



NEWS

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ZONE 1: SOUTHWEST: ARIZONA, NEVADA, CALIFORNIA. Coordinator: R. L. Langston (RLL).
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(RW). COUNTY, STATE (in caps.) = new county, state records. NORTH, SOUTH, etc. =
range extensions. HIGH, LOW = altitudinal records.

Initials only are used for ALL Rhopalocera genera: look up the strangers in Mem-
oir #2. Differing name combinations and subspecies are the concepts of various con-
tributors and the coordinator.

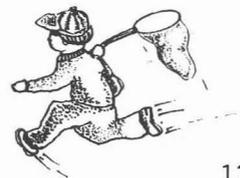
ARIZONA: Nine new COUNTY records for butterflies, with N, S, & E range extensions.
Possible new records for moths, but not researched by contributors or the coordinator.
Unusual rainfall amounts in June, July, & Aug. in the southeastern parts (Cochise Co.)
produced lush growth on the desert with many nectar sources (CDF). Measurable rain
almost every day in the Chiracahua Mts. from early June to late Aug., with light-trap-
ping poor. White Mts. cold and wet in early Aug. with snow reported near Springerville
on 3 Aug.

MIGRATORY SPECIES: Approx. 100 larvae of N. californica on Ceanothus, E. Turkey
Cr. nr. Onion Saddle, COCHISE CO., 24 May (JB). No adult migrations of any of the
usual species reported for Arizona.

MOTHS: Sphingidae: Agrius cingulatus, Manduca rustica, M. mucosa, M. florestan,
Sphinx separatus, Erinnyis ello & Xylophanes falco, Box Cyn. Summit, Santa Rita Mts.,
Pima Co., 29 July (JB,MS) at blacklight in constant drizzle. Ceratonia sonorensis,
rest stop 3 mi. SW Patagonia, S. Cruz Co., 27 July (JB,MS). Proserpinus terlootii,
Santa Rita Lodge, Madera Cyn., S. Cruz Co., 16 July (MS). Saturniidae: Two records
of Agapema galbina anona from Condalia spathulata: larvae, Colossal Cave, Rincon Mts.,
Pima Co., 31 Mar. (MS) and pupae, Hwy 82, 4 mi W Hwy 90, Cochise Co., 19 July (DM,MS):
worn ♀♀ and egg rings common on Eriogonum fasciculatum ssp. H. junio, SW Tucson, 3 Jan.,



1981 Season Summary



egg rings on *Prosopis*, adults 24 Oct. (DM,MS); also larvae on *Prosopis*, Sabino Cyn. Visitor Center, 3 May (MS) and adults Hwy 181, 10 mi. E of Hwy 666, Cochise Co., 14 Nov. (DM,MS). *H. diana*, Molino Basin, Pima Co., larvae on *Quercus oblongifolia*, 9 May, adults 30 Oct. (JB,MS); adults Wet Cyn., Graham Co., 10 Oct. (DM,MS) & Ruby Rd. 2 mi. W Pena Blanca L., S. Cruz Co., 11 Nov. (MS). Citheroniidae: *Citheronia splendens*, Box Cyn. summit, Pima Co., 29 July (JB,MS). Arctiidae: *Lerina incarnata*, Molino Basin, 9 May, larvae on "conifer-like *Aesculapias*" (JB,MS). Noctuidae: *Erebos odorata*, Box Cyn. summit, 29 July (JB,MS.) Notodontidae: *Crinodes biedermanni*, Ash Cyn., Huachuca Mts., Cochise Co., 21 July (GB)--few records by other collectors and scarce in museums [NOT new county as 1924 specimens in CAS from Carr Cyn.--RLL]. Lasiocampidae: *Dicogaster coronado*, Box Cyn. summit, 29 July--black-light in constant drizzle (JB,MS).

BUTTERFLIES: *U. proteus* & *L. accius*, Garden Cyn., Huachuca Mts., 19 Sept., both new for COCHISE COUNTY (JB, JM, MS). *T. drusus*, Sycamore Cyn., S. Cruz Co., 25 July (JB). *Y. carus*, Alamo Cyn. 3 mi. SW Pena Blanca L., S. Cruz Co., 11 July (MS). *H. uncas lasus*, scattered populations in San Rafael Vy., S. Cruz Co., 25, 31 May, EARLY (JB, MS). *H. woodgatei*, Garden Cyn., Huachuca Mts., 19 Sept., 4 Oct. (JB, JM, MS). Atypical *A. campestris*, Portal, Cochise Co., 14 Aug. (CDF). *O. snowi*, Carr Peak at 7000', Cochise Co., 2 Aug. (JB). *A. cestus*, Sabino Cyn., S. Catalina Mts., Pima Co., 9 May (JB, MS). 2nd brood 16 Aug. (JB)--NORTH, previously known only from the Baboquivari & Atacosa Mts. *A. ovina edwardsi*, vicinity of Portal, COCHISE COUNTY, 13-19 Aug. (CDF). *L. arabus*, Sycamore Cyn., S. Cruz Co., 25 Apr., EARLY (JB). *P. polyxenes/rudkini* (many different phenotypes) abundant in the desert areas vic. Portal, Cochise Co., 13-19 Aug. (CDF). *P. rudkini*, Uncle Jim Point, Grand Cyn., Coconino Co., 1 Aug. (JM). *P. indra kai-babensis*, Pt. Imperial, 8800', Grand Cyn., 30 July (JM). *H. cresphontes* larvae on native *Choisya* sp. & *Ptelea* sp. (both Rutaceae) with *P. multicaudata* larvae also on *Ptelea*, Sycamore Cyn., S. Cruz Co., 15 Aug. (JB, MS). *Neophasia terlooti*, Sawmill Cyn., Huachuca Mts., Cochise Co., 26 Sept. (MS). *E. boisduvaliana* & *P. dina westwoodi*, Sycamore Cyn., 8 Aug. (MS). *P. lisa*, Sycamore Cyn., 15 Aug. (JB, MS). *P. nise*, Sycamore Cyn. nr. Ruby, SANTA CRUZ COUNTY, 25 Apr., EARLY (JB). Both *P. proterpia* & *A. nicippe* very common, vic. Portal, 13-19 Aug. (CDF). *H. crysalus*, 10 mi. SE Alpine, Apache Co. & 39 mi. N Morenci, Greenlee Co., both 3 July, plus Onion Saddle, Chiri. Mts., 5 July (all JB, MS). *P. alcestis oslari* larvae on *Sapindus saponaria*, Rosemont Cyn area, S. Rita Mts., PIMA COUNTY, 8 Apr. & adults 4 mi. NE Nogales, S. Cruz Co., 31 May (JB, MS). *X. xami*, Sabino Cyn., Pima Co., 8, 16 Mar. (MS) and larvae on *Graptopetalum bartramii*, Sycamore Cyn., S. Cruz Co., 25 July (JB, MS). *S. columella istapa*, mouth of Miller Cyn., Huachuca Mts., COCHISE COUNTY, SOUTH & EAST for Arizona, 13 Sept. (JB, MS). *E. hegesia hoffmanni* adults, Sycamore Cyn. S. of Ruby, SANTA CRUZ COUNTY, 8 Aug. including larvae on native *Passiflora* with larvae of *A. vanillae incarnata* (MS). *S. nokomis nitocris*, Hawley Lake Jct., Apache Co., 10 Oct., LATE (JB). *T. theona thekla*, *T. fulvia* & *ancia hermosa* larvae concurrently on two species of *Castilleja*, ridge SE above Molino Basin, Pima Co., 4 Apr. (MS). *C. pertipeda manotia*, vic. Portal, Cochise Co., 13-19 Aug. (CDF). *C. pegala boopis*, Gooseberry Cr. 3 mi. E McNary, APACHE COUNTY, 29 Aug., LATE (JB). *C. p. damei* common, Uncle Jim Point, Grand Cyn., Coconino Co., 1 Aug. (JM). *C. meadii mexicana* very common, 8 mi. N Jacob Lake, Coconino Co., 3 Aug. (JM).

NEVADA: Three new STATE records and about 60 new COUNTY records. However, many merely filling in gaps. Therefore, only 11 cited below, with N, S, E & W range extensions. A dry year, but collecting was generally excellent (GA). Collecting still good [mid-June-Aug.] in central Nevada, despite a record drought (OS). No migration or moths reported from Nevada.

BUTTERFLIES: *T. mexicana blanca* Scott, 1981, 2 locations in Desert Cr., Sweetwater Mts., LYON COUNTY, 4 June--first record away from the Sierras and new STATE for this newly described taxon (GA). *C. aurantiaca*, *A. campestris* & *L. eufala*, Pahrnagat N.W.R. Hdqtrs., LINCOLN COUNTY, 17 Sept., all 3 new COUNTY and on NORTH fringe of ranges for Nevada (GA). *H. miriamae*, Boundary Peak, 13,140', Esmeralda Co., 21 July, EARLY (GA)--only known Nevada colony, with just 2 previous records--in Sept. *P. sabuleti chusca*, Potts, Monitor Valley, NYE COUNTY, 22 Aug. (OS). *P. indra nevadensis*, II, III, IV instar larvae, Red Rock Cyn. Rec. Area, Clark Co., 15 May (WD). *P. multicaudata* (♀ with lots of orange), War Cyn., Clan Alpine Mts., Churchill Co., 17 June (OS). *P. eurymedon*, Timber Cr. 5 mi. E Hwy 486, WHITE PINE COUNTY, 15 July (GA)--SOUTH for eastern Nevada. *P. sisymbrii elivata*, Red Rock Rd. at W edge of Duck Flat, 4700', Washoe Co., 23 Apr. (SM). *A. cethura*, 2-4 mi. N Smoke Cr. Ranch Rd. Jct., 4500', Washoe Co., 24 Apr. (SM). *A. sara thossa*, Hwy 81 at Mtn. Pass, 6100' & W edge of Duck Flat, Washoe Co., 23 Apr. (SM). *H. titus immaculosus*, Crutcher Cyn., Granite Range, WASHOE COUNTY & WEST, 1 July (GA). *S. tetra*, Seven Mile Cyn., Hwy 341, STOREY COUNTY & EAST, 9 Aug. (GA). *C. lemberti*, Hwy 81 at Mtn. Pass, 6100', 25 mi. NW Gerlach, WASHOE COUNTY & EAST, 23-24 Apr. (SM). [Also a new STATE record by implication as not in Harjes 1980 Checklist--RLL]. *E. battoides glaucon*, 2-4 mi. N Smoke Cr. Ranch Rd. Jct., Washoe Co., 24 Apr., EARLY (SM). *E. claudia*, War Cyn., Clan Alpine Mts., CHURCHILL COUNTY & NORTH, 5 July (OS). *O. anicia veazieae*, Mtn. Pass, 6100', 23 Apr., EARLY (SM). *O. ivallda*, Tahoe Mdns. 2.4 mi. W Mt. Rose summit, WASHOE COUNTY & STATE, 29-30 June (GH). First formal record for Nevada, although there are rumors of old specimens in California museums. Also, *ivallda* at Snow Valley Peak and ridge to N, Carson City COUNTY, 25 July (GA).

CALIFORNIA: Six STATE and 8 new COUNTY records for moths with W, S & E range extensions. For the butterflies, 14 new COUNTY records with S extensions prevailing, but others in all directions. Warmest summer on record at South Shore, Lake Tahoe with 4 times as many 80°+ days as usual with little rain before Sept. (AS). High country of Mono & Tuolumne Counties also dry and warm, little precipitation with snow remaining only on higher N facing slopes by mid-June (RLL). As a result, species emerged early, peaked and dropped off (AS), with June, early July records for many expected in Aug. & Sept. at the higher elevations (RLL). Foothill, lowland and coastal areas with an open early spring--many species out by early Feb., both N & S Calif. (RLL). Autumn was exceedingly wet, with general rains by 25 Sept. and frequently in Oct. to years end (RLL, AS). Central Valley flight seasons peaked early and fizzled out in the damp (AS).

MIGRATORY SPECIES: *N. californica* very low and spotty (AS); low numbers in southern Sierra (Kern-Tulare Cos.), but more common than in 1980 (KD). *V. cardui* very low in spring, but good in fall--migrating S (AS); Jerseydale Ranch, 3500', Mariposa Co., light NW - NNW migration, 8 May (OS); both sexes at Cuyama, S.L.O. Co., 18 June (RS). *D. plexippus* sunning, nectaring at Point Loma, San Diego, 31 Jan. (RLL); numerous Yosemite Valley, 4000', 22 Aug. (RLL); Carson Pass, 9000', 27 Aug. (AS); peaking in C. Costa Co. late Sept.-early Oct. (RLL); newly emerged ♀, Davis, Yolo Co., 1 Dec., LATE (AS); San Simeon, S.L.O. Co., 26 Dec.--an overwintering colony of perhaps 5000-10,000 (RHL)--observed several times in past, so must be permanent.

MOTHS: Saturniidae: *Saturnia mendocino*, Hwy 36 at Beegum Gorge, 1250', Shasta Co., 22 Feb., EARLY (SM). *Coloradia pandora*, 5 mi. E Lake Alpine, 8200', Alpine Co., 1 Aug. (RW), and 2000+ ova around and below lights at restroom, Crestview, 7450', Hwy 395, Mono Co., 29 Aug., larvae eclosed 10 Sept. thru Oct.--*Pinus jeffreyi* dominant in area (RLL). Ctenuchiidae: *Scepsis* nr. *fulvicollis* numerous, Mono Lake County Park, 6500', MONO COUNTY, STATE & WEST, 15 Aug. (RLL). Arctiidae: *Diacrisia vagans*, Plantation, Sonoma Co., 10 May, day-flying ♀ & ♂ at blacklight, Tuolumne Mdns., 8800', HIGH, 26 June, 3 July (RLL). *Platyrepria guttata*, Mono Lake Cty. Park, 6500', 12 July (RLL). Noctuidae: *Euxoa satis*, Angeles Oaks, 6000', S. Bdn. Co., 26 July (RHL). *E. nr. quebecensis*, *E. simularia* & *Homohadena fifia*, Mt. Pinos, Kern Co., 2 Aug. (RHL). *Euxoa sculptilis* & *Sunira decipiens*, Oak Glen, SAN BERNARDINO COUNTY & STATE, 8 Nov. (RHL). *Xylomyges* nr. *variabilis*, Angeles Oaks, 6000', 17 May (RHL). *X. heimalis*, 2 mi. SE Bradley, Monterey Co., 2 Feb., EARLY (RLL). *Rancora serraticornis*, I-95 rest area SW of Huron, Fresno Co., 29 Jan., EARLY (RLL). The day-flying *Stylopeda modestella* on *Eriogonum heermanni* blossoms, Cuyama R., VENTURA COUNTY, 2 Aug. (RHL). *Cucullia dorsalis*, 18 Sept., plus *Ruacodes tela*, *Schinia argentifascia*, *Fruva fasciatella* & *Tarachidia cuta*, 4 Sept., Pinyon Crest, 4400', all 4 new to RIVERSIDE COUNTY & STATE (RHL). *Oncocnemis melantho*, Angeles Oaks, 22 Aug. (RHL). *Annaphila baueri*, 3 & 6 mi. NE Placerville, Eldorado Co., 16 Feb., EARLY (RLL). *A. pseudo astrologa*, Pinyon Crest, new to area, 30 Mar. (RHL). *A. casta*, Plantation, Sonoma Co., 10 May (RLL, DM). Many day-flying *Pseudotamilla vaccinae*, Mt. Pinos, VENTURA COUNTY & SOUTH, 2 Aug. (RHL). *Catocala macdunnoughi*, Moore Cr. Cpgd., 3500', Calaveras Co., 20 June, 4 July (RW). Pericopidae: *Gnophaela latipennis*, 3 mi. N Upper Lake, Lake Co. (DP); Crane Flat, 6200', Mariposa Co., 17 July (T. Koerber, RLL); and White Wolf, 8100', Tuol. Co., 26 July (RLL). Notodontidae: *Phoesia portlandia*, Clark Cyn., S.L.O., 25 May (RHL). Liparidae: Swarms of *Homocampa pseudotsugata*, Angeles Oaks, 6000', S. Bdn. Co., 22 Aug. (RHL). Lasiocampidae: *Tolype distincta*, Tuolumne Mdns., 8800', 14-25 Aug.--to 30 ♂ at blacklight per night (RLL). Geometridae: *Nothopteryx veritata*, Wheeler Springs, Ventura Co., 15 Mar. *Oporoptera occidentalis*, Eureka, Humboldt Co., 31 Dec. *Eup. longipalpa* & *Anthelia hyperborea*, Fort Bragg, Mendocino Co., 30 Dec. *Hydriomena tuolumne* & *H. irata* ssp., Angeles Oaks, S. Bdn. Co., 17 May. *Chloroclysta leoninata* & *Hulstina grossbecki*, Clark Cyn., S.L.O. Co., 25 May.

Semio. *pervolata*, Pinyon Crest, new to area, 18 Sept. Pter. *leuschneri*, Bob's Gap, L.A. Co., 17 May--7 Topotypes (all Geos. by RHL). Pyralidae: *Pyrausta semibrualis*, Tuolumne Mds., 8800', HIGH, 25 June, 4 July. *P. subsequalis petaluma*, Pt. Richmond, C. Costa Co., 5 Jan., EARLY. *Pyla viridisuffusella*, Glacier Cyn., 10,000', E of Mt. Dana, Mono Co., 5 July. *P. nigricula*, slope SE Saddlebag L., 10,500', Mono Co., 28 June, 11 July (all RLL). Olethreutidae: *Rhyacionia zozana*, Angeles Oaks, 6000', 26 July (RHL). Tortricidae: *Choristoneura lambertiana carnana*, Angeles Oaks, S. Bdno Mts., EAST, 26 July--past records only from the San Gabriel Mts. (RHL). Ethmiidae: *Ethmia discostrigella*, Tuolumne Mds., 8800', HIGH, 22-24 June--the known *Cercocarpus* hosts unknown at this altitude (RLL). Sesiidae: *Synanthedon resplendens* on Musk for Men, Mt. Pinos, Kern-Ventura Cos., 2 Aug. (RHL).

BUTTERFLIES: *E. clarus*, N of Loch Lomond, Lake Co., 2 May (RLL) and Lang Crossing, 5000', Nevada Co., 18 July (AS). *E. icelus*, 1 mi. N Callahan, Siskiyou Co., 4, 9 May (SM) and Yuba R. E of Washington, 2600', Nevada Co., 10 May (RK). *E. brizo lacustra*, ridge 5 mi. W Briceburg, 2750', MARIPOSA COUNTY, 9 Apr. (OS). *E. pacuvius lilium*, Piute Mtn. Lookout, KERN COUNTY & SOUTH for interior Calif., 19 June (KD); Middle Cr. 3 mi. N Upper Lake, LAKE COUNTY, SOUTH for Coast Range, 2 May (RB,RLL,DP); Snow Mtn., 6-7000', Colusa-Lake Cos., 20 June, assoc/w *Ceanothus cordulatus* (RK). *E. afranius*, Pinyon Crest, 4400', Riverside Co., 30 Mar. (RHL). *E. persius*, Carson Pass, 9000', HIGH, 3 July and Donner Pass, 7000', Placer Co., 23 Aug. (AS). *P. ruralis*, Loch Lomond, Lake Co., 2 May (RB,RLL,DP). *P. albescens*, Rancho Cordova, Sacto. Co., breeding happily and reared on *Modiola caroliniana* (AS). *H. ericetorum*, Donner Pass, 7000', HIFH, 21 June (AS). *P. catullus*, Tule Elk State Reserve, Kern Co., 20 Aug., 5 Sept.--first records for southern San Joaquin Valley (KD) and Davis, Yolo Co., 29 Oct., LATE (AS). *P. eunus*, S. fork Kern R. (New Nature Cons. Reserve), 13-14 June (RHL) and very abundant Weldon, Onyx areas, Kern Co., 4, 21 Aug. (KD). *H. comma leussleri*, Angeles Oaks, 6000', S. Bdno. Co., 26 July (RHL). *H. c. dodegi*, San Bruno Mts., S. Mateo Co., 5 July, EARLY (RK). *H. columbia*, Chuchupate Cpgd., Frazier Mtn., Ventura Co., 29 May, 9 Oct. (KD) and Limekiln Gulch, 3200', 1 mi. N Callahan, Sisk. Co., 4, 9 May (SM). *P. sabuleti* ssp., Black Butte summit, 7448', GLENN COUNTY, 29 Aug. (SM). *A. campestris*, 1 mi. S Willow Gr. G.S., 5000', Hwy 139, LASSEN COUNTY, 8 Sept. (SM) and Redding, 496', Shasta Co., 26 June (SM). *O. sylvanoides* common, Donner Pass, 7000', 6 Aug., EARLY for high alt. (AS). *L. eufala*, Redding, 496', SHASTA COUNTY, NORTH, 26 June (SM) and Letts L., 4500', Colusa Co., 6 Sept., stray from valley (RK). *P. phoebus sternitzkyi* larva on *Sedum*, 28 June and reared to adult, Little Gray-back Mtn., DEL NORTE COUNTY, WEST (SM). *B. philetor hirsuta*, See Cyn. Rd. nr. Avila Beach, SAN LUIS OBISPO COUNTY, SOUTH, 23 June (RS). *P. bairdii*, Lightning Ridge, 9000', Rd. 2N93, S. Bdno. Co., 6, 28 June (WD). *P. indra* common, ridge 2 mi. E Alpine L., 8400', Alpine Co., 18 June (JM) and ♀♀ only by 28 June, Saddlebag L., 10,000', Mono Co. (RLL). Fresh ♀ *P. indra fordi* plus 8 more, Granite Mts., S. Bdno. Co., 23 Feb., EARLY, more adults 22 Mar. and ova, larvae 26 Apr. (WD). *P. rufulus*, downtown Glendale, L.A. Co., 9 Jan., very EARLY (WD). *N. menapia*, Jerseydale, 3500', Mariposa Co., VERY COMMON by late June (EARLY), last seen 20 July (OS); abundant, Crestview Rest Area, Hwy 395, 7540', 29-30 Aug. and Mammoth Lakes, 30 Aug., all assoc/w *Pinus jeffreyi*--NOT late as Sept. flights usual in Mono Co. (RLL). Numerous *N. m. melanica* Scott, 1981, 17 mi. E Manchester, 1800', Mendocino Co., 22 June (SM). *P. beckerii*, 3 locs. in Bakersfield--Oildale areas, Kern Co., 18 May-26 June--confirmed resident in southern San Joaquin Valley (KD has data) and Cuyama, S.L.O. Co., 18 June (RS). *P. sisymbrii elivata*, 6 mi. E Ft. Bidwell, Modoc Co., 22 Apr. (SM). *A. napi microstriata*, N of Loch Lomond, Lake Co., 2 May (RB) and Crawford Cr. 2 mi. N Cecilville, Sisk. Co., 3 May (SM). *A. n. marginalis* 2nd brood, Klamath R. vic. Martins Ferry, Humboldt Co., 14 June (SM). *E. hyantis* (Mt. Pinos block segregate), Caliente Range, 3100-3800', 14-18 mi. NW New Cuyama, SAN LUIS OBISPO COUNTY, 13, 17 Apr. (WS); Quatal Cyn. 14 mi. E Hwy 33, Ventura Co., 2 May (WS); and Cuddy Vy., 5675', Kern Co., 11 May (TD). *A. cethura morrisoni*, Salto Mtn., 3100-3200', 18 mi. NW New Cuyama, S.L.O. Co., WEST, 17 Apr. (WS)--assoc/w the white-flowered mustard, *Thelypodium lasiophyllum*. *A. sara thooosa*, 2 locs. in Lassen Co., 1 in Modoc Co. (SM has data). *F. lanceolata*, 3 mi. NW Loch Lomond, 2 May (RLL). *F. I. australis*, Erskine Cr. Rd., Lake Isabella, Kern Co., abundant 24 Apr. (KD) and Quatal Cyn., 13 mi. E Hwy 33, VENTURA COUNTY, 2 May (WS). *C. philodice*, Donner Pass, 7000', Placer Co., 12 Sept. (AS). *C. harfordii*, Chuchupate Cpgd., Frazier Mtn., Ventura Co., 9 Oct., fall brood (KD). *Z. eurydice*, campus Loma Linda Univ., S. Bdno. Co., 19 Dec., LATE and unusual down this low in suburbia (WD). *I. arota*, 1 mi. N Callahan, 3200', Sisk. Co., 16 Aug. and virginianensis, Christi Beach 4 mi. NW Eagle Lake, Lassen Co., 8 Aug. (SM). *L. gorgon*, Reservoir Cyn. Rd., S.L.O. Co., 9 June (RS). *L. helloides* swarming, S. fork Kern R. (New Nature Cons.), 13-14 June (RHL) and Cuyama, S.L.O. Co., 18 June (RS). *S. fuliginosum*, 20 mi. W Stonyford, 3700', LOW, COLUSA COUNTY & SOUTH for Coast Range, 20 June (RK). *S. auretteorum*, Branscomb Rd. 5 mi. W Laytonville, 2000', Mendocino Co., 20 June (SM) and See Cyn. Rd., Avila Beach, SAN LUIS OBISPO COUNTY & SOUTH for coast, 21 June (RS). *S. saepium* (very dark), Los Osos--along beach, S.L.O. Co., 26 May (RHL)--dark ones also LATE in season, 24 Aug. 73, Los Osos (RLL); S slopes Mt. Bidwell, 6500', Modoc Co., 7 Sept., LATE (SM). *C. dumetorum*, Gibson Gulch, 2700', 1 mi. S Cecilville, 3 May & 1 mi. N Callahan, 4, 9 May, both Sisk. Co. (SM). *I. mossii doudoroffi*, ca. 30 late instar larvae on *Dudleya* prob. *cyrosa*, 5 mi. W Atascadero, S.L.O. Co., 7 June (MS)--more than 2 mi. EAST of colony found by JB 16 May '76. *I. m. windi*, fresh adults at Skelton Cyn. E of Jerseydale, Mariposa Co., 7 Apr. (OS) and larvae on *Dudleya cyrosa* (NEW windi host), Yuba R. E of Washington, 2600', Nevada Co., 10 May (RK). *I. m.* ssp. A, ex-larvae 14 June '80 on *Sedum spatulifolium*, adults 9, 15 Apr. '81, N slope North Peak, 2800-3000', Mt. Diablo, CONTRA COSTA COUNTY (RK). *I. m.* ssp. B, 1 ♂ plus ova on *Sedum*, Little Grayback Mtn., 28 June, both Del Norte Co. (SM). *I. m.* ssp. D, numerous larvae from an unusual *Sedum*, Hoopa Indian Res., 350', 16 mi. N Willow Creek, Humboldt Co., 14 June (SM)--note late larval date as windi W of Willow Creek are finished pupating by late April! (At least 8 more "ssp." Both RK & SM have details. Each colony seems to be a separate entity!--RLL.) *B. exilis* common, Ntl. City, San Diego Co., 1 Feb., EARLY (RLL) and West Sacramento, Yolo Co., 17 May (AS). *L. marina*, Bonita & Otay, S.D. Co., 1 Febr., EARLY--already worn (RLL); Dune Lakes, Oceano, S.L.O. Co., 13 June (RS); and Arroyo Seco Cyn., Pasadena, L.A. Co., 20 Dec., LATE (WD). *E. amyntula*, 1 mi. S Otay, 1 Feb., EARLY (RLL) and 3 locs. in Mono Co., 10-12,500', HIGH (RLL has data). *E. battoides intermedia*, Redding, 496', LOW, Shasta Co., 6, 7 June & 5-10 mi. E Smith River, Del Norte Co., 27 June (SM). *G. lygdamus australis*, Arroyo Seco Cyn., Pasadena, 20 Dec. '81, EARLY for 1982 season (WD). *G. pius*, Boardman Ridge, 4100-4300', Hull Mtn. Rd., Lake Co., 23 May (RK) and 1 mi. N Callahan, Sisk. Co., 4, 9 Apr. (SM). *G. p.*, *L. melissa paradoxa* abundant and *I. acmon-lupini* common, Hwy 33 at Brubaker Cyn. Rd., 3250', Ventura Co., 11 May (TD). *L. m. melissa* very abundant on abandoned alfalfa, 5 mi. N Cedarville, Modoc Co., 7 Sept. (SM). Both *G. pius* & *I. icarioides* common, Jerseydale, 3500', Mariposa Co., late Apr.--mid-June (OS). *I. i. moroensis*, Los Osos--along beach, S.L.O. Co., 26 May (RHL) and Nipomo (INLAND record), 12 June (RS). *P. emigdionis*, S fork Kern R. (New Nature Cons. Reserve), Kern Co., 13-14 June, assoc/w salt bush (RHL). *A. m. moro* swarming, mouth of Stony Cr. 2 mi. NW Lodoga, 1250', COLUSA COUNTY, 12 Sept. (C. Hageman via SM). *A. m. virgulti*, 7 mi. S Creston, S.L.O. Co., 20 July (RS). *S. nokomis apacheana*, 2 mi. E Lundy L., 7600', Mono Co., 9 Aug. (RLL). *S. zere*, Footman Ridge E of Jerseydale, Mariposa Co., 22 Oct., LATE (OS). *S. z. gloriosa*, Low Divide Rd. 5 mi. E Smith River, 27 June (SM). *S. z. cynna*, Horse L. Rd. 12 mi. SW Ravendale, 5200', Lassen Co., WEST, 9 Aug. (SM). *S. coronis* & nominate *callippe* sympatric, hills NE St. John's Mine Rd., Vallejo, Solano Co., 6 June (RK & M. Minno). *S. callippe elaine* & *egleis*, Little Grayback Mtn., Del Norte Co., 28 June (SM). *S. c. macaria* & *laurina* sympatric, Bodfish Rd. 2 mi. S of Walker Basin Rd., Kern Co., 14 June (WD). *S. egleis* larvae on *Viola purpurea* var. *integrifolia*, 24 May, Snow Mtn., 6-7000', Colusa-Lake Cos., SOUTH in Coast Range, adults 20 June-25 July (RK)--sympatric with *zere*, *callippe lilliana* & *hydaspe purpurascens* (RK). *S. adiate clemencei*, Nacimiento-Ferguson Rd. 9 mi. E Hwy 1, Monterey Co., 10 June (MS). *S. atlantis irene*, 3.5 mi. NE Cottage Station, 6200', LOW, Calaveras Co., WEST, 18, 19 July (RW). *S. mormonia erinna*, Deadfall Lakes area, 8500-9000', Mt. Eddy, Sisk. Co., 31 July 1 ♂ (AS), 15 Aug. 2 ♀♀ (SM)--still no more localities in Calif. (AS). *B. epithore chermocki*, vic. Pine Flat Mtn., 7-10 mi. ENE Smith River, Del Norte Co., 27 May (SM). *T. leanira*, Nacimiento-Ferguson Rd. 9 mi. E Hwy 1, Monterey Co., 10 June (MS) and 4-8 mi. E Manchester, 1000-1500', Mendocino Co., 22 June (SM). *T. l. wrighti*, W of Kernville, 24 Apr., 9 May and Fay Cr. 6 mi. N Weldon, 9 May, both Kern Co. (KD). *C. californica* larvae on *Viguiera deltoidea* var. *parishii*, Bonanza King Mine Cyn., S. Bdno. Co., 17 May (WD). *C. neumoeniggi*, Fort Irwin, S. Bdno. Co., many fresh adults, 20-22 Aug., LATE summer brood (JF)--confirms J.A. Comstock, 1927 statement that *neumoeniggi* is double brooded! (at least in some "unusual" seasons). *P. o. orseis* common, Crawford Cr. 2 mi. N Cecilville, 3100', 2, 4 May and Limekiln Gulch, 3200', 1 mi. N Callahan, 9 May, both Siskiyou Co. (SM). *P. o. herlani*, Saddlebag L., 10,000', Mono Co., 28 June (RLL). *O. anicia veazieae*, E slopes Cottonwood Mts., 4600', Lassen Co., 23 Apr. (SM). Larvae of *veaz.* and 1 ♂ *editha* ssp. plus larvae, both on *Penstemon*, Cowhead Slough, 5700', 14 mi. N Ft. Bidwell, Modoc Co., 22 Apr. (SM). *P. faunus rusticus*, S slope Mt. Bidwell,

6500', 7 Sept. (SM). *B. weidemeyerii latifascia*, Warren Cyn. at 9500', HIGH & WEST, Mono Co., 1 Aug. (RLL,DP). *C. californica eryngii* f. "siskiyouensis", 1 mi. N Callahan, 3200', Sisk. Co., 16 Aug. (SM). *C. o. oetus*, ridge 2 mi. N L. Alpine, 8600', Alpine Co., WEST for central Sierras (RW) and abundant, slopes SE Saddlebag L., 10,500', HIGH, Mono Co., 15 Aug. (RLL). *O. ivallda* & *chryxus stanislaus* together, plus intermediates, ridge 2 mi. E Alpine L., 8400', Alpine Co., 18 June (JM). These 2 also sympatric (with intermediates), slopes SE of Saddlebag L., 10,500', 28 June, 11 July (RLL,DP); Warren Cyn., 9500', 3 July (RLL); AND Glacier Cyn., 10,000', 5 July (RLL), all Mono Co.--perhaps "usual" in many places where *ivallda* is found! *O. nevadensis iduna*, 4-8 mi. E Manchester, 1000-1500', Mendocino Co., 22 June and Low Divide Rd. 5 mi. E Smith River, DEL NORTE COUNTY & NORTH, 27 June (SM). *D. gilippus strigosus* breeding in numbers on *Asclepias fascicularis*, Tule Elk State Reserve along Kern R. flood control channel, 20 Aug., 5 Sept. (KD)--now considered a resident in the southern San Joaquin Valley.

ZONE 2: PACIFIC NORTHWEST: OREGON, WASHINGTON, BRITISH COLUMBIA. Coordinator: Jon H. Shepard (JHS). Contributors: Gary Anweiler (GA); Nelson Curtis (NC); C.D. Ferris (CDF); Nick Gessler (NG); John Hinchcliff (JH); Stanley G. Jewett, Jr. (SGJ); Norbert Kondla (NK); John Pelham (JP); Edward M. Peters (EP); Merrill A. Peterson (MP); Ted Pike (TP); Robert Pyle (RP); Felix Sperling (FS); Gerald B. Straley (GS); David L. Threatful (DT). General Collecting Conditions: poor from early Spring until late July. Then a compressed but good season for three weeks.

MIGRATORY SPECIES: General lack of migratory species. B.C. Peace River District: Alaska Hwy. at Pink Mt., 6 July (CDF) *V. atalanta*; Queen Charlotte Islands: Graham Island, not date given (NG) *V. atalanta*; Kootenay District: Sproule Cr. nr. Nelson, 12 Aug. (JHS) *E. claudia* (sight record); Dawn Mt., Purcell Mt., 8100', nr. Revelstoke, 12 Aug. (DT) *E. claudia* (sight record). These are the first records of *E. claudia* in B.C. since one in 1950s, one in 1930s, and one in 1910s.

OREGON: MOTHS: Clackamas Co., West Linn (SGJ) poor season, all species reduced in numbers.

BUTTERFLIES: Early spring collecting both west (SGJ) & east (JH) of the Cascades was normal. After that collecting was poor until late July. Baker C., Snake River Rd. nr. Huntington, May 25 (JH) *C. acastus*, *E. anicia* ssp.; Harney Co., Cottonwood Cr. Canyon, a mile S. of Fields, May 23 (JH) *T. leanira alma*.

WASHINGTON: BUTTERFLIES: Same general conditions as Oregon (JH,JP,MP,RP). Recovery from Mt. St. Helens ashfall was spotty. Cowlitz Co., Ryderwood, 16 Aug. (RP) *S. zereke*, COUNTY record, *C. tullia*, COUNTY record; Longview City Park, 15 Sept. (RP) *V. annabella*, COUNTY record; Willow Grove nr. Longview, 15 Sept. (RP) *C. eurytheme*, COUNTY record; Douglas Co., E. side of Lenore Lake, 16 Apr. (JHS) *S. melinus* (abundant), *E. hyantis*, *P. sisymbrii*, *P. beckeri*, *S. melinus* abundant here in a heavy ash-fall area like Kittitas Co. below; Grant Co., Corfu Rd., Crab Creek, 3 July (JP) species collected in '79 were all present and accounted for in normal numbers, no apparent damage from ash; Gray's Harbor Cp. nr. Arctic, 8 Aug. (RP) (western most record to date); Jefferson Co., Quinalt River nr. McNeil Cr., 9 Aug. (RP) *C. occidentalis*, COUNTY record; Ikanogan Co., Horseshoe Mt. and vic., E. of Windy Peak, 6800-7800', 25 July-1 Aug. (MP,JP) *P. centaureae*, *H. comma manitoba*, *C. nastes*, *O. editha beani*, *O. anicia howlandi*, *C. titania*, *C. epithore*, *S. callippe*, *E. vidleri*, *O. melissa beani*; Pacific Co., Naselle, 26 July (RP) *V. atalanta*, COUNTY record; Wahiakum Co., Pigeon Bluff, Gray's Bay, 28 Feb. (RP) *C. ladon* (earliest Wash. record); Yakima Co., Gotchen Cr. Guard Stn., Mt. Adams, 24 June (JH) *P. mardon* common and apparently not effected by ash fallout; Kittitas Co., Schnebly Coulee, 4 Apr. '80 (JP) *P. zealicaon* (common), *P. sisymbrii* (common), *P. beckeri* (common), *E. hyantis* (common), *C. affinis*, *C. sheridani* (common), *S. melinus* (average), *E. battoides*, *G. lygdamus*, *C. palla sterope* (abundant), *O. editha* (abundant), 21 Mar. '81 *P. beckeri* (reduced), *S. melinus* (abundant), *C. sheridani* (rare). *C. palla sterope*(I), *P. zephyrus*, *A. milberti*, others from 1980 not seen; Klickitat Co., Avery Boat Launch, Columbia River, 20 July (RP) *P. sabuleti*, COUNTY record.

BRITISH COLUMBIA: BUTTERFLIES: Vancouver Island, collecting poor, many genera not seen (GA); Gulf Islands, Galiano Islands, 17 Apr. (GS) *I. fotis mossi*, Regional record; Gambier Island, 15 Aug. (GS) *H. comma*, Regional record; Queen Charlotte Islands, Graham Island, no date given (NG) *A. rapae*, *C. ladon*, *V. atalanta*, all are Regional records; Northwestern Mainland District, Gellamie Mt. nr. Cassiar, Jlt 29 (EP) *C. palaeno*, *C. nastes*, *E. dorus*, *E. mariposa*, *B. napea*, *C. improba*, *C. titania*, *C. selene*, *E. rossi*, *O. melissa*, all significant range extensions; Peace River District, Pink Mt., July (CDF,NC,FS,TP), collecting good with most species recorded in previous years, 1 July (TP) *C. a. astarte*, 6 July (CDF) *C. a. astarte*, 29 June (NK) *P. centaureae*; S. of Ft. St. John, 9 July (NK) *P. batesii*, Provincial record; Attachie, between Ft. St. John & Hudson Hope, 9 July (FS) *C. titus*, Regional record; Butler Ridge, 25 km NW. Hudson Hope, 7-8 July (FS) *P. centaureae*, *P. zelicaon*, *P. machaon*, *C. palaeno*, *C. improba*, *onomia*, *astarte*, *B. napea*, *O. melissa*, *O. polyxenes*, *O. macounii*; Caribou District, Jesmond and vic., several collectors found good collecting but no new records (NC,CDF,EP,JHS); Fraser River at Hwy. 20, 450 m, 20 July (JHS) *H. nevada*, *H. comma*, *P. oregonia*, *A. rapae*, *C. philodice*, *S. titus*, *P. barnesi*, *S. atlantis*, *C. tullia*, *C. sthelene*, Regional record; Okanogan-Cascade District, Crater Mt., 4500-5500', W. of Keremeos, 1 July '81 (CDF) *H. nevada*; Kootenay District, Robson, 28 June (CDF) *Oarisma garita*, most western record in B.C.; Golden, 15 May (DT) *E. hyantis*, Regional record; Yoho Ntl. Park, 22 May (DT) *E. hyantis*; nr. Revelstoke, 6 June (DT) *T. lineola*, most eastern record in B.C.

ZONE 3: ROCKY MOUNTAINS: ALBERTA, IDAHO, MONTANA, WYOMING, UTAH, COLORADO & NEW MEXICO. Coordinator: Ray E. Stanford. Contributors: Gary C. Anweiler (GGA); Karölis Bagdonas & his "Flying Circus" (BFC) (incl. William Bagdonas, Sterling Blanche, Barbara Bracewell, John Carlisle, Terry Clifford, Bob Davis, Chuck Farber, Mary Harter, Lorrie Lee, Claudia Tantillo, Eloy Vasquez & Becky Willis); Jim P. Brock (JPB); Steven J. Cary (SJC); Nelson S. Curtis (NSC); Peter L. Eades (PLE); J. Donald Eff (JDE); Paul R. Ehrlich (PRE); David L. Eiller (DLE); Scott L. Ellis (SLE); Clifford D. Ferris (CDF); Michael S. Fisher (MSF); Clyde F. Gillette (CFG); Richard Holland (RH); Sam A. Johnson (SAJ); John C. Jordison (JCJ); Steven J. Kohler (SJK); Norbert G. Kondla (NGK); Robert Lavigne & other members of the Entomology Dept. at the Univ. of Wyoming (RL); Tim L. McCabe (TLM); Joanna McCaffrey (JM); William W. McGuire (WWM); Steven J. Mueller (SJM); Jim Oberfoell (JO); Paul A. Opler (PAO); Ted M. Pike (TMP); Floyd & June Preston (FJP); Robert M. Pyle (RMP); Patrick J. Savage (PJS); James A. Scott (JAS); Charles P. Slater (CPS); Michael J. Smith (MJS); Ray E. Stanford & family (RES); Thomas E. Valente (TEV); Ernest H. Williams (EHW). As for the last couple of years, the emphasis in records submitted to me and in what I have selected to include in the Summary is new distributional information. Publication of Butterflies of the Rocky Mountain States (BRMS) with its range maps has generated a lot of new data, both from recent collecting and from review of museum collections. Old "new" data are not included in this Summary, but are available on request. Capital letters denote putative STATE, COUNTY, EARLY, LATE, or directional range extensions (HIGH ALT, N, S, E, W, etc.). Zone 3 totals for 1981 include 4 STATE & 351 COUNTY records for butterflies, and at least 1 STATE and several county records for larger moths. Within the Zone, extensive data were received from each of the states, and an especially detailed report from Alberta (TMP). The Utah data from CFG are especially detailed also, with even the altitude of capture for nearly every species. In many instances I have had to abridge records in order to include a greater variety of information, but not quite to the extent necessary previously (e.g., Idaho in 1980). I have tried to verify unusual records, but the final responsibility for accuracy lies with the contributor. The order of butterflies is that of BRMS, very close to that of the Miller/Brown Catalogue. I have encountered somewhat of a "sagebrush rebellion" in terms of what generic names to use, so have followed my middle-of-the-road policy of the last two years and used the more inclusive genus abbreviation, followed by the more restrictive one in parentheses. Similarly, "new" species names are followed by the more familiar one in parentheses.

ALBERTA: Contributors: (NSC), CDF, TMP. The immensity of Alberta was not apparent to me until this year; with 255,285 sq. miles, the province is nearly as large as Texas (267,339 sq. mi.) and larger than Montana and Wyoming combined; TMP contributed an enormous amount of field data, incl. 88 butterfly species from Alberta in 1980-1981, of which nearly 70 are from the poorly-known

Peace River Valley where he lives. Some may be new subspecies, and many are major range extensions. All records below are his (TMP) except for those from CDF & NSC; the latter are all from the Highwood & Livingstone Ranges along the Kananaskis Forest Rd. from S of Kananaskis Provincial Park to Coleman, 9 July 1981. PRV = Peace River Valley (TMP).

MOTHS: *S. jamaicensis*, at blacklight, PRV, 10 May 80. Various Lasiocampids, Noctuids, Sphingids, Arctiids & Geometrids, PRV, Spring '80. Noctuids, 12 Aug. 80; *Catocala relictica* & *briseis*, 27 Aug. 80.

BUTTERFLIES: *T. pylades*, PRV, 18 May 80; 6 June 81. *P. communis*, PRV, 17 May 80 to 25 Aug. 80. *H. comma manitoba*, Prospect Mtn., 5 July 80 (TMP). *H. comma assiniboia*, PRV, 13-22 Aug. 80 & 13-17 Aug. 81. *O. garita*, 7-20 June 80; 4 June 81, PRV. *C. palaemon*, 18 May-14 June 80, PRV; 7 July 80, Prospect Mtn. (TMP); Savannah Cr., 6000', and seep 16 mi. S Racehorse Cg., 4900' (CDF). *P. zelicaon*, Spirit R. ridge, 17 May 80 (TMP). *P. oregonius*, PRV, 14-20 June & 4 Aug. 81; larvae 13-28 Aug. 80, PRV. *P. oregonius dodii*, Drumheller region, 23 & 30 July 80; larvae 7-9 Aug. 80 (TMP). *P. glaucus canadensis*, PRV, 17 May thru June; seep 3 mi. S Racehorse Cg., 4900' (CDF). *P. occidentalis*, PRV, 5 May 81, 12-17 Aug. 81 (TMP--some notebook records show *protodice*, but only *occidentalis* is on his checklist of PRV butterflies). *C. alexandra*, Prospect Mtn., 5-8 July 80 (TMP). *C. meadii elis*, Prospect Mtn., 5 July 80 (TMP). *C. nastes*, Prospect Mtn., 7 July 80 (TMP). *C. g. gigantea*, PRV, 14-15 June 80. *C. pelidne*, Prospect Mtn., 8 July 80 (TMP). *L. phlaeas arethusa* & *L. cupreus snowi*, Plateau Mtn., 27 July 80 (TMP). *L. (G.) xanthoides dione*, Lethbridge, 18 July 80 (TMP). *L. (C.) rubidus*, Milk River townsite, 17 July 80 (TMP). *L. (H.) hyllus* (= *thoe*), PRV, 17 Aug. 81. *L. (E.) helloides*, 11 mi. N Taber, 5 Aug. 80; PRV, 14 Aug. 80 & 17 Aug. 81. *H. titus*, PRV, 28 June 81; Calgary area, July 80. *S. liparops*, PRV, 26 June 81. *C. (I.) nippon clarki*, PRV, 13 & 18 May 80. *C. (I.) polio obscurus*, PRV, 13 May 80 & 18 May 81. *C. (I.) augustus* (= *augustinus*), PRV, 18 May 81. *E. amyntula*, PRV, 13 May 80, 6 June 80 (? *comyntas*), 8 June 80. *C. ladon* (= *argiolus*), PRV, 7 June 80. *L. argyrognomon*, Prospect Mtn., 7 July 80 (TMP). *P. (I.) icarioides* ? *pemina*, 16 mi. S Racehorse Cg., 4900' (CDF). *P. (I.) acmon lutzi*, same data. *S. cybele*, Calgary, 20 July 80 (TMP). *S. aphrodite*, PRV, Aug. 80 & 81. *S. atlantis*, Kananaskis Forest Rd., 9 July 81 (NSC, fide CDF). *B. (P.) eunomia dawsoni*, PRV, 8 June 80. *B. (C.) selene*, PRV, 7 June & later 80, 6 June & later 81. *B. (C.) bellona jenistai*, PRV, 10 May 80, 14 June 80, 13 & 25 Aug. 80. *B. (C.) frigga saga*, PRV, 18 May & 8 June 80, 23 May 81. *B. (C.) freija*, PRV, 19 May 80 & 18 May 81. *B. (C.) titania grandis*, Prospect Mtn., 5 July 80; Whitecourt, 12 Aug. 80. *B. (C.) improba*, Prospect Mtn., 7 July 80 (TMP). *B. (C.) astarte*, Plateau Mtn., 27 July 80 (TMP). *E. (O.) a. anicia*, Prospect Mtn., 7 July 80 (TMP); Racehorse Cg., 4500', 9 July 81 (CDF). *C. palla* ssp, PRV, 17-22 June 81. *C. acastus*, Wintering Hills nr. Drumheller, 13 July 80 (TMP). *C. gorgone*, PRV, 17 May, 21 May, 7 June 80; 31 May, 2 June 81. *P. tharos/batesii* (under study), PRV, 6-20 June 80; 3-17 June 81. *P. satyrus*, Edmonton, 1 Aug. 80 (TMP). *P. faunus*, Edmonton, 1 Aug. 80; Whitecourt, 12 Aug. 80; PRV, 19 Aug. 80. *P. progne*, Edmonton, 1 Aug. 80 (TMP). *N. vau-album*, Whitecourt, 12 Aug. 80 (TMP). *C. tullia (inornata) benjaminii*, PRV, 11 May into June 80; Calgary, 6 Aug. 81 (TMP--ssp not specified). *C. pegala ino*, PRV, 14-19 Aug. 80; 28 June 81. *E. discoidalis macdunnoughi*, Calgary, 18 Apr. 81; PRV, 10 May 80, 18-19 May 81. *E. epispodea*, PRV, 17 May 80. *E. disa*, 25 mi. N Hinton, 4 July 80 (TMP). *O. macounii*, PRV, 13 June 81. *O. chryxus*, Prospect Mtn., 4 July 80 (TMP); Plateau Mtn., 27 July 80 (TMP); Savannah Cr., 6000' (CDF). *O. uhleri varuna*, PRV, 10 May into June 80 & 81. *O. alberta* ssp, PRV, 10 May 80, 3-18 May 81. *O. jutta ridingiana*, PRV, 3-13 June 81. *O. taygete*, Cadamin, 10 July 80 (TMP). *O. polixenes*, Prospect Mtn., 7 July 80 (TMP).

IDAHO: Contributors: NSC, DLE, CDF, RMP. CDF reports that many butterfly populations are of uncertain subspecies, and that light trapping for moths was poor in 1981 except for a few nights in the Lemhi Range. NSC & CDF are working on some of the more difficult taxa in Idaho, and we expect a great deal of new knowledge to evolve over the next several years. Much of this year's report comes from the notebooks of DLE. Moth data are too few to evaluate in terms of new records. A STATE record (*L. xanthoides dione*) is included in the 76 butterfly COUNTY records received.

MOTHS: Sphingidae: *S. vashti* & *S. cerisyi*, Lemhi Range, W of Gilmore, 7200-8200', 22 June (CDF).

BUTTERFLIES: *E. clarus*, CANYON Co., 31 July (DLE); Rock Cr. Park, Twin Falls, TWIN FALLS Co., 19 July (RMP). *E. persius*, FREMONT Co., 22 July '78, genitalic det. (DLE). *E. afranius*, all genitalic det. E of Dawson Lake, BOUNDARY Co., 27 June (CDF); vic. of Elk River, 2800', CLEARWATER Co., 25 June (CDF); Lemhi Range, W of Gilmore, 7200-8200', LEMHI Co., 22 June (CDF); Craig Mts., NEZ PERCE Co., 24 June (CDF); Hidden Cr., 2600', extreme SW corner of SHOSHONE Co., 25 June (CDF). A few *Erynnis* from Clearwater Co. are intermediate between *persius* & *afranius*, even in genitalic characters (CDF). (I see BIG TROUBLE here, folks--RES!). *P. communis*, CANYON Co., 14-17 July '78 (DLE); MINIDOKA Co., 1 Aug. 81 (DLE). *P. catullus*, CANYON Co., 2 Aug. 79 (DLE). *O. sylvanoides*, CANYON Co., 31 July (DLE). *P. peckius* (= *coras*), CUSTER Co., 28 July 79 (DLE); Craig Mts., NEZ PERCE Co., 11-12 July (CDF). *H. juba*, CANYON Co., 8 June 76 (DLE). *H. comma* (ssp not specified), Boise Co., 28 July (DLE). *P. (E.) eurymedon*, Rock Cr. Park, Twin Falls, TWIN FALLS Co., 19 July (RMP). *N. menapia*, ADAMS Co., 26 July 79 (DLE). *P. protodice*, BUTTE Co., 22 July 78 (DLE); CANYON Co., 15-18 July 78 (DLE); Rock Cr. Park, Twin Falls, TWIN FALLS Co., 19 July (RMP). *P. occidentalis*, POWER Co., 13 July 78 (DLE). *C. philodice eriphyle*, Cn. ESE Lewiston, 2500', NEZ PERCE Co., 24 June (CDF); OWYHEE Co., 21 Aug. (DLE). *C. alexandra*, CANYON Co., 31 July (possibly *x philodice*--DLE). *L. (G.) xanthoides dione*, BONNER Co., STATE & WEST, 7 Aug. (NSC). *L. (G.) editha montana*, Craig Mts., NEZ PERCE Co., 11-12 July (CDF); Boise Co., 28 July (DLE). *L. (C.) heteronea*, ADAMS Co., 26 July 79 (DLE); TETON Co., 24 July 81 (DLE). *L. (E.) dorcas florus*, Teton Co., 24 July (DLE). *L. (E.) helloides*, CANYON Co., many records, early June thru late Aug., several years (DLE); Cn. ESE of Lewiston, 2500', NEZ PERCE Co., 24 June (CDF). *L. (E.) nivalis*, ADAMS Co., 26 July 79 (DLE). *L. (E.) mariposa penroseae*, BOISE Co., 28 July 79 (DLE). *H. titus* ssp, ADAMS Co., 26 July 79 (DLE). *S. (C.) b. behrii*, Boise & Butte counties, late July-early Aug. (DLE). *S. fuliginosum*, ADAMS Co., 26 July 79 (DLE); BOISE Co., 28 July 81 (DLE). *S. californica*, ADAMS Co., 26 July 79 (DLE). *S. sylvinus* ssp., CANYON Co., 17 July 78 (DLE); Boise Co., 28 July 81 (DLE); Snake R., SW shore at Hwy 30 bridge near Hagerman, TWIN FALLS Co., 19 July (RMP). *S. saepium*, Boise Co., 28 July (DLE). *M. spinetorum*, BOISE Co., 21 July 78 (DLE). *S. melinus*, CANYON Co., Aug. 70/74/79 (DLE). *B. exilis*, CANYON Co., summers in 1930s (DLE); Strike Resrv., OWYHEE Co., 1 Aug. (DLE). *E. a. amyntula*, BLAINE Co., 21 July 78 (DLE); Hidden Cr., extreme SW corner of SHOSHONE Co., 2600', 25 June (CDF). *E. battoides* ssp. Boise Co., 28 July (DLE). *L. argyrognomon* ssp (tentative det. pending genitalic exam), ADAMS Co., Kinney Pt., 7100', 26 July 79 (DLE). *P. (I.) acmon lutzi*, Boise Co., 28 July (DLE). *S. zerene*, ADAMS Co., 26 July 79; Boise Co., 28 July 81 (DLE). *S. hydaspe*, Adams, Boise, Custer & Fremont counties, late July 78-81 (DLE); Craig Mts., NEZ PERCE Co., 11-12 July (CDF). *S. atlantis nr dodgei*, Craig Mts., NEZ PERCE Co., 11-12 July (CDF). *S. mormonia* ssp, Craig Mts., NEZ PERCE Co., 11-12 July (CDF); BOISE Co., 21 July 78 (DLE). *S. cybele leto*, Boise Co., 28 July (DLE). *S. aphrodite* ssp, tentative det., BONNER Co. & 2nd STATE record (NSC--source uncertain). *B. (C.) bellona* ssp, Bonner Co., 7 Aug. (NSC). *B. (C.) epithore borealis*, Craig Mts., NEZ PERCE Co., 24 June (CDF). *E. (O.) anicia*, tentative det., TETON Co., 24 July (DLE); a few others pending det. also). *C. acastus*, TETON Co., 24 July (DLE). *P. m. mylitta*, CANYON Co., 14 July-19 Aug. 74-79 (DLE); POWER Co., 13, July 78 (DLE). *P. pallida*, Rock Cr. Park, Twin Falls, TWIN FALLS Co., 19 July (RMP). *P. pratensis* (= *campestris*), Adams, Boise, Custer, Fremont & Teton counties, late July 78-81 (DLE); Craig Mts., NEZ PERCE Co., 11-12 July (CDF). *P. satyrus*, Boise Co., 28 July 81 (DLE); CANYON Co., 17 July 78 (DLE). *P. faunus rusticus*, SW Bonner's Ferry, BOUNDARY Co., 26 June (CDF); Boise Co., 28 July (DLE). *N. californica*, Boise Co., 28 July (DLE). *V. atalanta*, CANYON Co., 18 July 78 (DLE). *V. cardui*, Franklin Co., 13 July 78 & POWER Co., 13 July 78 (DLE). *V. (carye) annabella*, Craig Mts., NEZ PERCE Co., 11-12 July (CDF); CANYON Co., 14 July-5 Aug. 70-79 (DLE); POWER Co., 13 July 78 (DLE). *L. (B.) archippus*, Rock Cr. Park, Twin Falls, TWIN FALLS Co., 19 July (RMP); CANYON Co., 1930s (DLE). *L. (B.) lorquini*, Boise Co., 28 July 81; CANYON Co., 17 Aug. 74 (and 1930s--DLE). *C. haydenii*, Fremont Co., 22 July 78 (DLE). *C. tullia ampelos*, CANYON Co., many records 26 June thru 20 Aug. 74-79, suggesting two generations (DLE); GEM Co., 11 June 76 (DLE). *C. pegala* (ssp not indicated), POWER Co., 13 July 78 (DLE). *C. sthenela* (ssp not indicated), BOISE Co., 28 July 81 (DLE); TWIN FALLS Co., 19 July 81 (RMP); WASHINGTON Co., 26 July 79 (DLE). *C. oetus charon*, ADAMS Co., 26 July 79 (DLE). *E. epispodea* ssp nr. *hopfingeri*, Craig Mts., NEZ PERCE Co., 24 June (CDF). *O. c. chryxus*, W of Gilmore, 7200-8200', Lemhi Range, Lemhi Co., 22 June & 13-14 July (CDF). *D. plexippus*, Boise & Owyhee counties, 28 July-1 Aug. (DLE--adults & larvae seen).

MONTANA: Contributors: (GGA), (JCJ), SJK, TEV. SJK reports that collecting was fairly good in western MT, mitigated by considerable bad weather early in the season and very dry conditions later on. Many species flew either in much greater abundance than usual, or were virtually absent. The moth data from TEV are the first from MT in several years; some are probably new county records but I've not had time to pull together a data base. There are 35 butterfly COUNTY records from 1981, included in the list below. TEV's localities are all in Gallatin Co.

MOTHS: Saturniidae: *H. gloveri*, 8 mi. N Bozeman, 27 June (all moth data are from TEV, 1981). *H. eglanterina*, 8 mi. N Bozeman, 5-11 July. *H. hera*, 10 mi. N Bozeman, 2 Aug. Sphingidae: *S. vashti*, Bozeman, 14 July. *S. cerisyi*, 8 mi. N Bozeman, 24 June-21 July. *P. myops*, 8 mi. N Bozeman, 22 July. *H. euphorbiae*, 8 mi. N Bozeman, 30 June-19 July. Arctiidae (all 8 mi. N Bozeman): *P. plantaginis*, 30 June. *T. permaculata*, 27 June. *H. maculata*, 22 June-1 Aug. *A. williamsi determinata*, 22 June. *A. parthenice*, common, 14 July-2 Aug. *A. ornata achaia*, 30 June-22 July. Pericopidae: *G. vermiculata*, 10 mi. N Bozeman, 19 July. Noctuidae: *C. unijuga*, 8 mi. N Bozeman, 11 Sept.

BUTTERFLIES: *P. ruralis*, near MacDonald Pass, POWELL Co., 29 June; also records from Ravalli, Glacier, Gallatin & Beaverhead counties, 18 Apr. (Woodchuck Cr., Florence, Ravalli Co.) to 2 July (5 mi. W Polaris, Beaverhead Co.) (SJK). *P. scriptura*, S of Helmsville, Powell Co., 18 May & 2 June (SJK). *P. communis*, Hwy 2, 2 mi. W Brockton, ROOSEVELT Co., 29 July (JCJ, fide SJK). *P. draco*, near Skalkaho Pass, GRANITE Co., 12 Aug. (SJK). *H. juba*, Miller Cr., near Missoula, MISSOULA Co., 9-11 Sept. (SJK); 3-Mile Cr., near Florence, RAVALLI Co., 16 Sept. (SJK). *H. uncas*, 6 km N Opheim, VALLEY Co., 6 June (GGA, fide SJK). *H. nevada*, S of Helmsville, POWELL Co., 2 June (SJK). *C. palaemon mandan*, Railroad Cr. at Skalkaho-Rye Rd., RAVALLI Co., 25 June (SJK). *P. zelicaon*, dark form "nitra", 10 mi N Bozeman, GALLATIN Co., 19 July, worn (TEV). *P. (bairdii) oregonius*, 8-Mile Cr., Florence, Ravalli Co., 23 Aug. (SJK). *P. (E.) glaucus canadensis*, 7 mi. NW Babb, GLACIER Co., 9 June (SJK). *P. occidentalis*, S of Helmsville, POWELL Co., 18 May (SJK); Colstrip, ROSEBUD Co., 8 June (GGA, fide SJK); Hwy 2, 2 mi. W Brockton, ROOSEVELT Co., 29 July (JCJ, fide SJK) (N.B.--Most prairie records for this species turn out to be protodice; until examined by Shapiro or SJK I consider this record only tentatively correct.). *E. ausonides coloradensis*, Little Snowy Mts., GOLDEN VALLEY Co., 28 May (SJK). *E. hyantis*, Woodchuck Cr., Florence, Ravalli Co., 18 Apr. (SJK). *E. olympia*, Little Snowy Mts., Golden Vy. Co., 28 May (SJK). *C. p. philodice*, Hwy 2, 2 mi. W Brockton, ROOSEVELT Co., 29 July (JCJ, fide SJK). *C. alexandra*, 7 mi. E Geysers, JUDITH BASIN Co., 29 May (SJK). *C. pelidne skinneri*, Beaverhead, Ravalli, Granite & Missoula counties, 2 July-13 Aug. (SJK). *C. gigantea harroweri*, 10 mi. N Bozeman, 18 Aug. (TEV). *L. (E.) helloides*, W of Phillipsburg, GRANITE Co., 30 June (SJK). *H. titus immaculosus*, 8 mi. N Bozeman, 19 July (TEV). *S. saepium okanagana*, 10 mi. N Bozeman, GALLATIN Co., 18 Aug. (TEV). *S. sylvinus*, Mineral, Missoula & Ravalli Cos., 6-13 Aug. (SJK). *C. sheridanii neoperplexa* (ssp inferred by RES, not stated by SJK), 9-Mile Prairie, Missoula Co., 14-30 Apr. (SJK). *I. eryphon*, Little Snowy Mts., GOLDEN VALLEY Co., 28 May (SJK). *E. euptotes*, 9-Mile Prairie, Missoula Co., 15-25 June; Railroad Cr., Skalkaho-Rye Rd., RAVALLI Co., 25 June; nr. MacDonald Pass, POWELL Co., 29-30 June; W of Phillipsburg, GRANITE Co., 30 June (all SJK). *G. lygdamus oro*, Valley Industrial Park (? nr. Glasgow--SJK), VALLEY Co., 5 June (JCJ, fide SJK). *C. piasus* ssp, Florence, RAVALLI Co., 25 June (SJK). *L. m. melissa*, Forsyth, ROSEBUD Co., 8 June; 6 km N Opheim, VALLEY Co., 6 June (both GGA, fide SJK); Hwy 2, 2 mi. W Brockton, ROOSEVELT Co., 29 July (JCJ, fide SJK). *P. (I.) acmon lutzii*, W of Phillipsburg, GRANITE Co., 30 June & 4 July (SJK); nr. MacDonald Pass, POWELL Co., 3 June & 10 July (SJK). *E. claudia*, Miller Cr., MISSOULA Co., 31 Aug., and Woodchuck Cr., Florence, RAVALLI Co., 22 Aug., first records from western Montana (SJK). *S. aphrodite*, Bass Cr., nr. Florence, RAVALLI Co., 6 Aug. (SJK). *S. callippe gallatini*, W of Phillipsburg, GRANITE Co., 30 June (SJK). *B. (C.) bellona jenistae*, 7 mi. NW Babb, Glacier Co., 9 June (SJK). *B. (C.) freija* ssp, 8 mi. NW Babb, GLACIER Co. & NORTH, 13-21 May (SJK). *E. (O.) anicia bernadetta*, 7 mi. E Geysers, JUDITH BASIN Co., 29 May (SJK). *E. (O.) anicia howlandi*, 5 mi. W Polaris, Beaverhead Co., 2 July (SJK). *P. satyrus*, 20 mi. N Bozeman, 15 Aug.-12 Sept. (TEV). *P. faunus rusticus*, 20 mi. N Bozeman, 10 Sept. (TEV). *P. oreas silenus*, Woodchuck Cr., Florence, RAVALLI Co., 18-30 Apr., 25 May & 22 Aug. (SJK); 6 mi. S Big Sky, GALLATIN Co. & SOUTH, 12 July (TEV, det. verified by SJK). *V. atalanta*, Woodchuck Cr., Florence, RAVALLI Co., 22 Aug. (SJK). *C. tullia (inornata) benjamini*, Valley Industrial Park, VALLEY Co., 5 June JCJ, fide SJK, confirmed the very next day, 6 km N Opheim, Valley Co., 6 June (GGA, fide SJK). Even Montana can be a small world!--RES. *C. pegala ino*, Hwy 2, 2 mi. W Brockton, ROOSEVELT Co., 29 July (JCJ, fide SJK). *E. discoidalis mcdunnoughi*, S Fk. Milk R., S of St. Mary, Glacier Co., 12 May (SJK). *N. r. ridingsii*, 5 mi. W Twin Bridges, Madison Co., 19 June (SJK). *O. jutta reducta*, 6 mi. S Big Sky, 12 July (TEV). *O. uhleri varuna*, 7 mi. E Geysers, JUDITH BASIN Co., 29 May (SJK); also Fergus, Golden Valley, Lewis & Clark & Powell Cos., 18 May-2 June (SJK); 6 km N Opheim, VALLEY Co., 6 June (GGA, fide SJK). *O. a. alberta*, 4 mi. SE Duck Lake, Glacier Co., 12-20 May; 8 mi. NW Babb, Glacier Co., 21 May; Little Snowy Mts., Golden Valley Co., 28 May (all SJK). *D. plexippus*, W of Phillipsburg, GRANITE Co., 30 June (SJK).

WYOMING: Contributors: BFC, DLE, CDF, (RL), JO, EHW. A warm, dry winter was followed by cold, wet spring and summer, resulting in generally poor collecting. It was the worst moth year ever (BFC,CDF), and butterflies had a bizarre flight with spring and summer species flying together in various conditions from fresh to rags (Lincoln Co.; CDF). There were no new records for moths, but 24 COUNTY records for butterflies incl. the first STATE records for *P. mylitta*.

MOTHS: BFC listed only 15 of the 20 species listed last year from GTNP, Teton Co., and nearly all were well down in numbers. The only exceptions were *H. eglanterina* & *H. hera* among Saturniidae, and the pericopid *G. vermiculata*, all of which were abundant. The arctiid *D. vagans*, common in 1980, was virtually absent in 1981.

BUTTERFLIES: *E. icelus*, 18 recorded in GTNP, June-July (BFC). *E. afranius*, 3-4 mi. W of Buffalo, JOHNSON Co., 2 June (RL, genit. det. CDF); several at lower elevations GTNP, July (BFC). *E. persius*, nearly 50 in GTNP, June-early July (BFC). *P. centaureae*, 16 recorded in GTNP, alpine habitats, late June thru July (BFC). *P. ruralis*, Pole Mtn., Albany Co., 25 May (BFC/CDF); good flight in GTNP, June into early July (BFC). *P. communis*, 1-5 mi. NW Thermopolis, HOT SPRINGS Co., 25 June 80 (RL); five taken in GTNP, TETON Co., July thru early Aug. (BFC). *P. catullus*, 28 recorded at lower elevations of GTNP, June-July vs none in 1980 (BFC). *H. comma manitoba*, over 200 recorded in GTNP, late July-Aug. (BFC). *C. palaemon mandan*, again scarce in forest clearings, GTNP, July (BFC); 24 July (DLE). *P. zelicaon*, common, GTNP, June-Aug. (BFC). *P. i. indra*, always uncommon in GTNP but only 2 sightings in 1981, late June & early July (BFC). *P. (E.) eurymedon*, unusually common in GTNP with over 50 sightings, June-July (BFC). *P. (A.) napi*, one of most abundant butterflies in GTNP with nearly 350 recorded, June-Aug. (BFC). *P. (A.) occidentalis*, over 40 recorded, GTNP, late June thru early Aug. (BFC). *P. sisymbrii*, Pole Mtn., Albany Co., 25 May (BFC/CDF). *P. beckerii*, two taken at Two Ocean Lake, GTNP, TETON Co., 22 June (BFC). *E. olympia*, Guernsey St. Pk., PLATTE Co., 28 May 80 (RL). *A. sara browningi*, abundant, nearly 500 recorded, GTNP, June-early Aug. (BFC). *A. sara*, ssp not specified, Park Co., 23 July 78 (DLE); Pole Mtn., Albany Co., 25 May (BFC/CDF). *C. eurytheme*, CROOK Co., 21 July (DLE). *C. meadii*, Albany Co., 4 Aug. (DLE); less common than usual, Beartooth Plateau, Park Co., Aug. (EHW); about 70 recorded in GTNP, July-early Aug. (BFC). *C. scudderii*, Carbon Co., 4 Aug. (DLE). *C. pelidne skinneri*, Big Horn & Sheridan Cos., 22 July (DLE); down in numbers from 1980 in GTNP, only 5 being recorded (BFC). *L. phlaeas arctodon*, several fresh specimens, Beartooth Plateau, Park Co., 6-7 Aug. (EHW). *L. cupreus snowi*, only 6 recorded in GTNP, late June-early July (BFC). *L. (G.) editha montana*, fewer than 20 seen, GTNP, late June-early July (BFC); CARBON Co., 4 Aug. (DLE). *L. (C.) rubidus sirius*, very rare in GTNP, late July (BFC). *L. (C.) heteronea*, Hwy 271 nr. Jct. Hwy 410, Uinta Mts., UINTA Co., 16 Aug. (RL). *L. (E.) nivalis*, below Woodchuck Pass, Bighorn Mts., SHERIDAN Co., 29 July 79 (JO). *L. (E.) mariposa penroseae*, nearly 100 seen in GTNP, late July-early Aug. (BFC); SHERIDAN Co., 22 July (DLE). *C. sheridanii neoperplexa*, rare in GTNP with 10 recorded, June (BFC). *C. affinis*, only 10 seen, GTNP, late June-early July (BFC). *I. eryphon*, usually common but only 7 recorded, GTNP, June-early July (BFC). *I. polios*, fairly common on Pole Mtn., Albany Co., 25 May (BFC/CDF). *E. enoptes ancilla*, about 135 seen in GTNP, mid-June into early Aug. (BFC). *G. lygdamus oro*, 3-4 mi. W Buffalo, JOHNSON Co., 9 June 80 (RL); extremely abundant in GTNP, over 1,000 recorded, June-Aug. (BFC). *G. piasus daunta*, over 50 seen in GTNP, mid-June-July (BFC). *P. saepiolus*, usually common but rare in GTNP in 1981 with only 13 sightings (BFC). *P. (I.) acmon lutzii*, nearly 70 seen in GTNP, late June-early Aug. (BFC). *P. (I.) shasta pitkinensis*, only 4 recorded in GTNP, early Aug. (BFC). *A. glandon (franklinii) rustica*, more common than usual in GTNP, with over 100 sightings, late June-Aug. (BFC); Albany, Big Horn, Sheridan & Teton Cos., late July-early Aug. (DLE). Eight *Speyeria* species recorded by BFC in GTNP,

incl. about 10 specimens of *S. coronis* ssp, new for TETON Co., lower elevations of the Park, July-early Aug. *S. aphrodite*, CAMPBELL Co., 21 July (DLE). *B. (P.) eunomia ursadentis*, Beartooth Plateau, Park Co., 7 Aug. (EHW). *B. (C.) frigga sagata*, few seen in GTNP, June (BFC); two taken, Beartooth Plateau region, PARK Co., 2 July (EHW). *B. (C.) freija browni*, usually common but only 2 seen in GTNP (BFC). *B. (C.) kriemhild*, good flight in GTNP with over 130 recorded June-early Aug. (BFC); Park & Teton Cos., 24 July 78 & 81, respectively (DLE). *E. (H.) gilletti*, Red Top Creek, W of Cottonwood Lake, Lincoln Co., 15 July (CDF); study population down in numbers compared with 1980, Park Co., July (EHW). *E. (O.) anicia* ssp, Big Horn & Sheridan Cos., 22 July (DLE); perhaps a few *E. (O.) editha* ssp mixed in, genitalic study pending). (N.B.--If confirmed, *editha* would be new from BIG HORN Co.--RES). *E. (O.) editha hutchinsi*, common in GTNP with over 350 specimens recorded, June-early Aug. (BFC). *C. acastus*, Canyon S of Shoshoni, FREMONT Co., 27 June 80 (RL); 1 mi. S Midwest, NATRONA Co., 11 June 81 (RL); Teton Co., 24 July (DLE). *P. m. mylitta* (det. CDF), 8 mi. NE Meeteetse, PARK Co., 25 June (RL) and 2 mi. S Midwest, NATRONA Co. & STATE & EAST & ASTONISHING, 11 June (RL). *P. pratensis* (= *campestris*) *camillus*, very common in GTNP, June-Aug. (BFC). *C. haydenii*, very common in GTNP, about 350 specimens recorded, June into Aug. (BFC); Park Co., 23 July 78 and Teton Co., 24 July 81 (DLE). *C. tullia ochracea*, 1 mi. S Midwest, NATRONA Co., 11 June (RL). *C. pegala* (ssp unspecified), CAMPBELL Co., 21 July (DLE). *C. oetus charon*, Hwy 271 nr. Jct. Hwy 410, Uinta Mts., UINTA Co., 6 Aug. (RL). *E. magdalena*, uncommon on talus slopes of GTNP, late June-July (BFC) & Park Co., 10 July (EHW). *O. jutta reducta*, odd-year only population in GTNP, only 8 individuals recorded in 1981 (BFC). *O. c. chryxus*, nearly 350 seen in GTNP in 1981 of almost none in 1980 (probably biennial or nearly so--RES), late June into Aug. (BFC); Big Horn, Sheridan & Teton Cos., late July (DLE).

UTAH: Contributors: BFC, JPB, PLE, CDF, CFG, SJM, PAO, (FJP), PJS, MJS, RES. The major input is from CFG, who is compiling data for a book on Utah butterflies and has spent the last nine years in museums and in the field. Although not yet shown on my maps, he has over a dozen species recorded from every county in Utah; this cannot be said for any other state in Zone 3, and perhaps for any in the entire USA. His research has brought into question some of the county dots for Utah published in BRMS, and I will prepare an errata list, perhaps to be printed in next year's Summary or separately in the News. CDF & RES found the season well underway in eastern Utah on 26 April, when 13 species of butterflies were on the wing incl. a Utah STATE record, *C. "paradoxa"* (new sp/spp nr. *comstocki*). PLE added some nice records from Duchesne Co., and the Prestons from 3 eaver & Juab Cos. (fide CFG). BFC ran into trouble in remote Daggett Co., losing a transmission in Crouse Cn., therefore unable to do any moth work in 1981. All told there were 132 butterfly COUNTY records, 83 of recent origin and listed below, and 49 from study of museum collections by CFG & RES. Space does not allow inclusion of these, some from the early-1980s, in this Summary, but a list is available from RES.

MOTHS: No data received.

BUTTERFLIES: *E. icelus*, Bryce Cn. Natl. Prk (BCNP), 8000', Garfield Co., 20 June 80 (SJM, det. RES). *E. p. pacuvius*, BCNP, 9100', Kane Co., 12 July 80 (SJM, genit. det. RES). *P. ruralis*, Yovimpa Pass, BCNP, 8300', KANE Co., 14 June 80 (SJM, det. RES). *P. (H.) alpheus oricus*, Negro Bill Cn. nr. Colorado R., 4300', GRAND Co., 26 Apr. (CDF). *P. sonora utahensis*, Cougar Hollow, Kane Co., 13 Aug. 80 (SJM, det. RES). *H. juba*, BCNP, 8000', Garfield Co., 20 June 80 (SJM, det. RES). *H. comma harpalus*, Crouse Cn., Daggett Co., 29 July (BFC). *M. coloradensis browni*, Colorado R. Rd., 6.5 mi. above Hwy 160, 4400', 26 Apr. (CDF/RES). *P. zelicaon*, Wasatch Mts., 6400', MORGAN Co., 24 May (CFG); Ephraim Cn., 8200', SANPETE Co., 18 June (CFG). *P. i. indra*, ridge 6200-6300', S end of Dugway Mts., JUAB Co., 15 May 80 (PJS). *P. indra* nr. *nevadensis*, with some tendency toward *martini*, Leeds Cn., Pine Vy. Mits., Washington Co., 10 Apr. (MJS/JPB). *P. (E.) rutulus*, NW side Circleville Mtn., 9300', BEAVER Co., 4 July (FJP, fide CFG). *P. (E.) eurymedon*, Middle Cn., 6000-6500', Oquirrh Mts., TOOELE Co., 4 June & 15 June 80 (PJS). *P. (E.) multi-caudatus*, Schuster Cr., 7200', MORGAN Co., 26 June 80 (CFG); common, Crouse Cn., Daggett Co., 29 July (BFC). *P. beckerii*, N of Sunglow Cg., 7300', WAYNE Co., 18 Sept. (CFG); fairly common, Crouse Cn., Daggett Co., 29 July (BFC). *P. sisymbrii*, Colorado R. nr. confluence with Dolores R., 4300', GRAND Co., 26 Apr. (CDF); Snake Cr., 6400', WASATCH Co., 13 May (CFG); Parowan Gap, 5900', IRON Co., numerous, 15 Apr. (CFG). *E. ausonides coloradensis*, Camp Bear Lake BSA, 6000', Rich Co. (1972 record exists), 26 June 79 (RES). *E. hyantis* nr. *lotta*, Colorado R. nr. confluence with Dolores R., 4300', GRAND Co., 26 Apr. (CDF); S of Delta, 5800', MILLARD Co., 4 May 80 (CFG). *C. eurytheme*, late summer-early fall records from CARBON, DUCHESNE & PIUTE Cos., 1981 (CFG). *C. philodice eriphyle*, fields S of Morgan, MORGAN Co., 28 Apr. (Emily C. Dial, fide CFG). *C. alexandra*, Little Emigration Cn., 6400', MORGAN Co., 24 May (CFG). *T. arota*, Lake Fk. R., nr. Altonah, DUCHESNE Co., 18 July (PLE); Crouse Cn., DAGGETT Co., 29 July (BFC); Deep Cr. Cn. spgs, 7000', WASATCH Co., 16 Aug. (CFG); Water Cn. fk. Whitmer Cn., 7600', CARBON Co., 3 Sept. (CFG). *L. (C.) rubidus*, Crouse Cn., DAGGETT Co., 29 July (BFC). *L. (C.) heteronea*, 2 mi. N Clear Cr., Hwy 96, 8000', CARBON Co., 22 Aug. (CFG); Lake Fk. R. nr. Altonah, Duchesne Co. (confirms 1928 record by E.R. Day, fide CFG), 18 July (PLE). *L. (E.) helioides*, SE Price, CARBON Co., 4 Sept. (CFG); nr. Tropic, 6400', GARFIELD Co., 17 Sept. (CFG). *L. (E.) helioides/dorcas* complex, perhaps *castro* (speculation by RES), NW side of Circleville Mtn., 9300', BEAVER Co., 4 July (FJP, fide CFG); Monte Cristo Cg., Wasatch Ridge, 8900', RICH Co., 6 Aug. (W.J. Hanson, fide CFG). *A. halesus*, The Cockscomb, 38 mi. E Kanab, KANE Co., 13 Apr. (JPB). *S. sylvinus*, tentative determination is CONFIRMED for GARFIELD Co., record reported last year (SJM). *C. sheridanii neoperplexa*, tentative determination is CONFIRMED for GARFIELD Co. record reported last year (SJM); Mt. Ogden, 9600', WEBER Co., 22 June (CFG--ssp *neoperplexa*). *C. "paradoxa"* (mss name, new sp/spp nr. *comstocki*), several gulches along Colorado R., 6-27 road mi. above Hwy 160, 4220-4600', GRAND Co., STATE & WEST, 26 Apr. (CDF/RES). *C. affinis*, 0.4 mi. E De Moisy Peak, 8400', MORGAN Co., 24 June (CFG). *I. augustus* (= *augustinus*) *iroides*, Snake Cr., 6400', WASATCH Co., 13 May (CFG). *S. melinus*, 2.5 mi. W Tremonton, 4300', BOX ELDER Co., 8 July 80 (CFG); 1.2 mi. SE Francis Peak, 9000', DAVIS-MORGAN County line, 15 July (CFG). *B. exilis*, lowlands of JUAB, PIUTE & SANPETE Cos., 20-21 Sept. (CFG); nr. Ft. Duchesne, Uintah Co., 19 July (PLE). *L. marina*, Ephraim Cn., 6600', SANPETE Co., 18 June (CFG); Torrey, WAYNE Co., 26 Aug. (CFG). *H. (E.) isola*, Crouse Cn., DAGGETT Co., 29 July (BFC). *E. amyntula*, mouth of Schuster Cr., 6000', MORGAN Co., 16 June 80 (CFG). *C. tadon* (= *argiolus*) ssp, Quaking Aspen Cr., 5900', MORGAN Co., 28 Apr. (CFG). *G. piasus*, 1.7 mi. N Francis Peak, 9000', DAVIS Co., 18 July (CFG); Schuster Cr., 6300', MORGAN Co., 26 June (CFG); Leeds Cn., 5900', WASHINGTON Co., 21 May 79 (JPB, fide CFG). *P. saepiolus*, Schuster Cr., 7200', MORGAN Co., 26 June 80 (CFG). *P. (I.) icarioides*, Ephraim Cn., 7900', SANPETE Co., 18 June (CFG). *P. (I.) acmon*, Farmington Cn., 7200', DAVIS Co., 12 July (CFG); 0.4 mi. NE Francis Peak, 9400', MORGAN Co., 15 July (CFG). *S. n. nokomis*, Lake Fk. R., nr. Altonah, Duchesne Co., 18 July (PLE). *S. n. apacheana*, spgs. N of Callao, TOOELE Co., SE Great Salt Lake Desert, 25 June, EARLY & 7 Aug. (PJS). *S. Cybele letona*, Lake Fk. R. nr. Altonah, DUCHESNE Co., 18 July (PLE); nr. Sunset Cg., Farmington Cn., 6500', DAVIS Co., 15 July (CFG--ssp *leto*). *S. coronis*, Crouse Cn., Daggett Co., 29 July (BFC). *S. hydaspe*, N Ogden Pass, 6200', WEBER Co., 6 July 77 (G. Andrushko, fide CFG). *S. atlantis* (ssp not stated), Crouse Cn., Daggett Co., 29 July (BFC). *S. mormonia mormonia*, Francis Peak Rd., 7500', DAVIS Co., 18 July (CFG). *C. palla flavula*, Snake Cr., 6400', WASATCH Co., 28 June (CFG); Crouse Cn., Daggett Co., 29 July (BFC). *C. acastus*, E Cn., Wasatch Mts., 6000', 12 June 78 (K.B. Tidwell, fide CFG). *P. tharos*, Little Emigration Cn., 6500', MORGAN Co., 25 June 80 (CFG); Ephraim Cn., 6400', SANPETE Co., 18 June (CFG). *P. mylitta*, Bear Cn. RA, SE side of Mt. Nebo, 6800', JUAB Co., 6 July (CFG); Maple Grove Cg., 6600', Pavant Range, MILLARD Co., 14 Apr. (CFG); Little Emigration Cn., 6500', MORGAN Co., 25 June 1980 (CFG); 1.8 mi. NW Burrville, 7300', SEVIER Co., 19 Sept. (CFG). *P. pallida barnesi*, Duchesne R. Cn., 7100', DUCHESNE Co., 29 June (CFG). *P. faunus* (closest to *rusticus*), nr. Anderson Mdw. Resvr., 9300', Circleville Mtn., BEAVER Co. & SOUTH, 4 July (FJP, fide CFG). *N. antiopa*, Huntington Cn., 8300', EMERY Co., fresh specimen, 4 Sept. (CFG). *N. (A.) milberti*, Fisher Plateau, 8400', GRAND Co., 26 Apr. (RES). *V. cardui*, 0.7 mi. N Green R., EMERY Co., 25 Aug. (CFG); Torrey, WAYNE Co., 26 Aug. (CFG). *V. (carye) annabella*, Finn Cn., 8500', CARBON Co., 22 Aug. (CFG); 2.5 mi. N Marysvale, 5800', PIUTE Co., 14 Sept. (CFG); Jct. Hwy 24 & Grover Rd., E of Torrey, 6800', WAYNE Co., 26 Aug. (CFG). *C. tullia ochracea*, Farmington Cn., 6200', DAVIS Co., 21 June (CFG). *C. sthenelle* (ssp not stated), Price Cn., 8100', CARBON Co., 23 Aug. (CFG); Baker Cn., 6400', 20 Sept., worn specimen (CFG). *N. ridingsii*, Duchesne R. Cn., DUCHESNE Co., 29 June (CFG); Lake Fk. R. nr. Altonah, Duchesne Co., 18 July (PLE). *D. plexippus*, S end of Kanab, Kane Co., 10 June (CFG); Sevier R. 2.5 mi. N Marysvale, PIUTE Co., 14 Sept. (CFG).

COLORADO: Contributors: BFC, PLE, JDE, PRE, SLE, CDF, MSF, SAJ, (TLM), WWM, RMP, JAS, CPS, RES. Record warm, dry winter with lowest snowpack since 1977 was followed by cooler spring and summer with very cold nights in the mountains. PLE observed a *N. antiopa* on 30 Dec. '80 in Boulder, and RES observed one on 16 Feb. '81; as far as I know these are the latest and earliest records for any butterfly in Colorado. The above conditions resulted in the worst moth year in history (BFC) but only a fairly poor one for diurnals; some butterflies and diurnal moths flew in much better than average numbers. There was a moth STATE record, several moth COUNTY records, and 35 butterfly COUNTY records. Only the more interesting of many EARLY flight records are listed; over 30 butterfly species were recorded before 1 May.

MOTHS: Saturniidae: *H. gloveri*, 2 taken, Larimer Co., early June. *A. p. polyphemus*, adults early June & larvae late Aug., Ft. Collins. *A. p. olivacea*, 5th year sampled, Bear Creek, Fremont Co., mid-June. *C. pandora*, Boulder, Fremont, Larimer Cos., June. *H. nevadensis*, "wiesti site", Weld Co., reared specimens emerged Sept. Spingidae: *H. lineata*, an explosion year with adults common late May-early June in Denver (RES) and larvae causing massive defoliation in Weld Co. (BFC). *E. wiesti*, Weld Co. colony reduced in numbers but still kicking after being sprayed in 1980 and the habitat decimated by *H. lineata* larvae in 1981 (BFC). *H. senta*, Rist Cn., Larimer Co., 6 June (CDF); also Boulder Co. (BFC). Arctiidae: *E. clio*, 4 mi. S Wigwam, DOUGLAS Co. & STATE record, 21 July (TLM, reported by BFC). *L. lena*, John Brown Cn., 5200', MESA Co., 25 Apr. (RES); 5 specimens, Stove Prairie, Larimer Co., early May (BFC). Most Arctiid species down in numbers, but 16 species were found in Larimer Co. canyons incl. *P. virginica*, *P. plantaginifera*, *P. fuliginosa* & *B. trigona* in early summer (BFC). Pericopidae: *G. vermiculata*, population explosion for 2nd consecutive year at Maroon Lake, Pitkin Co. (BFC). Agaristidae: *A. octomaculata*, Rist Cn., Larimer Co., 6 June (CDF). Syntomidae: *L. pholus* & *L. grotei*, Larimer Co., July (BFC). Noctuidae: *E. odora*, Boulder, 3 Aug. (JDE). *C. stretchii* and only 2 other Catocala species, Yampa River nr. Craig, Moffatt Co., 29 July (BFC).

BUTTERFLIES: A new North American record of 107 butterfly species in one day (97 within official Xerces Society circle) was established on 12 July in the foothills W of Denver by a group incl. Dale Barlow, PLE, David Ferguson, MSF, Don Philipsson, Glenn Scott, JAS, CPS, RES & family. Most species were down in numbers compared with other years, but the diversity was not diminished. *E. brizo burgessi*, again many miles from known oaks, Horsetooth Resrv., Larimer Co., 16 June (BFC). *E. martialis*, Bear Cr., 5 mi. SE Salida, FREMONT Co., 16 June (BFC). *P. ruralis*, Larimer Co. canyons, late Apr. thru May (BFC). *P. mejicana*, Bear Cr., 5 mi. SE Salida, Fremont Co., 16 June (BFC). *A. simius*, Rist Cn., Larimer Co., 2nd week of June (BFC). *A. argos*, more common than usual, foothills of Jefferson Co., 12 July (RES). *O. snowi*, Paonia Resrv., Gunnison Co., 19 July (BFC). *O. sylvanoides*, Bear Cr., 5 mi. SE Salida, FREMONT Co. & SOUTH for eastern slope, 16 June EARLY (BFC). *P. peckius* (= *coras*), very common in Ft. Collins region, Larimer Co., two generations in June & Aug.-Sept. (BFC). *P. sonora*, Larimer Co. foothills, late July-mid-Aug. (BFC). *H. juba*, Highline Canal nr. Broadway, ARAPAHOE Co., & EAST, 29 Aug. & 4 Sept. (MSF). *H. uncas*, explosion in Larimer Co., with hundreds recorded nr. Twin Forks on 21 June; few seen at "wiesti site", Weld Co., 31 May (BFC). *H. ottoe*, EL PASO Co., 1 July (WWM). *H. leonardus pawnee*, same data as *H. juba* (MSF). *Y. rhesus*, several, Larimer & Weld Cos., Tate May (BFC). *M. coloradensis browni*, John Brown Cn., 5200', Mesa Co., 25 Apr. (CDF, RES). *B. philenor*, SW shore Bonny Resrv., Yuma Co., 1 July (RMP). *P. zelicson*, Boulder, 11 Apr. EARLY (PLE). *P. i. indra*, Bear Cr., 5 mi. SE Salida, FREMONT Co. & SOUTH, 16 June (BFC). *P. indra minor*, Coal Mine Pt. (type locality), Mesa Co., 27 Apr. EARLY (CDF, RES) & 29 May (PLE). *P. (E.) glaucus*, typical eastern male, Jarre Cn., DOUGLAS Co. & WEST, 30 Apr. EARLY (JAS). *P. (E.) eurymedon*, 1 and 5 mi. SE Salida, CHAFFEE & FREMONT Cos., 16 June (BFC). *P. (E.) multicaudatus*, along Arkansas River at Jct. of US Hwy 24 & Weston Pass Rd., about 9200', LAKE Co. & HIGH Alt., July (BFC); 1 mi. E Salida, CHAFFEE Co., 16 June (BFC). *A. sara thoosa* (not *inghami* as reported in error last year, my error), West Unaweep Cn., 5200', Mesa Co., 25 Apr. (CDF, RES). *P. sennae*, Maroon Lake, PITKIN Co., 18 July; Weston Pass, Park Co., 21 July (BFC). *K. lyside*, fairly common, Bonny Resrv., YUMA Co., 6 July (BFC--mostly worn, on flowers, not migrating noticeably). *N. iole*, scattered records in July but explosion in Sept. & Oct., Larimer & Boulder Cos. (BFC). *I. arota*, Yampa River nr. Craig, MOFFATT Co., 30 July (BFC). *L. cupreus snowi*, nr. No Name Lake, 11,300', CONEJOS Co., worn, 9 Aug. (SAJ). *L. (E.) nivalis*, Maroon Lake, PITKIN Co., 18 July (BFC). *H. crysalus*, good flight in Douglas, Moffatt & Gunnison Cos., July (BFC). *H. titus*, E side of Old La Veta Pass, HUERFANO Co., 3 Aug. (CDF). *S. liparops*, Bonny Resrv., YUMA Co. & FIRST RECORD from eastern prairies of Colorado, 6 July (BFC). *S. acadica*, 1 mi. SE Lafayette, BOULDER Co. (JDE & RES have looked in vain for years!), 10-12 July (BFC); common on milkweeds, Bonny Resrv., Yuma Co., 1st week of July (BFC, RMP). *S. sylvinus*, good numbers, Erickson Spgs. Cg., Gunnison Co., 19 July (BFC). *C. sheridanii*, Edwards, EAGLE Co., in assoc w/ *Eriogonum umbellatum*, 11 Apr. (SLE); common in foothills of Boulder & Larimer Cos., Tate March thru May (BFC, PLE). *C. "paradoxa"* (new sp/spp nr comstocki), W Unaweep Cn., 5200', MESA Co., & Paradox Cn., 5200', Montrose Co., 25 Apr., EARLY (but already worn) (CDF, RES); larvae taken on *Eriogonum corymbosum*, Paradox Cn., Montrose Co., 30 May (PLE). *C. sheridanii* complex, not "paradoxa", unlike anything ever seen, Parachute Creek, 5600', GARFIELD Co., 27 Apr. (RES); tip by SLE). *M. spinetorum*, Coal Mine Pt., Mesa Co., 27 Apr. EARLY (RES). *M. siva*, Phantom Cn., Fremont Co., 25 Apr. EARLY (PLE). *I. augustus* (= *augustinus*) *iroides*, Parachute Cr., 5600', Garfield Co., 27 Apr. EARLY (RES). *I. augustus* (= *augustinus*) nr. *annettae*, Paradox Cn., 5200', Montrose Co., 25 Apr. EARLY (RES). *I. eryphon*, Lone Pine Cr., 10 mi. W Walden, JACKSON Co., 27 June (SLE). *B. exilis*, Parachute Cr., 5600', Garfield Co., 27 Apr. EARLY (RES). *H. (E.) isola*, Jct. Hwy 24 & Weston Pass Rd., LAKE Co., July; Maroon Lake, PITKIN Co., 18 July (BFC). *E. comyntas*, sympatric with *amyntula* locally in Jefferson Co. foothills, 12 July (JAS); Bonny Resrv., Yuma Co., 6 July (BFC). *E. eunotus ancilla*, Parachute Cr., 5600', Garfield Co., 27 Apr. EARLY (RES). *E. rita coloradensis*, his backyard, S Logan St., Arapahoe Co. (only recent record from western portion of county for this species, which was probably common in the Denver area before the city existed--RES), 5 Aug. (MSF). *P. (I.) acmon*, many records incl. Yuma Co., May thru early-July (BFC). *A. vanillae*, fresh ♀, Denver, 23 Sept. LATE (RES). *E. claudia*, very common throughout the State in 1981, with records from 25 Apr. (EARLY--PLE) thru July (BFC, RMP) but no new county records. *S. nokomis*, Green River by raft, MOFFATT Co., July (PRE--details to be published; nice range extension and evidence of a protected population in Colorado). *S. edwardsii*, good flight while other *Speyeria* species were down in numbers in 1981 (BFC). *S. zerene*, E side of Old La Veta Pass, HUERFANO Co. & SOUTH, 3 Aug. (CDF). *S. c. cybele*, Woodmen Vy., 6300', El Paso Co., 1 worn ♂ taken and another sighted (MSF). *S. cybele charlotti*, ♂ common but no ♀ seen, Rabbit Ears Pass, Routt Co., 2 Aug. (PLE). *P. tharos* (type B--*pascoensis*), Rist Cn. & Poudre Cn., Larimer Co., 12 June (CDF). *P. pratensis* (= *campestris*), "wiesti site", WELD Co. (BFC). *P. interrogationis*, fairly common, Lafayette, Boulder Co., late Aug. thru Sept. (BFC). *P. satyrus*, Conejos River, 8000', CONEJOS Co., 10 Aug. (SAJ). *V. atalanta*, very common along Front Range, May to July (PLE); migrating SE to NW at rate 10/mile/min along I-25 between Denver & Ft. Collins, 28 May (SLE). *V. virginianensis*, "wiesti site", WELD Co., mid-June-mid-July (BFC). *L. hybrid* "weidechippus", first taken in many years, Sand Creek, Aurora (county unspecified), 15 July (Ron Wahl, reported by RMP). *C. pertepida dorothea*, nr. Wetmore, Custer Co., 20 June (PLE). *M. cymela*, SW shore, Bonny Resrv., Yuma Co., abundant on 1 July (RMP); very common 1st week of July (BFC). *E. magdalena* & *E. callias*, worst flight ever observed, many usual localities (BFC). *O. polixenes brucei*, Ptarmigan Pk., 12,300', RMNP, LARIMER & Grand Cos., 10 July (BFC); Lake Emma, Park Co., 28 July (JAS).

NEW MEXICO: Contributors: SJC, CDF, RH, JM, MJS, RES. It was a good year for Lepidoptera in NM, except that rainy weather in August made light trapping poor, especially for Catocala (CDF). RH continues his study of the Capitan Mts. (Lincoln Co.), and JM again provided very useful computerized results of her observations in the Sacramento Mts. (Otero Co.). SJC provided several new records from the Santa Fe region, as well as a fresh viewpoint and some controversial records from the Sacramento Mts. (Otero Co.). CDF found conditions even more dismal than in previous years, but RES did his first collecting in southern NM and found excitement; perhaps familiarity indeed breeds boredom! Philosophical points aside, 1981 produced 39 butterfly COUNTY records, incl. a STATE record (*Dione moneta*--JM), but was not productive in terms of moth records.

MOTHS: *Dartis howardi*, rare and spectacular Pericopid species, over 50 taken at blacklight, 11 mi. N Tinnie, Lincoln Co., 4 July (RH with Glenn Gorelick). CDF reported blacklighting data from Aug., with many as yet undetermined species and the following: Gallinas Cn., Black Rg., 12 Aug: *Coloradia luski*. Cherry Cr. Cn., Grant Co., 15 Aug.: *C. luski*, *Gloveria arizonensis*, *Dicogaster coronada*. Sugarite Cn., 7500', Colfax Co., 21 Aug.: *Catocala ultronia*, *C. violenta*, *Hemihyalea* sp, *Pero* sp, *Mala-cosoma* sp, *Haploa* sp, *Tolype* sp, *Polia* sp, unusual Arctiid sp.

BUTTERFLIES: *Z. dorus*, Capitan Mts., 7000', Lincoln Co., 10 May (JM). *T. mexicana* *dobra*, Pines Cg., 8650', Sacto Mts., 7 June (JM). *T. drusius*, det. to be confirmed, Dog Cn., Sacto Mts., OTERO Co., 4 July (SJC). *E. icelus*, Capitan Mts., 7000', Lincoln Co., 10 May (JM). *E. p. pacuvius*, Capitan Mts., LINCOLN Co. & SE (Burns predicted it in his 1964 paper) (RH). *E. funeralis*, Sunspot, 9200', Sacto Mts., Otero Co., many fresh specimens, 24 July (RES). *P. communis albescens*, Dog Cn., Sacto Mts., OTERO Co., 17 May & 4 July (SJC). *C. nessus*, 11 mi. N Tinnie, 6000', Lincoln Co., 9 May (JM). *P. (H.) alpheus*, Sacramento Peak, 9200', Otero Co., 24 July (RES). *A. vierecki*, Capitan Mts., LINCOLN Co. (RH); Sunspot, 9200', Otero Co., 12 June (JM). *A. campestris*, Dog Cn., 4 July (SJC). *C. aurantiaca*, Capitan Mts., LINCOLN Co. (RH). *O. edwardsii*, Milepost 45, Hwy 24, 8600', Sacto Mts., OTERO Co., 7 June (JM). *A. arene*, Hwy 293, 4600', GRANT Co., 16 Aug. (CDF). *P. pirus*, Water Cn., 7000', Magdalena Mts., Socorro Co., 9 Aug. (CDF). *P. polingi*, Hwy 24, Milepost 35, 8600', Sacto Mts., 7 June (JM); Sunspot, 24 July (RES); Cheery Cr. Cn., Grant Co., 15-18 Aug., common (CDF). *B. philenor*, Capitan Mts., LINCOLN Co. (RH). *P. polyxenes asterius*, 1 mi. S Dilla nr. Pecos R., GUADALUPE Co., 23 July (RES). *P. (E.) multicaudatus*, Sunspot, 24 July (EARLY). *P. (A.) napi* ssp., common, Calavaras Cg., Sandoval Co., 5-6 Aug. (CDF). *A. sara inghami*, Dog. Cn., Sacto Mts., 11 March EARLY (JM). *C. eurytheme* & *C. philodice eriphyle* & *E. nicippe*, 1 mi. S Dilla, GUADALUPE Co., 23 July (RES); *C. p. eriphyle*, Capitan Mts., LINCOLN Co. (RH). *C. (Z.) cesonia*, *P. sennae* & *E. mexicana*, Capitan Mts., LINCOLN Co. (RH). *H. crysalus*, Sugarite Cn., 7500', Colfax Co., 5 Aug. (CDF). *A. halesus*, Santa Fe, SANTA FE Co., 24 May (SJC). *H. titus* nr *immaculosus*, Calavaras Cg., Sandoval Co., 5-6 Aug. (CDF). *M. leda*, Dog Cn., Sacto Mts., 4 July (SJC). *C. (S.) macfarlandi*, 11 mi. N Tinnie, 6000', Lincoln Co., 5 March (JM). *E. polingi*, 1.5 mi. E Capitan Gap Rd., Capitan Mts., 7000', Lincoln Co., 20 June (JM). *B. exilis*, several sight records, mid-late summer, Santa Fe, SANTA FE Co. (SJC); Sunspot, 24 July (RES). *L. marina*, Red R. Cn., TAOS Co., 29 July 80 (SJC). *C. ladon* (= *argiolus*) *cinerea*, Dog Cn., Sacto Mts., 11 Apr. (JM). *P. (I.) acmon texanus*, 11 mi. N Tinnie, Lincoln Co., 5 March EARLY (JM); Water Cn., 7000', Magdalena Mts., Socorro Co., 9 Aug. (CDF). *A. palmeri*, Hwy 54, 2 mi. N TX state line, 24 July (JM/RES). *L. bachmanii* larvata, Santa Fe, SANTA FE Co., 23-24 May (SJC); Dog Cn., Sacto Mts., 6 Sept. (tendency toward carinenta; more material needed--SJC). *A. vanillae*, Hwy 24, Milepost 45, Sacto Mts., 8600', OTERO Co., 6 July (JM). *Dione moneta*, Sunspot, 9200', Sacto Mts., OTERO Co., STATE & NORTH, 28 Apr. (JM). *S. aphrodite* ssp & *S. atlantis* ssp, Sugarite Cn., 7500', Colfax Co., 5 Aug. (CDF). *E. (O.) anicia cloudcrofti*, Pine Cg. nr. Cloudcroft, 8650', Otero Co., 7 June (JM). *T. leanira fulvia*, larvae & adults, St. Augustine Pass, Hwy 70/82, NE Las Cruces, Dona Ana Co., assoc/w *Castilleja integra*, 23 May (MJS); Capitan Mts., LINCOLN Co. (RH). *T. theona*, Dog Cn., Sacto Mts., 25 Apr., 17 May, 4 July & 6 Sept. (SJC). *C. definitiva*, Dog Cn., Sacto Mts., OTERO Co., 25 Apr. & 6 Sept. (SJC). *C. nycteis drusius*, Hwy 24, Milepost 28/35, 8600-8700', Sacto Mts., 7 June (JM). *P. tharos*, odd variant of "B" phenotype (= *pascoensis*), Cathey Peak Overlook, Sacto Mts., Otero Co., 23 July (RES). *P. mylitta arizonensis*, Dog Cn., Sacto Mts., 11 Apr. (JM); 25 Apr., 17 May, 4 July & 6 Sept. (SJC); two 4 July ♀♀ are atypical, and may represent another species). *P. interrogationis*, Capitan Mts., LINCOLN Co. (RH); Santa Fe, SANTA FE Co., 11 July (SJC); La Luz, 4800', Otero Co., 22 Aug. (JM). *P. faunus hylas*, Calavaras Cg., Sandoval Co., 5-6 Aug. (CDF). *N. californica*, Big Tesuque Cr., 10,000', SANTA FE Co., 20 July 80 (SJC). *V. virginianensis*, Sunspot, 24 July (RES). *J. coenia*, Capitan Mts., LINCOLN Co. (RH). *L. (B.) a. archippus*, Jct. Hwy 4/30, SANTA FE Co., 19 Sept. (SJC). *L. (B.) weidemeyerii angustifascia*, nr. Cathey's Peak Overlook, Sacto Mts., 23 July (RES). *A. bredowii eulalia*, Taos, TAOS Co., 30 Aug. 80 (SJC); Hyde Mem St. Park, SANTA FE Co., 14 June 80 & 28 Aug. 80 (SJC). *A. andria*, Capitan Mts., LINCOLN Co. (RH). *A. celtis montis*, 11 mi. N Tinnie, LINCOLN Co., 20 June (JM); Capitan Mts., LINCOLN Co. (RH). *C. pertepida dorothea*, Tunnel Sps., 6400', Sandoval Co., 7 Aug. (CDF); Water Cn., 7000', Magdalena Mts., Socorro Co. 9 Aug. (CDF). *C. meadii* ssp, same two data as for *dorothea* (CDF). *D. gilippus strigosus*, Santa Fe, SANTA FE Co., June 80 (Time Cary, fide SJC).

ZONE 4: MANITOBA, S. DAKOTA, NEBRASKA, KANSAS & TEXAS. Coordinator: H.A. Freeman. Contributors: George Balogh, David L. Eiler, Mike Elliston, James P. Fitter, H.A. Freeman, Mecky Furr, W.H. Howe, John A. Hyatt, John Jordison, Edward C. Kundson, Bill Lacey, Gary Marrone, Jim Reiser, James L. Smith, Mike Smith, Steve Spomer, John A. Stidham & Charles Watson. Best coverage in several years. Apparently good collecting in all of the areas covered.

MANITOBA: Mike Elliston reported on the Winnipeg area stating that the season started early with anglewings coming out in March & April. During May, *V. cardui*, *P. napi*, *G. lygdamus*, *P. rapae*, *A. milberti*, *O. chryxus* & *E. icelus* were collected. July & Aug. the following were well represented: *D. plexippus*, *B. arthemis*, *C. concumbens*, *H. lineata* & *M. jasminearum*.

SOUTH DAKOTA: Gary Marrone reported the following new COUNTY records: *A. numitor*, Bennett Co.; *S. liparops*, Jackson Co.; *A. clyton*, Minnehaha Co.; *B. archippus*, Bennett Co.; *B. weidemeyerii oberfoelli*, Jackson Co.; *S. idalia*, Yankton, Bon Homme, Charles Mix & Gregory Cos.; *S. edwardsii*, Todd Co.; *S. eurydice*, Bennett Co. & a STATE record; *A. texana*, Roberts Co., 7 July, leg. John Jordison. David L. Eiler reported a large number of species collected from 18-20 July, the most important ones which likely represent new COUNTY records are: *P. communis*, Shannon Co.; *P. origenes*, Pennington Co.; *E. ruricola metacomet*, Pennington Co.; *P. eurymedon*, Pennington Co.; *P. xanthoides*, Todd Co.; *L. melissa*, Shannon & Todd Cos.; *E. claudia*, Bennett Co.; *B. archippus*, Bennett Co.; *C. pegala*, Bennett Co., Shannon Co. & Todd Co.

NEBRASKA: David L. Eiler reported the following new COUNTY records collected 5 Aug.: *C. eurytheme*, Hayes Co.; *N. iole*, Hayes Co.; *S. melinus*, Hayes Co.; *C. gorgone*, Cheyenne Co.; *P. thraso*, Hayes Co. & *C. pegala*, Hayes Co. John Jordison & Bill Lacey reported for Douglas Co. the following BUTTERFLIES: *N. iole* & *E. claudia*, 10 Apr.; *P. glaucus*, 10 Apr.; *E. funeralis*, 11 Apr., possibly COUNTY record; *E. olympia*, 24 Apr.; *H. isola*, 28 May; *A. nicippe*, 6 June; *G. xanthoides dione*, 10 June; *S. a. acadica*, 23 June; *P. progne*, 16 June; *S. idalia*, 16 June; *E. mexicana*, 17 June; *A. andria*, 23 June; *Z. cesonia*, 1 July; *H. t. titus*, 8 July, & *P. agarithe*, 31 July.

MOTHS: *E. domingonis*, 30 Aug.; *M. xanthometata*, 2 May; *C. catalpae*, 19 June; *C. amyntor*, 5 Aug.; *C. undulosa*, 22 June; *D. inscripta*, 6 June; *D. myron*, 1 Aug.; *P. excaecatus*, 17 Aug.; *S. jamaicensis*, 24 July; *A. cingulatus*, 23 Sept.; *P. modesta*, 21 Aug.; *S. bassiformis*, 24 July, bait trap courtesy J. Holyday; *T. vellela*, 26 Aug.; *C. groteana*, 8 Sept.; *E. odorata*, 20 Sept.; *S. rugifrons*, 12 Aug.; *D. integerrima*, 9 Sept.; *E. magnarius*, 1 Oct.; *C. innubens* f. "*scintillans*", 14 July; *C. amatrix*, common Aug. & Sept.; *C. ilia* f. *osculata*, 8 July; & *C. cerogama*, 9 July. Steve Spomer & Jim Reiser reported the following new COUNTY records: BUTTERFLIES: *L. hyllus*, 10 Sept., Douglas Co.; *H. isola* *alce*, 5 June, Lancaster Co.; *S. acadica*, 18 June, Lancaster Co.; *L. marina*, 22 June, Lancaster Co.; *E. olympia* f. "*rosa*", 15 May, Saunders Co.; *N. iole*, 15 July, Otoe Co., 4 Aug., Gosper Co., 4 Aug., Red Willow Co., 3 July, Platte Co.; *E. mexicana*, 3 July, Platte Co.; *E. lisa*, 27 July, Saline Co., 29 July, Pawnee Co., 29 July, Gage Co., 15 July, Otoe Co., 4 Aug., Frontier Co.; *P. sennae eubule* f. "*browni*", 30 July, Richardson Co.; *L. portlandia anhedon*, 11 July, 1 Aug., Colfax Co.; *C. inornata ochracea*, 13 June, Platte Co.; *P. glaucus*, 4 Aug., Furnas Co., 4th instar larva on Ash.; *P. multicaudatus*, 4 Aug., Dawson Co., 4 Aug., Frontier Co., various larval stages on Chokecherry; *A. clyton*, 15 July, Otoe Co.; *L. arthemis astyanax*, 15 July, Otoe Co., 4 Aug., Frontier Co., 14 Sept., Saunders Co.; *A. andria*, 17 July, Otoe Co., 3 Aug., Furnas Co., 4 Aug., Frontier Co., 4 Aug., Adams Co.; *L. archippus*, 4 Aug., Frontier Co.; *P. comma*, 17 Sept.; *P. interrogationis*, 17 Sept., Otoe Co., 28 Sept., Saunders Co.; *P. progne*, 11 June, Colfax Co. A new STATE record: *M. gryneus*, 21 May, Lancaster Co., 28 Aug., Saunders Co. The following MOTHS were collected 2 May at Gallagher Canyon State Rec. Area, Dawson Co., at blacklight: *M. satyriniformas*, *A. figurata*, *A. phyllira*, *I. isabella*, *P. robiniae*, *P. quinquemaculatus*, *C. undulosa* & *C. lineata*. Also *P. coenia* larvae on *Linaria vulgaris*, 28 Aug., Saunders Co.

KANSAS: W.H. Howe reported average or better collecting for Franklin Co., with the appearance of some southern species such as *P. phaon*, *A. texana*, *Z. cesonia* & *P. agarithe* f. "*albarithe*" as late as 6 Nov. George Balogh reported the following collected just W of Medicine Lodge, Barber Co., 29, 30 Apr.: *E. baptisiae*, *H. metea*, *A. campestris*, *A. hianna* (most likely *turneri*), *A. oslari*, *A. erna*, *A. nysa*, *Z. cesonia*, *L. melissa*, *T. fulvia* (adults common, larva found on *Castilleja* sp.), *C. gorgone* &

P. jaunita, nectaring during the day on *Oxytropis Lambertii*. Charles A. Ely reported a list of 89 species of butterflies collected in Kansas during 1981. For lack of space the list will not be printed; however, for any person wanting this list the coordinator will be glad to send a copy.

TEXAS: Mike Smith reported the capture of *C. definita* at McKelligon Park, N. El Paso Co., 23 May. James Smith reported the following from Weimar-Almont Acres, Colorado Co., 30 May: *K. castalis*, *A. maerula*, & *C. pegala texana*. Ed Knudson, in company with Mike Rickard, reported the following: on 28 & 29 Sept., *Agathymus chisosensis* was collected in Big Bend at Green Gulch and in the Basin near the restaurant, and *Piruna baferniki* was not uncommon in Green Gulch. During Nov., the following good species were collected in the Rio Grande Valley, mainly at Santa Ana & Bentsen State Park: *D. moneta*, *B. hyperia*, *M. pixe*, *E. endymion*, *S. clonius*, *S. malitiosa pecta*, *P. anchisiades idaeus*, *A. fessonia*, *S. stelenes*, *E. frisia*, *A. fatima*, *E. hegesia*, *A. metaphis* & *C. corticea*. James P. Pitter reported for Fort Hood, Bell & Coryell Cos., that he collected 71 species of butterflies during 1981. The most interesting were: *A. toxeus*, *P. philetas*, *N. l'herminier*, *P. ocola*, *F. tarquinius* & *H. charitonius vazquezae*. During August *Catocala maestosa* was common at Reese Creek, Fort Hood, Bell Co., in a stand of medium-sized native Pecans. Mecky Furr reported the following: 21, 22 Apr., Rio Grande St. Park at Bentsen, Hidalgo Co., 28 species of butterflies collected; the most interesting were: *T. elada ulrica*, *T. theona bolli*, *C. ino melicerta*, *C. nemesis* & *P. agarithe maxima*. On 22 Apr. at Anzalduas Co. Park and Dam Granjero, Hidalgo Co., 17 species of butterflies were collected with the best being: *E. nise nelphe*, *C. gemma freemanii* & *S. columella istapa*. 23, 24 Apr., Relampago Trail along Rio Grande River, Hidalgo Co., 25 species of butterflies were collected with the best being: *E. boisduvaliana*, *H. ceraunus zachaeina*, *A. louisia*, *C. gemma freemanii*, *C. nemesis*, *C. rawsoni*, *M. p. pixe*, & *A. drusilla*. On 21, 22 Apr., a huge migration of *K. lyside* was observed between San Antonio & the Valley. 18, 19, 20 Oct. at Landa Park, New Braunfelds, Comal Co., 27 species of butterflies were collected; the best were: *C. rawsoni*, *S. alea*, *D. julia moderata*, *P. philea*, *P. sennae marcellina*, *H. c. vazquezae*, *C. pegala texana*, & *C. lacinia adjutrix*. John Hyatt reported: 20 May, at Pedernales Falls St. Park nr. Johnson City, the following butterflies: *C. pegala texana*, *E. rubricata*, *C. t. bolli*, *C. aurantiaca*, *A. arogos*, *E. o. autolytus*, & *P. alcestis*.

MOTHS: *S. heiligbrodti*, *H. fucosa* & *E. acraea*. At Bentson St. Park, Hidalgo Co., 23 May, the following butterflies were collected: *A. anaphus anetta*, *A. thraso tanemund*, *P. vibex praeceps*, *C. nemesis*, *C. isobea*, *A. antonio*, *A. louisia*, & *P. texana*. MOTHS: *M. perlaeta* & *P. insulata*. On 25-29 May at Black Gap Refuge, Brewster Co., the following butterflies were collected: *C. asychis georgina*, *P. albescens*, *S. zampa*, *P. alpeus*, *D. gilippus berenice*, *D. gilippus strigosus*, *E. mexicana*, *P. multicaudatus*, *A. mormo duryi*, *H. isola*, *B. exilis*, *P. acmon*, *C. chinatiensis* & *A. leilia*. MOTHS: *P. rustica*, *M. jucunda*, *C. cosyra*, *S. heiligbrodti*, *S. albolineata*, *C. mexicana* & *C. deducta*. John A. Stidham reported the capture of a very fresh ♂ *Dryas stupenda* (Stichel) on 19 July in Garland, Dallas Co. THIS IS A NEW RECORD FOR THE UNITED STATES. The coordinator will place this specimen in the American Museum of Natural History. Stidham also collected a fresh ♂ specimen of *Urbanus dorantes* in Garland on 17 Oct. H.A. Freeman reports: the usual species were common in Dallas Co. with the following BUTTERFLIES collected that are usually not present in the area: *H. charitonius vazquezae*, *A. thraso tanemund* & *Heliopetes laviana* (new COUNTY record). MOTHS: *C. maestopsa*, common in Garland & Dallas all summer from June-Sept., *C. agrippina*, Garland, July, Dallas, Aug.; *C. lacrymosa*, Dallas, Aug., Sept., Garland, July; *C. amatrinx* and f. "selecta", Dallas, Aug.; *C. piatrix*, Dallas, Aug.; *C. neogama loreta*, Dallas, Aug.; & *C. vidua*, Garland, 1 ♂, 19 Sept., and Garland, 1 ♂, 11 Oct. This is most likely a new STATE record. All *Catocala* were collected on tree trunks by net or killing jar.

ZONE 5: EASTERN-MIDWEST: MISSOURI to MINNESOTA to MICHIGAN to WEST VIRGINIA. Coordinator: M.C. Nielson. Contributors: C. Adams (CA); T. Anderson (TA); G. Balogh (GB); J. Bess (JB); C. Burkhardt (CB); J. Calhoun (JC); T. Carr (TC); P. Conway (PC); C. Covell (CC); D. Eiler (DE); L. Ferge (LF); L. Gibson (LG); M. Grocoff (MG); D. Hess (DH); R. Huber (RH); S. Kosti (SK); T. Kral (TK); R. Leary (RL); I. Leeuw (IL); V. Lucas (VL); E. Metzler (EM); W. Miller (WM); M. Nielsen (MN); C. Oliver (CO); D. Oosting (DO); J. Parkinson (JP); J. Prescott (JP); D. Schlicht (DS); J. Shuey (JS); E. Shull (ES); W. Sieker (WS); J. Slotten (JS); J. Tuttle (JT); R. Webster (RW); J. Wiker (JW); D. Wright (DW). Other collectors cited: G. Belyea (GB), L. Crabo (LC); R. Dana (RD); T. Herig (TH); C. Lundeen (CL); M. McInnes (MM); J. Melton (JM); L. Pfanmuller (LP); Y. Sedman (YS); W. Westrate (WW); J. Wilkie (W). General Comments: Another mild winter with below normal snowfall resulted in an early spring in most areas. Generally, many reported good collecting, while some found butterflies down from previous years. A total of 158 butterfly species were reported for the region--up from previous years. There was a good influx of southern species throughout the region. Noticeably abundant this year were *P. lisa*, *N. iole*, *E. claudia*, *V. cardui* & *J. coenia*; *V. atalanta* was found in explosive numbers in many areas. *Polygonias* & *Nymphalis* were down in northern areas. *Catocala* were reported down in all areas, although a few had good results with bait traps. Moths were reported by more collectors than in previous years. CAPITALS indicate a new COUNTY record and/or RANGE EXTENSION.

MISSOURI: Three collectors reported their findings in 14 counties from Putnam to Barry Co. Balogh submitted a detailed report covering 11 counties, incl. the Ozarks.

CHOICE BUTTERFLIES: (GB, exc. as noted) *E. martialis*, 24 Apr.-14 June, St. Francois Co.; *E. baptisiae*, 24 Apr.-21 June, Barton, St. Clair, St. Francois Cos.; *T. lineola*, Putnam, Scotland Cos. (DH); *H. phylaeus*, 26-27 Sept., Cooper, Marion Cos. (DH); *H. leonardus*, 30 Aug.-5 Sept., Jefferson, St. Francois Cos.; *H. metea*, 24-26 Apr., Jefferson, St. Francois, St. Genevieve Cos.; *P. coras*, 26 Sept., Marion Co. (DH); *A. arogos*, 20 June, Barton Co.; *P. byssus*, 14-27 June, St. Francois, St. Louis Cos.; *E. dion*, 6 June, *E. dukesi*, 6 June, 9 Aug., St. Charles Co. (*Carex hyalinolepis* is dominant sedge where these species occur); *A. hianna*, 22 Apr.-2 May, Barry, Jefferson, St. Francois, Stoddard Cos.; *A. linda*, 2 May, Barry Co.; *A. hegon*, 24 Apr.-2 May, Barry, St. Francois, St. Genevieve Cos.; *A. belli*, 2-31 May, Barry, St. Francois Cos.; *E. olympia*, 28 Mar.-24 Apr., St. Francois, St. Louis Cos.; *N. iole*, 21-27 Apr., 26-27 Sept., Barton, Cooper, St. Francois, Wayne Cos. (GB, DH); *F. tarquinius*, 9 Aug., St. Charles Co.; *G. xanthoides dione*, *H. hyllus*, 6 June, St. Charles Co.; *S. liparops*, 13-14 June, Cape Girardeau, St. Francois Cos.; *C. cecrops*, 21 Apr., Wayne Co.; *M. gryneus*, 28 Mar.-26 Apr., Jefferson, St. Francois, St. Louis Cos.; *C. muticum*, 31 May-14 June, 15-30 Aug., St. Francois Co.; *L. bachmanii*, 26-27 Sept., Cooper Co. (DH); *S. idalia*, 20-21 June, Barton, St. Clair Cos.; *C. bellona*, 6 June, St. Charles (common); *C. gorgone carlota*, 26 Apr., Jefferson Co.; *E. phaeton ozarkae*, 31 May-14 June, St. Francois Co.; *P. progne*, 27 Sept., Cooper Co.; *A. andria*, 26-27 Sept., Cooper Co.; *C. gemma*, 2 May, Barry Co.

CHOICE MOTHS: (GB, exam. by R. Heitzman) *L. apicalis*, 22 Aug., Jefferson Co.; *A. manifesta*, 24 Apr., St. Genevieve Co.; *A. elimata*, 25 Sept., St. Genevieve Co. (3rd STATE record); *O. modica*, 22 Aug., Jefferson Co.; *P. cerina*, 22 Aug., Jefferson Co.; *S. rosea*, 23-25 May, Barry Co. (adults rest. on *Allium mutabile* blossoms); *B. doubledayi*, 12 June, St. Genevieve Co.; *C. andromedae*, 13027 June, Cape Girardeau, St. Genevieve Cos.; *Z. martha*, 12 June, St. Genevieve Co.; *R. fraternalis*, 27 June, St. Genevieve Co.; *S. semirufescens*, 5 June, *S. concinna*, 22 Aug., Jefferson Co.; *N. mimosaria*, 25 Apr., St. Genevieve Co. (3rd STATE record); *G. fusciferata*, 13027 June, Cape Girardeau, St. Genevieve Cos.; *L. molliculata*, 5-27 June, Jefferson, St. Genevieve Cos.; *I. abruptata*, 5 June, Jefferson Co.; *P. merriccata*, 27 Mar., Jefferson Co.; *P. serinaria*, 22 Apr., Cape Girardeau Co.; *P. monillata*, 13 June, Cape Girardeau Co.

FOOD PLANT RECORDS: (GB, plant ID by A. Christ) *S. melinus*, 16-17 May, Barry Co., ex-larvae, fruits of *Astragalus mexicanus*; *P. jaunita*, larvae on *Gaura biennis*, 16-30 Aug., Jefferson, St. Francois Cos.; *P. gaurae*, larvae on *G. biennis*, 16 Aug., St. Francois Co.; *S. gaurae*, larvae & adults on *G. biennis*, 16 Aug.-5 Sept., St. Francois Co.

STATE RECORD: *Iridopsis larvaria*, 22 Apr., 15 Aug., Cape Girardeau Co. (DB).

KENTUCKY: Covell and members of the Society of Kentucky Lepidopterists enjoyed another good year of collecting, adding many new COUNTY & STATE records as part of the state's survey of lepidoptera--now 'hovering' near 2000 species! One of the highlights for the year was the fall collecting trip to the Paducah area on 5-7 Sept.; 11 collectors recorded a total of 57 butterfly

species, and many moths, in Fulton & Graves Cos., under ideal weather.

CHOICE BUTTERFLIES: (CC, exc. as noted) *E. baptisiae*, 21 Sept.-1 Nov., BOONE Co. (late date--JC,DH); *N. therminier*, GRAVES Co.; *L. accius*, FULTON Co.; *H. metea*, 17 Apr., HARLAN Co.; *A. logan*, GRAVES Co.; *P. yehl*, Fulton, Graves Cos.; *E. dukesi*, 6 Sept., FULTON Co. (LG); *A. aesculapius*, GRAVES Co.; *P. ocola*, Fulton Co.; *A. virginianensis*, 11-18 Apr., BULLIT, Harlan Cos.; *N. iole*, FULTON, GRAVES Cos.; *F. tarquinius*, GRAVES Co.; *C. cecrops*, FULTON, GRAVES Cos.; *P. m-album*, FULTON Co.; *C. ebenina*, 7-25 Apr., Nullitt, Harlan Cos.; *S. diana*, 23 July, Letcher Co. (VL); *A. andria*, 26 Sept., BOONE Co. (JC); *C. gemma*, GRAVES Co.; *H. sosybius*, 24 July, Letcher Co. (VL); *E. portlandia missarkae*, Fulton, Graves Cos.; *E. creola*, Fulton Co.

CHOICE MOTHS: *H. miniata*, 24 July, Letcher Co. (moth fell off logging truck on Pine Mtn.--VL); *F. comstocki*, 26 Apr., Harlan Co. (CC); *P. buffaloensis*, 5 Sept., FULTON Co. (CC); *S. florida*, 21 July, Harlan Co. (JC); *C. amatrinx*, 21 Sept., Boone Co. (JC); *C. aretaria*, 25 Apr., Harlan Co. (CC); *S. antidiscaria*, 5 Sept., Fulton Co. (CC); *S. anatomella*, 26 Apr., Harlan Co. (CC); *P. comstockiana*, 5 June, WHITLEY Co. (LG).

STATE RECORDS: *L. eufala*, 5 Sept., Fulton Co. (1 fresh ♂--MM); *P. philea*, 30 Apr., Louisville (A. Barron); *P. gemistrigulana*, 5 June, Whitley Co. (LG); *P. radiatana*, 4 May, Boone Co. (LG); *P. verna*, 10 Apr., Boone Co. (LG); *S. caryae*, 29 June, McCracken Co. (LG); *S. tautana*, 28 Mar., Meafe Co. (LG); *A. diminutana*, 26 Apr., Menifee Co. (LG).

WEST VIRGINIA: Oliver reported on the following butterflies from Sugar Grove, Pendleton Co.: *A. nicippe* (common), *P. tharos*, 3 July, type A & B flying together, 27 Aug., type A x B ♂ flying with A (type B is apparently strictly univoltine in this location), *E. anthedon*. Shuey, collecting briefly on 25-27 July, Randolph Co., found *C. interior*, *S. atlantis*, *C. selene*, *P. progne* & *V. cardui*.

FOOD PLANT RECORD: *C. ladon*, 11 June, Pendleton Co., ovipositing on *Lespedeza* sp., *Melilotus*, ova found on *Ceanothus americanus* (CO).

OHIO: Shuey, reporting from Athens, Hocking & Vinton Cos., collected a total 73 butterfly species. He found the season in the SE approximately 2 weeks early, with several spring species more common than usual, i.e., *Erynnis* sp., *A. hegon*, *A. midea*, *G. lygdamus*, *C. gemma*. He found this trend continuing through mid-summer with most butterfly species emerging 1-2 weeks earlier and appearing in good numbers; notable exception was *S. idalia* which emerged 4 weeks later than normal, and was noticeably scarce. Calhoun, in central Ohio, saw a warm spring progressing into a hot, dry summer with many butterflies more abundant than in previous years. He found *V. atalanta* in explosive numbers, *V. cardui* back to normal and common all summer, *S. idalia* was nearly nonexistent in many locations, and southern species, i.e., *E. nicippe*, *E. claudia* & *J. coenia*, more common.

CHOICE BUTTERFLIES: *E. martialis*, 3 June, Athens Co. (JS); *E. persius*, 16 May, Lucas Co. (TC); *H. phyleus*, 14 Aug.-20 Sept., Athens, Cuyahoga, Vinton Cos. (VL,JS); *H. leonardus*, 30 Aug., Vinton Co. (JS); *H. metea*, 21 May-8 June, ATHENS, HOCKING Cos. (JS); *P. massasoit*, 18 July, Lucas Co. (TC); *P. zabulon*, 20 May, Cuyahoga Co. (VL); *P. viator*, 11-18 July, Lucas, Portage Cos. (TC,JS); *E. dion*, 5-29 July, CHAMPAIGN, Paulding, Portage, UNION Cos. (JC,MN,JS,RW); *E. dukesi*, 5 July-3 Aug., Lucas, Paulding, UNION Cos. (JC,TC,MN,RW); *E. conspicua*, 11-18 July, Lucas, Portage Cos. (TC,JS); *A. hegon*, 12 May-3 June, Athens, Vinton Cos. (JS); *H. crespontes*, 25 May, UNION Co. (JC); *F. midea*, 3 May, Morgan Co. (VL); *P. lisa*, 5 July-20 Sept., Adams, Athens, Paulding, Vinton Cos. (VL,JS,RW); *A. nicippe*, 14 July-29 Aug., Athens, FAIRFIELD, Vinton Cos. (JC,JS); *H. hyllus*, 14-22 July, FAIRFIELD, Vinton Cos. (VLJC); *S. acadica caryaevorum*, 27 June-11 July, Portage Co. (JS); *S. liparops strigosum*, 19 July, DELAWARE Co. (JC); *M. gryneus*, 11 July-1 Aug., Adams Co. (VL,JS); *P. m-album*, 8-12 May, Athens, Vinton Cos. (JS); *C. ebenina*, 22 Apr.-8 May, Athens, Vinton Cos. (JS); *G. lygdamus*, 20 Apr.-8 May, Athens Co. (JS); *C. borealis*, 5-11 July, Adams, Paulding Cos. (VL,MN,RW); *L. bachmanii*, 6 July-26 Sept., Adams, Cuyahoga, Pikaway, UNION Cos. (JC,VL,JS); *E. claudia*, 10-26 Sept., Franklin, Hamilton Cos. (JC); *S. idalia*, 22 July, Vinton Co. (VL); *E. phaeton*, 7 June-12 July, Hocking, Portage Cos. (JC,JS); *E. progne*, 8 July, Paulding Co. (TC); *J. coenia*, 12-26 Sept., UNION Co. (JC); *A. clyton*, 5 Aug., UNION Co. (JC); *E. anthedon*, 5-29 July, Cuyahoga, Paulding, UNION Cos. (JC,VL,MN,RW); *S. appalachia leeuwi*, 23 June-3 Aug., Lorain, Paulding, Union Cos. (JC,VL,MN,RW); *C. gemma*, 20 Apr.-29 June, Athens Co. (JS); *C. pegala nephele*, 1-7 July, Cuyahoga, Portage Cos. (JC,VL).

CHOICE MOTHS: *M. jasminearum*, 11 July, Adams Co. (VL); *X. tersa*, 8 July, Lucas Co. (TC); *C. angulifera*, 11 July, Adams Co. (VL); *H. maia*, 27 Sept.-17 Oct., Lucas, Vinton Cos. (TC,VL); *E. imperialis*, *C. regalis*, 11 July, Adams Co. (VL); *C. pura*, 1 Aug., ADAMS Co. (1st in 50 yrs.--EM); *E. deflorata*, 18 June, Delaware Co. (JC); *A. octomaculata*, 25 May, UNION Co. (JC); *A. spinigera*, 23 May-1 Aug., ADAMS, ATHENS, LAKE, VINTON Cos. (EM); *A. cristata*, 3 July, VINTON Co. (1st record since 1878, the year it was described--EM); *F. jocosa*, 31 Mar., LAKE Co. (EM); *L. tinita*, 14 June, PORTAGE Co. (EM); *C. triangulifera*, 30 Aug., Cuyahoga Co. (VL); *S. florida*, 29 July-5 Aug., UNION Co. (JC); *C. quadrifera*, 1 Aug., ADAMS Co. (EM); *C. insolabilis*, 21 June-8 July, Lucas, Paulding Cos. (TC,RW); *C. dejecta*, 23 June, Lucas Co. (TC); *C. connubialis*, 5 July, PAULDING Co. (RW); *A. elonympha*, 17 Aug., Cuyahoga Co. (VL); *D. major*, 3 July, VINTON Co. (EM).

FOOD PLANT RECORD: *E. dukesi*, 2 live pupae and 1 parasitized larva in nests on *Carex lacustris*, 5 July, Paulding Co. (MN).

PREDATOR RECORDS: *A. rapae*, taken by spider, *Argiope aurantia*, & *V. atalanta*, taken by spider, *A. trifasciata*, 14 Sept., Union Co. (JC).

STATE RECORD: *A. manifesta*, 8 May, Lucas Co.; *X. dolosa*, 8 May, Lucas Co.; *S. abstrusa*, 13 June, Lake Co.; *Z. inconspicualis*, 19 July, Vinton Co.; *H. louisiana*, 14 June, Portage Co. (EM).

INDIANA: Eiler & Shull, reporting from Lagrange to Harrison Cos., filed comprehensive reports. Extensive travel enabled Shull to collect 93 BUTTERFLY and 306 MOTH species; he found most species down in numbers, partly due to adverse weather. Eiler found many southern species noticeably more common in summer and fall than in previous years, such as *H. phyleus*, *A. campestris*, *P. lisa*, *N. iole* & *J. coenia*. He found *V. atalanta* extremely abundant throughout the spring in NE areas.

CHOICE BUTTERFLIES: *A. lyciades*, 9-20 June, Fayette, Lagrange Cos. (DE,ES); *E. brizo*, horatius, 6 May, Kosciusko Co. (ES); *E. baptisiae*, 3 June, Harrison Co. (ES); *P. communis*, *N. therminier*, 19-20 Aug., Brown Co. (ES); *H. phyleus*, 16 Aug.-16 Oct., Fayette, Kosciusko, Wabash Cos. (DE,ES); *H. leonardus*, 19-20 Aug., Brown Co. (ES); *A. campestris*, 4 July, Harrison, Washington Cos. (DE,ES); *P. zabulon*, 13 June-20 July, Union Co. (ES); *E. conspicua*, 9 June-7 July, Lagrange Co. (DE,ES); *E. dion*, 30 June, HANCOCK, Madison Cos. (DE,ES); *B. philenor*, 2 May, FAYETTE Co. (DE); *P. protodice*, 17 June-20 Sept., Wabash Co. (DE,ES); *A. napi oleracea*, 26 Apr.-7 July, Lagrange Co. (DE,ES); *P. lisa*, 13 June-26 Sept., Brown, Kosciusko, Orange, Union Cos. (DE,ES); *N. iole*, 20 Sept., Elkhart, Wabash Cos. (CB,DE); *F. tarquinius*, 17-19 Aug., Brown, Knox Cos. (ES,DW); *H. hyllus*, 4 June-26 Sept., Noble, Kosciusko, Wabash Cos. (DE,ES); *E. dorcas*, 7 July, Lagrange Co. (DE,ES); *E. helloides*, 23-28 Sept., Wabash Co. (ES); *S. caryaevorum*, 20-30 June, Fayette, Hancock, Kosciusko, Wabash Cos. (DE,ES); *S. liparops strigosum*, 30 June, Madison Co. (DE,ES); *S. edwardsii*, 4 June, Lagrange Co. (ES); *C. cecrops*, 19-20 Aug., Brown Co. (large colony in S. Pk.--ES); *M. gryneus*, 4-21 July, Orange, Union, Washington Cos. (DE,ES); *L. bachmanii*, 30 June-29 Aug., Bartholemew, Shelby, Wabash Cos. (DE,ES); *E. claudia*, 18 June-15 Oct., Wabash Co. (ES); *C. nycteis*, 20 June, FAYETTE Co. (DE); *P. progne*, 9 Apr.-20 June, ADAMS, Kosciusko Cos. (DE,ES); *J. coenia*, 5 Aug.-26 Sept., Kosciusko, Wabash, Whitley Cos. (JC,DE,ES); *A. andria*, 3 July, Harrison Co. (ES); *E. anthedon*, 13 June, Fayette, Knox, Union Cos. (DE,ES,DW); *S. appalachia leeuwi*, 7 July-11 Aug., Lagrange Co.; *N. mitchellii*, 7 July, Lagrange Co. (Cedar Lk. bog--DE,ES); *C. pegala alope*, 22 July, FRANKLIN Co. (ES); *C. p. olympus*, 23 July, Union Co. (ES).

CHOICE MOTHS: *M. jasminearum*, 2 July-20 Aug., Brown, JEFFERSON Cos. (DE,ES); *C. hageni*, 19 June-1 July, Fayette, JEFFERSON Cos. (DE,ES); *P. plebeja*, 20 June-1 July, Fayette, Jefferson Cos. (DE,ES); *C. angulifera*, 1-4 July, Harrison, Jefferson Cos. (DE,ES); *C. regalis*, 1 July, Jefferson Co (ES); *C. fungorum*, *P. hebraicum*, *P. xanthioides*, *A. elonympha*, 1 July, JEFFERSON Co. (ES); *P. oculatrix*, 2 June, Wabash Co. (DE); *C. marmorata*, 18-20 Aug., Brown Co. (ES); *C. junctura*, 4 Aug., WABASH Co. (ES); *B. abalinealis*, 1 July, JEFFERSON Co. (DE,ES); *N. basitriens*, 19 June, Fayette Co. (DE); *E. amaturaria*, 29 Aug., WABASH Co.; *A. defectararia*, 20 July, UNION Co. (ES); *H. alienaria*, 20 June, Fayette Co. (DE); *E. delphini*, *L. pomonella*, 1 July, JEFFERSON Co. (ES); *T. semipurana*, 21 May, KOSCIUSKO Co. (ES).

ILLINOIS: Hess found winter generally mild, with very warm weather in late March; many spring species appeared early. From late April through July, it was quite wet, but the rest of summer was variable with some hot spells. The first frost occurred on 22-23 Oct., though a few species flew to mid-Nov. Hess and several other collectors concentrated efforts on a nature preserve study of sand and loess hill prairies in western counties. Slotten, using a bicycle for transportation, managed to collect 21 species of *Catocala* in the vicinity of Chicago!

CHOICE BUTTERFLIES: *A. lyciades*, 6 June, Mason Co. (2nd record for co.--YS); *S. hayhurstii*, 31 May, Mercer Co. (PC); *E. baptisiae*, 25 July, Winnebago Co. (IL); *E. martialis*, 7-11 July, Mason Co. (PC,YS); *E. horatius*, 10 July, Greene Co. (YS); *A. numitor*, 30 Sept., Pike Co. (late date--DH); *H. phyleus*, 10 Sept.-20 Oct., McDonough Co. (DH,YS); *H. ottoe*, 20 June-7 Aug., Mason, Winnebago Cos. (GB,PC,IL,YS); *P. origenes*, 30 May-7 Aug., Mason Co. (YS); *A. campestris*, 29 July-20 Oct., McDonough Co. (GB,YS); *A. arogos*, 20 June-18 July, Mason Co. (GB,PC,YS); *P. byssus*, 3 July-6 Aug., Greene, Mason, McDonough, Tazwell Cos. (GB,PC,YS); *P. massasoit*, 2-3 July, Lake, Winnebago Cos. (GB); *E. bimacula*, 1-3 July, Lake, Mason, Winnebago Cos. (GB,PC); *E. conspicua*, 2 July, Winnebago Co. (GB); *A. hianna*, 9 May, MASON Co. (GB); *A. aesculapius*, 23 Apr., Jackson Co. (DB); *L. eufala*, 17 Oct., MCDONOUGH Co. (DH); *Z. cesonia*, 26 Sept., Mason Co. (YS); *P. lisa*, 29 June-5 July, CLINTON Co. (JP); *A. nicippe*, 13 Apr.-4 June, Menard Co. (common--JW); *N. iole*, 23 Apr., Menard Co. (early date--JW); *F. tarquinius*, 10 Sept., McDonough Co. (YS); *G. xanthoides dione*, 1-7 July, Mason, Winnebago Cos. (GB,PC); *S. acadica*, 2-3 July, Lake, Winnebago Cos. (GB); *M. gryneus*, 22 Apr., Jackson Co. (GB); *I. henrici*, 3-15 Apr., Menard Co. (JW); *L. bachmanii*, 21 July-4 Oct., Mason, Menard, McDonough Cos. (DH,YS,JW); *E. claudia*, 3 July-2 Oct., CLINTON, Mason, McDonough Cos. (DH,JP,YS); *S. idalia*, 6 June-29 July, Mason, Winnebago Cos. (PC,IL,YS); *S. aphrodite alcestis*, 1 July, Winnebago Co. (PC); *C. bellona*, 6 June-11 Oct., MASON, McDonough Cos. (DH,YS); *P. progne*, 23 Apr.-11 Oct., Mason, Menard, McDonough Cos. (DH,YS,JW); *A. andria*, 9 Apr.-4 Oct., McDonough, Menard Cos. (DH,JW); *C. pegala olympus*, 27 June, CLINTON, JEFFERSON, ST. CLAIR Cos. (JP).

CHOICE MOTHS: *A. cingulata*, 3 Nov., McDonough Co. (student coll.); *A. figurata*, 9 July, MASON Co. (Reavis Hill N.P.--YS); *Holomelina* sp. (nr. *brevicornis*), 30 May-6 June, Mason Co. (Gleason N.P.--YS); *S. gloriosa*, 10 July, McHenry Co. (IL); *S. lucens*, 20 June-4 July, Mason, Winnebago Cos. (GB,IL,YS); *S. jaguarina*, 13 June-18 July, Mason Co. (Reavis Hill N.P.--GB,PC,YS); *T. lactipennis*, 1 July, Tazwell Co. (GB); *C. relicta*, 5 Aug., McHenry Co. (IL); *L. intermicata*, 1 July, Tazwell Co. (GB); *M. cucurbitae*, 23-27 June, McHenry Co. (IL).

IOWA: Schlicht, the only collector reporting, collected *E. phaeton* (2 ♂♂, 1 ♀) on 4 July, Linn Co.--the first record in about 50 years; he found *T. lineola* spreading into Linn & Van Buren Cos.

MINNESOTA: Huber reported it was a good year for southern migrants; special organized field trips for "priority species" produced many new COUNTY records and RANGE EXTENSIONS.

CHOICE BUTTERFLIES: *E. baptisiae*, CHIPPEWA, COTTONWOOD, FILLMORE, LESUEUR, LINCOLN, MURRAY Cos. (LC,RD,CL); *O. poweshiek*, CHIPPEWA, DOUGLAS, GRANT, SWIFT Cos. (CL); *H. ottoe*, RENVILLE, WINONA (19 July) Cos. (GB,RH); *H. pawnee*, MURRAY, SWIFT Cos. (RH,CL); *A. arogos*, FAIRBAULT, SWIFT, Winona (19 July) Cos. (GB,CL); *P. massasoit*, viator, *E. dion*, CHIPPEWA, MARTIN Cos. (CL); *A. hianna*, BIG STONE, CHIPPEWA, NICOLLET, RENVILLE, SWIFT Cos. (CL,JM); *A. hegon*, HOUSTON, PINE Cos. (CL); *L. eufala*, COTTONWOOD, MURRAY, REDWOOD Cos. (RH,CL); *E. mexicana*, OLMSTED, WILKIN Cos. (CL,JM); *P. lisa*, FILLMORE Co. (RD); *F. tarquinius*, CARLTON Co. (LC); *M. gryneus*, FILLMORE, RENVILLE (W'most record) Cos. (LC,CL); *S. melinus*, RENVILLE Co. (CL); *H. isola*, SWIFT, Winona (19 July) Cos. (GB,LP); *L. melissa samuelis*, 19 July, Winona Co. (1 fresh ♂--2nd brood just emerg.--GB); *S. idalia*, FARIBAULT, MURRAY Cos. (LC,CL); *J. coenia*, LINCOLN Co. (RD).

WISCONSIN: Six collectors responded and gave good coverage for the state. Ferge reported the winter was characterized by unusually mild periods and less than normal snowfall; he found butterflies were generally scarcer than usual throughout the state. The large *Polygona* & *Nymphalis* populations of the last few seasons in the north collapsed, with scarcely any individuals seen. Several southern *Pieridae* & *Noctuidae* were collected from 25 July to Oct. Fall weather was quite cool after mid-Sept., and collecting was essentially over by late Oct. Kral complained of a very poor year because of the lack of snow; yet, he recorded 94 butterfly species and many moths! Leary had a "fantastic" spring and found *P. viator*, *P. lisa* & *G. lygdamus* abundant. Parkinson, collecting from mid-March to mid-Nov., found most bog species common in May and all swamp-marsh skippers common. Most collectors reported that *Catocala* were down; baited trails and bait traps produced few specimens. Sieker attracted a ♂ *H. euryalus* to a ♀ *cecropia* on the outskirts of Madison--an unusual record, assuming it did not originate from imported stock! In Door Co., he found *A. luna* & *A. polyhemus* again very common; *Sphingidae* were in good numbers, especially *C. undulosa*, *P. excaecata*, and the *Catocala* very poor.

CHOICE BUTTERFLIES: *E. baptisiae*, 3 July, Juneau Co. (TK); *E. lucilius*, 11-12 July, Grant Co. (GB,JP); *E. persius*, 30 May, Adams Co. (JP); *O. poweshiek*, 27 June-16 July, Waukesha Co. (GB,JP); *T. lineola*, 27 June-6 July, KENOSHA, VILAS, Waukesha Cos. (GB,JP); *H. metea*, 15-22 May, Adams, Burnett, Douglas, Juneau, Marinette Cos. (JP); *H. comma laurentina*, 5-19 Aug., Florence, Forest, Langlade Cos. (TL,JP); *H. ottoe*, 27 June-12 July, Grant, Green Cos. (GB,JP); *P. origenes*, 27 June-16 July, Adams, Grant, Green, Juneau, Monroe, Sauk Cos. (TK,JP); *P. verna*, 27 June, Dane Co. (LF); *A. campestris*, 12 Sept., Juneau Co. (1 fresh ♀--TK); *P. massasoit*, 4-11 July, Green Lake, Waukesha, Winnebago Cos. (GB,TL); *P. viator*, 4-26 July, Green Lake, Juneau, Winnebago Cos. (TL,JP); *E. bimacula*, 3-8 July, Kenosha, Vilas Cos. (GB); *E. conspicua*, -1 July, Waukesha Co. (GB); *E. dion*, 7-17 July, Juneau, Langlade, Shanano Cos. (TL,JP); *A. hianna*, 15 May, GRANT Co. (LF); *A. hegon*, 5 June, LANGLADE Co. (LF); *L. eufala*, 12 Sept., Juneau Co. (1 fresh ♀--TK); *H. crespontes*, 15 May-17 Aug., Grant, Sauk Cos. (LF,TL,JP); *P. protodice*, 19 Sept., Oneida Co. (LF); *Z. cesonia*, 16 July, Green Co. (JP); *P. lisa*, Florence, Forest, Grant, Green, Juneau, Langlade, Monroe, Sauk, Winnebago Cos. (LF,TK,RL,JP,RW); *N. iole*, Grant, Green, Sauk Cos. (LF,JP); *F. tarquinius*, 5 June, FOREST Co. (LF); *L. epixanthe michiganensis*, 30 June-7 July, Monroe (common, ovipositing on cranberry--TK); *L. helloides*, 11-29 July, Juneau Vilas, Waukesha Cos. (GB,TK,JP); *S. caryaeorum*, 27 June-13 July, Adams, Green, Green Lake, Juneau Cos. (GB,TK,RL,JP); *S. liparops strigosum*, 20 July-19 Aug., Burnett, Eau Claire, Juneau, Langlade Cos. (GB,RL); *M. gryneus*, 13 July-26 Aug., Green, Sauk Cos. (IL,JP); *I. henrici*, 16-22 May, Burnett, Langlade Cos. (RL,JP); *I. nippon clarki*, 15 May, GRANT Co. (LF); *S. melinus*, 14 June-12 Sept., Grant, Green (nectar on *Amorpha canescens*), Juneau Cos. (LF,TK,JP); *E. amyntula*, 22 May, Burnett, Douglas, Washburn Cos. (LF,JP); *G. lygdamus couperi*, 15-22 May, Adams, Burnett, Marathon Cos. (JP); *L. argyrognomon nabokovi*, 29 June-9 July, Florence, Langlade, Oconto Cos. (GB,RL,JP,RW); *L. melissa samuelis*, 30 May, 4-23 July, Adams, Burnett, Eau Claire, Wood Cos. (GB,JP); *P. saepiolus*, 8 July, Forest Co. (RL); *E. claudia*, 13 July, Sauk Co. (JP); *S. idalia*, 27 June-12 Sept., Green, JUNEAU, Sauk Cos. (GB,LF,TL,JP); *C. frigga* ssp., 30-31 May, FOREST, Langlade Cos. (JP); *C. freija* ssp., 10 (429F)-30 May, Langlade, Oneida Cos. (LF,JP); *C. gorgone carlota*, 20 July (2nd brood)-1 Sept., Burnett, Winnebago, Wood Cos. (GB,RL); *P. faunus*, *satyrus neomarsyas*, 16 May, Florence Co. (overwintered--JP); *E. discoidalis*, 31 May, Forest Co. (JP); *O. chryxus strigulosa*, 16-24 May, Douglas, Marinette Cos. (LF,JP); *O. jutta ascerta*, 31 May, FLORENCE Co. (JP).

CHOICE MOTHS: *S. canadensis*, 2-31 July, Door, IRON (nect. on evening primrose), Marathon, MARINETTE Cos. (LF,WS); *S. eremitus*, Kalniae, 10 July, Juneau Co. (nect. on *Nicotiana*--TK); *S. drupferarum*, 22 May-3 July, Douglas, Juneau Cos. (TK,JP); *H. gracilis*, 4 July, ONEIDA Co. (LF); *D. hylaeus*, 29 July, Juneau Co. (nect. on *Nicotiana*--TK); *H. columbia*, 6-14 June, ASHLAND, LANGLADE, Lincoln, Oneida, PRICE, SAWYER, Vilas Cos. (attracted to *cecropia* ♀--LF); *E. imperialis*, 24 July, Grant Co. (LF); *H. lamae*, 4-8 July, Oneida, Vilas Cos. (GB,LF); *P. spraguei*, 18 June, Wood Co. (at UV--LF); *S. prima*, 12 June, Florence Co. (JP); *A. caja americana*, 5-12 Aug., Door, Marinette Cos. (JP,WS); *A. quadrata*, 13 June-2 July, Douglas, Marinette Cos.; *M. fishi*, 8 May, Oneida Co. (UV--LF); *A. oblata*, 5 July, Oneida Co. (UV--LF); *P. rugosa*, 5 June-5 July, Oneida Co. (LF); *P. pulverulenta*, 4 June-3 July, Iron, Marathon Cos. (LF); *A. capsularis*, 4 June-13 July, Douglas, Marathon, Sauk Cos. (LF,JP); *L. rubripennis*, 15 Aug., Grant Co. (LF); *B. borealis*, 10-18 Apr., MONROE, Oneida Cos. (LF); *F. jocosa*, 2 Apr., Marathon Cos. (LF); *L. digitalis*, 4 Oct., Florence Co. (JP); *L. semiusta*, 2-7 Apr., 27 Sept.-29 Oct., Dane, Florence, MONROE Cos. (LF,JP); *L. patefacta*, 28 Mar.-2 Apr., DANE, Marathon Cos. (LF); *X. thoracia*, 10 Apr., MONROE Co. (LF); *C. sericea*, 29 Oct., MONROE Co. (LF); *J. rufago*, 2 May,

ADAMS Co. (LF); *P. appassinata*, 29 Aug., Oneida Co. (LF); *P. experimens*, 4-18 July, Iron, Oneida Cos. (nect. on fireweed and *Lychnis alba*--LF); *H. borealis*, 15 May, Juneau Co. (nect. on strawberry--JP); *S. florida*, 7 July-9 Aug., Adams Co. (GB,LF); *S. septentrionalis*, 26 Aug.-12 Sept., Green Co. (LF,IL); *A. mappa*, 4 July, Oneida Co. (nect. on *L. alba*--LF); *S. microgamma nearctica*, 19 June, Florence Co. (LF,JP); *S. rectangula*, 4-31 July, Forest, Iron, Oneida Cos. (nect. on fireweed & *L. alba*--LF); *S. viridissima*, 18-31 July, Forest, Iron Cos. (nect. on fireweed--LF); *S. epigea*, 9 Aug., Adams Co. (LF); *C. venusta*, 7-31 July, Forest, Vilas Cos. (GB,LF); *C. inubens*, *serena*, *nebulosa*, *subnata*, *whitneyi* (bait-worm), *abbreviata* (worn-bait), 24 July, Grant Co. (LF); *C. praeclara*, 13-31 July, Juneau, Marinette Cos. (LF,TK); *C. clintoni*, 24 June, Dane Co. (UV-LF); *C. semirelecta*, Door Co. (WS); *C. similis*, 13 July-10 Aug., Juneau, Marinette Cos. (TK,JP); *C. micromypha*, 14 July-2 Aug., Juneau Co. (TK); *C. connubialis*, 30 July, JUNEAU Co. (TK); *M. texana*, 24 July, Grant Co. (LF); *S. lunilinea*, 24 July-15 Aug., Grant Co. (LF); *A. argillacea*, 5 Oct., Dane Co. (LF); *A. erosa*, 13 Oct., Dane Co. (LF); *H. aurora*, 29 June-10 July, Dane Co. (UV--LF); *A. angelica*, 24 July, Grant Co. (LF); *I. sulphurea*, 8 July, Vilas Co. (GB); *C. centerensis*, 28 May-14 June, Juneau Co. (TK); *S. quadriguttatus*, 4-31 July, Forest, Oneida Cos. (LF).

FOOD PLANT RECORDS: *L. melissa samuelis*, 21-22 July, multiple larvae attended by ants on *Lupinus perennis*, adults emerg. 1-10 Aug., Burnette, Eau Claire Cos. (GB).

STATE RECORDS: *P. byssus*, 12 July, Grant Co. (GB); *P. lineata*, 29 June, Dane Co. (UV--LF); *H. subrotata*, 26 June-24 July, Grant Co. (UV--LF).

MICHIGAN: A record fifteen reports were received, giving the state wide coverage throughout the season. Another mild winter, with below average snowfall, and an early spring resulted in 21 butterfly species on 2-3 May in Montcalm Co. Nielsen found butterflies, and most moths, were generally up from previous years; yet *Catocala* were down in southern counties. Approximately 630 *Catocala*, representing 21 species, were bait-trapped, in addition to those at a bait trail, during the 1st week in Aug. in Otsego Co.; at least half of the trapped specimens were *C. antinympha*! Some reported an influx of southern species, especially *P. lisa*, and many found *V. atalanta* up in numbers from previous year. Miller found *E. claudia* & *P. coenia* very common in Van Buren Co. Webster found *Hemileuca* sp. (previously reported as *H. lucina*) larvae extremely abundant on 30 June, stripping small willows adjacent to large bog in Roscommon Co.; Carr reported the adults common in the same area on 24 Sept.

CHOICE BUTTERFLIES: *E. baptisiae*, 17 July, Monroe Co. (GB); *E. martialis*, 7-27 June, Kalamazoo, ONTONAGON Cos. (MN,RW); *E. persius*, 3-24 May, Monroe, Montcalm Cos. (TC,MN,RW); *P. centaureae wyandot*, 3 May, Montcalm Co. (RW); *C. palaemon mandan*, 24 June, Chippewa Co. (RW); *T. lineola*, Dickinson, Ontonagon Cos. (GB,JP); *H. comma laurentina*, *leonardus*, 25 Aug., DICKINSON Co. (JP); *H. metea*, 20 May, Dickinson Co. (JP); *P. massasoit*, viator, *E. dion*, 9-10 July, Cass, Montcalm Cos. (MN); *E. bimaculata*, 24 June-4 July, Dickinson, Mackinac, Otsego Cos. (JP,RW); *E. dukesi*, 24 July, Lenawee Co. (MN); *A. hegon*, 9 June, DICKINSON Co. (JP); *B. philenor*, 15 Aug.-6 Sept., Lenawee, St. Joseph Cos. (MN,JW); *P. protodice*, 5-6 Sept., St. Joseph Co. (JW); *A. virginiensis*, 23 May, BARAGA, Leelanau Cos. (GB,MN,DO,RW); *Z. cesonia*, 31 May-13 Aug., CLINTON, VAN BUREN Cos. (TH,WJ); *P. lisa*, 15 June-31 Aug., Allegan, BERRIEN, DICKINSON, HILLSDALE, Jackson, Kalamazoo, Mackinac Cos. (CA,MG,SK,WM,RW); *N. iole*, 5-12 Sept., BERRIEN, St. Joseph Cos. (CA,JW); *F. tarquinius*, 30 July, Roscommon Co. (RW); *E. helloides*, 31 May-12 Sept., Montcalm, St. Joseph Cos. (MN,JW); *E. dorcas*, 19 July, Alpena Co. (RW); *H. titus*, 26 July, Keweenaw Co. (RW); *I. henrici*, 3 May, Montcalm Co. (MN,RW); *I. irus*, 2-3 May, Montcalm Co. (MN,RW); *I. polios*, 22-23 May, Baraga, Dickinson, Iron Cos. (MN,JP,RW); *S. melinus*, 23 May, Baraga Co. (RW); *E. laeta*, 21 July, Emmet Co. (2nd brood--1 ♀ slightly worn, nect. on common milkweed--DO); *L. melissa samuelis*, 24 May-6 June, 17-18 July, Allegan, Monroe, Montcalm Cos. (GB,JB,TC,MN); *P. saepiolus*, 26-29 June, Alger, Chippewa, Iron Cos. (DO,RW); *L. bachmanii*, 12 Sept., St. Joseph Co. (MN); *E. claudia*, 25 July-7 Sept., Mackinac, St. Joseph, Van Buren Cos. (WM,JW,RW); *P. eunomia dawsoni*, 24 June, Chippewa Co. (RW); *C. frigga* ssp., 22-23 May, Baraga, Iron Cos. (GB,MN,RW); *C. freija* ssp., 21 May-3 June, BARAGA, Dickinson Cos. (GB,MN,JP,RW); *P. batesii*, 19-25 June, ARENAC, VAN BUREN Cos. (MG); *P. tharos*, Type A, 9-10 July, Cass, Montcalm Cos. (Type B, 1 worn ♂, with A in Flat RSGA--CO); *N. mitchellii*, 21 June-10 July, Cass, Jackson Cos. (JB,MN,CO); *C. inornata inornata*, 25-30 June, Emmet, Cheboygan, Luce, Mackinac Cos. (DO,RW); *E. discoidalis*, 21 May-3 June, DICKINSON Co. (GB,MN,JP,RW); *O. chryxus strigulosa*, 3-23 May, Dickinson, Iron, Montcalm Cos. (GB,MN,JP,RW); *O. jutta ascerta*, 21-22 May, Dickinson Co. (GB,MN,RW).

CHOICE MOTHS: *S. gordius*, 15-21 June, Jackson Co. (JB); *S. poecila*, 22-23 May, Baraga, Dickinson Cos. (MN,JP); *D. versicolor*, 25 June-1 July, Jackson Co. (JB); *C. angulifera*, 25 June-9 July, Cass, Wayne Cos. (JT,WJ); *H. columbia*, Mecosta Co. (ex-cocoons--GB,MN); *E. imperialis pini*, 4 July, Crawford Co. (TC); *P. assimilians*, 15-21 May, Osceola, Otsego Cos. (JB,MN); *A. caja americana*, 29 July-4 Aug., Cheboygan, Otsego Cos. (MN,RW); *P. tacoma*, 23 May, DICKINSON Co. (MN); *A. cordigera*, 21 May, DICKINSON Co. (MN); *C. intermedia*, 23 May, DICKINSON Co. (MN); *F. comstocki*, 22 May, Baraga Co. (MN); *P. thaxteriana*, 29-30 Mar., Clinton, ROSCOMMON Cos. (MN); *E. grandis*, 29 Mar.-7 Apr., Clinton Co. (MN); *L. semiusta*, 12 Oct., DICKINSON Co. (JP); *L. amanda*, 30 May, CRAWFORD Co. (MN); *L. patefacta*, 25 Sept., 12 Oct., OTSEGO Co. (det. by D. Schweitzer--MN); *P. anceps*, 24 Sept., OTSEGO Co. (MN); *F. enthea*, 25 Sept., 9 Oct., Otsego Co. (MN); *P. carnosa*, 25-26 Sept., Otsego Co. (MN); *J. rufago*, 24 Sept., CRAWFORD Co. (MN); *A. mixta*, 5 Aug., Otsego Co. (MN); *E. claudens*, *jocasta*, 6 Aug., Otsego Co. (MN); *H. stramentosa*, 24 Sept., OTSEGO Co. (MN); *A. octo*, 31 Aug., SHIAWASSEE Co. (TA); *C. coelebs*, 24 July-11 Aug., Otsego, Roscommon Cos. (LG,MN,JS,RW); *C. subnata*, 15-18 Aug., Ingham, Lenawee Cos. (MN); *C. semirelecta*, 2-10 Aug., Otsego Co. (LG,MN,JS); *C. illecta*, 8-9 July, Kalamazoo Co. (WM); *C. coccinata*, 1 July-3 Aug., Jackson, Otsego, Roscommon Cos. (JB,MN,RW); *B. infans*, 29 Mar., Montcalm Co. (TC); *L. chirodotha*, 19 June, Jackson Co. (JB); *C. melshimeri*, 14-21 June, JACKSON Co. (JB); *A. aurea*, 27 July, Shiawassee Co. (TA).

FOOD PLANT RECORDS: *I. henrici*, *C. ladon*, 31 May, Montcalm Co., numerous larvae feeding on flower heads of *Viburnum acerifolium* (MN); *P. faunus*, 28 July, Keweenaw Co., 6 larvae feeding on *Vaccinium* sp., adults emerg. 9-16 Aug. (RW); *H. maia*, 24 May, Monroe Co. colonies of 1st instar larvae on *Populus tremuloides* & *Salix* sp. (TC); *P. cataphracta*, larvae boring in *Desmodium nudiflorum*, *Eupatorium purpureum*, Lenawee, ST. JOSEPH Cos. (MN); *P. teucostigma*, larvae boring in garden columbine, Lenawee Co. (MN); *P. necopina*, larva boring in *Helianthus grosseserratus*, BERRIEN Co. (MN); *P. silphii*, larva boring in *Silphium terebinthinaceum*, BERRIEN Co. (MN); *H. stramentosa*, larvae boring in *Scrophularia marilandica*, Lenawee Co. (MN); *C. illecta*, many instar larvae found hiding in grass beneath small isolated *Gleditsia triacanthos*, 4 June, Kalamazoo Co. (RW).

STATE RECORD: *X. xanthographa*, 12 Aug., Emmet Co. (det. by D. LaFontaine--also one collected in Antrim Co., 1980--EM).

ZONE 6: SOUTH: ARKANSAS, LOUISIANA, TENNESSEE, MISSISSIPPI, ALABAMA, FLORIDA, GEORGIA, SOUTH & NORTH CAROLINA, VIRGINIA. Coordinator: H.D. Baggett (HDB). Contributors: W.L. Adair (LA); J.K. Adams (JA); G. Balogh (GB); R.W. Boscoe (RB); V.A. Brou (VB); J.V. CALHOUN (JC); R.W. Cavanaugh (RC); J.M. Coffman (JMC); T.S. Dickel (TD); L.C. Dow (LD); I. L. Finkelstein (IF); H.A. Freeman (HF); M. Furr (MF); R. Gattelle (RG); R.M. Gilmore (RMG); A. Ginsburg (AG); J.J. Gonzalez (JG); W. Grooms (WG); W. Hank (WH); P. & D. Henry (P&DH); M.L. Israel (MI); L.C. Koehn (LK); V.P. Lucas (VL); B. Mather (BM); J. Pilkington (JP); G.B. Straley (GS); J. Tuttle (JT); C.N. Watson (CW); R. Webster (RW); W. Wright (WW). All new U.S., STATE, COUNTY, PARISH records indicated by caps., as are range extensions (NORTH, SOUTH, etc.).

ARKANSAS: BUTTERFLIES: Papilionidae: *Heraclides cresphontes*, July, Eureka Springs, Carroll Co. (P&DH). Nymphalidae: *Speyeria cybele*, *Anaea andria*, *Euptoieta claudia*, July, Eureka Sprgs. (P&DH). Pieridae: *Falcapica midea*, April, Heber Sprgs., Cleburne Co. (P&DH); *Phoebis agarithe*, 1 June, Heber Sprgs. (P&DH). Heliconiidae: *Agraulis vanillae*, July, ovip. on *Passiflora* sp., Eureka Sprgs. (P&DH). Lycaenidae: *Mitoura gryneus*, 28 Apr., Fayetteville, Washington Co. (GB); *Parrhasius m-album*, June, Heber Sprgs. (P&DH). Satyridae: *Enodia portlandia missarcae*, May, Fayetteville (GB); *Enodia creola*, 23 May, Fayetteville (GB); *Cylopsis gemma*, Apr.-May, Fayetteville (GB) & Woolly Hollow St. Pk., Faulkner Co. (P&DH). Hesperidae: *Erynnis icelus*, Apr.-May, Fayetteville (GB); *Amblyscirtes aesculapius*, *A. carolina*, *A. belli*, all early May, Fayetteville (GB).

MOTHS: Sphingidae: *Hemmaris thysbe*, *H. gracilis*, *Eumorphia pandorus*, *E. achemon*, July, Eureka Sprgs. (P&DH). Noctuidae: *Erebos odora*, at light, 5 Spet., Hope Hill Farm, Faulkner Co. (HF); *Catocala maestosa*, *C. vidua*, *C. lacrymosa*, *C. ulalume*, & *C. paleogama*, all resting on tree trunks, Hope Hill Farm, Faulkner Co. between 5-7 Sept. (HF).

LOUISIANA: BUTTERFLIES: Danaidae: Danaus gillippus, 27 Sept., ovip. on Cyranchum angustifolium, Grand Isle, Jefferson Parish (MI). Nymphalidae: Anthanassa texana seminole, 22-29 Sept., Gardere & 13 Oct., Indian Mound, both East Baton Rouge Parish (MI). Hesperidae: Poanes aaroni howardi, May, Little Chenier, Cameron PARISH (STATE) (VB); Euphes dukesi, locally common, 24 July-16 Aug., Baton Rouge (MI); Euphes ruricola metacomet, 16 Oct., Manifest (MI). Pieridae: Zerene cesonia, 14 Oct., Baton Rouge (MI); Nathalis iole, 5 Oct., Mandeville; 16 Oct., Manifest; & 16 Oct., Marksville (MI).

MOTHS: Saturniidae: Automeris louisiana (n. sp.), March, Vermillion PARISH (VB); Hyalophora cecropia, 10 Apr. & 3 May, Baton Rouge (MI); Hemileuca maia, adults in mating flight 18 Nov.-23 Dec., Baton Rouge (MI). Sphingidae: Manduca jaminearum & Sphinx kalmiae, St. John PARISH (VB); Eumorpha pandorus, Tangipahoa PARISH (VB); Daraps pholus, 4 Sept., Crowley (MI); Dolba hylaeus, 5 Sept., & Pachysphinx modesta, 26 Aug., both Baton Rouge (MI). Arctiidae: Holomelina laeta, 27 July, Chemin-a-haut St. Pk. (MI); VB indicated that the following are all new STATE records: Pygarctia abdominalis. Noctuidae: Hypernodes fractilinea, Epizeuxis denticulalis, Chaetagnathia tremula, Lithophane signosa, Ogdoconta tacna, Acronicta modica, A. perblanda, Ptichodes bistrigata, Cerastis tenebrifera, Feralia major, Lepipolys perscripta, & Pippona bimatrix. Geometridae: Eumacaria latiferrugata, Tacparia zalissaria, Euchlaena effecta, Metarranthis duaria, Glena plumosaria, Itame coortaria, & Ceratomyx satanaria. Notodontidae: Schizura epicalis, Notodontia basitriens. Lasiocampidae: Phyllodesma carpinifolia. Pyralidae: Geshna primordialis, Hypsochyra costalis, Herculia olinalis, Blepharomastix ranalis, Lamprosema magualis, Sameodes albiguttalis, Eoparargyractis irroratalis, Pyrausta magniferalis, P. freemanalis, P. illibalis, P. euphaesalis, Langessa nomophilalia. Olethreutidae: Eucosma scintillana. Tineidae: Fernaldia anatomella. Glyphipterygidae: Glyphipterix impigritlella.

TENNESSEE: BUTTERFLIES: Papilionidae: Pterourus glaucus, P. troilus, & Battus philenor, 28 June, Dale Hollow Lake, Clay Co. (MF); same ssp. 19 July, Pickwick Dam, Hardin Co. (MF). Nymphalidae: Speyeria cybele, Dale Hollow Lake & 26 June, Edgar Evans St. Pk., DeKalb Co. (MF); Speyeria diana, 18 July, Carter Co. (CW); Speyeria aphrodite, 9 July, Washington Co. (CW); Clossiana bellona, 11 Apr., Washington Co.; 2 May, Hawkins Co.; & 18 July, Carter Co. (CW); Charidryas nycteis, July-Sept., Shelby Co.; 19 July, Pickwick Dam (MF); Junonia coenia, 19 July, Pickwick Dam; common Aug.-Sept. in Shelby Co. (MF). Euptoieta claudia, Sept., Shelby Co. (MF). Pieridae: Phoebis sennae eubule, unusually common in 1981, Aug.-Sept., nectaring on Impatiens capensis, Shelby Co. (MF); Nathalis iole, 6 July & 7 Sept., Shelby Co. (MF); Artogeia virginiana, Apr., Sullivan & Washington Cos.; May, Hawkins Co. (CW); Pyrisitia lisa, 26 Aug., Washington Co. (CW); Abaeis nicippe, Aug.-Sept., Shelby Co. (MF); 11 Apr., Washington Co. (CW) (EARLY record, not previously in the spring and not thought to overwinter). Satyridae: Cercyonis pegala, 15 July-9 Aug., Shelby COUNTY (MF); 19 July, Pickwick Dam (MF); Enodia portlandia, 10-21 Aug., Shelby Co. (MF); Enodia creola, July-Sept., Shelby St. Forest & Nonconah Creek, Shelby Co. (MF); Cyllopsis gemma, 19 July, Pickwick Dam; unusually common, Shelby Co. (MF). Lycaenidae: Hemiargus isola alce, 26 Sept., Shelby COUNTY (probable STATE) (MF); Feniseca tarquinius, 22 June, common nr. Elm trees, Shelby St. Forest (MF); Celastrina ebenina, 11-18 Apr., Washington COUNTY; 2 May, Hawkins COUNTY (CW); Glaucopsyche lygdamus, 11-18 Apr., Washington Co.; 25 Apr., Sullivan Co. (CW); Incisalia augustinus, 11 Apr., Washington Co. (CW). Hesperidae: Staphylus hayhurstii, 18 May & 2 Aug., Sullivan COUNTY (CW); Erynnis brizo, 18 Apr., Washington Co. (CW); Urbanus dorantes, Oct., Shelby COUNTY (STATE) (MF).

MOTHS: All from MF in Shelby Co., no dates. Saturniidae: Callosamia promethea, C. angulifera, S. bisecta, S. bicolor. Sphingidae: Amphion nessus & Speocodina abbotti, common at bait; Ceratomyx amyntor, Xylophanes tersa, & Eumorpha fasciatus. Arctiidae: Apantesis phalerata. Noctuidae: Catocala angusi, C. amatrix, C. ilia, C. alabamiae, C. cara, C. epione, C. innubens, C. amica, C. illecta, C. paleogama, C. ultronia, Amphipyra pyramidoides, Eparthenos nubilis.

MISSISSIPPI: MOTHS: Saturniidae: Automeris louisiana (n. sp.), Bay St. Louis, Hancock COUNTY, taken by Rick Kergosian (VB) (STATE, 1st record outside of Louisiana). Noctuidae: Catocala subnata (STATE) (BM); Catocala sappho, Hinds COUNTY (BM); Catocala relecta, Warren COUNTY (4th from the state). BM also indicated that Basilcladus tracyi, Bay St. Louis, Hancock COUNTY, taken by R. Kergosian, is a new STATE record.

ALABAMA: All of the following are records from Huntsville, Madison Co., courtesy of JG.

BUTTERFLIES: Papilionidae: Pterourus troilus, common all summer; Heraclides cresphontes (1, rare in area); Eurytides marcellus, early spring only. Nymphalidae: Nymphalis antiopa (1 all season); Euptoieta claudia, early fall only; Vanessa cardui, late summer only; Asterocampa celtis; Junonia coenia, Polytonia interrogatilis, Basilarchia arthemis astyanax. Pieridae: Colias eurytheme; Artogeia rapae (abundant); Phoebis sennae eubule, unusually large numbers in late summer; Abaeis nicippe, common all summer. Heliconiidae: Agraulis vanillae nigrior. Libytheidae: Libytheana bachmanii, late summer. Hesperidae: Poanes viator, locally common; Amblyscirtes vialis, Epargyreus clarus.

MOTHS: Saturniidae: Hyalophora cecropia, Actias luna, Antheraea polyphemus.

FLORIDA: BUTTERFLIES: Papilionidae: There were no reports received for either Heraclides aristodemus ponceanus or Heraclides andraemon bonhotei during 1981. The Florida Game & Fresh Water Fish Commission plans to initiate a recovery program to benefit H. a. ponceanus in 1982 (see News of the Lep. Soc. #1, Jan.-Feb. 1982). Pterourus palamedes, 30 Mar.-3 Apr., Homestead, Dade Co. (JP). Nymphalidae: Anthanassa texana seminole, 18 Apr., Suwanee River St. Park, Suwanee COUNTY (HDB). Anaea floridalis, 1 Apr., Camp Owaissa-Bauer, Homestead (JP); 28-29 Dec., Big Pine Key, Monroe Co. (P&DH). Marpesia petreus, 28 Nov., Ochopee, Collier Co. (VL). Siproeta stelenes bipagiata, common but mostly worn, 8-15 Nov., Homestead (MF); reared ex-ova from ♀ taken 2 Nov., Homestead on Blechnum brownii (RB). Anthanassa frisia, common, 11-14 Nov., Upper Matecumbe & Plantation Keys, Monroe Co. (MF); 27 Nov., Collier-Seminole St. Pk., Collier Co. (VL); reared ex-ova from ♀♀ taken on Key Largo, 9 Nov. on Dicliptera assurgens (RB); Anartia jatrophae guantanamo, abundant, 8-15 Nov., Florida City (MF); reared ex-ova from ♀♀ taken 7 Nov., Homestead, on Lippia nodiflora (RB); 27 Nov., Long Key St. Pk., Dade Co. (VL); Collier-Seminole St. Pk., Collier Co. (VL). Basilarchia archippus floridensis, common, 8-15 Nov., Florida City, Dade Co. (MF); 26 Nov., Naples, Collier Co. (VL). Eunica tatila tatilista, unusually common in hammocks on N Key Largo, Nov. (RB,LK); 1 Nov., Upper Matecumbe Key, common in hammocks beside US 1 (HDB); IFAS Tropical Research Station, Homestead, Dade Co., several at bait (LK). Eunica monima (not regarded as a Florida resident!) was reported from a number of localities in 1981, in some cases rather commonly. These are the first records since 1973: 4, 7, 10 Nov., Goulds, Dade Co. (RB); 1 Nov., Big Pine Key, Monroe Co. (record from G. MacDonald); 6 Nov., three, Stock Island, Monroe Co. (RB); common at bait, Goulds, mid-Nov. (LK); several, 2-4 Nov., nectaring on Lantana in open clearing in downtown Key Largo (record of J. Wilkie). Many of these appeared flight-worn, although LK reported them as being fresh at Goulds; perhaps it is gaining a toe-hold in s. Florida. Junonia evarete n. ssp. michaellesi (hereafter type "A") was collected for the 1st time 31 Oct.-1 Nov., Key Largo, Monroe COUNTY (STATE, U.S.) by T.M. Neal & J.R. Watts; Big Pine Key, 1 Nov., by S.J. Roman. A current re-evaluation of the Junonia evarete complex from the Caribbean region is in progress by D. Harvey, Univ. of Texas, Austin. The exact status of type "A" is not clear at this time; type "B" currently refers to the tropical buckeye of past Florida references, and apparently deserves full species status, according to Harvey. Other records for type "A": 3 Nov., IFAS Tropical Research Station, Homestead, Dade COUNTY, abundant, visiting Bidens pilosa (HDB,RB); 5 Nov., Key Largo, reared ex-ova on Stachytarpheta jamaicensis (RB); 21 Nov., IFAS Station, few present, worn (LK,HDB). 15 Dec., Plantation Key, Monroe Co. (JC); Dec., Stock Island, R. Godefroi; 28-29 Dec., Big Pine Key, Monroe Co. (P&DH). Anaea andria, 7 Apr., Suwanee Riv. St. Pk., Suwanee COUNTY (WG). Danaidae: Danaus eresimus tethys, 11-14 Nov., Upper Matecumbe Key (MF); D. gillippus berenice, 11-14 Nov., Upper Matecumbe (MF); Lake Placid, Highlands Co. on 22 Nov. (VL). Heliconiidae: Dryas iulia largo, Ochopee, Collier Co. (VL) on 28 Nov. Lycaenidae: Mitoura hesseli, 18 Mar., Sumatra, Liberty Co., reared ex-ova on Chamaecyparis thoides (RB); Mitoura gryneus swadneri, 7 Apr., Suwanee Riv. St. Pk., Suwanee COUNTY (WG)--(unusual, since most records for this are along the coast); 9 Mar., Yankeetown, Levy Co. (WW); Incisalia henrici margaretae, 7-8 Mar., Deland, Volusia Co. at blossoms of Salix carolinensis (WW); Strymon columella, 27 Nov., Collier-Sem. St. Pk. (VL); Strymon martialis, Aug., Summerland Key, Monroe Co. (JA); Tmolus azia, N. Key Largo, Monroe

COUNTY during Nov., at Acacia blossoms (RB,LK)--(NOTE: I heard of another capture from Stock Island during spring of 1981, but have not received confirmation of this--RG); Chlorostyrymon s. simaethis, Nov., very common locally nr. Cardiospermum halicacabum vines, N. Key Largo (MF,LK,HDB); Chlorostyrymon maesites, several Nov. & Dec., N. Key Largo, visiting Eupatorium flowers (LK)--the site of this colony is under construction at present. Hemiargus thomasi bethunebakeri, 26 Nov., Marco Island, Collier Co. (VL): NOTE: first mainland record since the early-1970!; 12-14 Nov., Big Pine Key (MF); Aug., Key Largo (JA). Satyridae: Enodia portlandia floralae, Enodia appalachia, & Cyllopsis gemma, 18 Apr., Winter Springs, Seminole Co. (LD). Hesperidae: Megathymus cofaqui, ex-lv. & pupae in Yuccae filamentosa, Mar., Hillsborough Co. (LA); Atrytone arogos, Atrytonopsis loammi, 3 May, Tampa, Hillsborough Co. (LA); Amblyscirtes hegon, 7 Apr., Suwanee River St. Pk., Suwanee COUNTY (WG); Megathymus yuccae, 7 Apr., Suwanee Riv. St. Pk., Suwanee COUNTY (WG); Poanes zabulon, 18 Apr., Suw. Riv. St. Pk., Suwanee COUNTY (HDB); 26 Mar., Brooksville, Hernando COUNTY (WG); Euphyes pilatka, 30 Mar.-3 Apr., Homestead, Dade Co., & 31 Mar., Key Largo, Monroe Co. (JP); Ephriades brunnea floridensis, 30 Mar.-3 Apr., Homestead (JP); Phocides pigmalion keechobee, 6 Apr., Ft. DeSoto Pk., Pinellas Co. (WG) (NORTH); 30 Mar., Homestead (JP); Polites baracoa, 1 Apr., Homestead (JP).

MOTHS: Saturniidae: Callosamia angulifera, July, Hamilton COUNTY (JT); Callosamia securifera, ♂ in morning flight, May, Tampa, Hillsborough Co. (JMC); cocoons on Magnolia virginiana, Oct., Highlands Hammock St. Pk., Highlands Co. (HDB). Sphingidae: Sphinx franckii, 8 Aug., Campbellton, Jackson COUNTY, 2nd Florida record (JA); Eumorphia intermedia, 1 May (HDB); 8 May (D, Ivey); 27 June (RG), all Torreya St. Pk., Liberty COUNTY (only 2 others known from Florida); Sphinx kalmiae, 18 Apr., Torreya St. Pk., (HDB). RG has a larvae of this from the same locality, preserved. These are confirmational STATE records.) Xylophanes pluto, 25 Apr., Withlacoochee St. Forest, Hernando COUNTY (NORTH) (HDB). Cocytius anteus, reared ex-lv. found on Annona glabra, Nov. 81, Jane's Scenic Drive, Collier Co. (TD); Dec., reared ex-lv. on same, Miami, Dade Co. (P&H); Dec., Pseudosphinx tetrio, ex-lv. on frangipani from H. Darrow, Duck Key, Monroe Co. (TD); defoliating frangipani, Naples, Collier Co., Oct. (TD report from Naples newspaper); Protambulyx strigilis, abundant, Sanibel Island at MV, Dec. (LA). Pericopidae: Composita fidelissima, ex-lv. on Echites umbellata, Nov., N Key Largo (TD); 29 Nov., Homestead (VL); Arctiidae: Eupseudosoma involutum floridum, 24 Nov., Naples, Collier Co. (VL). Noctuidae: Gonodonta nutrix, ex-lv. on Annona glabra, Nov., Collier Co. (TD); Gonodonta incurva, Dec., Sanibel Island, Lee COUNTY (LA) represent the 2nd & 3rd from the state; Hemeroblemma opigena, 7 Mar., Collier-Sem. St. Pk. (TD); Catocala dejecta, 27 June, Torreya St. Pk., Liberty COUNTY (3rd from state--HDB); Hypocala andromedae, 4 Sept., Fakahatchee Strand, Collier COUNTY (LA); Amphipyra pyramidoides, May, Tampa, Hillsborough COUNTY (SOUTH) (LA). Notodontidae: Schizura concinna, S. unicornis, reared ex-lv. on Cornus foemina, Nov., Collier Co.; S. unicornis also on loquat, Dec., Homestead, Dade Co. (TD). Pyralidae: Neocataclysta magnificalis, 9 May, Oakland, Orange Co. (LD); Loxostege helvialis, 3 May, Magnolia Pk., Orange Co.; Loxostegopsis merrickalis, 24 July, Winter Garden, Orange Co. (LD). Olethreutidae: Eucosma guttulana, Ocoee (LD) (STATE). Glyphipterygidae: Glyphidocera lactiflosella, 24 July, Winter Garden (LD).

GEORGIA: BUTTERFLIES: Papilionidae: Heraclides cresphontes, May, Pigeon Mt. WMA, Walker COUNTY (IF). Nymphalidae: Anthanassa texana seminole, Spring Creek, 2.5 mi. W of Damascus, Early COUNTY (records of S. Brown & J. Beardon) (NORTH). Polygonia comma, Basilarchia arthemis astyanax, Asterocampa celtis & A. clyton, 12 May, Ocoee Natl. Forest, Jasper Co. (IF). Libytheidae: Libytheana bachmani, 12 May, Ocoee Natl. For. (IF). Lycaenidae: Feniseca tarquinius, 12 May, Ocoee Natl. For. (IF); Incisalia henrici, I. nippon, A. halesus, 14 Mar., Macon, Bibb Co. (IF). Satyridae: Enodia anhedon, common, May, Pigeon Mt. WMA, Walker COUNTY (IF, A. Towers & H. Flaschka). The latter represents a confirmational STATE record (refer to the Heitzman & dos Passos revision of Lethe.) Pieridae: Zerene cesonia f. rosa, 14 Mar., Macon (IF). MOTHS: Noctuidae: Catocala angusi, C. nebulosa, & Cirrhophanus triangulifer, Aug., Dahlonga, Lumpkin Co. (RG).

SOUTH CAROLINA: RG reported that Leptotes cassius theonus was discovered on one of the coastal islands in Charleston COUNTY by a forestry worker for a new STATE record (NORTH). Nymphalidae: Anthanassa texana seminole -as found by the same forestry worker along Hwy 41 in Charleston Co.; J. Ingraham of NY found this on 4 June, Dorchester COUNTY (NORTH). Nymphalis antiopa was reported much more common than normal during 1981 in much of the southeast: FL, GA, SC, & NC.

NORTH CAROLINA: BUTTERFLIES: Papilionidae: Pterourus palamedes, 12 Sept., Sandhills Wildlife Area (SWA), Richmond Co. (RW); 13 Sept., Jct. Rt. 41/70, Jones Co.; 13 Sept., Otway Carteret Co. (RW); 15 Aug., Sunbury, Gates Co. (RB). Females from the last locality oviposited on Persea borbonia and were reared to adults on Sassafras albidum in PA. Danaidae: Danaus gillippus berenice, 16 Aug., Southport, Brunswick Co. (RC). Pieridae: Phoebis sennae eubule, 2 May, Newport, Carteret Co. (RC); 15 Nov., Durham, Durham Co. (sight record of RW); Pontia protodice, 12 Sept., SWA, Richmond Co. (RW); 12 Sept., Pinebluff, Moore Co. (RW); Jct. 221/220, Candor, Montgomery Co. (RC). Abaeis nicippe, 6 Nov., Durham (RW). Lycaenidae: Mitoura gryneus, 30 Aug., Ft. Macon, Carteret Co. (RC); Atlides halesus, 13, 28 Sept., Jones Co. (RW); Parrhasius m-album, 6 Sept., common but worn, flying with Calycopis cecrops, Pinebluff (RW); Satyrium caryaevorus, 4 July 1977, Deep Gap, Watawga COUNTY (RC). This is a confirmational STATE record; the specimen was not determined until 1981. Nymphalidae: Euptoieta claudia, SWA, Richmond Co., 12-18-27 Sept. & 5 Nov. (RW). Phyciodes tharos, 13 Nov., Durham (RW). Satyridae: Enodia creola, E. portlandia, & Cyllopsis gemma, SWA, Richmond Co. on 18 Sept. (RW). Neonympha areolata, 6 Sept., Pinebluff & 28 Sept., Jones Co. (RW). Riodinidae: Calephelis virginienis, Aug., Carteret Co., ex-lv. on Carduus spinosissima (= Circium horridulum) (RC). Hesperidae: Problema bulenta, Euphyes dukesi, & Poanes viator, 16 Aug., Wilmington, Brunswick Co. (RC). Staphylus hayhurstii, 16 May, Sunbury, Gates Co. (RB); females oviposited on Chenopodium album and the progeny reared to adults. Panoquina panoquin, 13-28 Sept., Beaufort, Carteret Co., common (RW); Euphyes dion, Jct. Rt. 41/70, Jones Co. (RW) on 13 Sept. Poanes yehi, 13 Sept., SWA, Richmond Co.; 18 Sept., Jones Co. (RW). Hesperia attalus, 6 Sept., Pinebluff, Moore COUNTY; 27 Sept., SWA, Richmond COUNTY (RW). Hesperia meskei, 18, 27 Sept., visiting Heterotheca flowers, SWA, Richmond COUNTY (STATE, NORTH) (RW). Urbanus proteus, 13 Sept., Otway, Carteret Co. (RW). Lerema accius, 12-27 Sept., SWA, Richmond Co.; 11 Sept. & 15 Nov., Durham (RW). Nastra Therminier, 12-27 Sept., SWA, Richmond Co.; 13 Sept., Jones Co. (RW).

MOTHS: cocoons presumed to be Callosamia securifera (23) found on Magnolia virginiana, along Naked Creek in the SWA in both Moore & Richmond COUNTIES, later at the Jct. of 15-501 & Lumber River, Scotland COUNTY (NORTH) (RW).

VIRGINIA: BUTTERFLIES: Nymphalidae: Speyeria idalia, 30 June-9 July, Eggleston, Giles Co. (GS); Euphydryas phaeton, 6 June, Fairfax Co. (WH); Euptoieta claudia, 12 June, Fairfax Co.; 30 June-9 July, much more common than usual, Eggleston (GS). Pieridae: Artogeia virginienis, 2-19 Apr., Scott Co. (CW); Abaeis nicippe, 19 Apr., Scott Co. (CW). The latter is a very EARLY record for this state--see note under TN summary. Lycaenidae: Satyrium liparops strigosum, Harkenlinus titus mopsis, 30 June-9 July, Eggleston (GS). Celastrina ebenina, 19 Apr., Scott Co. (CW); Glaucoopsyche lygdamus, 2 & 19 Apr., Scott Co. (CW). Satyridae: Enodia portlandia & Enodia creola, ♀♀ of each collected and confined with Arundinaria tecta, progeny reared to adults, 15 & 29 Aug., Suffolk, Nansemond Co. (RB). Cyllopsis gemma, 29 Aug., Suffolk (RB). Hesperidae: Wallengrenia otho, 30 Aug., Scott Co. (CW). Erynnis baptisiae, 2 Aug., Scott COUNTY (CW).

MOTHS: Saturniidae: Hemileuca maia, 17 Oct., Rockingham Co. (JMC). Noctuidae: Catocala dulcicola, early July, several, Rockingham Co. (JMC); Catocala miranda, Catocala parta, July, Rockingham Co.; Catocala unijuga, Oct., Rockingham Co. (JMC).

ZONE 7: NORTHEAST: QUEBEC (to 50th parallel), MARITIMES, NEW ENGLAND, NEW YORK, NEW JERSEY, PENNSYLVANIA, DELAWARE, MARYLAND, and D.C. Coordinator: Dave Winter (DW). Contributors: W. L. Adair (WA), R. W. Boscoe (RWB), W. Boscoe (WB), Jo Brewer (JB), A. E. Brower (AEB), C. Burkhardt (CB), R. C. Busby (RCB), G. Ehle (GE), J. Fales (JF), T. Franks (TF), L. P. Grey (LPG), W. R. Grooms (WG), J. Holmes (JH), J. Ingraham (JI), P. Keane (PK), W. Kiel (WK), R. A. Layberry (RL), H. A. LeBeau (HL), V. P. Lucas (VL), D. MacDonald (DM), R. May (RM), G. M. McWilliams (GM), M. J. Mello (MM), C. G. Oliver (CO), P. Payzant (PP), J. Prescott (JP), C. E. Schild-

knecht (CS), D. F. Schweitzer (DFS), D. K. Simmonds (DKS), Scott Smedley (SS), T. S. Williams (TW), D. M. Wright (DMW). COUNTY records in capitals.

Numbers of butterflies and of moths were high in many areas of the northeast until mid-July, after which they diminished severely. It was tempting to attribute this to the extensive *L. dispar* infestation and its attendant defoliation and epizootic of polyhedral virus infection, which killed 80-100% of last instar *dispar* larvae in some areas of eastern Massachusetts (DW) and Connecticut (DFS). A spread of the virus to other species then in the larval state could be postulated, but the general decrease in leps was reported from many areas not experiencing *dispar* outbreaks. A number of observers found *Catocala* and other Noctuids very low, but not DFS in Connecticut. Expected flights of *H. maia* in eastern Mass. and the Albany Pine Bush were nil; daytime temperatures did not exceed 55° F. during the early October flight period.

QUEBEC: All information is from RL with occasional assists from Peter Hall (PH). In general, resident species were sparse and migratory species numerous; *V. atalanta* was abundant, with larvae on *Urtica dioica*, *U. gracilis*, and *Laportea canadensis*.

A. vialis 27 June near Katzabazua, Gatineau Co. (PH); *P. viator*, four colonies in Gatineau Park 15-24 July, near Meach and Hawley Lakes and in an old beaver meadow near Champlain Lookout at 1100'; *H. leonardus* common 2 Aug. in Bowman Twp., Papineau Co., and 23 Aug in Eardley Twp., Gatineau Co. and Bristol Twp., Pontiac Co.; *H. sassacus* 11 June, Limbour, Gatineau Co., and 20 June in Quyon, Pontiac Co.; *P. origines* 11 July, Mulgrave Twp., Papineau Co.; *A. numitor*, 13 June, Masson, Papineau Co., and 20 June, Heyworth, Gatineau Co.; *E. clarus* 13 June, Perkins, Hull Co., and 13 July, Limbour. *C. interior* 27 June, abundant near Kazabazua; *E. olympia* 31 May, one fresh specimen near Low, Gatineau Co. *F. tarquinius* 19 May in Perkins, 2 Aug. in Bowman Twp.; *I. nippon*, 19 & 23 May at Perkins and at Brown Lake, Gatineau Co.; *E. laeta*, 17-21 May e. of Low, also 23 May near Farrelton, Gatineau Co.; no oviposition obtained; disturbed ♀♀ flew straight to top of nearest tall tree of any species. Epidemia epixanthe colonies 10 July, Folly Bog, and 19 July, Hopkins Hole Bog, Gatineau Co.; *E. comyntas*, 27 June, Kazabazua (PH), first local record in 15 years. *Charidryas nycteis* 27 June, Kazabazua; *P. interrogationis* 13 June, MacGregor Lake, Gatineau Co., ovipositing on elm, and 20 June, Onstow Twp., Pontiac Co.; *P. faunus* 19 May, 19 July, and 2 Aug. at several locations, Papineau Co. & Gatinneau Park; *E. claudia*, 27 June, Kazabazua (PH). *Satyroides appalachia* 15 July, colony found near Meach Lake, Gatineau Park.

NOVA SCOTIA: *Noctua pronuba*, early August, 10+ specimens at light and bait (PP), only second year of record in North America (paper by B. Wright & K. Neil submitted to Journal).

MAINE: except for the *Artogeia rapae* that riddled his cabbage, AEB saw a disappointingly poor year for leps in the many areas visited; but JB took *E. claudia* 29 June at Islesboro, WALDO Co., far n.e. of previous records; *V. atalanta* was abundant there, with many seen flying across the water to the island and over 55 being taken in bait traps in one day in June. LPG in Penobscot Co. found *T. lineola* still absent; *I. nippon* was numerous late May; a new colony of *Epidemia dorcas claytoni* was found near Springfield; *C. inornata* continued to increase. *E. brizo* 25 May, *I. bathyllus* 14 June, *C. interior* 14 June, *I. henrici* 25 May, all at Shapleigh, York Co. (DFS,DM); *C. inornata* numerous in June, with some in early September, same area.

MOTHS: numbers and variety were very high in Islesboro, late June; over 25 *A. luna* at MV light many nights; notable were *Sideridis maryx*, *Noctua oblata*, *Polia tacoma* & *rugosa*, *Acronicta funeralis* & *interrupta*, *Autographa biloba* & *flagellum*, and on 29 June, 6 *Magasa orbifera* (DW).DFS/DM recorded 41 *Hemipachnobia monochromatea* 14 June nectaring at sheep laurel, Shapleigh, and 5 Sept. at *Solidago* flowers *Euxoa dimallonis*, *ochrogaster*, *albipennis*, and *perpolita*; *H. lucina* was common same date; *Catocala similis*, *micronympha* (STATE RECORD), *coelebs*, *gracilis*, and *andromeda* were taken in West Newfield, York Co., in July. *Eulyte hastata* (typical) and *r. gothicata* were common on Islesboro late June; *Nepytia pellucidaria* 15 September (DW).

NEW HAMPSHIRE: JH reported abundant *V. atalanta* and *N. antiopa* in Jefferson, Coos Co.; *B. arthemis astyanax* f. near "proserpina"; *S. acadica* 12 July, Whitefield, Coos Co.; *Alypia langtoni* ♀ nectaring at dogbane 12 July, *Acronicta funeralis*, *Autographa flagellum* and *S. libatrix*, all 6 July, Jefferson. WA took 2 *Hyles galii* 3 Aug., Meriden, Sullivan Co. at MV light; Rick Gray comments that this species is "scarce" because collectors are scarce at flight time: dawn at flowers!

MASSACHUSETTS: *E. claudia* was taken 19 Aug., Hatches Harbor, Barnstable Co. (MM), and 25 Sept., Holliston, Middlesex Co. (WK); *J. coenia* 18 Aug., Centerville, Barnstable Co. (SS); 2 *P. progne* 13 April at bait, Hopkinton, Middlesex Co. (TF). *C. inornata* was recorded June 6-13 and Aug. 7-16 in Middlesex Co. (RCB), and newly extended into Williamstown, BERKSHIRE Co., 3 July and 11 Aug. (HL). *Agrius cingulatus* 14-25 Sept., Provincetown, Barnstable Co. (MM); *H. lucina* 27 Sept., Brewster (SS); *Haploa lecontei* 5 July, Dedham, Norfolk Co. (DW); *Amyna octo*. 26 Sept. & 18 Oct., *Anticarsia gemmatilis* 14 & 20 Sept., *Erebos odora* ♀ 12 Sept., *Mocis latipes* 20 & 22 Sept., all Provincetown (MM); *M. orbifera* 38 in Provincetown 17 June to 27 Sept. (MM) and 15 at Brewster 4-26 Aug. (SS); *Schinia lynx* 3 Aug., Brewster (SS); *Ateva punctella* 1 July, *Yponomeuta multipunctella* 26 July, Dedham (DW).

CONNECTICUT: all records DFS, who reported an extremely cold dry January, but spring under way by 1 March; summer very dry. Early records for New Haven Co.: *Falcapica midea* 8 April, common on ridges north to Meriden; *Artogeia virginianensis* 18 April; *M. gryneus* 3 May (2nd brood worn, 7 July); *A. lyciades* 8 June; *C. habilis* 24 July. *S. caryaevorum* numerous at West Rock Park; *E. claudia*, several in July, New Haven; *P. comma* common early May & mid-July; *N. vau-album* common early July. *C. promethea* very common 25 May to 11 July (45 ♂♂ attracted to caged ♀♀ at once), Wallingford; *C. angulifera* common at West Rock Park late June-early July; *D. versicolor* 25 July, W. Redding, Fairfield Co.; *S. kalmiae* June, Wallingford. Rare species (bait, New Haven Co., unless noted): *Sericaglaea signata* 18 Feb, 25 Oct.; *E. cirripalea*, March, reared ex ovis on oaks and walnut; *E. laticinerea* 17 Nov.; *Phoberia orthostoides* 31 March (light); *C. briseis* 30 Aug.; *C. meskei* 9 July; *Procus chlorostigma* early July; *Epizeuxis denticulalis* July & Aug.; *Plusiodonta compressipalpis* July; *Lithinia extremaria* (night, flying in acid swamp) 3 May (new for NEW ENGLAND).

NEW YORK: *Falcapica midea* 24 April, Rockland Co.; *A. milberti* 5 June, Green Co.; *Basilarchia a. arthemis* 5 June, Ulster Co.; *Pyrisitia lisa* 12 Sept., Suffolk Co.; *Eupanychis spinosae* 12 Sept., Jones Beach, Suffolk Co. (all CB).

URBAN: Jeff Ingraham has compiled an extensive survey of the status of lepidoptera collecting in 47 parks and cemeteries in New York City (available from coordinator on request), noting those where collecting is productive, and those where collecting is imprudent due to infestation with rodents or antisocial humans. He has added the following to his 44-species NYC list of 1980: *W. egeremet*, *P. viator*, *P. massasoit*, *P. communis*, *E. juvenalis*, *E. baptisiae*, *B. philenor*, *Pyrisitia lisa*, *P. sennae* (D. Riepe), *S. caryaevorum* (det. L. Gall), *S. edwardsi*, *P. m-album* (L. Pohner), *V. cardui*, *C. bellona*, *E. claudia*, and *L. bachmanii*. CB noted numerous *J. coenia* flying in Queens 9 Nov., max. temperature 56° with intermittent sun.

NEW JERSEY: *Euphyes dion* & *bimaculata* 30 June, Lebanon State Forest, Burlington Co.; *A. logan* 24 June, Washington's Crossing, Mercer Co. (TW); *Atrytonopsis hianna* 8 June, Harmony Twp., Warren Co.; *Eurytides marcellus* 29 June nectaring at alfalfa, same site (DKS). *P. lisa* 29 Aug., Lincoln Park, Morris Co. (RM); *M. hesseli* nectaring at Labrador tea, *C. ladon* nectaring at high-bush blueberry, pixie, Labrador tea, Pine-barrens sandwort, all 8 May, Wharton State Forest, Burlington Co. (TW); *M. gryneus* 2 May, Lakehurst, Ocean Co. (DKS); *S. liparops* larva on *Vaccinium corymbosum* 9 May, Lakehurst, reared to adult, confirming previous observations of foodplant associations (RWB). *A. celtis* 23 June, Cedar Grove, Essex Co. (RM); *E. phaeton* 12 July, Harmony Twp. (DHS).

MOTHS: *H. gracilis* freshly emerged 8 May, resting on *V. corymbosum* (demonstrated by B. Williams to be larval foodplant), Wharton State Forest (TW); *D. inscriptum*, 13-26 May, repeatedly seen nectaring about 2030 hrs. at yellow ornamental azaleas, Caldwell, Essex Co. (RM); *H. diffinis* nectaring at petunias 7 Aug., Cedar Grove; *C. amyntor* at BL 8 Aug., Harmony Twp. (DKS). *Eupsilia cirripalea* 28 Feb., Pomona, Atlantic Co., mated, reared on *Prunus serotina*, enclosed October (DFS). About 700 *Catocala* at 45 baited trees 13 July at Atsion, Burlington Co., 22 species recorded, including *consors scorsoni*, *innubens*, *melanic ultronia*, *pretiosa* (mostly worn), *epione*, and *paleogama* (DFS). *L. querquera* 15 Oct., Wharton State Park (TW). *Phigalia denticularia*, *titea*, and *strigataria* 28 Feb. (early for latter 2 sp.) at lights, Pomona and Oceanville (DFS).

PENNSYLVANIA: *Pyrgus communis* early Oct., Erie Co., (GM); *P. centaureae* BEDFORD CO. and Fulton Co., no dates, (CO); *H. metea* captured by crab spider *Misumenops asperatus* 20 May, and *C. philodice* taken next day by same spider on same flower, Montgomery Co. (DMW); *A. logan* 15 July, WARREN CO. (JP). *Heracles crespontes* frequent 21 May to 16 Aug, and *Eurytides marcellus* in May, Gettys-

burg, Adams Co. (CS); *Pterourus glaucus* puddling by hundreds early June, McKean & adjacent Cos., and melanica ♀ 8 June (JP). *Pyrisia lisa* 7 July & 27 August, Gettysburg (CS), 3 & 30 July & 11 Sept., Erie Co. (GM), 15 July, Warren & McKean Cos. (JP); *Nathalis iole* 19 July, Erie Co. (GM), 15 July, WARREN & MCKEAN COS. (JP); *Abaeis nicippe* July to Sept., Lancaster Co. (GE); *E. olympia* & *F. midea*, Bedford Co., latter also Fulton Co., no dates (CO); *A. virginiana* 10 & 27 April, Fayette Co., and 14-22 May, Westmoreland-Fayette Co. line (CO). *F. tarquinius* 14 May, Westmoreland Co. (CS); *C. ladon* oviposition observed repeatedly on *Mellilotus* & *Sambucus* (elderberry), reared through on former, but *Sambucus* apparently toxic to 1st instar larvae (CO); *ladon* seen nectaring on *Collinsonia canadensis* (horsebalm) and *Oxydendrum arboreum*, and ovipositing on the horsebalm 9 July, Montgomery Co. (TW); *H. hyllus* reared on *Rumex obtusifolius* (CO); *hyllus* in Erie Co., 7 July (GM&JP), and at Gettysburg 21 May to 30 Sept (CS); *I. irus*, behaving like an *Erynnis*, taken 25 May in Lancaster Co., first since 1955 (GE); *P. m-album* 14 May & 10 Sept, same area (GE), and 11, 13 Sept., Philadelphia (TW). *L. bachmanii* worn ♀ 7 June, Springfield Twp., Montgomery Co. (TW). *E. claudia* noted by GE to be fewer than in 1980; noted 13 Sept., Philadelphia (TW) and 27 July, Union City (GM); *J. coenia* 31 July, Union City (GM); *P. tharos* type B 26 June, Elk & Clearfield Cos. (CO); *C. bellona* very common in Flourtown, Montgomery Co. 3 May and mid-July (TW), and 16 April to 22 Aug., Gettysburg (CS); *S. idalia* 12 July-18 Aug., Gettysburg (CS); *S. atlantis* 14 June, Warren Co. (VL); *E. phaeton* 7 June, Westmoreland Co. (CS). *Satyrodes eurydice* 8, 11, 19 July, Erie Co., and 31 July, Mercer Co. (JP); *S. appalachia* 2 July, Westmoreland Co. (CO). *D. plexippus* larvae devouring leaves and flower buds of *A. tuberosa* in July, Glenside, Montgomery Co., despite published statements to contrary (TW).

MOTHS: WB sent his annual comparative report of selected moths for Quakertown, Bucks Co. (complete details available from him): among 21 sphingid species were *D. hyloeus*, *E. achemon*, *S. eremitus*, *S. kalmiae*, *S. chersis*, *H. lineata*, *M. jasminearum*, *E. satellitia*; Saturniidae showed no great variation from former years. *Estigmene acraea* was abundant. While many *Catocala* were increased, the expected *resida*, *retracta*, *vidua*, *ilia*, *crategi*, *grynea*, *cordelia*, and *subnata* were not taken. *P. modesta* 13 June, Warren Co.; *D. myron*, *A. io*, *Apantesis anna* var. "persephone", Clearfield Co. 14 June (all VL). *Celiptera frustulum* was taken 29 August at bait, in Philadelphia (TW).

MARYLAND: latter half of summer dry; fall long and mild. *P. centaureae* 18-26 April very numerous, Green Ridge, Allegany Co. (PK); *A. hianna* 13 May, WICOMICO CO. (JF); *S. hayhurstii* 4 Aug., Montgomery Co., 19 July-20 Aug., Calvert Co. (JF); *E. icelus*, *A. vialis*, *P. hobomok* 21 May, Allegany Co. (JF), and *hobomok* 7 June, Carroll Co. (PK); *P. zabulon* widespread 6 June-10 Sept.; *P. massasoit* 11 Aug., Dorchester Co. (JF); *E. dion* 17 July (PK) and 11 Aug. (JF), Dorchester Co.; *E. conspicua* 18 July, Garret Co. (PK); *A. logan* 7 July (JF) and 12 July (PK), Allegany Co., and 30 July, Calvert Co. (JF); *I. lineola* 18 July, GARRETT CO. (PK); *H. metea* 13 May, Wicomico Co.; *H. leonardus* 8 Sept., Anne Arundel Co.; *H. phyleus* only 12 & 31 July, 13 Aug., 4 Oct.; *P. bulenta* 11 Aug., Dorchester Co.; *W. otho* 28 Aug., Calvert Co.; *P. viator* common 3 July-1 Aug., Calvert Co., 30 June Harford Co. (all JF). *E. marcellus*, 3 May Pocomoke Swamp, Worcester Co. (RM); *H. cresphontes* 16 May, Calvert Co. (JF), and 24 May & 9 Aug., Montgomery Co. (PK). *F. midea* 11-29 April, Calvert Co. (JF), 3 May, Worcester Co. (RM), Allegany Co. (CO); *E. olympia* 18 April, Allegany Co. (WG, PK, CO); *P. lisa* 4 Nov., Montgomery Co. (JF); *A. nicippe* June (PK) thru Aug. to 11 Oct., Dorchester Co. (WG), Dorchester Co.; *A. virginiana* 8 April, Washington Co. (PK). *F. tarquinius* 26 April, Allegany Co. (PK), 20 Sept., DORCHESTER CO. (WG); *I. henrici* 16 April, Calvert Co. (JF), and WORCHESTER CO. (WG); *I. Nippon* 28 April, Anne Arundel Co., 13 May, Wicomico Co., 14 May, 25 June, Calvert Co. (JF); *S. edwardsii* 30 June, Baltimore Co. (JF), 18 July (WG) & 21 July (JF), ALLEGANY CO.; *M. gryneus* only 4 May and 12 July, Calvert Co. (JF); *S. melinus* 8 April, Washington Co. (PK); *E. ontario* 14-21 June (PK), 7 July (JF), Allegany Co.; *S. liparops* 17 July, 11 Aug., Dorchester Co. (JF); *A. halesus* 21 June, 3 Oct. (PK), 17 July, 11 Aug. (JF), Dorchester Co.; *P. m-album* 8 April, Calvert Co. (JF), 26 April Allegany Co. (PK), 20 Aug., Montgomery Co. (WG), 25 Sept., Anne Arundel Co. (PK); *Epidemia epixanthe* 19 July, GARRETT CO, STATE REC. (PK); *G. lygdamus* very numerous 18-26 April, Allegany Co. (CO, WG, PK). *C. borealis* common 12-17 July, Allegany Co. (JF, PK). *B. a. arthemis* 14 June, (PK), 20 June & 5 Aug. (WG), Allegany Co.; *E. phaeton* 30 June, Harford Co. (JF), and at 3 new localities (PK): Carey Run, Garrett Co., Liberty Run & Monkton, Baltimore Co.; hibernating larvae offered turtlehead and plantain in spring fed preferentially on the latter, but all but 1 failed to mature on it; *S. idalia* 23-30 June, Harford Co. (PK & JF); *C. bellona* 16 Oct. (late), Washington Co. (JF); *N. vau-album* 21 June, Allegany Co. (WG); *E. claudia* 20 April, Anne Arundel Co. (early, PK). *A. celtis* (plus some *clyton*) were present in such large numbers, and so aggressive, 14 June at Green Ridge, Allegany Co., that PK had to use his net for defense! *D. plexippus* weak spring flight arrived starting 29 April, Calvert Co. (were seen leaving Michoacan, 1900 miles to the southwest, mid-March: JB); southward flights 6 Sept.-6 Nov. peaked 28-29 Sept., max 4.2/min., accompanied by *A. rapae* and *V. virginiana* (JF)!

MOTH (singular): *P. astylus* at blacklight 28 July, ST. MARY'S CO. (PK).

ZONE 8: THE FAR NORTH: ALASKA, NORTHERN CANADA. Coordinator: Kenelm W. Philip. Contributors: G. G. Anweiler, H. Epstein, M. Epstein, L. P. Grey, H. P. Kimmich, J. D. Lafontaine, R. Leuschner, W. J. Neill, E. M. Peters, E. M. Pike, J. White, D. M. Wood, J. Zeligs, K. Philip (for the Alaska Lepidoptera Survey). Previously unreported localities or species are emphasized. Note regarding Alaska Lepidoptera Survey: Owing to the abominable weather, no ALS volunteers that have reported in to date were successful in obtaining specimens--so the ALS was restricted to Philip's mid-May to late June collecting on Murphy Dome and Eagle Summit, plus one almost completely abortive expedition to Toolik Lake (North Slope, Dalton Highway) in early July with Hans and Mark Epstein.

NEWFOUNDLAND: Grey and Neill report. Range extensions: *Boloria chariclea* from Doyles, Newfoundland Island--the southernmost latitude record for this form, suggesting that Newfoundland may yet produce material applicable to the *titania-chariclea* problem. In Labrador, *Vanessa atalanta* (swarming everywhere) and *Coenonympha tullia* ssp. (L'Anse au Clair) are new records *vide* Morris. Newfoundland Island: Gros Morne, 2 July: This 2500' mountain on the west coast of the north peninsula, with an open tundra summit, has been regarded as a possible refuge for alpine species--but Neill found "nothing but rocks" despite perfect weather. Doyles (formerly Doyles Station) and vic., 9 July - August: *Coenonympha tullia mcisaaci* common in bogs, *Speyeria atlantis canadensis* ♂♂ (fresh) abundant at edge of spruce wood on the old Doyles homestead (adjacent to Grand Codroy Park), *Caripeta diversaria* (suffused aberrations). Grey & Neill collected 9-13 July, but the station agent (James White) carried on through August, adding the following: *Thymelicus lineola* and *Vanessa atalanta* in outbreak numbers, *V. virginiana* and *V. cardui* common, *Colias pelidne* common in bogs (late July), two worn *Papilio brevicauda* ♀♀ (21 & 28 August), *Polygonia progne* (18 July), and one worn ♂ *Boloria chariclea* (10 August). Trans Canada Highway, 10 miles S Doyles & 1 mile S McDougall Brook, 13 July: *Lycaeides argyrognomon aster* in roadside bog, ♂♂ & ♀♀ common and fresh. Stephenville (hayfield off West St.), 8-13 July: *C. tullia mcisaaci* common. Note: there was little or no xeric versus mesic segregation in this species, as had been suspected formerly. Instead, the variation suggested liberal gene interchange in an essentially homogenous population. Labrador: 3-5 July: L'Anse au Loup, bog: *Oeneis polixenes* (brownish, similar to *katahdin*), *O. jutta* (fresh), *Boloria freija*, *Aspilates conspersarius*. On a nearby hill *Pieris napi frigida* was common. Forteau, roadside bog: *O. polixenes*. L'Anse au Clair (near Quebec border, along coast): *Hesperia comma borealis* (fresh ♀), *Pyrgus centaureae* ssp. (sight), *Pieris napi* ssp., *Colias pelidne* (just out), *Boloria eunomia* (fresh), *Coenonympha tullia* ssp. On the W side of the road in this area, small boggy openings in the krummholz yielded a few *Oeneis jutta* (small, both sexes heavily ocellate), and *Boloria chariclea* (light brown, silvered--the true Far North phenotype).

NORTHERN BRITISH COLUMBIA: Atlin, no date: Pike reports: *Colias philodice*, *Euchloe ausonides*, *Agriades aquilo*, and sight records of: *Parnassius phoebus* ovipositing on *Arctostaphylos*, *Vanessa atalanta*, and *Boloria astarte/distincta*.

NORTHWEST TERRITORIES: Fort Providence, 1-5 June: Peters reports: *Erynnis persius*, *E. icelus*, *Pyrgus centaureae*, *Papilio glaucus*, *Pieris napi*, *Colias christina*, *Euchloe creusa*, *E. ausonides*, *Incisalia augustinus*, *I. eryphon*, *Glaucopsyche lygdamus*, *Celas-*

trina argiolus, *Polygonia progne*, *Nymphalis antiopa*, *Boloria frigga*, *B. freija*, *Oeneis uhleri nahanni*, *O. jutta*, *Erebia disa*, *E. discoidalis*. Tungsten, 11-15 June: Peters reports: *Pyrgus centaureae*, *P. ruralis* (a most interesting record, if confirmed), *Parnassius evermanni*, *Papilio machaon*, *Pieris occidentalis*, *P. napi*, *Colias hecla*, *C. boothii*, *C. alexandra* ssp., *Euchloe creusa*, *Glaucopsyche lygdamus*, *Celastrina argiolus*, *Boloria freija*, *B. titania*, *Oeneis bore*, *O. polixenes*, *Erebia rossii*, *E. disa*. Kilometer 491 Dempster Highway, 26 June 1980 (1000m): Lafontaine & Wood report: *Pieris napi*, *Colias hecla*, *C. palaeno*, *C. nastes*, *Agriades aquilo*, *Boloria improba*, *B. frigga*, *B. distincta*, *B. chariclea*, *Oeneis bore*, *Erebia rossii*, *E. disa*, *E. sp.*

YUKON TERRITORY: Province (and country) record: *Pararctia subnebulosa* from the Ogilvie Mountains--the first Canadian occurrence of this species. Probable province record: *Plebejus icarioides pembina* from Carcross.
Dempster Highway: Kilometers 465-8, 23 June - 7 July 1980 (800-1220m): Lafontaine & Wood report: *Papilio machaon*, *Pieris occidentalis*, *P. napi*, *Colias hecla*, *C. palaeno*, *C. gigantea*, *C. nastes*, *Euchloe creusa*, *Agriades aquilo*, *Vacciniina optilete*, *Boloria napaea*, *B. improba*, *B. polaris*, *B. distincta*, *B. freija*, *B. chariclea*, *Oeneis bore*, *O. melissa*, *O. polixenes*, *Erebia rossii*, *E. disa*, *E. mackinleyensis*, *E. fasciata*, *E. sp.* Eagle Plains and vic, 24 June: Peters reports: *Papilio machaon*, *Pieris napi*, *P. sisymbrii* (previous YT records are from near the YT/BC border--another interesting record if confirmed), *Colias palaeno*, *Glaucopsyche lygdamus*, *Boloria freija*, *B. titania*, *B. eunomia*, *Coenonympha kodiak*, *Oeneis bore*, *O. polixenes*, *Erebia rossii*, *E. disa*, *E. mackinleyensis*, *E. discoidalis*, *E. theano*. Kilometer 155, 18 June - 3 July 1980 (950-1250m): Lafontaine & Wood report: *Papilio machaon*, *Pieris occidentalis*, *P. napi*, *Colias hecla*, *C. palaeno*, *C. philodice*, *C. gigantea*, *Lycaeides argyrognomon*, *Agriades aquilo*, *Boloria improba*, *B. polaris*, *B. distincta*, *B. chariclea*, *B. eunomia*, *Coenonympha kodiak*, *Oeneis bore*, *O. melissa*, *Erebia rossii*, *E. mackinleyensis*, *E. fasciata*, *E. sp.*, *E. theano*. Lafontaine & Wood collected the Ogilvie Mts. again in 1981, and reported the following butterflies not seen in 1980 (no exact locality given): *Hesperia comma*, *Lycaena phlaeas*, *Oeneis uhleri cairnesi*, *O. sp. nov.*, *O. jutta*; and the following moths: (*Arctiidae*) *Pararctia subnebulosa*, *Acasala anomala*, (*Noctuidae*) *Pachnobia* spp., *Archanarta bryanti*, *A. sp.*, *Anomogyna* spp. (6), *Sympistis melaleuca*, *S. lapponica*, *S. funesta* (all preceding noctuids absent in 1980 and thus odd-year species in area), *Parabarrovia keelei*, *Trichosilia carnea*, (*Lymantriidae*) *Gynaephora rossii*, *G. groenlandica*. For most species of moths both larvae and adults were collected. Lafontaine & Wood concentrated on fellfield/blockfield habitats, climbing every rocky hill near the road at their collecting sites. Kilometer 135, June: Kimmich reports: *Erebia rossii* near *ornata*. Whether this is just one extreme of the (large) variability of the species, or whether there is an anomalous population of *rossii* at this site, is not known. I have seen individuals near *ornata* from several Alaskan localities. North Fork Pass, 21-23 June: Peters reports: *Pieris occidentalis*, *Euchloe creusa*, *E. ausonides*, *Plebejus saepiolus*, *Boloria frigga*, *B. polaris*, *B. titania*, *B. chariclea*, *B. eunomia*, *Oeneis bore*, *O. polixenes*, *Erebia rossii*, *E. fasciata*, *E. theano*. Klondike Loop: about 5 miles up access road to Clinton Creek, 17 July: Pike reports: *Pieris napi*, *Colias palaeno*, *Lycaeides argyrognomon*, *Boloria distincta* (sight), *B. chariclea*, *Oeneis polixenes*, *Erebia theano* (common). 40 km W Dawson, peak of mt. S of road, 17 July: Pike reports: *Boloria polaris*, *B. distincta*, *B. chariclea*, *Oeneis melissa*, *O. polixenes*. Campbell Highway: Lapie Canyon, 18 June: Peters reports: *Polites* near *coras* (another interesting record, if not confused with *draco*, which is known from the YT), *Pieris napi*, *Colias* near *hecla*, *Boloria frigga*, *B. bellona jenistai*, *B. eunomia*, *Oeneis chryxus*, *O. sp.* near *nahanni*, *O. jutta*, *Erebia disa*, *E. epipsodea*. Alaska Highway: Pine Creek, 11 July: Pike reports: *Carterocephalus palaemon*, *Pieris napi*, *Lycaeides argyrognomon*, *Plebejus saepiolus*, *Vacciniina optilete*, *Phyciodes tharos*, *Boloria chariclea*, *Coenonympha ochracea*, *Oeneis jutta*. Mile 1127, 11 July: Pike reports: *Colias hecla*, *C. gigantea*, *Lycaeides argyrognomon*, *Vacciniina optilete*, *Coenonympha ochracea*, *Oeneis jutta*. Approx. W (14-17 km) of Burwash Flats, 10-12 July 1980 (1250-1600m): Lafontaine & Wood report: *Parnassius phoebus*, *Papilio machaon*, *Pieris occidentalis*, *Colias hecla*, *C. palaeno*, *C. philodice*, *C. nastes*, *Lycaena phlaeas*, *Lycaeides argyrognomon*, *Plebejus saepiolus*, *Agriades aquilo*, *Vacciniina optilete*, *Phyciodes campestris*, *Euphydryas anicia*, *Boloria napaea*, *B. improba*, *B. chariclea*, *B. eunomia*, *Speyeria* sp., *Coenonympha kodiak*. Klwane N.P., near Mt. Wallace, 14-15 June, 6 July 1980 (1050m): Lafontaine & Wood report: *Pieris occidentalis*, *Colias christina*, *Lycaeides argyrognomon*, *Phyciodes campestris*, *Euphydryas anicia*, *Speyeria* sp. Whitehorse, May-?: Anweiler reports: *Erynnis persius*, *Pyrgus centaureae*, *Hesperia comma*, *Papilio machaon*, *P. occidentalis*, *P. napi*, *Euchloe creusa*, *E. ausonides*, *Colias interior*, *C. philodice*, *Lycaena dorcas*, *Lycaeides argyrognomon*, *Agriades aquilo* (common--ovipositing on *Saxifraga tridentata*), *Glaucopsyche lygdamus*, *Celastrina argiolus*, *Everes amyntula*, *Phyciodes campestris*, *Euphydryas anicia* (common, but the first seen in 3 seasons), *Boloria frigga*, *B. freija*, *B. titania*?, *B. eunomia*, *Oeneis chryxus*, *O. bore*, *O. jutta*, *Erebia disa*; Leuschner reports, 3 July: (*Geometridae*) *Campaea perlata*, *Dysstroma walkerata*, *Eupithecia perfusca*, *Xanthorhoe munitata nemorella*, (*Pterophoridae*) *Platyptilia pallidactyla*. Carcross Loop: Carcross, 4 July: Leuschner reports: *Plebejus icarioides pembina*.

ALASKA: Weather: Interior Alaska and the North Slope had the worst summer since I came to Alaska (1965). Spring was early, and there was excellent collecting from early May until 25 June--at which point the clouds rolled in and there were only about 4 good collecting days until early August, by which time the season was effectively over. In the Interior it merely rained--but on the North Slope and in the Brooks Range it snowed almost every day during the usual collecting season. After a promising start, it was a thoroughly miserable summer! Notable captures: *Erebia mackinleyensis* at 18 mile Teller Road, Seward Peninsula--the second specimen of that species from the Seward Peninsula; *Colias pelidne* from near Chicken, Taylor Highway--previous Alaskan material attributable to *pelidne* has come from the North Slope/Brooks Range; *Colias hecla*? along the railroad tracks inside the city limits of Fairbanks (the '?' indicating some uncertainty as to where this specimen stands with regard to the Murphy Dome *Colias*).

North Slope: Toolik Lake, 2-10 July (with snow on all but two days!), moist tundra: Epsteins & Philip report: *Colias palaeno*, *Euchloe creusa*, *Boloria napaea*, *B. improba*, *B. freija*, *B. chariclea*, *Oeneis polixenes*, *Erebia rossii*, *E. disa*, *E. youngi*.

Brooks Range: ridge E of Galbraith Lake (1979 Brooks Range Field Trip locality), 3 July: Epsteins & Philip report: additional species (see 1979 Annual Summary): *Erebia mackinleyensis*. Numbers were down compared to 1979, probably because of the over two weeks of nearly continuous snow, clouds, and gale-force winds that had preceded our visit. Plans to check Slope Mountain for the new *Oeneis* had to be abandoned when the weather remained awful for the remainder of our stay at Toolik Lake. Nuturwik Creek (Dalton Highway, upper Dietrich River), 11 July: Epsteins & Philip report: *Parnassius evermanni*, *Colias gigantea*, *C. palaeno*, *Lycaena phlaeas*, *Vacciniina optilete*, *Boloria chariclea*, *Coenonympha kodiak*, *Oeneis bore*. Iniakuk Lake, E of Alatna River, 27 June: Zeligs reports: *Hesperia comma*, *Pieris napi*, *Colias philodice*, *C. palaeno*, *Vacciniina optilete*, *Oeneis jutta*. Headwaters Alatna River, 2800-3600', 28 June - 6 July: Zeligs reports: *Parnassius evermanni*, *Colias hecla*, *C. palaeno*, *C. nastes*, *Lycaena phlaeas*, *Agriades aquilo*, *Boloria napaea*, *B. frigga*, *B. freija*, *B. chariclea*, *Oeneis melissa*, *Erebia rossii*, *E. disa*, *E. sp.*, *E. youngi*. 5 miles NE Howard Pass, E of Etivluk River, 1600-2500', 3 July: Zeligs reports: *Colias palaeno*, *C. nastes*, *Agriades aquilo*, *Boloria frigga*, *B. improba*, *B. freija*, *B. distincta*, *B. titania*, *Oeneis bore*, *O. melissa*, *Erebia rossii*, *E. disa*, *E. fasciata*, *E. mackinleyensis*, *E. sp.* Lake Amitchiak, 23 miles SE Howard Pass, 2400-3200', 3 July: Zeligs reports: *Colias hecla*, *C. palaeno*, *C. nastes*, *Lycaeides argyrognomon*, *Agriades aquilo*, *Vacciniina optilete*, *Boloria napaea*, *B. frigga*, *B. chariclea*, *Coenonympha kodiak*.

Seward Peninsula: Mile 41.3 Council Road, 11 July: Zeligs reports: additional species (see 1979 Annual Summary): *Colias philodice*, *C. nastes*. Mile 18 Teller Road, 11 July: Zeligs reports: additional species (see 1976/79/80 Annual Summaries): *Erebia mackinleyensis*. Mile 42-43 Teller Road, 11 July: Zeligs reports: additional species (see 1976/79 Annual Summaries): *Erebia rossii*, *E. disa*, *E. youngi*.

Interior: Eagle Summit, 18-27 June: Epsteins & Philip report: all the usual species (see 1979 Annual Summary). *Boloria improba* abundant and fresh, *B. distincta* in mint condition on the rockslides, *Erebia mackinleyensis* also fresh. This was an early season, but in general the rockslide species are among the first to emerge. Mile 90.2 Steese Highway, 25 June: Epsteins & Philip report: *Erebia theano* abundant and very fresh. Murphy Dome, 16 May - 16 June: Epsteins & Philip report: additional species (see 1980 Annual Summary): *Carterocephalus palaemon*, *Papilio machaon* (strangely absent in 1980), *Colias palaeno*, *Incisalia polios*,

Celastrina argiolus, Boloria polaris, B. frigga, B. chariclea, B. eunomia, Oeneis bore, O. melissa, O. jutta, O. polixenes, Erebia disa, Pararctia lapponica. This report combined with the 1980 Murphy Dome list amounts to a checklist for the site. Fairbanks, ARR tracks on N side of city, 14 June: Epsteins report: Colias hecla? This is a heavily disturbed area, and is also one of the sites where Art Shapiro found Pieris occidentalis abundant. The (single) specimen looks like normal hecla rather than the Murphy Dome Colias nr. boothii--and is the first record I know of in Alaska for hecla in the taiga, far from any tundra site. Goldstream valley, near Fairbanks, 26 June: Zeligs reports: Lycaena phlaeas arethusa. Alder Creek, Parks Highway near Ester, 12 & 24 July: Epsteins, Philip, & Pike report: Lycaena phlaeas arethusa. This colony, discovered by Dave Bauer in 1979, appears to be doing well. Walker Fork, Taylor Highway, 20 July: Peters reports: additional species (see 1979 Annual Summary): Hesperia manitoba, Lycaena dorcas, L. helloides (another interesting record, pending confirmation), Vacciniina optilete. Between Mosquito Fork and Chicken Creek, Taylor Highway, 15 July: Pike reports: Hesperia comma, Colias pelidne, C. palaeno, Lycaena dorcas, Lycaeides argyrognomon, Boloria chariclea/titania, Erebia theano. Alaska Highway, 23 miles N of Delta, 14 July: Pike reports: Colias pelidne?, Lycaena phlaeas arethusa, L. dorcas, Vacciniina optilete, Boloria titania, Coenonympha kodiak. Southeastern Alaska: Skagway, 4 July: Leuschner reports: (Noctuidae) Eurois occulta, Autographa ampla, (Geometridae) 21 spp. including Perizoma alaskae, Hydriomena crokeri, H. renunciata, H. expurgata, (Pterophoridae) Platyptilia pallidactyla (common). All specimens dusk-flying, netted. Sitka, 7 July: Leuschner reports: (Geometridae) 5 spp. including Perizoma grandis, Dystroma hersileata. Day-flying under clouds.

Note on nomenclature: Future Zone 8 reports will be based on the new Miller/Brown Catalogue/Checklist. It is hoped that most contributors and all readers will be able to adjust to the resulting changes in names of both genera and species. For the Alaskan fauna, 9 genera and 4 species will be affected.

ZONE 9: NORTHERN NEOTROPICS, & ZONE 10: SOUTH AMERICA: no reports received.

ZONE 11: ONTARIO: Coordinator: Quimby Hess.

The 1981 season in Ontario was notable for a fairly strong migration into southern Ontario from the south and from the mid-western United States of several species, especially in June. These included Battus philenor, Pyrisitia lisa, Euptoieta claudia, Junonia coenia, and even an Ascia monuste (probably Texas subspecies), the latter being observed at Point Pelee by Alan Warmington. The greatest influx occurred on the shores of Lake Erie 16 June. The greatest assemblage of J. coenia ever observed in Ontario was at Point Burwell on Lake Erie from 23 Aug. to 12 Sept. During this period Tom Toyomi Ikeda counted 50-100 fresh adults each day.

Other migrants into Ontario, Vanessa virginiensis, cardui, and atalanta, and Danaus plexippus were more numerous than in 1980. It was discovered in 1981 that plexippus larvae were present on the common milkweed where it occurs in the southern regions of northern Ontario.

Range extensions occurred for C. inornata in southwestern Ontario and M. cymela in northeastern northern Ontario. Evaluations were made of the occurrence and population sizes of the two endangered butterflies in Ontario, Incisalia irus (may be extinct as of 1981), and L. melissa samuelis (endangered: needs complete protection in Ontario).

MOTHS: R. Layberry reports that J. Fowler took 2 H. columbia ♀♀ at UV light 5 June, at the south end of Long Swamp, Huntley Twp., Carleton Co., near Ottawa. This is one of the sites where T. N. Freeman took the species in the 1930's. Ova were obtained for rearing. Dave Elder reported abundant A. luna in the Rainy River district.

NEW MEMBERS.....

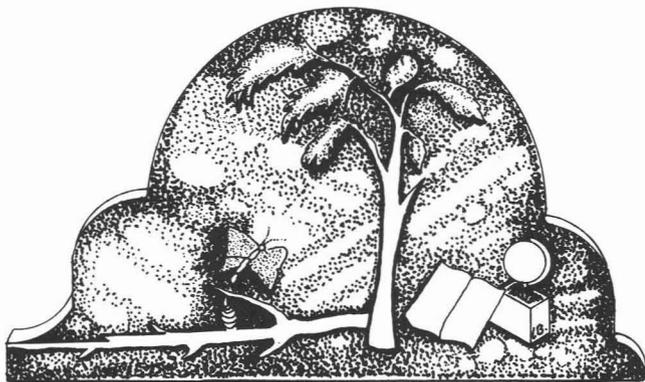
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Metamorphosis

CURT EISNER.....

Curt Eisner, of The Hague, Netherlands, noted expert on the genus Parnassius died 30 December 1981. He was in his early 90's.

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PERRY HERBERT.....

Perry Herbert, of Sunland, California, a member for only the past year, is reported to have died.

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GEORGE W. KAMP.....

George W. Kamp, of Dedham, Massachusetts, died in late February.

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CHARLES P. KIMBALL.....

On 4 March 1982 Charles P. Kimball, of West Barnstable, Massachusetts, died at age 84; he was a charter member of the Society.

In November of 1981 he had donated his extensive reference collection of moths to the Museum of Comparative Zoology at Harvard University. This collection of over 22,000 identified specimens (including 192 paratypes) is largely limited to pairs for the macros (perhaps 3000 species represented) and short series of micros (? over 1500 species). Over 4000 undetermined spread micros are waiting to challenge the experts. His massive library of reprints and historic volumes was also deposited at the MCZ.

Charley was well known for his work on the "Lepidoptera of Florida" (1965) and of s. e. Massachusetts ("The Lepidoptera of Nantucket and Marthas Vineyard", with F. M. Jones, 1943). In 1981, in appreciation of his contributions to lepidopterology in the southern U.S., he was voted the first recipient of the John Abbott Award by the Southern Lepidopterists. He was particularly revered by the many amateur collectors for whom he so willingly did identifications.

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LLOYD M. MARTIN.....

On 28 January a chapter in the annals of western Lepidoptera came to an end with the death of Lloyd Martin in Fresno, California. He was 69.

In 1969 Lloyd retired from the Natural History Museum, where he had been Curator of Lepidoptera for 33 years. He was a charter member of the Society, and served the organization in many capacities, including President in 1972. He had been an officer, and for 50 years a member, of the Lorquin Entomological Society. He was devoted to the study of southwestern Lepidoptera and was constant in

his support and encouragement of young entomologists.

In tribute to his many significant contributions to the study of Lepidoptera, the Natural History Museum of Los Angeles County has established the "Lloyd M. Martin Memorial Lepidoptera Research Fund" to support the fields of inquiry to which he devoted most of his life and energies. This fund will encourage field research in unexplored or little-known localities, and the acquisition, preparation, and study of moths and butterflies of the western United States.

Contributions to the Memorial Fund, payable to the "LACM Foundation", may be mailed to the attention of Julian P. Donahue, Los Angeles County Museum, 900 Exposition Blvd, Los Angeles, CA 90007.

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WILLIAM E. SIEKER.....

William E. Sieker, of Madison, Wisconsin, a charter member of the Society, died 22 January 1982 at the age of 70. A lawyer and a conservationist, he had served as president of the Madison Audubon Society and as legal counsel for the Wisconsin Chapter of The Nature Conservancy.

A collector of Lepidoptera for nearly 50 Years, his Spingidae constitute one of the finest private collections in the US. He was well known to many Society members, both personally and as a correspondent, and had helped many young people to develop an interest in insects.



Notices

SCHOLARSHIP IN MEMORY OF BOB SILBERGLIED.....

The Smithsonian Institution has established a Robert E. Silberglied Memorial Fund to support student research and training in tropical entomology. Those who wish to contribute a gift of any size may send it to: Robert E. Silberglied Memorial Fund, Accounting Office, Smithsonian Institution, L'Enfant 3500, Washington, DC 20560.

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1982 ANNUAL MEETING UPDATE.....

Plans for the 1982 Annual Meeting in Laramie, Wyoming, 15-18 July, continue to evolve.

The registration fee for the meeting is now definitely set at \$16.00, rather than the figure tentatively quoted on page 2 of the Jan/Feb NEWS.

If you have already sent in your pre-registration form without fee, please send your \$16.00 check, made out to the Lep Soc., to Cliff Ferris now. Fees for banquet, picnic, group photo, etc., will be payable in Laramie.

For those who have not yet registered, a form is available inside the back cover of this issue.

Don't miss this opportunity to meet your fellow Society members, and to visit an outstanding collecting area!

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DOOR PRIZES SOLICITED FOR THE ANNUAL MEETING.....

If you wish to contribute a door prize to be raffled off at the Annual Meeting in Laramie, please contact C. V. Covell, Department of Biology, University of Louisville, Louisville, KY 40292.

The prize maybe brought to the meeting, or sent to

Dr. Clifford D. Ferris, P.O.Box 335, University Station, Laramie, WY 82071.

Any item of lepidopterological interest would be welcome.

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ELECTION RESULTS.....

The 596 ballots cast in the Society's 1982 election of officers have been tabulated, with the results listed below; successful candidates are indicated by an asterisk*:

PRESIDENT-ELECT:

*Charles V. Covell, Jr. 583

VICE PRESIDENTS:

*Clifford D. Ferris 431
*Alberto Diaz Frances 324
*Claude Lemaire 277
Allan Watson 258
D. G. Sevastopulo 210
Miguel R. Gomez Bustillo 174

EXECUTIVE COUNCIL MEMBERS-AT-LARGE:

*Frances S. Chew 394
*Gloria J. Harjes 320
*Eric H. Metzler 295
Everett D. Cashatt 269
William J. Swisher 216
Benjamin H. Landing 183

KARL JORDAN MEDAL REPRESENTATIVE:

Thomas D. Eichlin 513

(The balance of the votes consisted of abstentions and a total of five write-ins.)

Officers of the Society are now as follows:

Through the 1982 Annual Meeting:

President: Lincoln P. Brower
First Vice President: Maria Etcheverry
Vice Presidents: Gerardo Lamas Muller
R. H. Carcasson
Secretary: Julian P. Donahue
Treasurer: Ron Leuschner

After the 1982 Annual Meeting:

President: Charles V. Covell, Jr.
First Vice President: Clifford D. Ferris
Vice Presidents: Alberto Diaz Frances
Claude Lemaire
Secretary: Julian P. Donahue
Treasurer: Ron Leuschner

Executive Council: (term expiring after annual meeting)

1982 M. Deane Bowers 1984 K. S. Brown
E. R. Hodges T. C. Emmel
W. D. Winter *
1983 R. L. Langston 1985 Frances S. Chew
R. M. Pyle Gloria J. Harjes
A. M. Shapiro Eric H. Metzler

* vacancy created by the death of R. E. Silberglied.

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NEW ENTOMOLOGICAL JOURNAL.....

Announcing the coming of "ENTOMOGRAPHY", an annual publication for insect biosystematics, filling the need for a publishing outlet for papers longer than 10 printed pages. All submissions refereed prior to acceptance; turn-over time about 6 months; nominal page charge, making it now possible to publish medium to large manuscripts at realistic costs to authors (institutions); no charge for first 25 reprints. For consideration of manuscripts,

or more details, write to: ENTOMOGRAPHY, 2015 J St. #32, Sacramento, CA 95814.

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XERCES SOCIETY 1982 ANNUAL MEETING.....

The 9th Annual Meeting of the Xerces Society will be held Friday morning through Sunday afternoon, 25-27 June 1982, on the campus of the University of California, Santa Cruz.

The meeting will include general sessions, for which contributed papers are solicited (deadline for submission of titles is 15 May, 1982) and a symposium on Sand Dune Biota or on Conservation Strategies for the '80's (to be determined).

Registration fee is \$15. A room and board package of 7 meals (Friday noon through Sunday noon) plus two nights lodging (Friday & Saturday) is available in University facilities for \$75. (Thursday night lodging and Friday breakfast can be included for an additional \$25.) These fees together cover the Friday evening party, Saturday night banquet, and Sunday afternoon field trip, probably to the Santa Cruz Mountains to observe Speyeria adiaeste.

Please send paper titles, and registration and room/board checks, to (and payable to): John H. Lane, Meeting Chairman, 3174 Scriver St., Santa Cruz, CA 95062. (Tel. 408-429-3760).

Pre-registration and room/board fees must be received by 20 May 1982. No refunds on cancellations received after 20 May, 1982.

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CZECH YOUTH SEEKS LEP PEN-PALS.....

Otto Drabek, a 14 year old Czechoslovakian lad who is an avid butterfly collector, has written us, via a friend of his in Brussels, seeking contacts in the U.S. with whom he may correspond and trade butterflies. He will have a translator available for his (and your) correspondence.

He lives in the Labe (Elbe) River valley a few miles east of Prague and would appreciate your letters: Otto Drabek, Zliczka 1134, 28000 Kolín V, CZECHOSLOVAKIA.

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FOR BETTER SERVICE.....

A number of members have been writing directly to our publisher in Lawrence, Kansas, about various matters. Eventually this mail gets forwarded to Manhattan Beach, where the treasurer sends it on to the proper places, but meanwhile weeks or months go by. PLEASE DO NOT SEND ANYTHING TO THE PUBLISHER!

For address changes, dues payments, memoir #2 orders, back issues orders (prepayment necessary for both of these, please), missing publications, write to the TREASURER, Ron Leuschner, 1900 John St., Manhattan Beach, CA 90266.

Send notices for the NEWS, and items of general interest, to the NEWS EDITOR, Dave Winter, 257 Common St., Dedham, MA 02026.

For information on membership, or changes in your "interest" listing, write to the SECRETARY, Julian Donahue, Natural History Museum, 900 Exposition Blvd., Los Angeles, CA 90007.

If your mail is properly addressed, we shall be able to serve you sooner. (The Management!)

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REARING - CURATORIAL POSITION OPEN.....

WANTED: technician to do insect breeding work for a captive insect breeding program; also minor curatorial duties; position commencing early summer; \$1000 plus per month depending on experience and capability. Please send resume to R. H. T. Mattoni, 9620 Heather Rd., Beverly Hills, CA 90210.

"CHECKLIST OF THE LEPIDOPTERA OF AMERICA NORTH OF MEXICO"

This new checklist was originally planned as a fascicle of "The Moths of America North of Mexico", but the Board of the Wedge Entomological Research Foundation, co-publishers with E. W. Classey, Ltd., have decided that it will be a separate publication, due out in April 1982.

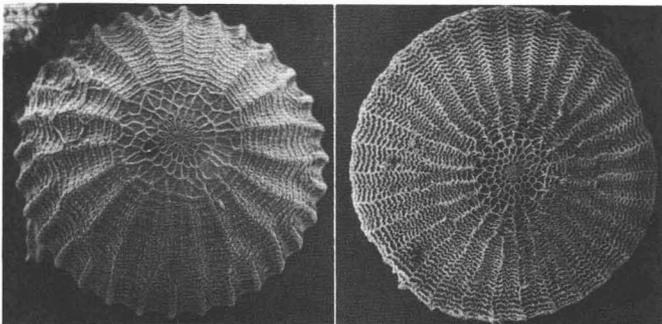
The retail price has been set at \$88.00 + postage. Regular subscribers to MONA have been mailed reservation forms by E. W. Classey, entitling them to purchase this checklist for \$79.20 + postage, a 10% discount.

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RESEARCH REQUESTS.....

❖ WANTED: collection records and localities for Euphydryas gilletti (in Miller & Brown as Hypodryas gilletti). I am evaluating the habitat requirements and status of this species, and along with general collection records, I need detailed directions of how to find different populations. Contributors will receive a report of the results. Dr. Ernest H. Williams, Dep. Biological Sciences, Wellesley College, Wellesley, MA 02181.

❖ EGGS? Live eggs and/or hatched egg shells of Catocala requested for comparative systematic research, using scanning electron microscopy. Exchange for live Catocala eggs or other material considered (see Buy/Sell/Exchange, this issue). Only 2-3 eggs/shells are required from each species for this study. List of species needed on request. SAVE THOSE SHELLS! Lawrence F. Gall, Dept. Biology 257 OML, Yale University, New Haven, CT 06520.



Catocala amatrinx

Catocala obscura

❖ WANTED, for scientific study, living pupae of all North American Pieridae. Urgently needed are pupae of the genera Pieris (Artogetia), Pontia, Euchloe, Anthocaris and Colias, even from the most common species. Exchange with various European material is possible, but I will also buy pupae. Hansjürg Geiger, Zoologisches Institut der Universität Bern, SWITZERLAND.

❖ WANTED: contact with any collectors with access to females of any Holarctic Hepialidae for a Ph.D. thesis on the biology of these moths. I am interested in securing viable ova to test the suitability of several artificial and natural larval substrates. Any information regarding the biology of these moths, e.g., observations of associated flora, periods of adult activity, or mating flights, would be particularly useful. David Wagner, 218 Wellman, Dept. of Entomology, Berkeley, CA 94720.

❖ HELP REQUIRED to collect samples of Maniola species (M. jurtina, nurag, telmessia, cypricola, megala) from any area for research project. Exchange possible; please write first. George Thompson, Dept. of Biology, The University of Stirling, Stirling, SCOTLAND, FK9 4LA.

❖ BERLIN: Is there anyone who will be visiting the Berlin Museum and would be willing to take down data from the labels of a species of Brazilian kite swallowtail? For details contact Dr. David A. West, Dept. of Biology, VPI & SU, Blacksburg, VA 24061.

BUY, SELL, EXCHANGE.....

Items submitted for inclusion in this section are dealt with in the manner outlined on page 9 of the 1982 NEWS (Jan/Feb issue). Please note that it was decided several years ago to exclude prices from the printed notices, except for the prices of lists and printed matter. "SASE" calls for a self-addressed, stamped envelope. Notices will be entered once, unless entry in two (maximum) successive issues is requested.

EXCHANGE ONLY: a few A+ pairs of S. diana for other material which I can use from western US and Canada. Send offers to Frank Bodnar, Box 52, Spring Church, PA 15686

FOR SALE OR TRADE: wild-collected H. cecropia cocoons. Wanted: ova lists of Saturniidae available this year, especially E. imperialis and C. regalis from larvae that fed on Staghorn Sumac. James C. Romer, 7991 E. Hampden Circle, Denver, CO 80237.

WANTED: ova of C. regalis and C. sepulchralis, preferably in mid-July, willing to buy, or exchange papered worldwide or Pennsylvania material. Also need Catocala ova. Gasper Danish, Jr., 1017 Second Ave., Altoona, PA 16602

FOR SALE: "A Review of the Family Spingidae of the Palearctic and Chinese Himalayan Fauna" (hardbound); N. Ya. Kutnetsova (1972), \$10. "Revised Catalog of the African Spingidae with Descriptions of the East African Species" (2nd Ed., softbd.); R. H. Carcasson (1976) \$15 Glenn A. Gorelick, Citrus College (Biology), Azusa, CA 91702.

EXCHANGE: limited number of H. columbia cocoons to exchange for cocoons or pupae of southern or southwestern Saturniidae, i.e.: Eupackardia calleta, A. zephyria, R. forbesi, Hemileuca sp.; etc. Tom Carr, 10430 Airport HWY, Lot 184, Swanton, OH 43558.

EXCHANGE: we have ova of 35+ sps. of N.E. Catocala, with extras of ca. 30 sps. including herodias gerhardi, blandula, praeclara, badia, subnata, obscura, briseis, etc., some in limited #s. Exchange for comparable stock desired, esp. midwestern sps. (also still need unijuga, residua, neogama). Requests for 1982-83 exchanges invited; we expect to have sordida, gracilis, pretiosa. Full list and details available from L. Gall & D. F. Schweitzer, Dept. Biology 257 OML, Yale University, New Haven, CT 06520 (see also Research Notices).

EXCHANGE ONLY: v.g. A2 repaired extra large ♀ and 2 ♂ P. machaonides; a few of the following Cuban sp., none perfect, 1A-2B Parides gundlachianus ♂ & ♀, Papilio crespfontes ♂-♀, P. thoas oviado ♂♂, B. devilliersi ♀, others. Want rarer Neotropical, esp. Papilio, Morpho, Prepona, and world Papilio. Dave Matusik, 3757 Main St., Skokie, IL 60076.

FOR SALE: cocoons of A. luna, A. polyphemus, A. io form coloradensis, H. euryalis. Ova of preceding plus H. gloveri, and some Hyalophora hybrids available beginning mid-May. Some AI papered Saturniids and a few H. lineata available. SASE for lists. Carita Hamblin Bates, P.O. Box 3133, Eldorado Springs, CO 80025.

FOR SALE: quantities of A. polyphemus cocoons. Tom Kral, Rt. 2, Box 648, Necedah, WI 54646.

SALE OR EXCHANGE: large wild-collected H. gloveri cocoons for exotic or uncommon native Saturniidae, papered or livestock. J. Bruce Duncan, 5821 So. 2150 West, Roy, UT 84067.

WANTED: Dryas c. cillene, D. c. moderata, Danaus gilippus strigosus, D. eresimus montezuma, Lycorea ceres demeter, L. c. atergatis, Euptychia areolata septentrionalis. Brian Dunleavy, 2040 Grubbs Mill Rd., Berwyn, PA 19312.

WANTED: books for the identification of numerous tropical moths I have in my collection (Castnia, Saturniidae, Spingidae). Anyone wishing to share or sell books please contact J. Sgro, 4618 Derbyshire Dr., N. Randall OH 44128.

BOOKS FOR SALE: "Butterflies", E. B. Ford, 1945, hardback; "Moths", E. B. Ford, 1955; "Moths of the British Isles" Richard South, 1908, hardback; "Field Guide to British & European Butterflies", Higgins & Riley, 1970, hardback; "A Butterfly Book for the Pocket", E. Saunders,

PREREGISTRATION & PAPER TITLE FORM: 1982 ANNUAL MEETING

NAME _____

ADDRESS _____

I should also like to give a paper (please type or print information):

TITLE _____

Time Required: ___ 15 min.; ___ 20 min.; ___ 30 min.; ___ other (specify) _____

Please list any special requirements for audio-visual aids other than a standard 2x2 slide projector and screen:

If you are bringing family or friends with you to the meeting, please indicate the total number in your party: _____

Deadlines: paper & title registration 1 April 1982; preregistration only, 1 June.

Please send completed forms and check for \$16 per registrant (payable to The Lepidopterists' Society) to:

Dr. Clifford D. Ferris
P.O.Box 3351, University Station
Laramie, Wyoming 82071, USA

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(British), 1939, hardback; "Field Guide to the Butterflies of North America", A. B. Klots, 1951, hardback; "Biochemistry of Insects", Darcy Gilmour, 1961, hardback; "The Life of Insects", V. B. Wigglesworth, 1968, paperback; "The Wonderful World of Butterflies & Moths" Robt. Goodden, large vol., 1977; "All Color Book of Butterflies", Robt. Goodden, 101 color photos. George W. Rawson, 10405 Amherst Ave., Silver Spring, MD 20902.

WANTED: papered specimens of all N. Amer. butts. & moths, esp. Papilionidae, Parnassius ssp. (♂ only), Speyeria ssp. esp S. diana ova/pupae or papered ♂♀; all S. nokomis & leto ssp., papered; Eumaeus atala florida ♂♀; pupae of P. troilus; P. glaucus, P. polyxenes asterias; papered P. joanae and all Macros esp. H. columbia papered ♂♀ or live pupae, Hemileuca papered or ova; all Rothschildia ssp. papered or pupae, and most US and foreign macro pupae & papered ♂♀. Dennis E. Walker, 1441 So. 18th Ave., Maywood, IL 60153.

FOR SALE: specializing, parting collection. Numerous species and subspecies from N. Amer. available and/or will trade for other N. Am. sp. I need. Write offerata/desiderata; all replies answered promptly. Mike Fisher, 6521 S. Logan St., Littleton, CO 80121.

FOR SALE: H. L. Lewis' "Butterflies of the World", 5000 spec. illus. in color; out of print; mint condition; SASE for price. Janice Logan, Rt. 1, Box 236, Fayetteville, TN 37334.

FOR SALE: A1 papered Morpho didius from Peru; SASE for price, Janice Logan, address above.

TO BUY OR EXCHANGE: colorful butts. & moths from anywhere, esp. S. America, Africa, & Asia; A1, A, & B condition welcome; major interests Morpho, Papilio (esp. birdwings), and S. Amer. Nymphalidae. Please write stating species, quality, price, or desired exchange. B. L. Gooi. P.O.Box 9, Tanah Rata, Cameron Highlands, Pahang, WEST MALAYSIA.

EXCHANGE ONLY: 35 papered French butterflies, A1, with data. Desire N. Am. Lycaenidae in exchange. Send list. Paul Brand, 620 Lodge Ave., Toledo, OH 43609.

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MEMBERS' COMMERCIAL NOTICES.....

CHRISTOPHER J. FARRELL, Apartado #103, Tingo Maria, Peru,

S.A.: selling South American butterflies, beetles, and assorted insects, including many rare species; enquiries from collectors and dealers welcomed; wholesale discounts.

RONALD N. BAXTER, 16 Bective Rd., Forest Gate, London E7 ODP, ENGLAND: seeking reliable contacts throughout world for supply of living and dead Saturniidae, Sphingidae (live) and papered Lepidoptera, Coleoptera, and other insects; solicits offers and prices.

T. W. TAYLOR, COMBINED SCIENTIFIC, P.O.Box 1446, Ft. Davis TX 79734, USA: selling and trading of all categories of world-wide insects and related fauna. Complete catalog available, listing 6000 items.

TOM EICHLIN, 2712 Green Bay Way, Sacramento, Ca 95826: butterfly T-shirt, 3 N.A. species depicted in 6-color process on 100% cotton beige Haines shirt, sizes boy's L to men's XL @ \$8.

SIMON ELLIS, Transworld Butterfly Co., Apartado 7911, San Jose, Costa Rica, C.A.: new summer catalog, \$1 cash, or mailing list service, next 10 catalogs, airmail, \$6; butterflies, moth traps, books, etc.; mastercard.

W. B. RICHFIELD, INTERNATIONAL SPECIMEN SUPPLY, P.O.Box 1066, Goleta, CA 93116, USA: selling all families of world lepidoptera by mail order; quality papered specimens with data. Free introductory price listing, or send \$3 for additive specimen price lists, 12-issue subscription.

MRS. CHANG PI-IZU, P.O.Box 873, Taipei, Taiwan, R.O.C.: selling Formosan butterflies, moths, beetles and other insects; sexual mosaics, color aberrations and rare butterflies, including one beautiful sexual mosaic of Actias sinensis; ova and cocoons of Attacus atlas, Erigyna pyretorum, & Actias sinensis.

C. Y. YU, MOKUSEI INSECTS CO., P.O.Box 55-738, Taipei, Taiwan: can supply Taiwan butterflies, moths, and beetles in large quantities.

CHARLES T. IANNI, IANNI BUTTERFLY ENT., P.O.Box 81171, Cleveland, OH 44181: "The Illustrated Encyclopedia of the Butterfly World" in color, Paul Smart, over 2000 species depicted life-size.

M. ASAKAWA, ASAKAWA TRADING COMPANY, P.O.Box 14, Komatsushima, Tokushima 773, Japan: selling butterflies of Japan; buying Parnassius from north & east European regions.

from: The Lepidopterists' Society

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P. O. Box 368
Lawrence, Kansas 66044

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Boulder, CO 80303

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DEADLINES: Material submitted for inclusion in a specific issue of the NEWS should reach the NEWS EDITOR no later than the 15th of the preceding even-numbered month. Reports for the SEASON SUMMARY must reach the ZONE COORDINATORS (listed on front cover of this issue) no later than 31 January.

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INFORMATION ABOUT THE SOCIETY.....

Membership in the Lepidopterists' Society is open to all persons interested in any aspect of Lepidopterology. Prospective members should send the TREASURER the full dues for the current year (\$18.00 US), together with mailing address and a note about areas of interest in Lepidoptera; student membership (must be certified) \$12; sustaining membership \$25. Remittances must be in US dollars, payable to the Lepidopterists' Society. All members will receive the JOURNAL (published quarterly) and the NEWS (published bimonthly). A biennial membership list will comprise the last issue of the NEWS in even-numbered years.

Information on membership may be obtained from the TREASURER, Ron Leuschner, 1900 John St., Manhattan Beach, CA 90266, USA. Changes of address must be sent to the TREASURER, and only when the changes are permanent or long-term.

Other information about the Society may be obtained from the SECRETARY, Julian P. Donahue, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007, USA. Please notify him of any additions or changes in areas of interest for publication in the membership list.

Manuscripts submitted for publication in the JOURNAL are to be sent to the JOURNAL EDITOR, Dr. Thomas D. Eichlin, JOURNAL of the Lepidopterists' Society, Insect Taxonomy Laboratory, 1220 N Street, Sacramento, CA 95814, USA. See the inside back cover of a recent issue of the JOURNAL for editorial policies.

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AVAILABLE PUBLICATIONS OF THE SOCIETY.....

CATALOGUE/CHECKLIST OF THE BUTTERFLIES OF AMERICA NORTH OF MEXICO (Memoir No. 2), Lee D. Miller & F. Martin Brown: includes references to original descriptions and location of type specimens. Members and subscribers, \$10 cloth, \$5 paper; non-members, \$17 cloth, \$8.50 paper, postpaid. Order from Ron Leuschner, Treasurer, 1900 John Street, Manhattan Beach, CA 90266, USA.

COMMEMORATIVE VOLUME, 1947-1972: a 25-year review of the Society's organization, personnel, and activities; biographical sketches; JOURNAL 25-year cumulative index by author, subject, and taxon; clothbound. Members and subscribers, \$6; non-members, \$10, postpaid. Order from Ron Leuschner, Treasurer, address above.

BACK ISSUES of the JOURNAL and of the NEWS of the Lepidopterists' Society: order from Ron Leuschner, Treasurer, address above. A list of the available issues and their cost, postpaid, is in the NEWS for Nov/Dec 1981, page 74.