTON Co. (RES). Oarisma edwardsii, 13 July, nr. Weston, 6500', Las Animas Co. (MAR-JBV). P. mejicana (catalus?), 28 May, nr. Strasburg, ARAPAHOE Co. (F&JP). P. alpheus & Pyrgus scriptura, late June, Mesita, COSTILLA Co. (KR-BG). P. ruralis, 24 May, common Golden Gate Park, Gilpin Co. (RES). E. z. funeralis, 26 Aug., 10 mi. E. Kiowa, ELBERT Co. (ME). A. delaware lagus, 18 July, AFA, El Paso Co. (SF). P. beckeri fm. pseudo-chloridice, 3 May, 4 mi. N of Boulder, (MSF), P. occ. calyce, 6 Apr., Haystack Mtn., NE of Boulder (RES), both Boulder Co., 2 June, Jarre Canyon, Douglas Co. (JDE). Eur. o. violae & Ph. a. alcestitis. Cottonwood Canyon, 27 June, Las Animas/Baca Co. (MH & JDE). H. titus immaculatus, 27 July, Sweetwater Lake, GARFIELD Co. (MSF). S. fuliginosum, virtually unknown a few years ago, taken in Summit Co. (RES) (MAR-JBV), and in good numbers in Grand Co. (RH, AOD & T. Dickel). S. acadica montanensis, making a comeback after flood of '73. Numerous Platte River records (RES), nr. Brighton, Adams Co. (MAR-JBV), both July, and Aug., Highline Canal @ Toll Gate Crk., Arapahoe Co. (RMP). M. s. siva, 19 May, Two Buttes Res., PROWERS Co. (RES)... a most unusual record! P. b. centralis & Euptychia dorothea, 19 July, Woodmen Crk., 7200', El Paso Co. (RES). L. Bachmanni, Bonny Res. Rec Area (KR-BG), Wheat Ridge Park, (RES), Jarre Canyon, (JDE) and Boulder area "common" (PLE). Vanessa virginiensis, widespread, 11-12 July, Homestake Crk., EAGLE CO. (RES). P. interrogationis, 28 Sept., Ovid, Sedgwick Co., assoc. with Ulmus, larvae taken (RES), fairly common in Denver (RES), and Boulder in Aug. (PLE). P. hylas, 30 May, Wolf Crk. CG, Mineral Co. "relatively abundant" (F&JP), 12 June, W of Fraser, Grand Co. (JDE). E. e. gunnisonensis, June, Owl Crk. Pass Road, NE of Ridgeway (T. L.), Ouray Co. (JAL & JDE). B. e. caelestis, 11-12 July, Homestake Crk., EAGLE Co. (RES), NW extension of range. Agraulis v. incarnata, 6 July, Boulder Canyon (SM). N. ridingsii, 31 Aug., Poudre Canyon, Larimer Co. (JDE), 6 Sept., N of Boulder, Boulder Co. (MSF). Cercyonis meadi alamosa, 16-17 Aug., Hwy 17, San Luis Valley, Saguache Co. (WEK & CDF). O. t. edwardsi, 17 July, Cottonwood Pass, Chaffee Co. (SF). O. p. brucei & E. magdalena, 15 July, above Kite Lake, nr. Alma, Park Co. (SF). Above normal numbers for: E. horatius, P. ruralis, S. l. aliparops, S. fuliginosum, P. satyrus, S. californica, G. lyg. oro, C. nycteis drusus, C. argiolus, L. rubidus sirius, A. sara julia, P. sisymbrii, P. eurymedon, indra, O. chryxus, C. alexandra, L. h. coloradensis, E. epipsodea, C. gorgone carlota, A. celtis, S. b. crossi, E. amyntula and E. a. bernadetta. Below normal: C. eryphon, C. sheridani, S. c. halcyone, P. acmon lutzii, H. crysalus, H. titus, P. myl. Pallida, A. arogos iowa, d. lagus, H. pawnee and p. montana. \*\* Life history notes: C. alexandra on Hedysarum boreale (multiple ovipositions) P. shasta on Astragalus chamaeleuca (SLE). P. a. lutzii, ovipositing on Eriogonum umbellatum in Elbert Co., on E. effusum, El Paso Co., H. isola alce, ova on flower heads of Dales candida (just before buds open), Running Crk., Elbert Co., P. scriptura, in July on Malvastrum coccinium, El Paso Co., all FMB. MOTHS: One hundred plus larvae, 20 July, H. hera magnifica, E of Mesita, Costilla Co. on Artemesia tridentata 3rd. & 4th. instar. L. sexsignata, 26 Apr., common, Las Animas & Huerfano Co. (RES). Euproserpina juanita, 16 May, Pueblo Co. (MSF). G. vermiculata, 16 Aug., Douglas Co. foothills (RES). H. nevadensis, common in assoc. with Salix exigua, So. Platte R., Morgan, Logan and Washington Counties, 28 Sept. K. Bagdonas sent a 9 page list of moths from Larimer and Boulder Co.'s. (1 or 2 only): C. intermedia, Syn. rileyana, A. rosata, Nadata gibbosa, D. anguina, H. bilineata, Schizura concinna, Cer. modesta and A. elonympha. Rare: I. apicalis, P. excacatus, Coloradia pandora, C. undulosa, S. geminatus, Haem. brucei, A. nessus, Euch. oregonensis, Aem. ambigua, H. xylinoides, Pseudanarta flava, Anarta melanopa & cordigera, A. biloba, S. occidentis and Zale horrida. Common: P. plantaginis, Hab. scripta, Mamestra rosea, Syn. hohenwarthi, Platysenta albipuncta and Mel. pulchripennis.

NEW MEXICO: May 16, Oak Crk., NE of Folsom, Union Co., E. b. burgessi, telemachus, P. communis, S. melinus and E. claudia, all RES. Late June, Cimarron R., vic. Folsom, Union Co., A. eos, C. aurantica, A. numitor, K. lyside, S. behrii, c. falacer, E. o. viola and N. ridingsii, all KR-BC. Mid-June, 13 mi. SW of Nara Vista, Quay Co., P. a. alcestis (KR). Late April, Guadalupe Canyon, Hidalgo Co., Atry. pittacus and Cid. arizonensis, and late Sept., Ach. casica. Good things here over last 12 years. J. A. Legge on a mid-July trip took an unusual P. battoides, plus Erora quaderna, Magdalena Mtns., W of Socorro, and C. s. ruckesi in Taos area. Ministrymon ines, 24 May, Burro Mts. and P. b. centralis, 8 Aug., Lower Gallinis Canyon, both Grant Co. (CDF) (state records?). 21 May, Guadalupe Mtns., Eddy Co., Celotes nessus; 23-26 May, M. spinetorum, C. gabbi sabina, G. lyg. arizonensis, H. pahaska, Silver City area, Grant Co.; 24 May, Thessalia alma, t. thekla, M. leda, Burro Mtns., same Co.; 27 May, Systasea evansi, Lephelisca nemesis, Guadalupe Canyon, Peloncillo Mtns., Hidalgo Co.; 1 June, C. acastus, H. juba, M. s. siva, P. e. ancilla, vic. Aztec. San Juan Co.; 8 Aug., A. cassus, E. dorothea, r. cheneyorum, J. coenia, Lower Gallinas Canyon. Grant Co.: 9 Aug., A. simius, A. lunus, H. uncus nr. lasus. Pinos Altos Mtns.; 10 Aug., A. eos, Y. carus, E. t. tatus, Mule Mtns., and J. coenia in large numbers, Gila R. nr. Gila, all Grant Co., all CDF. A few sphingids of note: 9 Aug., S. doll, Bayard, and 2 Aug., P. occidentalis and S. separata, San Lorenzo.

ZONE 4: GREAT PLAINS: MANITOBA, NORTH DAKOTA, SOUTH DAKOTA, NEBRASKA, KANSAS, OKLAHOMA, and TEXAS. Coordinator: H. A. Freeman. Contributors: Richard Bailowitz, Matthew M. Douglas, Frank Fee, C. D. Ferris, E. A. Froemel, Frank R. Hedges, Paul Klassen, Edward C. Knudson, W. W. McGuire, Stephen E. Peterson, Jr., Floyd and June Preston, Robert M. Pyle, Russell A. Rahn, Mike A. Rickard, Larry Robinson, Killian Roever, R. E. Stanford, and John B. Vernon.

GENERAL CONDITIONS: Throughout Manitoba and the Dakotas collecting appeared to be fairly normal. Kansas and Oklahoma had good collecting conditions resulting in a number of fine species being recorded. Texas again for the second straight year proved to be a haven for unusual species, particularly in the Rio Grande area.

MANITOBA: Paul Klassen reported the following: Sandilands Provincial Forest, 18 May, Callophrys henrici, (probably a Manitoba record) flying with C. polios, which were abundant. C. augustinus and C. nippon clarki, common. Euchloe ausonides, abundant this year. Erebia discoidalis, rare. 12 June, E. disa mancinus, locally common. C. palaemon, E. icelus, T. pylades, and A. vialis, all common. A. samoset, and E. lucilius, rare. Pine Ridge, 21 & 24 May, Oeneis alberta, locally common. Chlosyne gorgone, rare. 22 Aug., Hesperia comma, locally common. Oeneis jutta ridingiana, on 17 June, locally common. Agassiz Provincial Forest, L. portlandia, Colias interior, abundant. Chlosyne harrisii hanhami, common and N. v-album, rare. Riding Mountains, Erebia epipsodea, common. Plebejus aquilo rustica, P. napi, O. macounii, rare. 15 July, Colias gigantea, local. Duck Mountains, 24 June, Papilio machaon hudsonianus, found a colony. P. kahli, very rare. Polygonia gracilis, rare. Boloria freija, rare. Culross, 31 August, Lycaena helloides, L. thoe, P. melissa, all common. Euptoleta claudia, very abundant this fall till 10 October. Brerton Lake, 6 July, Plebejus argyrognomon, locally common. S. liparops fletcheri, local. Two Euphydryas phaeton males were taken in Agassiz Provincial Forest, 12 July, 1974 (probably a Manitoba record).

NORTH DAKOTA: Killian Roever reported for early July: Slope County, Amblyscirtes oslari, Plebejus icarioides, and acmon, and larvae of Papilio bairdii.

SOUTH DAKOTA: Roever reported: Amblyscirtes oslari, A. simius, Hesperia pahaska, Poanes hobomok, Erynnis juvenalis, Papilio zelicaon, and Nathalis iole (latter common, unusual this far north) all Custer County. In Lawrence County: Erynnis persius, Euchloe ausonides, and Plebejus saepiolus. Russell A. Rahn reported: July 27 through August 1, collecting in Meade County, Pyrgus communis and Lycaeides melissa very common, and Euptoleta claudia common. In single or small numbers were Hemiargus isola alce and Chlosyne gorgone carlota. Collecting in the Black Hills, Lawrence County, along Spearfish Canyon and near Terry Peak, Plebejus saepiolus, both sexes, with females similar to f. caerulescens in about 1 in every three. Speyeria atlantis lurana, Cercyonis oetus charon and Colias alexandra krauthi were also taken, in small numbers. Icaricia icarioides not quite as common as P. saepiolus, but both sexes present.

NEBRASKA: E. A. Froemel reported: Columbus, October 17, a female Lycaena helloides was collected. On Passion vine growing in his garden a colony of Agraulis vanillae has become established.

KANSAS: Robert Michael Pyle reported: 26 May, Flint Hills National Wildlife Refuge, Lyon County, on the Neosho River, Poanes zabulon, Staphylus hayhurstii, Eurema nicippe, Lycaena thoe, Battus philenor (nectaring on evening primrose), Papilio glaucus and Nathalis iole (very abundant and nectaring on sweet clover) were present. Late that afternoon, in the area of the proposed Tall Grass Prairie National Park, near Matfield Green, Chase County, Cynthia virginensis was common and moving, fresh, hill-topping on the flint hills. Strymon melinus was common. Colias eurytheme were present, and a single Euptoleta claudia. Several Danaus plexippus were moving north. Floyd and June Preston reported a number of interesting species in the Lawrence area. April, Incisalia henrici and several Mitoura gryneus were collected. June, Speyeria idalia were abundant. Asterocampa celtis, abundant, and one female A. clyton was captured near Council Grove. Lycaena xanthoides dione were very abundant. Peabody, Marion County, June 21, L. xanthoides dione were abundant on orange milkweed. Council Grove, June 22 and 29, Speyeria idalia, were abundant. Same area, July 4, the same species were in evidence as well as H. titus mopsus. Lawrence, July, Amblyscirtes vialis, Libythea bachmanii, Polygonia interrogationis, Asterocampa celtis and Papilio crespontes were plentiful. Other species were Euchloe olympia, Catopsilia eubule, Staphylus hayhurstii, and Polygonia progne. Matthew M. Douglas reported: Sixty-two species of butterflies were collected in a field study conducted

from April 10 to November 17 of the West Campus Area. This area is undulating and rocky with some very dry areas and also a small lake in low lying regions. Ideal habitat is provided for most indigenous Kansas species, especially adults, since there is a large range and abundance of nectar-producing flowers. Secondary forests are growing along the higher ridges, though there is a grove of walnuts that are quite mature trees.

OKLAHOMA: Killian Roever reported: mid June: Atrytonopsis vierecki and Mitoura siva in Cimarron County. Euptychia cymela and rubricata sympatric in Woodward County. Chlosyne fulvia in Woods and Woodward Counties. Early June: Amblyscirtes oslari, Hesperia pahaska, and Eurema mexicana in Garden County, Nebraska. Larry Robinson sent a very comprehensive listing of his collecting in the northeastern section of Oklahoma which included research over Tulsa, Osage, Rogers, Mayes, and Creek Counties. The data started in April and extended through the month of September with interesting species of butterflies and moths (contact the coordinator or Larry for information).

TEXAS: R. E. Stanford reported collecting in various spots in Moore, Potter, and Randall Counties, 18 May, with the following data recorded: Palo Duro Canyon, Randall Co., E. horatius, P. alpheus, C. nessus, C. aurantiaca, H. uncius uncius, H. viridis (common), A. simius, A. aenus, A. oslari, A. eos, A. nysa, M. texanus, C. cesonia, E. nicippe, N. iole, S. melinus, M. gryneus castalis, H. iole, B. exilis, A. celtis antonia, E. rubricata. Taken along E. Amarillo Creek, Potter Co. were A. vierecki, L. marina, V. virginiensis and P. tharos. Several common species were taken east of Masterson, Moore Co., including P. catullus, H. viridis, A. aenus, A. oslari, A. eos, C. cesonia, N. iole, S. melinus, H. isola alce, L. marina, E. claudia, and 3 Vanessa sp., cardui, atalanta, and virginiensis. C. D. Ferris reported the following information: 3 miles N. of West Base of Sawtooth Mtn. on Hy. 166, Jeff Davis Co., 20 May; Oarisma edwardsi, Pyrgus communis, Nathalis iole, Pieris protodice, Eurema nicippe, Hemiargus isola alce, Plebejus acmon texanus, Leptotes marina, Cyllopsis pertepeda avicula. 12 mi. N. of Alpine on SR 118, Brewster Co., 21 May; Brephidium exilis, Hemiargus isola alce, Plebejus acmon texanus. 10 mi. N. of Alpine on SR 118, same date, Apodemia palmeri, and Plebejus acmon texanus. Limpia Canyon at SR 17, Jeff Davis Co., 21 May; Atalopedes campestris, Cogia hippalus and Strymon melinus franki. 2 mi. S. of Orla, Loving Co., 21 May; Pyrgus communis. Stephen E. Peterson Jr. reported: 23 Mar., Lee Park, Dallas, Callophrys henrici. 19 April, Love Dr., Dallas, Anthocharis midea, and on 20 April, Chlosyne gorgone, Amblyscirtes eos, and Erynnis funeralis. 20 July, Falcon State Park, Zapata Co., Myscelia ethusa. 26 and 27 July, Laredo, Hemiargus ceraunus, Microtia dymas, and Strymon favonius. 7 Sept., Falcon State Park, Myscelia ethusa and Ascia josephina. Richard Bailowitz reported: Brazosport, Brazoria Co., 6 Aug., Timochares ruptifasciata. Sarita, Kenedy Co., 7 Aug., Papilio ornythion. Santa Maria, Hidalgo Co., 9 Aug., T. undulatus. Larry Robinson reported: 27 November, collected at Falcon State Park; D. plexippus, E. nise, L. bachmanii, E. nicippe, H. ceraunus zachaeina, C. minima, P. mylitta, P. phaon, C. lavinia, E. lisa, C. guadeloupe, and C. cesonia. 28 November, collected on private property East of Santa Anna National Wildlife Refuge, Hidalgo Co., M. amymone, E. proterpia, E. hermes, L. bachmanii, L. carinenta mexicana, P. interrogationis, P. phaon, and P. philetas. 28 November, Bentson State Park, D. gilippus strigosus, A. aidea, M. ethusa, A. fessonia, A. thraso, C. guadeloupe, A. jatrophae luteipicta, C. cesonia, V. atalanta, P. phaon, K. castalia, M. amymone, E. hermes, N. iole, C. isobea, E. boisduvaliana, and E. nise. Frank Fee reported: McAllen, Hidalgo Co., 20 Oct., P. polybius lilea, A. fulgurator azul, 24 Oct., L. fessonia, E. emesia, and S. steneles biplagata. Granjeno, Hidalgo Co., 21 Oct., C. goodsoni, A. fulgurator azul, and M. clytie. 23 Oct., M. tyrtaeus, C. goodsoni, S. steneles biplagata. 25 Oct., M. tyrtaeus, C. odilia, and C. goodsoni. Relampago, Hidalgo Co., 28 Oct., D. percossius, T. undulatus, E. boisduvaliana, C. simaethis sarita, C. miserabilis, S. albata sedecia and L. sula peninsularis. Madero, Hidalgo Co., 27 Oct., C. zilpa, P. angra, S. clonius, C. goodsoni, A. halesus corcorani, A. fatima venusta, and S. steneles biplagata. Brownsville, Cameron Co., 22 Oct., N. nyctelius, T. ruptifasciata, M. petreus, and C. simaethis sarita. 30 Oct., N. nyctelius, D. percossius, P. polybius lilea, C. miserabilis, C. xami, L. sula peninsularis, and C. simaethis sarita. Near Los Palamos, Cameron Co., 29 Oct., N. nyctelius, C. simaethis sarita, C. miserabilis, and L. sula peninsularis. Frank R. Hedges (H), Edward C. Knudson (K), W. W. McGuire (M), Mike A. Rickard (R), and John B. Vernon (V), gave the following report: P. leo, Hidalgo Co., 6 April (R); A. asander, Hidalgo Co., 26-29 June (M, R); G. gesta, Austin Co., 27 Sept. (R); C. zilpa, Gillespie Co., 28 Sept. (R); T. undulatus, common, Hidalgo Co., Oct. (H, K, R, V); B. clytius, Hidalgo Co., 18 Oct. (K), 22 Oct. (K, R, V), 15 Nov. (K); E. horatius, Hidalgo Co., 12 Oct. & 24 Oct. (R); S. clonius, Hidalgo Co., 19 Oct. (H); Cameron Co., 12 Oct. (K); PELLICIA DIMIDIATA H-S. Hidalgo Co., 23 Oct. (V- New United States Record); A. thraso, Freestone Co., 15 June (H); U. doryssus, Hidalgo Co., 6 April (H); P. evansi, Hidalgo Co., 18 Oct. (R); A. oslari, Comal Co., 19 April (H, K); A. alternata, Freestone Co., 31 May, 24 Aug., 7 Sept. (H, K, R, V); C. corticea, Hidalgo Co., 24 Oct. (K- possibly new United States Record); RHINTHON OSCA (Plotz), Hidalgo Co., 24 Oct. (K- New United States Record); VETTIUS FANTASOS (Stoll), Hidalgo Co., 24 Oct. (K- New United States Record); M. eulogius, Hidalgo Co., 26 June (M, R), 23 Oct. (V); A. delaware, Hays Co., 21 Sept. (H), Gillespie Co., 28 Sept. (M, R); H. uncius, common, Dallam Co., 13 July (R, V); H. meskei, common, Freestone, Leon, Limestone Co., 30 Sept. (R); V. perigenes, common, Cameron Co., Oct. (K, R, V); P. ornithion, Terrell, Pecos Co., 30 Aug., Presidio Co., 31 Aug. (R); L. pixe, Hidalgo Co., 26 June (M); E. emesia, Hidalgo Co., 25 Oct. (R); T. azia, Hidalgo Co., 5-6 April (H, K, R), 29 June (R), 15 Nov. (K); C. herodotus, Hidalgo Co., 29 June (R); C. goodsoni, common, Hidalgo Co., June- Nov. (H, K, M, R, V); X. xami, Hidalgo Co., 18 Oct. (R); S. alea, Hidalgo Co., 28 June (R), 12 July (K); Travis Co. 8 Oct. (K, R); S. albata, Hidalgo Co., 26 June (R), 19 Oct. (H, K, R); S. bebrycia, Hidalgo Co., 29 June (M, R), 15 Nov. (K); F. tarquinius, Gonzales Co., 15 June (K); D. dyonis, Hidalgo Co., 27 July (K); L. archippus, Hidalgo Co., 24 Oct. (K, R), Presidio Co., 2 Sept., not obsoleta (H); C. annabella, Presidio Co., 12 Sept., ex larva (R); J. evarete, Hidalgo Co., 18 Oct. (R); A. pithyusa, Hidalgo Co., 12 July (H). Hedges reported the following from Big Bend Nat. Park, 20-21 May: C. arizonensis, A. chisosensis, C. macfarlandi, and E. polingi. Knudson reports these catches of Catocala: Hardin Co., 8 June: ilia, and andromidae. Gonzales Co., 15 June: amatrix. Washington Co., 21 June: epione, agripina, consors, maestosa, ilia, and deilah. Freestone Co., 22 June: dejecta, consors, epione, and lachrymosa.



ZONE 5: EASTERN-MIDWEST: MISSOURI to MINNESOTA to ONTARIO. Coordinator: M. C. Nielsen. Contributors: G. Balogh (GB), R. Boscoe, D. Brown, R. Bracher, C. Burkhardt, P. Conway (PC), C. Covell, Jr., B. Drees, P. Faber (PF), L. Ferge (LF), R. Gattelle, R. Hammon (RH), D. Harvey (DH), Q. Hess (QH), R. Hollister, R. Holzman, L. Hoying (LH), R. Huber (RHu), C. Jensen, F. Karpuleon (FK), R. Kuehn (RK), R. Layberry (RL), I. Leeuw (IL), R. Letsinger, L. Martin (LM), E. Metzler, W. Miller (WM), M. Nielsen (MN), J. Newman (JN), D. Oosting (DO), D. Parshall (DP), J. Pilkington (JP), R. Pyle, R. Rahn (RR), B. Ravy, J. Schwartz, J. Slotten (JS), E. Shull, K. Thorne (KT), B. Wilson (BW).

GENERAL COMMENTS: A record number of reports, noted by many as one of the BEST seasons for butterflies ever experienced! A new total of 172 butterfly species were reported. The season was early to normal starting in the southern areas to 10 days late in northern areas. There was a noticeable influx of southern species into the more northern portions, such as H. phyleus, N. iole and E. claudia. D. plexippus held its own throughout, and T. lineola continued its spread westerly. Single asterisk (\*) indicates new County record/range extension.

MISSOURI: Letsinger caught his first female E. imperialis and reared several from eggs on sassafras, took these choice moths: P. juanita; T. lactipennis, delecta; C. cerogama, ulalume, dulciola; L. heitzmanorum; G. anna. P. macmurtrei.

State records: Heliophana mitis (det. by J. R. Heitzman); Papaipema furcata (det. by E. Quinter) in 1974.

KENTUCKY: The winter of 1974-75 was again unusually mild. Brownell and Cornett added new moths to the state list of 1,615 species. Gibson took: A. delaware, 12 June, Clark Co., 18 June, Boone Co.; P. virginensis, 5,6 May, Owsley, Wolfe Co.s; C. borealis, 4 July, Campbell Co.; C. henrici, 26-28 April, Campbell, Gallatin Co.s; C. nippon, 12 June, Wolfe Co.; P. m-album, 21 April, Gallatin Co.; L. thoe, 11 July, Kenton Co.; E. phaeton, 13 June, Owsley Co. Koehn, in Bell and Whitley Co.s, took: A. hianna, P. ocola, L. accius, E. zarucco, S. acadica, E. ontario, F. tarquinius, C. harrisii, B. bellona, S. diana and L. appalachia. His only state location for C. gorgone is now destroyed. Showalter, on 4 July, made a Xerces butterfly count near Sadieville, Scott Co. of 19 species including H. titus mopsus, S. liparops and B. bellona. Covell also counted 17 species at Buckner, Oldham Co. including C. borealis, S. edwardsii, S. calanus falacer; also S. hayhurstii, 27 July, Louisville. Eleven Kentucky Lep. Soc. members met at Pine Mtn. State Park, Bell Co., 18-20 July, took A. aesculapius\* (Koehn). P. m-album (Covell), C. cecrops, C. nycteis, S. diana, worn males, and one fresh female by Campbell, E. hermes sosybius and gemma (both common). Gibson got second state record of E. laeta\*, along with S. diana, 17 July, at Big Black Mtn., Harlan Co.

WEST VIRGINIA: Drees, now compiling a state list of butterflies, found the season good. Allen found new colonies of P. virginensis, May, Randolph Co.; E. phaeton, 30 May, Randolph Co.; S. diana (both sexes), 19 July, Boone Co. A worn L. appalachia was netted by Butler on 13 Aug., Greenbrier Co. Boscoe found C. nycteis locally abundant in association with Actinomeris alternifolia on 20 Aug., Burlington, Mineral Co.; also A. celtis and L. anthedon. Jensen, collecting butterflies (21 species) in Mercer and Greenbrier Co.s, in May and late July-early Aug., found B. bellona common. Choice butterflies: S. edwardsii, 31 July, Greenbrier Co.; S. melinus humuli, 2 Aug., Greenbrier Co.; L. bachmanii, 31 July, Mercer Co. Moths taken by Jensen in Greenbrier Co.: D. inscriptum 24 May. C. myops, 28 July-3 Aug.; A. vittata, 2 Aug.; E. nubilis, 3 Aug.

OHIO: In NE Ohio, Jensen had a hot, humid season during May to Sept. He found P. p. asterius, S. cybele, aphrodite and Hesperids more common than last year, and P. troilus, Satyrium, L. p. americana, and C. virginensis down. Brown, in eastern Van Vert Co., found P. cresphontes, G. marcellus, P. hobomok, zabulon, E. r. metacomet, S. acadica, falacer, B. bellona, A. clyton and P. coenia. Parshall, in Vinton Co., 26 April-8 May, found A. midea, S. m. humuli, E. phaeton and L. anthedon. Martin reported D. plexippus migration during late Sept. and early Oct; stragglers to 19 Nov. Hoying reared B. philenor on Virginia Snakeroot, releasing all emerging adults. Two days later, one specimen returned to his garage and rested on its rearing cage!! Pyle reported V. atlanta "very noticeably moving northward" across Ohio on 21 May. Choice butterflies: A. campestris, 3-14 Sept., western Ohio\* (LH); P. vibex, 19 Sept., Wellington\* (LM); P. centaureae wyandot, 26 April, Vinton Co. (DP); P. virginensis, 2-10 May, Delaware, Franklin, Medina Co.s (DP); E. nicippe, 7 Sept., Vinton Co.\* (1st in over 20 years for the state-DP); A. midea, 3-5 May (DH,DP); C. henrici, 26 April-6 May, Vinton Co. (DP,DH); C. nippon, 5,6 May, Vinton Co. (DP); C. ehenina 26 April-5 May, Vinton Co. (1st in several years-DH,DP); S. idalia, July, Erie Co. (LM); E. gemma ssp, 6-8 May, Vinton Co. (only known colony, Zaleski St. For., DP). Metzler, had good moth collecting, reported 30 species (probably all state records). (Vinton Co., exc. as noted): C. sorghiella, 19 Sept; A. laetifica, 30 May-3 July; A. exilis, 28 July, Meigs Co.; G. bollii, 10 Oct.; X. alternans, 25,26 April; L. linda, 30 May-10 Oct., Champaign, Vinton Co.s; A. chionanthi, 4 Oct., Hocking Co.; L. patefacta, 26 April; O. exhausta, 15 July, Champaign Co.; P. nephrasyntheta, purpurifascia, 17 Sept.; A. rectifascia, 4 July-1 Aug; E. pulcherrima, 24-30 May, Champaign, Vinton Co.s; C. praeclara, 15 July, Champaign Co.; M. richardsi, 20 July-8 Sept.; B. atomaria, 19 July, Champaign Co.; C. citata, 10 Oct.; O. malaca, 30 May.

State record: A. samoset, one female, 30 May, Zaleski State Forest, Vinton Co. (DP).

INDIANA: Bracher reported 30 butterflies: P. troilus all season, 3 broods; P. p. asterius, appeared after several years absence; A. celtis, first in many years; Catocala were scarce. D. plexippus, from late April until early Nov.-peak migration in early Sept. One of his tagged Monarchs was recaptured in Kansas City - a flight of some 500 miles! Burkhardt collected 10 butterfly species 10-22 July in Elkhart Co., including P. catullus and L. helloides. Shull, 31 March to 18 Nov., recorded 89 butterfly species and even more moths-his best season: A. vialis, 19 July, Brown Co.; E. dion, 3 July, Kosciusko Co.; E. bimacula, 21 June, Kosciusko Co.; P. massasoit, 1 July, Mongo, Lagrange Co.; H. leonardus, 10 Aug., Brown Co.; N. lherminier, 23 June, Silver Lk., 10 Aug., Brown Co.; E. horatius, 10 Aug., Brown Co. St. Pk (his first); A. lyciades, 19 July-9 Aug., Brown Co.; P. cresphontes, 1 Aug., eleven in woods by impaling 2 dead specimens on a raspberry

bush (!): P. napi oleracea, 19 May, July, Aug., Mongo; P. s. eubule, 7 Sept., Marion Co.; C. muticum, 10 July, Mongo; H. titus, 1 July, Mongo.; S. caryaevorus, 2 July, Wabash Co.; L. dorcas, 22 July, N. Webster, Kosciusko Co.; L. melissa samuelis, 6 June, Lake Co. (IL); E. claudia, 21 June Wabash Co. (down in numbers in past 2 years); L. anthedon, 9-22 Aug., Brown, Wabash Co.s (first in many years). Choice moths from Shull: C. angulifera, 18 July, Brown Co.; C. regalis, E. imperialis, unusually common, Brown, Wabash Co.s; S. kalmiae, P. modesta, X. tersa, C. residua, 10 Aug. at UV, Brown Co. State Pk.  
State records: E. funeralis (det. by Burns) 1 July, Mongo, LaGrange Co.; P. zephyrus (det. by dos Passos), 1 Sept., Silver Lake, Kosciusko Co.-both by Shull.

ILLINOIS: Spring was late, cold into late April. Notable population gains, from Faber: P. byssus, H. leonardus, T. lineola, E. martialis, N. iole, and E. claudia. Slotten, N. Ill. found Sphingid larvae common on ash and wild grape: C. undulosa, D. inscriptum, S. abbotii and D. myron. Schwartz, Kane Co., found H. cecropia and T. polyphemus common, and C. promethea parasitized. Choice butterflies: A. carolina, 5 July, Jackson Co. (PF); A. samoset, 27 April, Jackson Co. (PF); A. vialis, 31 Aug. (late date), Jackson Co. (PF); E. bimacula, 19 June-13 July, Champaign\*, Cook, Ford\*, Grundy, Iroquois Co.s (PF, IL, DO, JS); P. byssus, 1 July-17 Aug., Champaign\*, Ford\*, Jackson\*, Mason, Vermilion\*Co.s (PF); P. mystic, 22 June, Will Co.\* (PC, DO); H. leonardus, 21 Aug.-10 Sept., Jackson\*, Mason, Vermilion Co.s (PC, PF); H. ottoe, 17 July, Mason Co. (PF); T. lineola, 19 June-1 July, Cook, Ford\*, Iroquois\*, Livingston\*, Will\* Co.s (PC, PF, DO, JS); L. accius, 30, 31 Aug., Jackson Co. (confirming 1880 date-PF); E. martialis, 30 May-27 July, Grundy\*, Iroquois\*, Jackson\*, Mason, Union\*, Vermilion Co.s (PF); S. hayhurstii, 14 June-6 Sept., Mason Co. (PC); C. cesonia, 19-21 Aug., Vermilion Co.\* (PF); E. nicippe, 16-29 Aug., Vermilion Co.\* (PF); A. midae, 26, 27 April, Jackson, Union Co., (PF); E. olympia, 10-17 May, Lake, Mason\* Co.s (PC, PF); S. liparops strigosa, 15 June-15 July, Ford\*, Grundy\* Union\* Co.s (PF); S. edwardsii, 22 June-10 July, Ford\*, Iroquois\* (PF); S. acadica, 1 July, Champaign\*, Ford Co.s (PF); C. henrici, 6 May (10, 11 June, larvae on Cercis canadensis), Vermilion Co. (PF); H. isola, 22 June-26 Aug., Cook, Mason\* Co.s (PF, JS); P. progne, 25 Aug., Mason Co.\* (PF); C. gorgone carlota, Champaign\*, Ford\* Co.s (common all season-PF), 10 May, Mason Co. (PC); B. bellona, 24 July-9 Sept., Ford\*, Iroquois Co.s (PF); E. phaeton, 22 June, Cook, McHenry, Will\* Co.s (PC, IL, DO); E. p. ozarkae, 14-16 June, Jackson, Union Co.s (PF); L. appalachia leeuwi, Cook Co. (JS), 8 July-3 Aug., Lake Co. (IL); L. creola, 15-31 Aug. (1 Sept., larva on Arundinaria sp.), Jackson Co. (PF); E. gemma, 24 April-6 Sept., Jackson Co. (PF). Choice moths (all Faber): C. hageni, 16 Aug., Union Co.; D. hylaeus, 13 July, (larva on Asimina triloba), Vermilion Co.; S. eremitus, 13 July, Champaign Co.; S. abbotii, 2 May, Union Co.; X. tersa, 5 June-15 Aug., Union Co.; C. angulifera, 2 May-5 June, Union Co..  
State records: A. reversa, 30, 31 Aug. (2 specimens), Jackson Co. (PF); P. yehl (confirmed by Irwin), 30, 31 Aug. (2f, 3m), Jackson Co. (PF).

IOWA: Gattelle found L. e. fumosus, common in Big Marsh, Butler Co.; also Howard\* Co., 1 July; O. powesheik, common in Howard Co. (highlight!), E. bimacula, 28 June-1 July, Guthrie, Howard\* Co.s; P. mystic, 1 July, Howard\* Co.; P. themistocles, 24 June, O'Brien\* Co.; L. x. dione, 28 June, Guthrie\* Co.; P. m. melissa, 24 June, Lyon, O'Brien\* Co.; B. s. myrina, 1 July, Howard\* Co.; B. bellona, 2 July, Marshall\* Co.  
State record: T. lineola, 21 June, Johnson Co.

MINNESOTA: Huber, summarizing collecting of others (R. Bartelt (RB), B. Cutler (BC), R. Dana (RD), H. Kulman (HK), W. Linscheid (WL)), reported 114 butterfly species, many southern migrants. Collectively, it was one of the best years in the past decade! Choice butterflies: A. hianna, 7 June, (ovipositing on Andropogon gerardi), Washington Co. (RD); E. bimacula, 28 June, Pine Co. (2nd in state-RD, RH); A. arogos, 5-12 July, Cottonwood\*, Yellow Medicine\* Co.s (RHu, RD); H. dacotae, 5 July-16 Aug. (late date), Lincoln, Lyon, Murray, Yellow Medicine\* Co.s (RD, RHu), H. ottoe, 5 July-9 Aug., Lincoln, Lyon, Renville, Wabasha\* Co.s (RD, RHu); H. pawnee, 16 Aug., Lincoln Co.\* (RD, RHu); O. powesheik, 5-12 July, Lyon\*, Murray\*, Yellow Medicine Co.s (RD, RHu); P. cresphontes, 13 Oct., Watonwan Co.\* (WL); E. mexicana, 20 June-13 Oct., Dakota\*, St. Louis\*, Watonwan Co.s (RD, WL, HK); S. melinus ssp., 16 Aug.-17 Oct., Hennepin, Watonwan\*, Yellow Medicine\* Co.s (RHu, WL); S. acadica, 5-19 July, Brown\*, Carlton\*, Murray\* Co.s (RD, RHu); L. dorcas, 19 July, Carlton Co.\* (RD, RHu); H. isola, 7 Sept., Renville Co. (RHu); P. m. melissa 28 June, Murray\*, Pine Co.s (RD, RHu); G. lygdamus ssp., 17 May, Fillmore Co.\* (RHu); A. celtis, clayton, 26 July, Fillmore Co.\* (RHu); C. g. carlota, 12 July, Lyon Co.\* (RHu); C. harrisii, 28 June, Pine Co.\* (RD); B. frigga ssp., 22 June, Lake Co.\* (RHu); B. freija ssp., 1-22 June, Aitkin\*, Lake, St. Louis Co.s (RD, RHu, HK); S. idalia, 12 July-16 Aug., Lincoln, Renville\*, Wabasha, Yellow Medicine Co.s (RD, RHu); L. a. leeuwi, 4-9 July, Anoka\*, Hennepin\* Co.s (RD); O. jutta ascerta, 26 May-14 June, Aitkin, Pine\*, St. Louis Co.s (RD, RHu, HK); Hersa cingulata, 16 Aug., Lincoln Co. (3rd one, state-RD).  
State records: P. melissa samuelis, 23 Aug., Cedar Ck. N.H. Area, Anoka Co. (RHu); C. lacinia adjutrix, 13 Oct. (1f), Watonwan Co. (1st N of Nebraska-WL).

WISCONSIN: Ferge found a late start in N. Wisc., with N. milberti and several species of Lithophane and Eupsilia taken on 21 April in Marathon Co. Bog inhabiting butterflies appeared early due to a hot spell in May. Autumn was unusually mild with C. eurhytheme seen as late as 8 Nov. Ferge closed the season on 16 Nov., collecting L. grotei, E. morrisoni, trisigmata and vinulenta in Marathon Co. Ravy, near Oshkosh, saw her first D. plexippus on 21 May, and found C. virginensis and N. milberti very common, with "thousands" of larvae on nettles, 7 Aug., Rush Lake. Rahn started with B. infans on 26 April, Marathon Co.; he found C. augustinus and O. j. ascerta common in bogs near Rhinelander, with a small gathering of ascerta males (20-25) in a 20 by 100 ft. area on a low rise in the bog! Both Balogh and Kuehn reported interesting captures from northern bogs. Karpuleon never saw B. e. dawsoni so plentiful in several bogs! Choice butterflies: A. hianna, 25 May-28 June, Adams\*, Burnett, Wood\* Co.s (LF, RHu); E. bimacula, 28 June-14 July, Barron\*, Douglas, Iowa\*, Marathon Co.s (RD, LF, FK); E. dion, 7-20 July, Barron\*, Juneau, Marathon Co.s (LF, FK, RR); E. conspiciua, 17-20 July, Adams\*, Juneau\*, Marathon, Rock Co.s (GB, LF); P. viator, 20, 21 July, Adams\*, Ozaukee Co.s (GB, LF); P. verna, 6 July, Dunn Co.\* (FK); H. metea, 25 May-1 June, Burnett, Douglas, Juneau\*, Marinette\* Co.s (GB, LF, RHu, RK); H. ottoe, 19 July, Grant Co. (LF); H. comma laurentina, 27 July-3 Aug., Iron\*, Swayer Co.s (LF, FK); E. lucilius,

19 July-31 Aug., Grant, Waukesha Co.s(GB, LF); E. martialis, 25 May (swarming), Burnett Co.(RHu); E. persius, 25 May-8 June, Adams, Burnett Co.s(GB, LF, RHu); T. bathyllus, 6 July, Dunn Co.\*(FK); P. glaucus canadensis, 8 June, Adams, Wood Co.s(southernmost records-LF); P. virginensis, 22-26 May, Marathon, Vilas Co.s (GB,LF, RR); C. interior, 8 June, Wood Co.(LF); P. s. eubule, 31 Aug., Grant Co.\*(LF); S. l. strigosa, 6-20 July, Dunn\*, Juneau\*, Waukesha Co.s(GB,LF,FK); C. polios, 17-31 May, Bayfield\*, Burnett, Douglas, Eau Claire, Marathon, Marinette\* Co.s(GB,LF,RHu,FK); C. henrici, 25 May, Burnett Co.(RHu); L. x. dione, 19 July, Grant Co.\*(LF); L. epixanthe ssp., 5-27 July, Forest, Marathon, Vilas\* Co.s(LF,RR); P. m. samuelis, 8 June, 9 Aug., Adams\*, Portage\*, Wood\* Co.s(LF); A. celtis clyton, 27 June, Jackson Co.\*(at least 1000 resting along 1/2 mi of rd.-LF); P. faunus, 6-23 May, 27 July, Iron\*, Marathon, Oneida\* Co.s(LF); C. g. carlota, 25 May, Burnett Co.(RHu); P. batesii, 21 June, Marathon Co.(RR); B. freijsa ssp. 23 May (70)-1 June, Oneida, Price, Vilas\* Co.s (GB, LF, FK, MN); B. e. dawsoni, 7 June, Chippewa Co.(FK); L. a. leeuwi, 6 July-2 Aug., Marathon Co. (LF, RR); O. chryxus strigulosa, 24-31 May, Douglas Marinette Co.s(GB, LF, RK); O. j. ascerta, 24 May-8 June, Bayfield\*, Douglas\*, Iron\*, Langlade\*, Marathon, Oneida\*, Vilas\* Co.s(GB,LF,RR); E. discoidalis, 23,24 May (55 on May 23), Oneida Co. (GB, LF, RK MN). Choice moths: (Ferge unless noted); S. canadensis, 10 June(early date), Marathon Co.; H. gracilis, 28 June-1 taken by crab spider on Puccoon, Burnette Co. (RHu); H. columbia, 9 June, Marathon\* Co.(1 m. attracted to cecropia f.); H. maia, 25 Sept., Douglas Co.\*; P. assimilians, 25 May, Waushara Co. (Sieker); A. cordigera, 1 June, Bayfield Co.; F. jocosa, 10 May, Marathon Co.; G. lintneri, 29 April-10 May, Marathon Co.; C. catenaria 25 Sept. (swarming in bog), Price Co.; C. centerensis, 6 July, Marathon Co. State record: Boloria frigga ssp., 24-31 May, Langlade, Lincoln, Vilas Co.s (GB,LF,FK,RR).

MICHIGAN: April was snowed in, May was warm, and the summer months unusually hot and dry. Oosting reported 53 butterflies, with many county records and range extensions. Nielson found 95 butterflies, 35 Catocala, other moths. Common species include: T. lineola (swarming in northern counties), E. clarus, Satyrium falacer, boreale edwardsii, P. faunus, V. atlanta, O. c. strigulosa, C. cerogama. Hollister and Carr found O. c. strigulosa common on the Newaygo 'prairie' on 17 May; the E. Kingbird "was picking them off in air as they were aroused"!! Nielsen collected Polygonias (5 sp.), Nymphalis sp. and Catocala (8 sp.) in bait traps, and found Plusiinae (12 sp.) common at dusk on Fireweed - all in Chippewa Co., 27-30 July. Choice butterflies: A. samoset, 2 June (common), Barry Co. (WM), 27, 28, Ontonagon Co.(DO) A. hianna, 26 May, Monroe Co.(WM), 13 June (abundant), Newaygo Co. (IL, DO); ; H. ottoe, 30 June-5 July (abundant), Allegan Co. (IL,DO), 7 July, St. Joseph Co.\* (W. H. Wagner); H. c. laurentina, 30 July, Chippewa Co.(MN), 5,6, Aug., Mackinac Co. (IL), 21 July, Houghton Co.\* (DO); O. powesheik, 1 July, Jackson Co.\* (DH); P. centaureae, 27 May, Otsego Co. (MN); E. baptisiae, 26 May, 12 July, Monroe Co. (WM, MN); E. martialis, 10-12 June, Barry Co.(WM); P. virginensis, 17-28 May, Antrim, Baraga, Charlevoix, Cheboygan\*, Emmet, Iron, Ontonagon, Schoolcraft\* Co.s (DH,MN,DO); C. niphon clarki, 19 May (over 100 taken in 3 hrs.), Lake Co. (DO), 24-26 Iron Co.\* (MN); C. irus, 4-19 May, Barry\*, Mecosta\* Co.s(MN,DO); L. epixanthe michiganensis, 25 June-22 July, Alger\*, Houghton\*, Keweenaw\*, Marquette\*, Mecosta\* Co.s (IL,DO,BW); S. boreale, 21, 22, June, (abundant), Lenawee Co. (MN); E. laeta, 27 May (1 immac.f.), Ontonagon Co.\* (250 miles WNW extension & NW-most location in NA-DO); P. gracilis, 29 July (1 immac.m.), Chippewa Co.(3rd state record & 1st in 60 years!-mn); P. batesii, 7-14 June, Montcalm, Newaygo Co.s(IL,MN); B. frigga ssp., 24-26 May, Iron Co.\* (Belyea, MN-2nd record for state); B. freijsa ssp., 24 May, Iron Co.\* (3rd record for state-MN); B. e. dawsoni, 19 June, Houghton Co.\*(Perona); S. cybele krautwurmi, 20 July-6 Aug., Mackinac, Ontonagon Co.s(IL,DO); E. mitchellii, 29 June-15 July, Cass, Jackson, St. Joseph Co.s(DH,RH,IL,DO); O. c. strigulosa, 12-27 May, Alger\*, Houghton\*, Mecosta\*, Muskegon\*, Presque Isle\* Co.s (DO); O. j. ascerta, 24-26 May, Iron Co.\* (Belyea, MN); E. discoidalis, 28 May, Baraga Co.(2nd state specimen-DH,RH). Choice moths: S. canadensis, 4 July, Kalkaska Co\*. (JN); S. luscitiosa, 8 June-4 July, Emmet\*, Kalkaska\* Co.s(JN,JP); A. titan, 6 July, Keweenaw Co\*. (Perona); H. gracilis, 8,9 June, Mackinac, Marquette\* Co.s(JP); S. bicolor, 9 Aug., Lenawee Co(MN); E. auxiliaris, 19 June, Oceana Co. (1st adult for state-JN); P. nevadae canadensis, 27 July, Chippewa Co.(MN); B. borealis, 25 April, Otsego Co. (MN); L. thaxteri, 25,26 May, Iron\*, Schoolcraft Co.s(MN); X. thoracia, 25 April, Otsego Co. (MN); N. oblata, 7-13 July, Gogebic Co.\* (JN); P. sutor, 5 Nov., Clinton Co.\*(MN); B. pepita, 9 Aug., Lenawee Co.(MN); C. coelebs, 28 July-4 Aug., Cheboygan, Chippewa\*, Otsego Co.s(Elliot, MN); H. andremona, 31 Aug., Houghton Co.\*(Perona); R. aurantiago, 27-30 June, Shiawassee Co.\* (JN); L. brephoides, 26 April, Otsego Co. (MN). Foodplant records: P. centaureae, 4 larvae on Fragaria virginiana, Otsego Co. (MN) H. immanis on Silphium terebinthinaceum, Cass Co.\*(MN); P. beeriana on Liatrus novae-angliae, Otsego Co. (MN); P. cerussata on Vernonia noveboracensis, Cass Co.\*(MN); P. silphii on S. terebinthinaceum. Cass Co.\*(MN), P. harrisi on Angelica atropurpurea, Cass\*, St. Joseph\* Co.s(MN). State records: Euristrymon ontario, 29 June, Lenawee Co. (DO); Platypolia anceps, 4 Oct., Cheboygan Co. (MN); Spodoptera exigua, 25 Aug., Berrien Co.(JN).

ONTARIO: Hess cited 94 butterflies plus several moths. Pilkington, from Windsor, found spring late, June-July good, Aug. wet, Sept. dry. L. unipuncta and P. saucia showed huge increases; he listed 107 moths. Hess found Sphingidae down. Layberry recorded 61 butterflies within 30 miles of Ottawa, his best year. More common species this year: E. clarus, Windsor area; A. celtis Pt. Pelee; L. arthemis (northern); L. archippus, Kilworth; N. i-album, Muskoka-Haliburton; S. cybele, Middlesex Co. Choice butterflies: A. hianna, Grand Bend (QH); E. bimacula dion, Crieff Bog (QH); E. conspicua, 13 July, Windsor (JP, Riotte); H. c. laurentina, Algonquin Pk, Heron Bay Parry Sound (QH); H. leonardus, Algonquin Pk, Parry Sound (RL,QH); E. lucilius, Algonquin Pk, Crieff Bog (RL,QH); E. martialis, St. Williams (QH); P. cresphontes, June-9 Aug., Kent Bridge, Pt. Pelee (JP,KT); P. virginensis, (abundant) Holton Co. (QH); S. boreale, Campbellville, Oakville, 2 July, Ottawa(RL,QH); S. caryaevorus, E. Flamborough, Campbellville, 30 June-1 July, Sylvan (QH,KT); C. gryneus, 14 June (one), Pt. Pelee (JP), C. irus, St. Williams (QH); C. henrici, 11 May, Constance Bay (RL); C. eryphon, 17 May, Algonquin Pk. (RL); P. argyrognomon ssp., Heron Bay (Escott); P. melissa ssp., St. Williams (QH); P. saepiolus, Latchford(QH); P. progne, Burnley, Dorset(QH); P. satyrus, Brownhill(QH); P. batesii, Campbellville, Grand Bend(QH); B. e. dawsoni, Algonquin Pk., Longlac (QH); C. inornata, S. Flamborough Twp., Oakville, Kettle Lake Pk., Maynooth, Algonquin Pk, Dorset, Brownhill (QH); E. disa ssp., 20 June, Geraldton (QH). Choice moths: C. amyntor, 27 June, Windsor(JP); A. nessus, Dorset(QH, Tremblay); H. columbia, Muskoka (QH); E. scribonia, Chaffey's Locks (EAST Ont.-QH); U. bella, 1 Sept., Pt. Pelee (JP).

ZONE 6: SOUTH: ARKANSAS, LOUISIANA, TENNESSEE, MISSISSIPPI, ALABAMA, FLORIDA, GEORGIA, SOUTH CAROLINA, NORTH CAROLINA, VIRGINIA. Coordinator: Bryant Mather. Contributors: Wayne A. Miller, Ronald R. Gatrell, Daniel P. and E. M. Oosting, D. J. Harvey, Ray E. and Katharine A. Stanford, Richard H. Smith, Jr. Steve Fratello, Richard B. Dominick, William D. Hartgroves, Ron Leuschner, Jim Tuttle, Richard W. Boscoe, Glenn S. Morrell, Michael J. Plagens, Irving L. Finkelstein, John B. Heppner, Vernon A. Brou, Bryant Mather, Leo J. Paulissen, E. C. Knudson, M. Rickard, and T. M. Neal.

ARKANSAS: Paulissen reported that spring in NW Arkansas was relatively late. First butterfly not spotted until 20 March. Timely moisture kept summer months "green". An unusually cool spell in September cut down normal fall showing of butterflies. Local species generally were in good numbers. Exceptions were, continued low numbers of S. liparops and E. ontario. S. cybele also were reduced. E. h. sosybius were common and P. asterius appeared in greater than usual numbers. Two E. funeralis were encountered but no other strays were seen. D. plexippus fall flight did not seem as large as 1974. A spring-time visit by the Douglas brothers resulted in collection of good series of S. caryaevorus, E. phaeton ozarkae, C. muticum and E. marcellus. A spectacular sight record was a C. eurytheme,  $\frac{1}{2}$  orange- $\frac{1}{2}$  white. Highest daily count was 49. A total of 85 species were recorded of 116 known from Washington County. A. W. Haddox, Jr. reported C. irus from Miller Co. Mothwise, Catocala were still relatively low in numbers in the woods.

LOUISIANA: Stanford on 6 March in Jefferson, St. Tammany, and Tangipahoa Parishes took specimens of 22 species including: U. proteus, E. horatius (Tang.Par. record), E. juvenalis (Tang. Par. record), C. minima (St. T. Par. rec.), L. accius (earliest La. rec.), P. polyxenes asterius (Tang.Par.rec.), E. nicippe, E. दौरa, S. melinus, C. cecrops (Jeff. Par. rec.), E. comyntas (Tang.Par.rec), P. interrogationis, P. tharos, and A. vanillae. From a series of over 1600 geometrids collected by Brou and studied by Rindge at the AMNH, material representing 60 species was recognized, new for LA. were: Scel.crossi, Scopula lautaria, and Anac.vellivolata. At Edgard, Brou took six specimens each of Darapsa versicolor and Enyo lugubris.

TENNESSEE: Miller reported the following for Clay Co: A. belli 6 Aug (4), A. aesculapius 6 Aug (2), P. zabulon 2, 6 Aug (14), N. lherminier 6 Aug (1), Sphinx franckii 4 Jul (1), Catocala andromedae 4, 6 Jul (2), C. cerogama 4 Jul, 5 Aug (4), C. nebulosa 5 Jul, 6 Aug (7), C. subnata 5 Jul, 5 Aug (3), C. serena 6 Aug (1), C. habilis 2, 5 Aug (3), C. flebilis 5 Jul, 5 Aug (12), C. sappho 4, 6 Aug (3), C. insolabilis 4 Jul, 3 Aug (4), C. angusi 2, 6 Aug (6), C. maestosa 2, 3 Aug (2), C. obscura 4 Jul, 5 Aug (8), C. residua 4 Jul, 6 Aug (30), C. judith 6 Jul, 6 Aug (4), and C. robinsonii 6 Aug (1). Finkelstein took two females of S. diana on 25 Aug on Tenn.Hwy.73 near Townsend, Sevier Co.; many were seen between 24 and 29 Aug in Great Smoky Mts. Nat. Pk. but only in the higher elevations.

MISSISSIPPI: Based on material submitted to F. H. Rindge and Eric. L. Quinter at the AMNH by Bryant Mather the following were added to the state list in 1975; Datana major, Dasy.tephra, Zanc.pedipilalis, Irid.lavaria, Acron.tristis, A. noctivaga, Zale metatoides, Sel.monotropa, Phil.metonalis, Chy.rupertii, Orth.garmani, Leuc.phragmitidicola, Phl.periculosa, Polia goodelli, Homorth.lindseyi, Zale phaecapna, Z.curema, Ptich.bistrigata, Argy.deleta, Cirr.triangulifer.

ALABAMA: Fratello, collecting at Craig AFB between 23 Jul and 3 Aug took L. bachmannii, A. celtis alicia, L. accius, and C. minima.

FLORIDA: Gatrell found L. henrici margaretae in good numbers at the type locality Deland on 8-10 Mar. The t.l. of M. gryneus swadneri is being destroyed by building but a few were taken on 8 Mar. In May in Liberty Co. he took: S. c. calanus, H. titus mopsus, S. l. liparops, F. tarquinius, and A. cellus. Heppner took about 2000 moths in Everglades Nat. Pk. (Long Pine Key and Royal Palm Hammock), Homestead, and upper Keys 24-30 Apr, mostly micros, including: Tortyra diva (Ev. Nat. Pk.), M. petreus (Roy. Palm). He took about 3000 at the Archbold Sta, Highlands Co. 1-10 May including: Rhyaconia subtropica and Urodus parvula and Machlotica n. sp. On 16 May, Macclenny, Baker Co. he took nearly 100 Choreutis inflatella near Scutellaria. On 11 Aug at Barrineau Pk. on the Perdido River, Escambia Co. he took the third known Florida specimen of Nymphuliella daeckealis; the second was by K. W. Knopf at Munson Co. Cpgd, Santa Rosa Co. on 8 Jun. On 24 Oct. at Suwannee S.P. Dahana atripennis was taken at flowers of Eupatorium compositifolium at dusk and in early morning (overcast). He reported 3 state records, the first also a American record: Parapoynx diminutalis Snellen, adults and larvae taken in Aug by E. S. Del Fosse in canals about 4 mi w of Ft. Lauderdale, aquatic larvae feeding on Hydrilla, native of SE Asia (t.l. Celebes). Abrenthia cuprea taken by C. B. Fairchild in malaise trap 24/25 March, 9 mi NW of Gainesville. Dyseriocrania auricyanea 22 Feb at light Sanfelasco Hammock 5 mi SE of Alachua. Plagens found Papilio spp numerous in Alachua Co. on 17 May; at Brandon, Hillsboro Co. 18-25 May he took: E. cymela villa, H. charitonius tuckeri, L. cassius theonus, and P. polydamas. At Key Largo, 23 May: C. fidelissima ex larva. Morrell listed species he had not previously collected as follows: S. epilais 21 Apr Jupiter, Palm Beach Co., two; P. agarithe and P. oileus Hobe Sound, Martin Co. 21 Apr, U. dorantes Jupiter, late Apr. Tuttle took a male Cocytius duponchel near Immokalee on 30 Sep (Grote regarded his 1886 record as dubious; Hodges knew only one taken in Texas in 1902). Leuschner was in S. FL in late June rather than late Jul as in '74, collecting was better. He took A. capucinus (2) 23 Jun, Key West, U. dorantes and P. l. savigny at Marathon 24 Jun, A. jatrophae and L. floridensis at Royal Palm; at Sugarloaf Key on 23 June he took 180 moths including A.io liliith, Litodonta hydromeli, Sterrha insulensis, Anicla cemoli; at Key Largo on 24 Jun he took 180 moths including C. grotei, Calidota strigosa, Casandra filifera; at Homestead on 25 Jun he took 110 moths including P. ficus, Cycnia insulata, C. cupentia, and Carteris oculatalis. D. P. Oosting and D. J. Harvey collected between 6 and 25 April, best was Big Pine and Sugarloaf Keys. Among the species they took were: 6 Apr, N. of Yeehaw, Osceola Co: E. favonius plus eight others. 7-13 Apr Matheson Hammock, Dade Co.: P. baracoa, U. proteus, U. dorantes, P. l. leo, P.p. okeechobee, A. d. neumogenii, P. a.maxima, M. petreus, A. j. guantanamo, H. c. tuckeri, D. j. cillene. 12 Apr 5 mi E of Florida City: P. oileus, S. c. modesta, L. c.

theonus, H. c. antibubastus, 14 Apr Coral Gables: P. m-album, E. angelica. 8 Apr N. Key Largo, Monroe Co: H. a. bethune-bakeri, E. t. tatilista. 9-11 Apr Big Pine Key: O. maculata, A. capucinus, E. arpa, W. otho, H. meskei, E. brunnea floridensis, S. a. bartrami, A. aidea floridalis, P. evarete zonalis. 11 Apr Sugarloaf Key: O. maculata, A. capucinus, E. arpa, H. meskei, E. b. floridensis. 16-17 Apr Archibald Station: B. p. lucayus, P. cresphontes, P. t. ilioneus, P. palamedes, E. favonius, P. m-album, E. areolata. 18,19,21,22, 24 Apr Istachatta, Hernando/Citrus Co: P. baracoa, E. zarucco, S. calanus, C. g. swadneri, A. halesus, E. favonius, L. bachmanni, A. c. alicia. 25 Apr, Torreya St Pk, Liberty Co: A. cellus, L. virginensis, L. portlandia, E. gemma, E. c. viola. \*\* Knudson, Rickard and Neal collected in Florida 1-8 May. Best captures were Euph. dion alabamiae, Prob. byssus at Gainesville, Alachua Co.; Panoq. panoquin at Yankeetown, Levy Co.; Jun. everete zonalis, Caleph. virginensis at Honeymoon Island, Pinellas Co.; Phoc. batabano, Eparg. zestos, Cym. tripunctus at Key West. Good moths from Copeland, Collier Co. were Coc. anteus, Eum. labruscae, Xyl. pluto, Iso. cupressi, Cal. strigosa, Ly. edwardsii, Euc. carolina, Gonod. nutrix and G. unica.

GEORGIA: Gatrell reported that the t.l. of S. kingi in Chatham Co. where T. texana seminole also occurs is under construction pressure. Heppner added a state record: U. dorantes, 25 Oct, near Boston, Thomas Co. at Aucilla River. Finkelstein reported above average season especially for S. diana and C. nippon where females outnumbered males by 4:1; U. proteus and A. delaware were very abundant. M. yuccae 14,16,19 Apr Arabia Mt, De Kalb Co; G. l. nittanyensis 1, 12 Apr Cartersville, Bartow Co; irus 6 Apr, Hartley Bridge Rd, Crawford Co; H. metea 19 Apr Arabia Mt; C. henrici 24 Apr Cartersville; P. hobomok 6 May Cartersville, A. cellus 11 May Carterville; E. phaeton 20 May Carterville, F. tarquinius 28 Jun Cooper Ck SP, Fannin Co (Co. record), E. a. septentrionalis 14 Jun Bartow Co; S. diana 21,22,29 Jun Cooper Ck SP, S. kingi 3 Jul Kennesaw, Cobb Co; A. alternata 20 Jul Hartley Bridge Rd (Co. record); H. a. seminole 2, 7 Aug Hartley Bridge Rd; P. t. seminole 16 Aug Savannah; P. byssus 16, 17 Aug, Richmond Hill, Bryan Co.; C. cesonia 13, 21 Sep Hartley Bridge Rd; P. yehl 21 Sep Hartley Bridge Rd (Co. record); H. meskei 28 Sep, 9, 19 Oct Macon Bibb Co; H. c. antibubastus 12 Oct Hartley Bridge Rd (Co. record). Leuschner got 10 species in city of Atlanta including E. zarucco and L. accius; on 28 Jun at Covington, Newton Co he took 95 moths including Leuc.adjuta, Mel.canad.choctawae, and Sten.zalissaria. D. P. and E. M. Oosting at Kennesaw Mt on 24-31 Apr and 5 May took: M. yuccae, A. vialis, H. metea, E. brizo, E. zarucco, E. martialis, E. horatius, E. juvenalis, T. bathyllus, C. marcellus, A. midea, C. nippon, P. m-album, P. interrogationis, C. gorgone, and E. gemma.

SOUTH CAROLINA: Gatrell took P. bulenta on the North Santee River in August as a new county record for Georgetown Co. I. irus was found in Berkeley Co and reared on Baptisiae. I. henrici was reared on Ilex opaca. S. kingi was reared on Symplocos tinctoria. A. cellus found at Givhans Ferr S.P., Dorchester Co. E. berryi was more numerous than in past two years, E. bimacula was scarcer than in 1974. M. g. smilacis was taken as a new state record in Berkeley and Charleston Co. A. m. midea was found on Edisto Is., Charleston Co. Dominick filed a list of butterflies and skippers in coastal SC based on 1966-75 collecting.

NORTH CAROLINA: Plagens reported numerous Papilio in Pasquatank Co on 26 Apr and 20 Aug (4 species); also E. areolata. Boscoe on 24 Aug at Corapeake in Gates Co found E. hermes sosybia, L. portlandia, L. creola, and L. accius common, E. gemma, A. aesculapius, and A. carolina were taken. East of Sunbury same date on US 158 a mud puddle assemblage of about 100 was seen including P. glaucus, P. palamedes, G. marcellus and a few P. sennae eubule. Hartgroves was in Duck on 6-9 Aug and took A. halesus, P. m-album, P. cresphontes.

VIRGINIA: Plagens reported that, as compared with 74 when P. s. eubule was not seen until Sep, in 75 they were present in Prince Georges Co by late Jun and were very common by late Aug. D. plexippus ("all year"), L. appalachia (reported last year as L. eurydice) 9 Aug; E. h. sosybia, A. celtis, C. gryneus, A. midea, E. lisa, B. philenor. Boscoe at Capron in Southampton Co on 23 Aug took L. portlandia, L. creola, L. accius, A. aesculapius, P. comma, and A. carolina. Hartgroves found C. gryneus common in Loudoun and Fairfax Co 1-13 May and a freshly emerged female on 3 Aug. C. nycteis was common. A. clyton was common 20 Jun - 15 Aug NW Loudoun. L. bachmanni was collected on 4 Aug by D. Martinez at Sterling Pk. Martinez also took P. cresphontes on 3 Aug, at Reston in early May C. cecrops, C. nippon and C. irus were taken. A. cellus was taken on Difficult Run 4-10 Jun. P. s. eubule was taken in Madison Co 10-13 Oct. L. borealis, F. tarquinius and S. aphrodite were found in Montgomery Co 15-18 Jul. E. h. sosybia, G. marcellus and P. palamedes were found at the edge of Dismal Swamp 25-20 Apr. Smith found A. clyton common Jun 29 and 26 Jul on Appalachian Trail from Sandy Hook Md to near Bluemont Va. E. phaeton was found on 14 Jun at Loudoun Hgts, L. bachmanni was found 26 Aug at Potomac Wayside, Loudoun Co; S. c. falacer found on 14 Jun and 29 Jun in Loudoun Co at Hillsboro and Loudoun Hgts respectively; P. s. eubule was taken on 12 Aug at Tysons Corner in Fairfax Co.

ZONE 7: NORTHEAST: MARITIMES, QUEBEC, NEW ENGLAND, NEW YORK to D. C. Coordinator: P. Grey. Contributors: R. Boscoe, W. Boscoe, E. Brower, P. Carey, L. Dow, G. Ehle, J. Fales, F. Fee, C. Ferris, S. Fratello, D. Guzo, J. Holmes, W. Kiel, C. Kimball, R. Layberry, R. May, G. Morrell, N. Proctor, D. Schweitzer, R. H. Smith, R. Stanford, L. Taggart, A. Thomas, D. Willis, W. Winter.

NEWFOUNDLAND: Ferris' extensive report is greatly condensed since he will furnish details to interested parties. Highlights were (1) the period July 7-10, 650 miles covered by car, best spot on Hy. 1, 2 mi. S. of Mummichog Park. L. a. aster taken; P. brevicauda, C. pelidne labradorensis & C. tullia macisaaci reported "common". Also (2) near Goose Bay (N.E. edge of Happy Valley), July 11, results poor but B. freija, P. gracilis and some good day-flying moths were taken. The Ferrises next flew to Nain, Labrador, lucked out again with some good collecting weather in the period July 13-25. Evidently Nain & other coastal villages are not rich collecting grounds. The suspicion grows that the whole Eastern Arctic is not to be compared with the riches of the Northwest.... the curse of the East persists to the northern extremities! Ferris did report C. nastes and the aquilo Blue "common" at Nain and he took some good bolorians including evidence of a titania-chariclea overlap. One fresh male taygete, July 14, was the only Oeneis seen. Not an area to brag about, when the town dump furnishes the "best habitat"!

QUEBEC: Big news from Holmes: Mt. Jacques-Cartier has at last yielded some records to put on the "new" list, viz, an Oeneis melissa subspecies and a Boloria eunomia colony (the latter closely like Labrador "tricularis", compared with material in the dos Passos Coll.). The melissa determined by genitalia. (Previous reports of melissa, from Mt. Albert, seem due to misidentification of the uniquely dark Oe. polixenes ssp. from there. L.P.G.). Another fine record from the July 10 expedition: Anarta richardsoni. Mt. Albert also was sampled, on July 12; one P. brevicauda was taken, another seen. It was an overcast day but the endemic skippers were moving and several Oeneis flying. Holmes suggests that the area sloping up to the south summit (these peaks are in sight on the left as one comes onto the tableland from the shelter cabin) should be explored as a likely concentration area for polixenes and taygete. Nobody has yet shed light on the mystery of O. chryxus here. Occurring rarely on the tableland (not below timberline), it runs parallel to taygete and could be confused easily. \*\* Layberry reported an excellent season for diurnals in Gatineau Co. Satyrium species in good supply, especially falacer: "many thousands" on Milkweed vic. Lucerne, 24-28 June. A colony of B. eunomia discovered in a bog in Marsham Twp. will be checked out next year for flight period and other data. A concentration of Amb. samoset in the Gatineau Park June 9.

NEW BRUNSWICK: One report, from Thomas, of a considerable outbreak of M. harrisii: "...every patch of Asters in Fredericton appeared to be covered with larvae..." Adults were common on June 24.

MAINE: Taggart had good collecting in southern Maine; E. phaeton especially high. A bog in Kennebunk yielded a lot of Lyc. epixanthe and some Lethe portlandia ssp., also C. interior. He notes Promethia silkworms becoming heavily parasitized after four big years along the southwestern border. \*\* Brower's comments on diurnals suggest that he had a poor season. He has exhumed a new (FIRST U.S.?) moth record: Caradrina morpheus Hufn. near Masardis in July, 1974; and in T9 R5 (adjacent to Oxbow) one in July, 1973 and one in July, 1974, all at light. This is an European species taken for a period of years by Mr. A. C. Sheppard at Montreal. \*\* Stanford took or sighted 24 diurnals on Mt. Desert, Aug. 5-12, including a few S. aphrodite and an abundance of Hesperia laurentina. \*\* Grey notes Incisalies very low; spring and fall light trap collecting was excellent at Enfield. \*\* Over in western Maine, Kiel & Holmes picked up a few more Oe. jutta and B. eunomia on the Wilsons Mills bogs where good series of Anarta cordigera also were taken coming to Bog Rosemary in blossom. June 14. \*\* Dow has a one-page report of butterflies taken vic. Kennebunk & Bridgton. He succeeded in locating most of the "expectable" diurnals, plus Lyc. thoe and S. acadica. Papilio polyxenes was common around Gorham and S. cybele high vic. Bridgton.

NEW HAMPSHIRE: Holmes & Kiel found Oe. melissa emerging unusually early in the Presidential Range, e.g., June 26 & 29, vic. Storm Point, Mt. Adams. Other good captures were Gynaephora rossii (5,520 ft.) and a black ab of Anarta melanopa. A stray female C. tullia inornata taken at this bleak spot demonstrates again how wandering individuals promote dispersal of species. Other diurnals were adjudged low in northern N. H. aside from M. pegala, which was quite high. Two good moth records: Conservula anodonta, July 19-20; Magusa dissidens (southern) Aug. 30, both at light, vic. Whitefield. \*\* Stanford collected diurnals at Hampton Beach, Aug 14: 14 common species. He also reported M. pegala as abundant. \*\* Willis was in Coos Co. in mid-August, finding Polygonia down, N. vau-album up; his first New England milberti was a thrill. The Monarch was seen to be high, with larvae abundant at Concord and at Berlin. \*\* Winter tells tall stories of blacklighting with Kiel in the Whitefield-Jefferson area, with catches measured by the pound! \*\* R. Boscoe was in the woods north of 2nd Conn. Lake, Coos Co. and on Aug. 14 P. faunus was "abundant". P. gracilis, interrogationis & progne and N. vau-album were taken in small numbers. Other fall "usuals" were taken, e.g., B. selene, H. laurentina, S. atlantis & aphrodite (worn), one N. milberti seen.

MASSACHUSETTS: A colony of Amb. samoset was found in Sherborn, Norfolk Co., by Willis--late May, early June. Euphyes bimacula was taken July 19 and A. lyciades was reported "not uncommon" from late May to early July. All of these were in a powerline cut which has yielded 72 species (!)--48 species were taken here in one day (July 4, 1975). Hairstreaks continue way down. \*\* Winter had a poor season for diurnals but reared several Incisalia species to pupation. Notable in moths were (1) a specimen of Euthyatira pudens var. pennsylvanica, May 9 (southern; NEW ENGLAND RECORD?) and a very nearly completely bilateral gynandromorph Gypsy Moth, July 24 (really weird!). Among other captures: Archanara laeta, a borer, rare, Aug. 3; Cat. innubens, new to the area, Aug. 14. Both Catocalae and Arctiidae were low, Sphingids also, but two "good ones" were taken: D. hylaeus June 23; S. drupiferarum June 8. All of the above from the Westwood area, near Boston. Winter suggests that more attention should be given to the Hemileuca situation (as reported in previous summaries, vic. Newberry, Tewkesbury, etc.). Presumed lucina in wet Spirea meadows, with apparent maja nearby (e.g., in Plymouth) in Scrub Oak areas, affords a rare opportunity for various researches. \*\* Kimball thinks he may have a new STATE RECORD: Lemmeria digitalis, from a cranberry bog in East Wareham, Oct. 21. \*\* Carey reported at length on diurnals vic. Springfield. B. bellona swarmed all summer at the Stebbins Wildlife Refuge; E. phaeton was common there in mid-June. C. niphon was low, P. polyxenes fairly high, E. cymela fairly common; numerous S. acadica found in a dry field, South Hadley, June 30. Outstanding regional records: L. portlandia ssp., Mt. Holyoke Range, July 27; F. tarquinius, Stebbins Refuge, Aug. 10- Sept. 7; A. celtis, Springfield, late Aug. \*\* Morrell has some Saturnian records, viz; 5th instar Cecropia larva on Beach Plum, second week in August, and an Io larva, also 5th instar, on Black Locust, Aug. 16, both Barnstable Co. A dozen male Polyphemus came to a caged female and/or light source, demonstrating this population down from '73 when 75 per night could be taken at light. This was in Charlemont, Franklin Co., late June, same data applying to three diurnals mentioned: L. eurydice (common); S. falacer; a couple males of L. thoe.

RHODE ISLAND: One report, from Schweitzer, of Cycnia inopinatus (gray form) July 31, and Hyparpax aurora May 29, both taken at Westerly by Mr. R. N. Ferreira.

CONNECTICUT: Morrell found a 3rd instar larva of Promethia on Sassafras, Aug. 15; he also attracted a few males to caged females, May 28 and in mid-July. A Cat. cerogama at light Aug. 5 was new to him. These

observations vic. West Hartford. \*\* Proctor, in coastal areas, reported numerous antiopea hibernators in early May. A small colony of Pieris virginiensis was found in North Guilford. The fall migration of Monarchs was only fair; P. lavinia also rather poor (high of 4 per hour in early Sept.) Local rarities: a N. milberti at New Haven, Sept. 3; L. bachmanni & P. sennae at Madison, late Sept. \*\* Moth flights vic. Southford were delayed by a cold spring, so that overwintering species such as Lithophane, Eupsilia, Pyreferra, persisted into May according to Schweitzer. Emergences were poor, e.g., not many O. hibisci. Among the hibernators, E. devia was high. Agrotis manifesta was common at UV in May; Ulolonche culea also common, May-June. A gray form of Cygnia inopinatus taken May 20. Saturnians were absent, Sphingids scarce (4 species) and Catocalas very notably scarce (7 species). It became hot in late spring and the summer leps were early or on time. The fall collecting, vic. Beacon Falls, Schweitzer reported as good. Schinia spinosae was taken at light, Sept. 12. Baiting yielded many Lithophane, petulca predominant. One L. patefacta Oct. 23. L. grotei abundant into Dec. Eupsilia sp. abundant, decliva especially so. Metaxaglaea inulta & semitaria (few) in Oct. M. viatica in Nov. A hot fall, record highs.

NEW YORK: Fratello took a worn singleton of Euristrymon ontario in W. Islip. July 3. Near Hunter Mt. on July 3 he took L. thoe and on a single thistle patch S. cybele, aphrodite and atlantis.

NEW JERSEY: Schweitzer found Incisalia henrici common near Tuchahoe, Apr. 20. At Batsto, a mild winter and fine collecting: e.g., Feb. 23-24, many Lithophane & Eupsilia plus Pyreferra hesperidago, several Sericaglaea signata, Plathypena scabra, also several micros, Phigalia olivacearia and Paleacrita vernata. But on April 20 Batsto collecting was incredibly poor for common Orthosia, Zale, etc. Best catches were Zale confusa and Cissura spadix at MV trap. On July 19-24 Batsto yielded some good Catocala, but mostly worn (13 species), with ilia, neogama and muliercula in best condition. No C. pretiosa (1 in '74). Sterrhia violacera was common at light & bait. First ever taken of Nepytia pellucidaria. One whitish form of Cygnia inopinatus. A. luna was up after some bad years, Sphingids were average, but no gordius. Again at Batsto Oct. 11-12, collecting was "normal"; 2 Anomis flava taken, no Cat. maestosa this year. By Nov. 7-11 southern migrants were especially numerous; series of A. flava were taken, also Elaphria nucicolor (STATE RECORD). At Robinson, Sept. collecting was good at light (MV trap), poor at bait. Two Spartiniphaga inops and one Thysanoptera intracta were taken; the intracta was taken commonly at bait Nov. 7 to Dec. 6 in Camden, Burlington and Cape May Counties. Another good collecting site was at Belleplaine State Forest in early November: numerous Perigea sutor and Anomis flava, two L. scirpicola, Lithophane patefacta swarming, also Sericaglaea signata fresh and common. Several choice moths were taken at Evesham Twp., Camden Co., Nov. 30 & Dec. 6, at bait. 16 species were taken in Nov. at Belleplaine during the freak warm weather, all unusually late or not normal for autumn. \*\* R. Boscoe was at Lakehurst in late April- early May: C. nippon, augustinus and polios were up, irus and A. midea down, scarce. E. brizo and juvenalis were common, H. metea going by in mid-May. On July 4, E. areolata was taken, Erynnis horatius common and S. liparops common on Milkweed. Six E. ontario were taken. In Jackson Twp., Ocean Co., E. dion found in a boggy meadow, July 22-26. In the salt marshes, Aug 29, P. panquin was common and fresh, P. aaroni common but worn. One P. sennae was taken, others seen. At Chatsworth, Burlington Co., a second brood of E. areolata was observed Aug. 29. \*\* May continues to see good diurnals in the Hatfield Swamp at West Caldwell. 1975 sightings included E. phaeton, S. acadica, S. cybele, L. appalachia & eurydice, and other, more common diurnals, interesting in this heavily industrialized region. Down in Cape May Co. May took several L. bachmanni and both species of Asterocampa, Aug 27, also S. melinus and C. cecrops. He finds the lineola skipper diminishing somewhat in numbers and the Gypsy Moth making a comeback. He saw a Polistes wasp hunting and killing small larvae of Promethia on the Spicebush. Sphingids were low, Saturnians rare aside from Promethia, and Catocala only fair (five species).

PENNSYLVANIA: R. Boscoe found Erynnis baptisiae common in mid-May to late-June, with a second brood in late-July to early Sept. Females were observed ovipositing on Hop Clover. N. lherminieri was common, associated with Andropogon. A. celtis was up; a few L. bachmanni were seen; Satyrium were found from June 20 on, with caryaevorus commonest. H. titus was down (all Montgomery Co.). \*\* While for Lancaster Co., Ehle's usual detailed report indicates an excellent year for diurnals, despite a poor start with a cold spring. June was exceptionally productive, most nymphalids really high. The Satyrium hatch was good, five species including a number of liparops, usually scarce. E. phaeton continued numerous; swallowtails up, especially glaucus which produced a tremendous gamut of black-yellow females. Fall flights were featured by swarms of some of the commoner species and the immigrant skippers such as P. ocola & L. accius. Thus, despite absence of some of the "irregular" species, the season was a banner one. L. thoe was found again in its usual haunts and a few new colonies were discovered in the southern part of the county. A couple worn P. m-album were taken on Bonaset, Sept. 30, and a week later another was seen. \*\* Luzerne, Wyoming and Bradford Counties were covered by Guzo. Skippers were abundant in May & June, especially Erynnis. Two new area records: I. nippon at Francis Slocum State Park, June 13 (late); B. selene in Orange Twp., June 20. Hairstreaks were decidedly low. T. lineola swarmed to the apparent extent of destroying collecting for other species. The "fasciata" form of the American Copper is rather spectacularly entrenched here. Guzo found examples turning up throughout northern & central Wyoming Co., while the population at Francis Slocum State Park now yields 50% of this aberration! \*\* Smith sent in a few records for Centre Co., viz, E. bimacula, P. mystic, T. lineola, S. falacer, June 19, in Lemont; E. phaeton, June 19, in Waddle. \*\* For Bucks Co., vic. Quakertown, W. Boscoe found the "spring mothing" comparatively poor, but summer and fall were enough better to compensate. Species reported "low" included A. rubicunda, A. vittata, A. luna, C. jasminearum, S. kalmiae, D. inscriptum, D. pholus, A. io, Cat. undulosa, judith and grynea. Callosamia angulifera also down. Highs included Cat. relecta, subnata, obscura, residua, palaegama, piatrix, cerogama and cara. Smerinthus excaecatus up also. Fee, in Huntingdon Co., at the Stone Valley Recreation Area, made a probably new COUNTY RECORD: P. centaureae wyandot, April 22. Other good records here: F. tarquinius, June 2; C. nycteis, June 28; H. leonardus, Aug. 20. Fee also had good catches in Centre Co., viz., N. vau-album July 2, at Fillmore, also, L. thoe & P. communis Aug. 18. In Banner Twp., a bonanza of F. tarquinius which were common from mid-June to mid-Aug., at least three broods, the larvae carnivorous on

the Alder Aphid (Prociphilus tessellatus). A tamarack bog in Clinton Co. also yielded well, producing C. harrisii liggetti June 14 & 21; S. atlantis, E. bimacula and A. samoset June 21 & 29; L. eurydice and E. phaeton July 22.

MARYLAND: Fales sent extensive comments on central and southern Maryland diurnal collecting. Starting with a cold spring the season was not too good. Among migrants, C. eubule was sensationally high; the Monarch showing was average. Over 50 species are analyzed from the viewpoint of population fluctuations. Samples: in Lycaenids, C. cecrops was down, S. melinus & E. comyntas high, C. pseudargiolus normal; L. thoe occurred late (Queen Annes Co., Oct 15). Papilios showed well but polyxenes was less abundant; E. lisa was active throughout the fall; the spring flight of A. midea was a weak one. Among numerous skippers noted it is interesting to see A. lyciades rated as "scarce" inasmuch as it has been expansionary northerly in recent years. Also on the "scarce" list were L. bachmanni, both Asterocampas and E. claudia, while most of the endemic nymphalids apparently had a good year. \*\* Fee sampled in Allegany Co., in the Green Ridge State Forest. Good captures included P. centaureae wyandot, E. martialis, I. nippon, G. lygdamus, F. tarquinus, A. midea and E. olympia, all in the period May 6-21.

ZONE 8: THE FAR NORTH. K. Philip, Coordinator. No room; will appear next issue for sure; Sorry, Ken!

ZONE 9: THE NORTHERN NEOTROPICS: Coordinator: Eduardo C. Welling M. Contributors: Dr. Raymond E. Stanford, William H. Howe, Allan Sheffield, Ron Leuschner, Colin Wyatt.

MEXICO: San Luis Potosi: Howe and Sheffield collected in late October around Tamazunchale, Xilitla, Arroyo Seco, Villa San Martin, etc., finding good collecting due to humid conditions and many flowers blooming at the time. Interesting species were Callicore anna, Prepona demophon, Catonephele numilia, Ageronia fornax, Papilio androgeus, Graphium protesilaus, G. phaon, G. branchus, Thecla barajo, T. battus, T. damo, and Diorina arcus thia. In spite of the two collectors being reluctant to venture into town (Tamazunchale?) at night because of political unrest, they were lucky finding Rothschildia splendida, Copaxa decrescens, C. purpurescens, Automeris janus, A. zozine, A. colenon, Manduca languosa and other Sphingidae, besides a Sematura luna. \*\* Quintana Roo: Weather patterns behind schedule as usual. Normal May-June rains didn't begin until late August in northern part of the territory, and about September in the southern part; this affected collecting greatly. Many good forest localities burnt out due to excessive drought. Collecting in general disastrous. \*\* Yucatan: Drought conditions lingered until about mid July to early August depending on area. Collecting at a very low level, with a few species making extraordinary showings, i.e. Euptoieta claudia, Calosoma aurocinctum (Coleoptera). \*\* Chiapas: On the southern coastal plain, collecting was at a low, probably reflecting drought conditions. \*\* Oaxaca: Collecting at certain localities in southern Oaxaca fair, with some good species showing up in normal numbers. Collecting in Northern Oaxaca was not extensive enough to make comparisons with results of other years. A new species of Pedaliodes (Satyridae) seen in numbers (and a few taken) in March on Muou Cuo around 1,800-2,000 m., as compared to rare specimens being found formerly during Oct-Dec.

GUATEMALA: El Peten: Collecting along the road, in September, Welling found several good spots. Savannas near Santa Ana Nueva and Santa Ana Vieja produced many good Hesperiidae visiting flowers. At Las Canas, equatorial forest collecting was good, many species being found there for first time, including more montane elements unrecorded for the essentially lowland equatorial rainforests. \*\* Escuintla: Welling and the late Colin Wyatt scaled the volcano Pacaya on Oct. 15th, finding collecting very very poor. Wyatt caught Anetia thirsa, Catasticta flisa, Lycaena pyrrhias, and some highland skippers. Welling found Vanessa virginianensis, Celastrina argiolus, and a few odd Satyrids at 2,400 m. at the base of the cinder cone of the volcano. Butterflies were observed swirling around in the clouds, vapor, and volcanic gasses on the very summit of the cinder cone, but couldn't be chased after on account of precarious footing, and quickly disappeared into the unearthly combination of mists and gasses. Chimaltenango: Welling collected between Zaragoza and Comalapa, finding collecting poor in November. Caught were Papilio multicaudatus, Hypanartia lethe, common highland skippers, and some Pine-Oak habitat Thecla. \*\* Solola: At Pahaj, a good colony of Lycaena pyrrhias was discovered, flying with Celastrina argiolus, Papilio multicaudatus, and a few other things; in general, poor collecting. \*\* Quetzaltenango: Welling spent two weeks around the city Xelaju finding collecting conditions poor. Of interest were Colias sp., and L. pyrrhias, leaving only 65 lineal kms. between the westernmost known colony in Guatemala and the Mexican border.

WEST INDIES: Puerto Rico: Leuschner in the Yunque Rain Forest in June found 4 Calisto nubila, Atrytone vitellius, and Catia druryi. Mr. & Mrs. Stanford collected for several days, finding Euptoieta claudia, a new record for the island (?). Other species: Ephyriades arcas, Papilio androgeus, Ascia josephina, Eurema portoricensis, Dismorphia spio, Electrostrymon angelia, Hemiargus bornoi, H. hanno (?), Calisto nubila, Antillea pelops, and a few day flying moths. Haiti: Leuschner was a victim of a condition many of us have found ourselves in at some time in our life: being at the right time and right place, WITHOUT a net! Many things observed, droolingly! Virgin Islands: Leuschner on St. Thomas, (Charlotte Amalie) found Hemiargus ceraunus, Pyrichtus oileus (syrichtus). At night on store fronts, Pyralids, Cossids, etc., in June. Bahamas: Leuschner on Paradise Island, Nassau, in June, found Dione vanillae, Euptoieta hegesia, Anartia jatrophae, Dryas julia, Leptotes cassius, Strymon martialis, Lerodea julia, Pyralids, and Ephyriades brunnea. Leuschner wants to prove a point: you can go on a tight vacation tour and still observe or catch a few insects.



ZONE 10: SOUTH AMERICA. Coordinator: Thomas C. Emmel. Contributors: Malcolm Barcant, Curtis J. Callaghan, Boyce A. Drummond, Keith M. Spencer. Special Extensive Report: Keith S. Brown, Jr.

ECUADOR: In the Galapagos Islands June 18-25, Emmel and Spencer found the vegetation (especially yellow flowering Corida and Acacia) still verdant from March and April rainfall, with large numbers of the endemic blue Leptodes parrhasioides, the short-tailed skipper Urbanus dorantes galapagensis, and Phoebis eubule (large and dwarfed forms) flying on Hood, Floreana, Santa Cruz, James, and Isabela islands. Agraulis vanillae galapagensis and Danaus gilippus were found at Tagus Cove on Isabela Island (latter around a leafless but flowering Asclepiadaceae vine). No butterflies were seen on remote Tower Island despite good weather and previous records of Leptodes and Urbanus from that island. \*\* On mainland Ecuador between May 7 and 20, Drummond and Emmel had the most outstanding collecting either had ever experienced in North or South America at the Hotel Tinalandia area 12 km east of Santo Domingo de los Colorados, in the Pacific lowland rain forest. Fantastic numbers of butterflies were visiting flowers and soaring on air currents along the ridgetops above the hotel site. Three Caligo spp., five Marpesia spp., a dozen Heliconiine spp., several dozen ithomiine spp., etc., could be taken within a hundred yards of trail and forest. Extensive collecting was also done along the Rio Napo, from Coca towards the east by canoe, and at Limoncocha, where conditions were about as reported in the 1974 Season Summary.

PERU, COLOMBIA and PANAMA: Keith Brown reports a visit to little-collected areas in December, with W. W. Benson, L. E. Gilbert and Gerardo Lamas M., giving appreciable new information. Pockets of humid forest near Pucara, Jaen, Bagua Grande and Pedro Ruiz in the generally dry upper Marañon River area (above the Pongo de Rentema) were shown to contain many endemic species. Many of these (asterisked) lap over low passes in the Andes to the western slopes, occurring along permanent watercourses on the seasonal thorn-forest hillsides. Unusual species included: Morpho achilles chinchipensis, Roswellia acrisione vitrala, Tithorea harmonia ssp., Mechanitis polymnia ssp., Scada kusa, Elzunia pavonii\*, Hyaliris latilimbata\* (in migration southward on western slopes above Olmos), Dione juno andicola x miraculosa\*, Dryas iulia x moderata\*, Agraulis vanillae forbesi\* (A.v. lucina below the Pongo de Rentema), Heliconius numata talboti/pratti/ignotus (H.n. bicolorata below the P. Rentema), H. erato himera\* (H.e., emma below the P. Rentema), H. charitonia bassleri\*, H. c. peruviana (only \*), Phyciodes simois pratti\* and several other interesting P. spp., Junonia evarete basifusca\*, Dynamine haenschii\*, Hamadryas ferentina ssp. and H. fornax ssp. (both very white), Biblis hyperia pacifica (females mimicking H. erato himera), Pseudolycaena marsyas damon, Enantia sp., Itaballia mandela tithoreides\*, Battus streckerianus\*, and Papilio paeon\*. \*\* The Tarapoto area produced, besides the usual common Huallaga -endemic species, a good series of Heliconius ethilla aerotome (larva on Passiflora (Tacsoniopsis) tarapotina). In narrow gullies along the Rio Mayo (road to Shapaja and Chazuta) 24 species of Ithomiinae were captured in four hours, including the rare Melinaea ethra tarapotensis (and a transition to M. e. cydon), a transitional Mel. marsaeus (phasiana x mothone) and Napeogenes pherantes crocodes and N. sylphis thira. A brief stop in Iquitos gave a number of Heliconius paradalinus butleri, common even in the brushy woods across the road from the airport (with H. numata nr. floridus and H. ethilla adela); the pardalinus foodplant was P. vitifolia. A communal roost was observed of Hel. antiochus with one H. erato lativitta also present. \*\* Four days were spent accumulating information on the upper Magdalena valley of Colombia, from Girardot and Ibague south to Pitalito and over to Florencia. A very high-rainfall, medium-elevation region (1300-2500 m.) at the head of the valley apparently serves as a barrier to some species (such as Hel. erato and melpomene, different in Guadalupe (e. guarica, m. euryas), canyons above Florencia which are just over a 2000-m. ridge from Guadalupe (e. lativitta), and the upper Putumayo just to the south (e. dignus, m. bellula with yellow hindwing bars), but represents an important mixing and spreading area for many other species; it includes Morpho sulkowskyi and a new subspecies of Hel. cydno. \*\* Finally, two days at the Smithsonian's Gorgas Research Station on the Rio Bayano in eastern Panama produced information on the fauna, including many endemics (Heliconiini and Ithomiinae), some Colombian invaders and unusual mixtures (such as Mechanitis polymnia isthmia x weneri x veritacilis, Hel. erato hydara x petiverana, H. melpomene melpomene x rosina, and in the east Anartia a. amathea x a. fatima). Interesting species included Cithaerias menander (abundant), Napeogenes stella (abundant), Hypothyris l. lycaste (common), Callithomia hezia smalli, C. beronilla panamansis (common), Pteronymia donata, Pt. aletta, Hypoleria nr. gephira, Heliconius ismenius bouletti (larvae on P. quadrangularis), and many good skippers.

BRAZIL: Callaghan submitted the following summary of particularly interesting sites. \*\* Coastal mountains (Serra do Mar) Rio de Janeiro State. Here the significant development was the total destruction of a number of traditional collecting areas including the Independencia hilltop near Petropolis which is the type locality for a number of species, through burning and woodcutting by squatters. Noted was an invasion of the area by more open country butterflies such as Actinote and some skippers. Choice capture: Arcus ducalus January 24 at Independencia. \*\* Two trips were made to the Serra de Bocaina west of Rio de Janeiro (1300m) in January and April. In spite of cloudy weather, 63 species were recorded in January including Eucorna sanarita (Riodinidae). The trip in April yielded 43 species, mainly satyrids and large skippers such as Mimoniaes versicolor and Sarbia damippe. \*\* Coastal plain collecting in Rio de Janeiro and Espirita Santo States was fairly good throughout the first half of the year. Two days collecting in woods near Barra de Itapemirim in southern Espirito Santo resulted in 120 species, including 11 riodinids and the moth Urania brasiliensis. (The latter after wading through waist deep water for about a mile!). On June 22 a woods near km 96 on Rio-Vitoria highway yielded 82 species of butterflies including 15 riodinids and 13 theclids. \*\* Serra de Espinhaco, Minas Gerais. During April some 10 days were spent collecting in this mountain range, specifically at Caraca (1500m) and near Diamantina (1300m). Collecting was good for hesperids (76 spp.), satyrids (30 spp.), theclids (42 spp.) and ticks (species not counted but many individuals). Papilios and ithomids were weakest with seven and two spp. respectively. Total spp. recorded was 213. \*\* The woods and cerrado hilltop (Planalto Central) at km 500 of the Belo Horizonte-Brasilia highway were visited twice in April and December. Woods were good in April and poor in December, and vice versa for the hilltop. A total of 110 species were recorded for two days in April, and 114 spp. in December;

30% were skippers, 20% theclids, 10% nymphalids and 8% riordinids. \*\* Five days were spent in the vicinity of Rio Clara, Sao Paulo State (subtropical forest and cerrado), at the end of the summer season (May-June). The cerrado yielded 47 species and the woods 108 spp., the bulk in both cases being skippers. Collecting was generally poor. The only unusual record was the abnormal abundance of Euptychia pagyris in a woods near Araras, Sao Paulo; 22 individuals were captured and many other sighted. \*\* Keith Brown submitted notes on four Brazilian areas: (a) A preliminary list of about 500 species for the region of Campinas, interior of Sao Paulo, contains many surprises. Six species of Morpho are confirmed, but the invaders from the coast (hercules, menelaus, epistrophus) are very local and have unusually short flying seasons; M.anaxibia will surely also be found, while M. portis is probably a stray (common residents are achilles and aega). Other interesting invaders from the wetter coastal forests include Dasyophthalma creusa, Pierella nereis, Splendeptychia doxes, Melinaea ethra and M. ludovica paraiya (previously unknown in Brazil's interior). Hypoleria adasa, Philaethria wernickei, Heliconius sara apseudes, Adelpha isis and A. velia, Paulogramma pyracmon, Callicore hydaspes, Hamadryas arete, Hypna clytemnestra huebneri, Ascia buniae, Battus crassus, Parides agavus and P. naphalio, Graphium protodamas, Stalactis susanna, and Xeniades orchamus. The region is quite poor in Lycaenidae and not too good for Hesperidae. Unusual species which invade from the colder southern states of Brazil or come down (to 600 m.) from nearby mountain forests include Blepolepis batea, Praepedaliodes phanias, Forsteriana necys and F. quantius, Godartiana muscosa, Episcada philoclea, Epityches eupompe, Heliconius besckei (rare), Cynth. carye (abundant), Siproeta epaphus trayja, Dynamine myrrhina, Leptophobia aripa, Theochila itatiayae, Pereute swainsoni, Colias lesbia pyrrhothea, Graphium asius, G. bellerophon, Pyrrhopyge charybdis, Sarbia damippe, Hegesippe luteizona, and Lychnuchoides ozias. Little-known species from the interior of Brazil which may be captured include Splendeptychia pagyris, Hypoleria plisthenes and H. goiana, Hypothyris euclea (laphria x nina), Dione moneta, Phyciodes velica, Catonephele numilia fulva, Eunica eburnea, Hamadryas chloe rhea, Aricoris tutana, Charis theodora, and Charonias theano. \*\*

(b) A trip to northern Para in January was made to study heliconians in general in Belem, and H. hermathena in Santarem; several days on the north coast of the Ilha de Marajo in the mouth of the Amazon across the Rio Para from Belem, turned up four endemic heliconian subspecies, only one already named (erato estrella), Synargis phillone, and no Ithomiinae; on the eastern Para coast near Salinopolis, only slight hybridization was observed in H. erato and H. melpomene; a brief stop in Obidos gave many heliconians and Callithea sapphira (common near the airport); in Terra Santa, a roost of Eueides tales was observed, consisting of scattered individuals under separate leaves of a single branch, about 6-8 m. up (much like lybia roosting), and specimens of H. demeter terrasanta and extreme reduced-band Neruda aeode astydamia were taken; and Heliotropium bait taken by companions to Tirios, at the base of the Serra Tumuc-Humac near the Suriname border, attracted among other Ithomiinae Melinaea maenius mediatrix and new forms of Hypothyris daphnis and H. ignorata. \*\* (c) An excursion to Goias and Mato Grosso by microbus in July gave an opportunity to acquire information in new areas of the highlands of central Brazil. A larva of Aeria elara was found on an Apocynaceous vine; it resembled that of other Aeria species (and of Tithorea). The bulk of the trip was spent in the area between Barra do Bugres and Tangara da Serra, as far as the Rio Sopotuba and up to the southern escarpment of the Serra dos Parecis, in central Mato Grosso northwest of Cuiaba. Among the more unusual Amazonian species found in this Paraguay-drainage area were Morpho menelaus and M. cisseis (rhetenor was not relocated near B. Bugres), Caligo idomeneus, Antirrhaea watsoni, Haetera piera, Pierella lena, Euptychia nr. mollina, Pareuptychia nr. metaleuca, Cepheuptychia cephus, Splendeptychia itonis, quadrina, and two additional S. spp., several Chloreuptychia spp., Caeruleuptychia brixius, Erichthodes erichtho, new subspecies of eight Ithomiinae (Hypothyris fimbria, Napaeogenes inachia, Callithomia alexirrhoe, Pseudoscada utilla, Hypoleria proxima, Hypoleria plisthenes, Oleria burchelli, and Heterosais edessa), Philaethria dido, Eueides lybia, Neruda aeode eurycleia, Heliconius burneyi, H. xanthocles meridionalis (larva on P. eichleriana), H. numata, H. melpomene amandus (B. Bugres) and H.m. penelope (Tangara) and many hybrids in the intervening area, H. erato hybrid forms anaitis (with rays only), diffluens and phyllides, Phyciodes sp. nr. aveyrona, Marpesia berania and several other M. spp., Adelpha epione and a dozen other unidentified A. spp., Napeocles jucunda, Nessaea obrinus, many Eunica spp., Peria lamis, Myscelia capenas, Tigridia aceste, Hamadryas velutina, Ectima iona, Anaea lineosa, Chorinea faunus and many unidentified Riordininae, Nymphidium cachus, Enantia sp., Battus crassus, Plumbago sp. and many other skippers. \*\* (d) Jaru, Rondonia, a small village with a pleasant hotel, on the Rio Jaru at the southwestern limit of the Rondonia endemic center for evolution is the hub of a booming agricultural area, but the woods along the river are preserved for the time being. In 18 collecting days from July 27 to October 6, I captured or surely identified totals of 421 (August 5), 427 (October 2), and 429 (October 5) species of Rhopalocera, making this area at least 40% better than the best reported previously (see J. Lep. Soc. 26, 183-196, 1972). Future carefully planned censuses aim at recording 650-700 species in a day. The area shows so far eight Morpho species including an apparent race of portis (!), a record 25 brassolines and an unbelievable 95 additional species of Satyrinae including Manataria hercyna (M. hymetho was expected!), 16 Taygetis spp., 10 Cissia spp. and 7 Splendeptychia spp., only the 2 Lycoreas among Danaines, 56 Ithomiinae including the first Godyris known from Brazil and many endemic species, only 1 Actinote, 25 heliconians including Agraulis vanillae lucina, Neruda metharme, and Heliconius hecale nigrofasciatus (common), ethilla new subsp., elevatus, and demeter, 120 species of Nymphalinae/Charaxinae though few "commercial" beauties, Libytheana carinenta, about 150 species of Riordininae and 70 of Theclinae so far (150 Lycaenidae including 100 Riordininae spp. were censused on October 2), only 16 Papilionidae and 20 Pieridae (contrasting with more cut-over areas nearby which have many more), and about 200 species of skippers with a maximum of 105 on August 5 - making presently nearly 800 species after only 18 collecting days.

TRINIDAD: In December 1975 Malcolm Barcant, long-time Trinidad lepidopterist (since 1927), left Trinidad (for Lakeland, Florida) and the firm of Angostura Bitters in Trinidad bought his huge collection of Trinidad butterflies, which included all illustrated specimens in Barcant's book Butterflies of Trinidad and Tobago (Collins, 1970). Bitters will use the collection for educational and public relations purposes in Trinidad.

**NOTICES:** New copy only. Full section resumed next issue.

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- FOR SALE:** Manual for Study of Insects, J.H.Comstock, 1897, 2nd Ed., \$6. History of British Butterflies, F.O.Morris, 1876, 4th Ed., Green cloth, emb.gold, excellent, \$35. Manual N.Amer.Butterflies, C.J.Maynard, 1891, 10 hand colored plates, green cloth binding split, \$15. Clo Wind, 827 Congress Ave., Pacific Grove, CA. 93950, USA
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- WANTED:** Distrib.data on Lycaena heteronea in California; biological data on all populations of same. Habitat, larval hosts, nectar sources esp. needed for my study of L.h.clara. Please help. Larry J. Orsak, Div.of Biological Control, 1050 San Pablo Ave., Albany, CALIF. 94706, USA

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Memoirs of the Lepidopterists' Society, Number 1 (Feb., 1964)  
**A SYNONYMIC LIST OF THE NEARCTIC RHOPALOCERA, by C. F. dos Passos**

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Information on membership may be obtained from the **TREASURER**, Dr. John M. Snider, 3520 Mulldae Ave., San Pedro, CALIF. 90732, U.S.A. Changes of address must be sent to him alone, and only when changes are permanent or very long-term.

Other information about the Society may be obtained from the **SECRETARY**, Dr. Lee D. Miller, Allyn Museum of Entomology, 3701 Bay Shore Rd., Sarasota, FLA. 33580, U.S.A.

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Items for inclusion in the **NEWS** should be sent to the Editor, Ron Leuschner, 1900 John St., Manhattan Beach, CA. 90266, U.S.A.