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SEASON'S SUMMARY, 1961

Editing by Coordinators has reduced the total editing necessary by the Editor in this season. In some cases the raw reports have been sent to the Editor and are on file. They may be used by members who request it. In other cases the Coordinator has reported back to his contributors. On behalf of the Society and its members, the Editor thanks the Coordinators for their fine efforts, and each contributor who has made the Summary possible.

ZONE I: CALIFORNIA, ARIZONA, NEVADA. Coordinator, FRED THORNE. Contributors: D. Dirks, H. A. Freeman, K. Hughes, S. Jewett, Jr., R. J. Langston, K. Roeber, O. Shields, R. Stanford, J. W. Tilden.

California: Seasonal rainfall was deficient, from 30% normal in the south to 80% normal in the north. Collecting was poor in the south to nearly normal in northern counties. Spring flights averages early, summer flight seasonal, fall flights early and short.

On the Mohave Desert, near Littlerock in mid-February larvae and pupae of Megathymus yuccae were common in Joshua Tree suckers but no adults there, in Apple Valley nor in Whitewater Canyon. Dirks and Shields found Pieris sisymbrii, Callophrys dumetorum and Philotes sonorensis fairly common at Scissors Crossing, San Diego Co., Feb. 13 & 19. Euphydryas chalcedona, Callophrys loki, and Anthocaris lanceolata were fairly common at Jacumba, 19 March. No Philotes speciosa found here in 1961. Anthocaris cethura was scarce in the deserts but it was found in coastal foothill areas along with A. sara, Callophrys iroides, C. dumetorum, Glaucopsyche lydgamus and Apodemia mormo. On 27 March Langston took a fresh female Papilio indra in the Laguna Mts.; several collectors found ova and larvae during April & May on Tecate Peak; adults were not common. Euchloe ausonides, C. dumetorum, Litocala sexsignata and Ethmia discostrigella were also found 27 March; Microtia dymas at Lakeside 20 miles from San Diego, 29 March, Langston. At Descanso 30 March, he found three species of Prodoxidae from Yucca flowers, plus some of previous species. He found Euphydryas chalcedona common but past, 10 April, Providence Mts., San Bernardino Co.; Callophrys siva, fotis and comstocki were not found. C. siva was taken in Mint Canyon, Los Angeles Co., 12 April.

Stanford & Opler found Battus philenor common near Tuolumne, Tuolumne Co., 15 April plus one Papilio multicaudatus, 10 A. lanceolata, some Euphydryas editha, Glaucopsyche lydgamus and an interesting series of Euchloe, described as intermediate between ausonides and creusa.

From the Laguna Mts., San Diego Co., Shields reports Colias harfordii, C. dumetorum, Lycaena xanthoides and Hesperia harpalus scarce in May, Plebejus icarioides common, Pyrgus ruralis absent. At Pinnacles National Monument, San Benito Co., Stanford reports Chlosyne gabbii abundant, Plebejus (resembling chlorina) and Philotes battoides, common. Langston found interesting moths in Humboldt, Mendocino, Shasta and Colusa Cos., 9-11 May, despite rainy weather, including Adela trigrpha, Euceratia castella & others.

Near El Portal, Mariposa Co., Tilden took Anthocaris sara & lanceolata, Euchloe creusa, Pieris napi, Euphydryas editha and many other species including Callophrys fotis, April 16. June 10, near Mather, Tuolumne Co., he found C. nelsoni, E. creusa, Phyciodes campestris, Thorybes diversus, Erynnis persius & Hesperia juba. At Wilson Lake, Tehama Co., he took one C. fotis (new locality, possible range extension) and at Mineral, same Co., C. nelsoni, Parnassius clodius and Boloria epithore, June 21. Here the season seemed retarded.

Stanford & Hughes found good collecting in the Greenhorn Mts., Tulare-Kern Cos., 24 June, taking over 200 specimens including 1 Callophrys spinetorum, but July 22 butterflies were scarce, & Speyeria hydaspes again absent.

In Mariposa Co., June 21-24, Dirks & Shields found Callophrys nelsoni very common, Satyrion californica and Habrodais grunus common, Speyeria callippe common, S. hydaspes & S. zerene scarce. At Tioga Pass, Tuolumne Co., Callophrys sp., app. not dumetorum (6), Papilio indra (2 pr.) and Chlosyne malcolmi, Oeneis invalida and Lycaena cupreus just emerging, 28 June. Same day, Q. chryxus just emerging at Sonora Pass, Stanislaus Co. Coenonympha tullia, Hesperia nevada and other species were found at Mono Lake, June 26-27 but the hybrid between Limenitis weidemeyerii and lorquini was scarce.

Langston reports Cercyonis pegala June 3 in Berkeley Hills, Alameda & Contra Costa Cos., moderate in numbers by June 18 and abundant June 24, worn on 1-8 July, normal sequence in spite of a dry year.

Shields and Dirks found good collecting in Sierra, Plumas, Lassen and Siskiyou Cos., 30 June-5 July. Stanford found collecting meager at Kaiser Pass 4 July, but took a nice series of Lycaena heteroneddplus a few Satyrion dryope, in the Tejon Mts. 5 July. He also reports Colias philodice from the Carson Valley, Nevada. Langston found Hesperia harpalus (dodgei) at Point Molate, near Richmond, Contra Costa Co., 6 Aug. & 3 Sept., a new county record.

Summer rains helped desert collecting in San Diego Co. Chlosyne californica larvae, adults of Apodemia palmeri and Microtia dymas were common, Pseudocopaeodes eunus scarce, Scissors Crossing, 3 Sept. Near Warner Hot Springs Philotes enoptes was common 7 Sept., scarce and worn 24 Sept.

Lerodea eufala was reported damaging sorghums in Madera Co., in September. Pteromalus vanessae was reported parasitizing Papilio zelicaon heavily in Tulare Co., October. Tilden observed that Plebejus saepiolus oviposits on Trifolium early (late June, early July) and on Hosackia later (August) when clovers dry up, at Crane Flat, Gin Flat and Tioga Pass, Yosemite National Park. Agraulis vanillae seems well established in the San Francisco Bay Region and has survived freezing weather, as reported by Langston, in spite of the fact that the larvae do not diapause but remain semi-active, as observed by Langston, Tilden and others. The normal migration of Danaus plexippus was noted by Langston in the Bay Region, starting 6 Aug., peaking 12 Sept., over by 12 Nov., in a general S. W. direction, heavier than usual.

Arizona: Winter rainfall very low, spring conditions very dry. Early summer rains spotty, but by August and September rain was above average for the state. Late rains, November and December, indicate promise for early 1962.

Dirks & Shields found Euchloe creusa, Microtia dymas, Chlosyne elada, Emesis zela, Hesperia pahaska, Atrytonopsis pittacus, Staphylus ascalaphus (! so reported - Ed.), Erynnis zarucco and burgessi and Battus philenor fairly common; Anthocaris cethura and Chlosyne theona were scarce.

Near Kingman, Mohave Co., in the Hualapai Mts., they found Callophrys, nr. augustinus, C. sierrae, Erynnis burgessi and Copanarta nigerima were common; Celotes nessus was scarce.

Jewett found Oak Creek Canyon, Coconino Co., abnormally dry in mid-June with night collecting disappointing. Diurnals included Emesis zela, Euphydryas klotsi, numerous but past, and P. rutulus & multicaudatus, L. bredowii & weidemeyerii, Speyeria sp. (atlantis? - Ed.), Epargyreus clarus, Eurema nicippe, Leptotes marina and Apodemia palmerii.

Roever, in July, reports Amblyscirtes aenus, oslari, prenda and nysa increased, A. exoteria & cassus, Atrytonopsis lunus and Oarisma edwardsi scarce. Freeman found drought conditions in Madera Canyon and on Mt. Lemmon early in July, collecting poor. Reduced vegetation however made locating tents of Megathymus ursus simpler; several pupae were found. Agathymus polingi larvae were abundant on Mt. Lemmon Road at 5500 ft. and 47 were dug from Agave plants July 7. Both Freeman and Roever report megathymid collecting good. Roever reports taking all species known to occur in Arizona, with several new locality records.

Freeman found Zestusa dorus common, Limenitis bredowii abundant in Madera Canyon 5 July. Collecting was poor in the Chiricahua Mts. He found Calphelis nemesis, Eurema proterpia, Cogia hippalus and one female of a new Cybaenes in the Patagonia Mts., 9 July. During late September & October Roever found Papilio ornythion, Euptoieta hegesia, Eurema nise, and E. boisduvaliana (general and common) in the Huachuca, Santa Rita and Baboquiviri ranges.

He also found Agathymus polingi in heavy flight at Molina Campground on the Mt. Lemmon Road, 13 Oct., with A. aryxna fairly common. Neophasia terlootii was scarce in Madera Canyon 14 Oct., but Eurema proterpia and Lerodea eufala were common; a few L. arabus were taken. Roever also reports some movement of Krignonis castalis, near Nogales in mid-July, and of Phoebis agarithe, Anteos chlorinde and A. maerula, same area, in early August.

Nevada: Stanford took a series of Speyeria (carolae) and a single Callophrys spinetorum in the Mt. Charleston area, 6 August.

ZONE II. PACIFIC NORTHWEST - BRITISH COLUMBIA, WASHINGTON, OREGON, IDAHO, MONTANA.

Coordinator: E. J. NEWCOMER. Contributors: D. L. Bauer, D. Carney, W. C. Cook, E. J. Dornfeld, R. Guppy, Emily Hendriksen, S. G. Jewett, Jr., W. C. McGuffin, J. Manning, D. McCorkle, E. J. Newcomer, O. Shields and R. E. Woodley.

Winter was mild over the whole area. April and May were cool, rainfall above normal. June to September, temperatures much above normal, rainfall normal. Butterflies of most species were more numerous than usual during the summer; there were some exceptions. Papilio zelicaon was scarce after early spring; it was the off year for Oeneis nevadensis; few were taken. Vanessa carye and cardui were nearly absent. Heliopetes ericetorum was scarce, though abundant in 1960.

British Columbia: Guppy reports a mild winter on South Vancouver Island, early spring cool and wet, hot spells in May & June and September exceptionally warm and dry. Early collecting poor, summer collecting good. The colony of Parnassius smintheus on Mt. Arrowsmith is thriving. Plebejus icarioides and Lycaeides melissa, scarce in 1960, were common in 1961 on Mt. Benson, with Lycaena mariposa, the latter two new records for the locality. Oeneis nevadensis scarce, the off year for its two year cycle. Papilio rutulus and P. eurymedon abundant, predictable from the mild winter, an observation that has held true for ten years. Arctiidae were plentiful. Halisidota argentata larvae scarce; Hyphantria textor reached plague numbers and Malacosoma pluviale is near top of cycle. M. disstria came to light in large numbers 14-15 July but was not seen again. Euthyatira semicircularis and Nadata gibbosa unusually plentiful. Most Phalaenidae were in reduced numbers. Geometridae seemed to show no trend worth mentioning.

McGuffin reports rearing Aethalura anticaria, Metarranthus duaria, Pero morrisonarius, Xanthorhoe sp. (defensaria ?), Venusia sp. (pearsalli?), and Earophila vasiliata from egg to adult, at Lumby. The life histories for the Aethalura and the Pero seem to be new.

Washington: The abundance of P. eurymedon, Colias, Speyeria, Euphdryas colon & editha, Chlosyne hoffmanni (manchada), Cercyonis, Phyciodes, Satyrium and Lycaena was noteworthy.

Carney and McCorkle report good series of Colias interior, Boloria selene and Phyciodes barnesi in Okanogan Co., and Callophrys johnsoni in Mason Co. E. colon and C. palla were common east of Republic, dates not given. A few Danaus plexippus were taken in Yakima Co., the first in several years. A single fresh specimen of Vanessa virginiensis was taken near Priest Rapids late in August.

Cook reports light trapping for moths in the Walla Walla area poorest in years. The only group more abundant than usual was Xylomiges. Andropolia diversilineata was taken in the Cascades in August and collecting in the Seattle area was good also in August. Scarce species taken were Lithophane dilatocula, Authographa metallica and Phytometra nichollae. Hyphantria textor was exceedingly common west of the Cascades, and also in Yakima, where usually scarce.

Idaho: James Manning reports that a disastrous forest fire ruined some of the best collecting area north of Boise. Weather was very hot and dry during the summer; no unusual numbers of any species noted, except Speyeria abundant at 8,000 - 9,000 foot elevation.

Montana: No reports.

Oregon: This state had best coverage. Bauer collected northerly, Shields southerly, Newcomer in central and southern areas, as did Dornfeld and Jewett; Cook and Hardwicke collected moths in eastern Oregon in September.

Bauer reporting from north central area found Colias and Nymphalis in March, and excellent

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collecting from June on. Species abundant were Euphydryas colon and Chlosyne stereope (by thousands); most Lycaenids, including Strymon melinus, Lycaena heteronea, editha, mariposa, nivalis, and helloides, Plebejus acmon, icarioides, Phaedrotus piasus and Lycaeides melissa; Papilio oregonius, Colias alexandra, eurytheme; Coenonympha tullia, Cercyonis spp.; Speyeria spp., Phyciodes spp., Nymphalis milberti, Apodemia mormo, Hesperia juba, Ochlodes sylvanoides, C. interior, scarce, only in the mountains. Vanessa carye, atalanta and (1) virginiensis were taken. Bauer found larvae of E. colon on Snowberry (Symphoricarpos), and of C. stereope on Rabbit Brush, prob. Chrysothamnus viscidiflorus.

Shields took Speyeria zerene (gloriosa) near Grants Pass, July; Newcomer took it south of Jacksonville, late July (also near Happy Camp, Siskiyou Co., Calif.) Shields found Speyeria spp. very common on Mt. Ashland, and also in Klamath and Deschutes Cos. and esp. in the Ochoco Mts., Crook Co. Also E. editha near Diamond Lake and Hesperia harpalus in Klamath Co.

In the Steens Mts., Harney Co., Jewett took E. anicia (macyi), C. acastus, Philotes battoides and the geometrid Fernaldella stalactaria, late May. Dornfeld, same area, took S. zerene, callippe and mormonia at Fish Lake in early August. He also reports Lycaena cupreus and Thorybes mexicana from Gilchrist and Hesperia lindseyi from Bly Mt., in June.

At Portland, Jewett took some good moths, beginning in March: Orthosia hibisci; Xylomiges cognata, perlubens, simplex, rubra; Lithophane pertorrida; Metalepsis cornuta, Pleroma obliquata, Eupithecia spp., Hydriomena edentata, Coniodes plumogeraria, Feralia comstocki, Xylena cinerita, Zale lunata, Caenurgia parva, Thallopaga spp., Semiothisa sp., Perizoma curvilinea and Eupithecia nevadata.

Newcomer found Lycaena rubidus and Cercyonis silvestris very common on Rabbit Brush near Burns, mid-July; S. zerene east of Lakeview, late July. He took what may be Pholisora libya (lena ?-Ed.) at Ana Springs, Lake Co., July 29. Speyeria spp. and C. alexandra abundant southwest of Prineville, in the Maury Mts. In a small meadow south of Skookum Butte, Walker Rim, Klamath Co., he took 30 spp. and over 100 specimens of butterflies in three hours. Callophrys johnsoni not reported from Oregon Cascades in 1961.

Cook & Hardwick, between La Grande and Steens Mts., Sept. 9-15, found noctuid collecting excellent at light and flowers. Euxoa spp., Agrotis orthogonia, Chorizagrotis auxiliaris and Spaelotis havilae especially in numbers.

The total season was one of the most rewarding for some years, and it is too bad our former coordinator, John Hopfinger, could not have lived to see it.

ZONE III. ROCKY MOUNTAIN AREA: ALBERTA, WYOMING, UTAH, COLORADO and NEW MEXICO.

Coordinator: DON EFF. Contributors: D. Eff, H. A. Freeman, K. Roever, W. Hammer, S. Jewett, Jr., J. L. Bauer, N. W. Van Veen.

Failure of local residents to submit reports was disappointing. However, for the first time we had good coverage of Alberta, thanks to the efforts of Van Veen. In general, 1961 was a good collecting season, in spite of being the coolest, wettest and cloudiest for years. Some areas had dry spells, and conditions varied, especially from north to south.

Alberta: Van Veen summarized activities of Anderson, Legge, McKenzie, himself and two unnamed collectors, covering seven areas: Calgary, Nordegg, Seebe, the Kananaskis Highway south to Coleman, Banff and Lake Louise area, and the Banff-Jasper Highway north to Columbia Ice Fields, Turney Valley, Watertown Lakes and Cypress Hills in SE corner of the Province. Collecting in general was about two weeks advanced, probably due to hot spell in mid-May. The season was interesting and better than usual, with more than a usual number of recorded species.

On the minus side was absence of Nymphalis j-album, near absence of V. cardui, scarcity of Limenitis arthemis and N. antiopa, diminished members of Erebia discoidalis and Oeneis alberta. The big news was the sudden appearance of Papilio nitra in what might be considered numbers! Four collectors took about a dozen in early June at Calgary, Exshaw, Moose Mt., Turner Valley and Cypress Hills. Also plentiful were Oeneis macouni, P. zelicaon, Colias astes, meadi, pelidne; E. anicia, Boloria toddi and most of the Speyerias were present in normal numbers. Highwood Pass was good for most of the above. Of highly desirable species, Van Veen took a couple of Oeneis beani on Highwood Pass, two Lycaena phlaeas were taken at Spray Lake, and a few Boloria astarte in the Lake Louise area on Mt. Whitehorn and at Bow Summit. One of Colin Wyatt's choicest localities, Nigel Pass, produced nothing but hosts of Nymphalis milberti. An Edmonton collector found many Speyeria edwardsi and C. alexandra in the Cypress

Hills, interesting ecologically and largely overlooked. The C. alexandra are varietal - intermediate or close to C. gigantea. Finally, McKenzie reports Chlosyne acasta near Drumheller. This appears beyond the known range but is on edge of arid badlands, definitely acasta habitat.

Wyoming: No resident collectors since DeFoliart left. Only reports are from Bauer and Hammer. Bauer found Pseudohazis hera larvae and Euphydryas bernadetta in eastern Wyoming. In Lincoln Co., May 29, he took E. anicia, editha, C. acasta and Phyciodes mylitta. At Togwotee Pass, early July, Hammer took Oeneis jutta, E. gillettii, Lycaena snowi, Coenonympha haydeni, Erebia epipsodea and Boloria kriemhild.

Utah: Bauer took some Phyciodes camillus and P. barnesi May 29 just south of Lincoln Co., Wyo., and in early May picked up 108 specimens of C. acasta at Thompson. Tilden took Speyeria atlantis in Indian Canyon, about 25 miles north of Castle Gate, on Route 33 leading to Duchesne.

Colorado: No reports from resident collectors! Two transient collectors report. Jewett collected in San Juan and LaPlata Cos., June 23-26, and Roever, from southern Colorado, first week in June. Eff was limited in 1961 collecting, partly due to weather. Spring collecting was about two weeks late. May was poor with not a single good day in the Boulder area. Low altitude material was delayed except that late summer species were nearly normal. High elevation in general good, only slightly retarded. The disappearance of Hypaurotis crysalus is a disappointment. Erebia theano also missing in 1961 after a peak in 1960.

In May, Bauer and Eff collected in Colorado National Monument, enjoying the only two days of perfect collecting weather seen all summer. C. acasta was out below, but we were early in the Monument. Same for E. anicia. However, a few specimens of P. indra (minori) were taken, including a female. Euchloe creusa (a good record) and Chlosyne fulvia were just emerging. Little is known of C. fulvia in Colorado. Scott, of Lakewood, took a fresh specimen of fulvia in late August, Rock Creek Arch, Pueblo Co. It is recorded from Colorado Springs by Sam Johnson.

Near Purgatory Campground, San Juan National Forest, Jewett had good collecting: Oeneis chryxus, E. ausonides, C. alexandra, Limenitis weidemeyerii and others. On Red Pass, near Silverton, Pieris napi, E. ausonides, E. epipsodea and Oeneis chryxus were scarce. On Grand Mesa he found P. napi and E. ausonides were abundant. He found no Parnassius in these areas.

Roever took thirty-five species of Lepidoptera in the Wet Mts., near Beulah, Pueblo Co. Of note is a reference to Erynnis telemachus. He also took Atrytonopsis hianna. In the Mountains, at San Isabel Lake he took Polygonia hylas. Speyeria edwardsi and Hesperia uncas were common in some spots along Rt. 160 between Trinidad and Pueblo.

In mid-August collectors were converging on Gothic, site of the Annual Meeting of the Lepidopterists' Society. One day was devoted to collecting and collectors went in all directions in search of such things as Speyeria cybele (charlottii), Colias meadii, Oeneis taygete (edwardsi). Some of the interesting captures, from the coordinator's viewpoint, were Lycaeides argyrognomon (sublivens), P. S. Remington, Irwin Lake; same from Emerald Lake, J. Scott, L. Martin and Eff, and again at Cottonwood Pass by W. S. McAlpine and Eff, and a small Oeneis taken above Tincup en route to Cumberland Pass, by Tilden.

New Mexico: No reports from resident collectors. Roever, Freeman, Jewett and Eff collected in the state briefly. Eff went particularly for Callophrys mcfarlandi. No adults taken, but full grown larvae were obtained, which pupated and emerged shortly. It is known that Jae made an identical trip about the same time, also with success.

Roever was in the Guadalupe Mts., Eddy Co., early May, and did well: Microtia dymas, C. definitiva, Mitoura siva, Erynnis telemachus & meridianus, Ancyloxypha arene, Yvretta rhesus, Hesperia pahaska, Atrytonopsis vierecki, and Amblyscirtes aenus, oslari, nysa and eos. In the Sacramento Mts., in May, he took Phyciodes campestris, Chlosyne theona, Callophrys spinetorum, C. sheridani, Zestusa dorus, Erynnis burgessi, Stinga morrisoni and others. In June, again in the Guadalupe Mts., he found Megathymus violae larvae common, and at Jemez Springs, Sandoval Co., he added Atrytonopsis deva and python.

At the same time, Freeman at Carlsbad National Park also took Megathymus violae. In the Powder House area, he found many Callophrys siva, Papilio polyxenes and Euptoieta claudia,

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and larvae of Agathymus mariae. Jewett found good collecting at the Holy Ghost Recreational Area on a tributary of the Pecos River. Microtia nycteis was the most abundant, Thorybes mexicana a close second. He then explored the Hondo Ski Area where he found few butterflies. It was hot and dry at Lordsburg and Deming during July and Freeman found little to collect. In August and September Roever found Agathymus carlsbadensis and mariae common in the Guadalupe Mts., and A. neumogeni near Hope and in the Organ Mts.

With the moths, there is little to report. The Alberta collectors took few, nothing startling. No moth reports from Utah or Wyoming. Jewett found moth collecting poor in Colorado and New Mexico, except along the Hondo River of that State, above Arroyo Sec.

ZONE IV. GREAT PLAINS - CANADA TO TEXAS IN THE PLAINS REGION. Coordinator: H. A. FREEMAN. Contributors: H. A. Freeman, R. O. Kendall, J. E. Lipps, K. Roever and R. Heitzman.

Kansas southward reported collecting fair to poor due to an unusually dry spring. Kendall, San Antonio, Texas, stated the spring one of the driest on record. June and July were however the wettest on record. Collecting in the Big Bend area of Texas was below normal, due to dryness.

Heitzman reports that Lethe portlandia and Strymon edwardsii were common, Anthocaris genutia, Euchloe olympia and Callophrys henrici in fair numbers, in Johnson Co., Kan. Butterflies in general were down, most Strymon reduced or lacking. Collecting in northeastern Oklahoma was poor, but in mid-June a good series of Atrytone arogos was taken on purple cone flowers. A few Lycaena dione and thoe were taken in moist roadway spots; also a few early Speyeria idalia. Collecting around Grand Lake was very poor, Battus philenor and Papilio troilus the only common species. Moths did not come to black light in this area.

Roever, in early May, reports the following from the Davis Mts., Texas: Euptychia dorothea and rubricata, Asterocampa clyton (near subpallida) and antonia, Limenitis archippus, and astyanax, Adelpha bredowii, Zestusa dorus, Authohton cellus, Thorybes pylades, Cogia hippalus, Achalarus casica, Staphylus ceos, Systasea evansi, Erynnis burgessi, tristis, meridianus, and juvenalis, Prygus oileus, Heliopetes domicella, Celotes nessus, Pholisora catullus, Oarisma edwardsi, Copaeodes aurantiaca, Stinga morrisoni, Hesperia pahaska, Atrytonopsis vierecki, pittacus and ovinia, Amblyscirtes simius, aenus, oslari, nereus, eos and texanus. It late May, conditions dry, Eurystrymon polingi was the only interesting addition. In September Roever took Agathymus judithae and M. yuccae, early stages, in the Hueco Mts., A. florenceae and M. violae in the Davis Mts., undetermined M. neumogeni complex in the Sierra Diablo and Sierra Blanca area, A. chisosensis and M. violae in the Chisos Mts., A. estelleae and M. yuccae near Langtry and A. mariae complex at numerous localities between El Paso and Del Rio.

Lipps reports the following from Brownsville: a pair Dryas julia in November, Heliconius charitonius fairly common, and one unidentified heliconiid. Myscelia ethusa, Nov., Mestra amymone, Oct. - Nov., Anartia jatrophae, Sept. - Dec., Agraulis vanillae common all year, ymnax pixe, taken in Aug., reared in Dec., Phoebis statira, Aug., P. philea, Aug. - Dec., Anteos maerula, common in Aug., A. chlorinde in Oct., Ascia monuste, May - Nov., P. sennae & agarithe June - Nov., Callophrys miserabilis, Nov., Phocides lilea and Astrartes fulgenerator in good numbers in 1961, Thysania zenobia and Erebus odora Aug. - Dec., Phallosia saucia (Pericopidae), early May and again in August.

Freeman found Callophrys hadros and Hesperia metea scarce near Tyler, March; larvae of M. yuccae were plentiful there and at Ben Wheeler. Collecting poor in the Dallas area, fewer larvae of M. yuccae (stallingsi) than usual. June, Big Bend National Park, pupae and adults of M. violae, a range extension. Larvae of A. mariae at type locality, Franklin Mt., El Paso, but weather dry, other collecting poor. Near New Braunfels, third week in July, Nastra julia, Systasea pulverulenta, and Papilio multicaudatus, not common. Chisos Mts., Aug., A. chisosensis, good series, plus two males Epora quaderna, new Texas record, and Heliopetes domicella, Staphylus ceos, Cogia hippalus, Brynnis meridianus and other skippers. Collecting poor at Presidio except for Calphelis nemesis. Larvae of Agathymus mcalpinei were taken in the Glass Mts., those of A. florenceae in the Davis Mts., and mariae complex larvae taken at 28 stations from El Paso to Bracketville. Larvae of A. estelleae at Dryden, Juno and Bracketville, and of stallingsia maculosa near Kingsville, type locality, third week Aug. Lubbock, Nov., larvae of M. yuccae (coloradensis), range extension.

Kendall found collecting good in southern Texas, though heavy emergence of many species failed to materialize. Spingids and micros absent mostly. Large pierids (Phoebis, etc.) scarce.

Catocala present in normal numbers and variety. Populations of Lepidoptera in general reduced. In Bexar Co., Euptychia cymela 13 May, new records, life history found; Eurema mexicana July 1, plus Cogia outis; Hemiargus ceraunus 15 Aug., eggs, reared. Pupae of Nymphalis antiopa, April 8. One Metamorpha stelenes, San Antonio, seen Oct. 11. In Hidalgo and Cameron Cos., 19-22 March, Achylodes thraso, Amblyscirtes celia, & nysa, Anaea andria, Asterocampa antonia, clyton, Battus philenor, Chlosyne lacinia, Chioides catillus, Colias philodice, Danaus gilippus, Euptychia hermes, E. gemma, Erynnis funeralis inc. immature stages, Heliopetes lavinia and macaira, Hemiargus isolus, Krigonia castalia, Calphelis nemesis, Lerema accius, Libytheana bachmanii, Nathalis iole, Papilio cresphontes, Phocides lilea (seen), Pholisora catullus, Phyciodes phaon, texana and vesta, Pieris protodice, Pyrgus oileus, Calycopis beon, Urbanus proteus, Vanessa atalanta and V. virginensis, Automeris io and Alypia sp. Near Mathis, San Patricio Co., 7-8 Oct., Achylodes thraso, Achalarus coyote, Amblyscirtes celia, nysa; Hylephila phylaeus, H. lavinia, inc. immatures, Lerodea eufala, Urbanus dorantes, Zerene cesonia, Copaeodes minima, Danaus plexippus, Eurema lisa, E. nicippe, Euptoietta claudia, Chlosyne theona, Papilio polyxenes, Phoebis sennae, Chlosyne elada, plus some of the preceding. Near Sinton, same county, 24-26 Nov., Agraulis vanillae, Atlides halesus, Anaea andria, Atalopedes campestris, Brephidium exilis, Colias eurytheme, Erynnis funeralis, Leptotes cassius, Nastra julia, Mestra amymone, Phyciodes tharos, Precis orithya, Strymon columella, and Lychnosea sp., plus many of the preceding. Near Bastrop, Bastrop Co., larvae of Battus philenor, Anaea andria, Strymon melinus and Thorybes bathyllus, Sept. 5, plus adults of Erynnis horatius, Eacles imperialis and Citheronia regalis. Huntsville, Walker Co., 2 Sept., Achalarus lyciades (with immatures), plus many of the preceding. Palo Duro Canyon, Randall Co., 3-4 Aug., Euptychia rubricata, plentiful, Cercyonis pegala, and immatures of Asterocampa antonia and Phaeostrynon alcestis. On Highway 83, between Paducah and Pease River, immatures of Cogia outis and Asterocampa clyton. In Stonewall Co., same day, Chlosyne gorgone, Grais stigmaticus and others. At exact geographical center of Texas, 17 miles north of Brady, McCulloch Co., Anaea andria, Atrytone vestris, Copaeodes aurantiaca, and many of the former listed species. May 1-3, Davis Mts., Eurema mexicana, Nathalis iole, Phyciodes phaon, vesta, Strymon melinus, Euptychia dorothea, Amblyscirtes eos, Celotes nesus larvae, Oarisma edwardsi, and larvae and adults of Pholisora catullus and Thorybes pylades.

(Coverage of Texas seems good. The Great Plains as such could use a few contributors. - Ed

ZONE V: CENTRAL REGION - MISSOURI TO WEST VIRGINIA, NORTH TO ONTARIO. Coordinator: E. G. VOSS. Contributors: C. J. Dempwolf, W. Edmonds, J. B. Hayes, R. Heitzman, R. Holtzman, B. Johnson, G. Nielsen, M. C. Nielsen, R. Royer.

A smaller number of reports than previously gives an even less thorough basis for judging trends in so large an area.

Missouri: Heitzman reports a very late spring, rather early fall, twice normal rainfall, with reductions in chances to collect and in species numbers. Most Strymon down, with Eurystrymon ontario, Panhiades m-album and Stavrium absent. Calycopis cecrops very common all through the Ozarks. Satyrium edwardsii continued very local, the larvae, found in June, guarded by ants. Mass movements more abundant this year, more Phoebis sennae, Eurema lisa, nicippe and mexicana, and Precis orithya. Asterocampa celtis and clyton continued abundant, but Nathalis iole, Colias cesonia, Libytheana bachmanii, Polygona progne scarce. Papilios continued uncommon. Spring, though late, was good for certain species. Problema byssus and Euphyes dion were reared. Scarce were Hylephila phylaeus, Atrytone logan, Polites verna, Erynnis baptisiae, Amblyscirtes nysa and Lerodea eufala. A good year for rearing, 100% success in obtaining eggs by enclosing female in nylon bag on branch of host plant. Several sturniids reared in numbers, with Hyalophora rubra x aeopropia producing larger than usual percentages of larvae. The season as a whole seemed a bit below average, but moth collecting was less affected than that for butterflies. Black light continued effective, sugaring also good. Catocala and Sphingidae less numerous in 1961 than in 1960.

Kentucky: Dempwolf and collaborators report a cold, rainy spring, winter passing almost directly into a fair summer with rain and temperatures a bit below normal. Vanessa atalanta and Pieris rapae as early as March 26. Euptychia gemma males fresh April 29. Callophrys nippon females June 4, Powell Co., late for this species; Calycopis cecrops worn, Lethe portlandia, Euptychia cymela, Speyeria cybele, Papilio glaucus, triolus, Graphium marcellus, Achalarus lyciades, & Autochton cellus all fresh. June 12, Fayette Co., Eurystrymon ontario fresh,

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Thymelicus lineola fresh and abundant, perhaps a southern extension; Satyrium falacer first June 19. June 24, Frankfort, fresh S. cybele, A. celtis, Chlosyne nycteis, P. crespontes and G. marcellus. A. clyton extremely abundant in early July in Jessamine & Mercer Cos. Speyeria diana males June 14, Powell Co., not uncommon but worn; June 22 a single deformed female on milkweed. P. crespontes abundant, Mercer Co., August 19, in the morning, going into woods in afternoon; Anaea andria ovipositing on Croton; Chlosyne nycteis abundant, 1 female Atlides halesus. Aug. 27, same place, P. crespontes and C. nycteis worn, Libytheana bachmanii fresh. Prevalent fall species included Precis coenia, Euptoieta claudia, Colias philodice and eurytheme, A. andria, Pyrgus communis, and Atalopedes campestris. C. eurytheme seen near Frankfort end of November.

Illinois: G. Nielsen reports above average collecting in southern Illinois in late April, Anthocharis genutia, Papilio troilus, B. philenor and esp. G. marcellus abundant. V. atalanta & virginiensis and Erynnis spp. common, and many worn Danaus plexippus. Collecting in August was poor; common species were P. troilus, B. philenor, Feniseca tarquinius, Lethe portlandia, Libytheana bachmanii and A. celtis. In Cook Co., populations were average, with decrease in Limenitis archippus and V. virginiensis. Precis orithya and E. claudia were taken after a few years' absence. Lycaena phlaeas in large numbers, L. thoe commoner than last year. Good year for Euptychia cymela and Cercyonis pegala. Migrating Danaus plexippus first noticed Sept. 19, peaked Sept. 26. Hayes also noted heavy migrations of this species Sept. 26-29, some seen until mid-October. Hayes reports very good season, in the Chicago area, submitting a closely-packed report, too extensive for complete inclusion, from Vanessa atalanta, April 21, to Colias eurytheme Nov. 26. Colias spp. including albinos were abundant through October. Hayes' complete report may be obtained from him or from Voss. It is to be regretted that considerable cutting of day-by-day reports is necessary.

Indiana: G. Nielsen reports conditions in the dune region similar to those in Illinois, with Precis coehia commoner, and a large emergence of Lycaeides melissa in late July.

Iowa: Johnson & Royer report a slow starting below average season, Polygonia spp. & Nymphalis antiopa appearing third week in April, P. comma commonest. Celastrina argiolus normal, end of April. Euchloe olympia males north of Des Moines May 14; first broods of Erynnis scarce. Lycaena thoe reduced in early June, Lycaena dione locally common July 1. Satyrium falacer and other strymonids nearly absent. Ledges State Park, July 2, similar to 1960, large series of Atrytone logan and arogos, Wallengrenia otho, one good male Chrysophanus titus, Speyeria common, one worn female S. idalia. Several male L. helloides near Oelwein, third week Aug., and near Des Moines L. phlaeas, "first really significant colony in ten years." Poanes zabulon common by end of May, even more abundant in the second brood. Staphylus hayhursti, fair numbers, mid-August. Lethe portlandia extremely abundant, second year in a row. September collecting spotty, very poor, Lerodea eufala near Hampton the only noteworthy thing; winter brood of Polygonia below average.

Wisconsin: Royer found Lycaenidae in great numbers in Burnett Co., early July, inc. Satyrium falacer, edwardsii and liparops, Chrysophanus titus, Lycaena thoe, helloides and epixanthe, Lycaeides melissa, and Celastrina argiolus. Others taken included Coenonympha tullia, Chlosyne harrisii, Euphyes dion, and Atrytone logan.

Michigan: M. C. Nielsen, observing and collecting about 50 days from May 13 - Oct. 8 in nine counties from southern part of state to Mackinac Straits found the season one-two weeks late for butterflies and many species in reduced numbers. Callophrys irus and henrici in fair numbers in mid-May; Psychomorpha epimenis a new county record. In Montcalm and Newaygo Cos., May 28, Glaucopsyche lyddamus, Erynnis juvenalis & persius peaked; Hesperia metea, females ovipositing on grasses. Callophrys polios & Amblyscirtes vialis new to Montcalm Co. Otsego Co., June 2-4 in jack pine-scrub oak openings, Callophrys nippon and augustinus, H. metea, A. vialis, & Erynnis spp. Notable captures were Amblyscirtes samoset and Apantesis celia. Many phalaenidae at UV, including Polia ingravis, Panthea furcilla, Sideridis rosea, Zale calycanthata, and 8 spp. of Acronycta. Thymelicus lineola very common in Lenawee Co., June 17 - July 3. A few Satyrium caryaevorus, first in several years; Graphium marcellus very scarce, Battus philenor still absent. Hesperia ottoe about two weeks late on cactus prairies of

Newaygo Co., peaking about Aug. 4. A few Speyeria idalia on the prairies; Euphyes bimacula in a nearby marsh. In Otsego Co. Aug. 5-14 extremely interesting moths at UV: Arctia caia (abundant), Eacles imperialis (pini), Graphiphora opacifrons, Eremobina hilli, Oligia bridghami, Catocala coccinata, semirelictus & coelebs, Notodonta simplaria. Hesperia leonardus a week late, sparser. UV in late August brought two new state records, Adelocephala bisecta and Schinia thorea. The following were very common: Apantesis arge, Estigmene acraea, Polia legitima, Schinia marginata and trifascia, and Papaipema arctivorens. Near Mackinac Straits Aug. 29 - Sept. 3, UV brought another state record, Oncocnemis piffardi; others included Cat. coelebs, Euxoa mimallonis, Cleoceris algens, Xylotype capax, Oligia mactata and illocata. A very unusual northern record was Hypocala andremona, Otsego Co., Sept. 3, at UV. Holzman reports 65% of H. cecropia pupae killed by Frontina frenchi - 25% greater than last year; about 2% T. polyphemus pupae (1% greater than 1960) attacked by F. frenchi, Eremotylus macrurus and an unidentified disease. However, these moth pupae were about 25% more abundant than in 1960.

Ontario: At Point Pelee, Aug. 21 - Sept., Holzman found numbers up sharply for Limnitis archippus, V. atalanta, and Lethe eurydice; most other species common last year were down. Many larvae were parasitized. Sugaring yielded only Catocala cara, common, and small moths. D. plexippus abundant compared to 1960, massing for migration Sept. 16-17.

Edmonds reports a poor spring around Toronto, the season a week to ten days late, but butterflies in about usual numbers. Spring and early summer cloudy, October warm and sunny. Pieris rapae first seen May 7. Brightest items were Atrytone logan, July 23, a fresh male west of Toronto and Hylephila phylaeus, worn male Oct. 10, Toronto. Big increase in Danaus plexippus over 1960; Nymphalis milberti and Vanessa atalanta also increased. Papilio polyxenes much reduced. Colias philodice and eurytheme scarce in spring & early summer, extremely common late August until late October, last date Nov. 11. Precis coenia seen Oct. 12, first time in Toronto in years.

ZONE VI: SOUTHEAST - FLORIDA TO LOUISIANA, NORTH TO ARKANSAS AND MARYLAND. Coordinator: BRYANT MATHER. Contributors: W. A. Anderson, L. Bayer, W. Boscoe, C. V. Covell, Jr., R. Heitzman, B. Mather, G. W. Rawson, W. J. Reinthal, C. F. Zeiger.

Maryland & District of Columbia: Anderson found the season late, more so in the north. Normal in spring were: H. metea, Erynnis icelus, C. argiolus, Everes comyntas, Colias spp., Pieris rapae, Anth. genutia, Callophrys henrici & augustinus, Glauc. lygdamus, Erynnis brizo, and P. troilus. Less common than usual were Erynnis juvenalis, Battus philenor and Pyrgus centaureae. More common: Papilio glaucus, esp. in the south. Early summer collecting was poor; mid-late summer normal. Colias spp., P. glaucus and Boloria toddi common, L. archippus and Poanes viator normal; Polites peckius, themistocles and origenes late and sparser. In Garrett Co., early July, Speyeria aphrodite and Epargyreus clarus were common; Boloria selene, Polites mystic and Poanes hobomok present but worn; Colias spp. & Pieris rapae normal; Speyeria cybele less common. Common moths were: Anisota rubicunda, Otenucha virginica, Euchlaena serrata, obtusaria & delphinii. In late July, Satyrrium falacer, Chrys. titus, Polygonia progne and Polites verna were common, Lethe portlandia and Cereyonis pegala uncommon, Satyrrium liparops rare. Charles Co., August, Calycopis cecrops, P. glaucus, troilus, Chiosyne nycteis were normal; Lethe eurydice, Euptychia sosybia and Polygonia comma more common; Asterocampa celtis and Eurema nicippe present. In Baltimore Co. Boloria toddi less common; Hemaris diffinis very common. A colony of Hesperia leonardus was found at Soldier's Delight, Baltimore Co., first week in Sept., the insects more common on dry grassy hillsides than near marshes and streams as usual. Colias spp. were found into first week in December in fresh condition as in 1960.

Virginia: Covell found the season slow and one-two weeks behind 1960, cool and damp. He took 73 species in 24 counties. New records for him were: Glauc. lygdamus (nittanyensis), Montgomery Co. 24-25 April; Eurystrymon ontario Middlesex Co. 11 June; Hesperia leonardus Montgomery Co. 29 Aug. - 5 Sept. More common were Papilio cresphontes, Autochton cellus, Nastra l'herminieri, Lethe eurydice (appalachica); less common were Speyeria diana, Polygonia spp., Callophrys arynaeus, Chrysophanus titus, Strymon melinus, Cereyonis pegala and Pieris protodice. Vanessa cardui was not seen.

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Bayer, Sikora and Cocks, Graysontown, 10-21 June, found Speyeria cybele, idalia, Euptoieta claudia, Boloria toddi, Chlosyne nycteis, Asterocampa celtis, Precis orithya, V. virginiensis and atalanta, Pieris protodice, Danaus plexippus, Limenitis archippus, Graphium marcellus, P. glaucus. Also P. Cresphontes (Blacksburg) and Battus philenor (Blue Ridge Parkway). Celerio lineata, Phlegothonius sexta and quinguemaculata were taken on Lonicera tatarica 7-9 P.M. Many moths were taken at lights.

North Carolina: Covell at Southern Pines Sept. 2-3 took: Precis orithya, Euptoieta claudia, Phyciodes tharos, Eurema दौरa, lisa and nicippe, Euptychia hermes, Calycopis cecrops, Strymon melinus, Everes comyntas, Lycaena phlaeas, P. glaucus, Ancyloxypha numitor, Copaeodes minima, Nastra therminieri, Atalopedes campestris, Hylephila phylaeus, and Lerema accius.

At Fontana Village Boscoe and Wilcox took many of the above and also: Euptychia gemma, Lethe portlandia, S. cybele, diana (male at light, 29 June), N. antiopa, Chlosyne nycteis, Polygonia comma & interrogationis, Vanessa cardui & virginiensis, A. celtis, P. orithya, Limenitis astyanax, P. troilus, Celastrina argiolus, C. eurytheme & philodice, P. rapae, Epargyreus clarus, Achalarus lyciades, Authohton cellus, Thorybes bathyllus & pylades, Euphyes vestris, Poanes zabulon, Euparthenos nubilis, Tropaea luna, Eopantheria deflorata, Anisota rubicunda, Telea polyphemus, Ceratomia undulosa, P. quinguemaculata, Darapsa pholus, Ampeloeca myron, versicolor (few only, just 2 in 1960), Dolba hylaeus, Paonias astylus, Sphinx kalmiae, Atreides plebeia, Amphion nesus, Automeris io, Callosamia angulifera, Anisota stigma, Apantesis anna, Haploa militaris, & clymene, Citheronia sepulchralis, Allotria elonympha, Catocala praeclara, epione, ilia, coccinata, micronympha, clintoni, and Prionoxystus robiniae.

Reinthal, on the North Carolina side of the Smokies upto 2000' found on March 25: overwintering P. faunus and V. atalanta, fresh P. glaucus, troilus, Callophrys niphon, worn C. augustinus and Erynnus horatius, plus some of previous species. On 24 Sept., Cherokee Co., near Hot house & Murphy, Battus philenor, Phoebis sennae, Eurema lisa, Pieris rapae, Danaus plexippus, Speyeria cybele, Phyciodes tharos, Everes comyntas, Polites verna & origenes, and Atalopedes campestris.

South Carolina: Reinthal found P. rapae, Precis orithya, at River Bridge Park, Bamberg Co., 2 June; at Walterboro, Colleton Co., V. virginiensis, Polites origines, vibex; Santee, Orangeburg Co., Asterocampa clyton and at Santee State Park, Graphium marcellus and Euptychia cymela.

Georgia: Covell took Pholisora catullus, Thorybes bathyllus, Phyciodes tharos and Everes comyntas. On 27 May, Bainbridge, Decatur Co., Reinthal found P. rapae, Precis orithya, Eurema दौरa, Graphium marcellus, Polites vibex, Copaeodes minima and Pyrquus communis. West of Bainbridge in Seminole Co. he added Battus philenor, Eurema nicippe, Colias cesonia, Erynnis horatius, H. phylaeus, Polites themistocles, Wailengrenia otho, Urbanus proteus, Hesperia attalus and Polites baracca. Near Boydville, Grady Co., 28 May: Colias eurytheme, Phoebis sennae, Strymon melinus, Erynnis baptisiae; near Whigham he added Vanessa virginiensis, and Epargyreus clarus to some of above. In Thomas and Brooks Cos., P. polyxenes, Eurema nicippe, Euptychia areolata, Phyciodes tharos, Agraulis vanillae, Erynnis zarucco and Panoquina ocala. May 29, Jekyll Island: B. philenor, P. palamedes, Pieris rapae, Eurema lisa & daira, Colias philodice, Calycopis cecrops, Eurystrymon favonius, Phyciodes phaon, Asterocampa alicia, Atalopedes campestris, Hylephila phylaeus, Oligoria maculata. June 1 near Richmond Hill, Bryan Co., E. lisa, Polites vibex, H. phylaeus and Wailengrenis otho. At Rincon, Effingham Co., 2 June, Nastra neamathla, and at Sylvania, Screven Co., E. cymela. Forsyth, Monroe Co., June 15: Urbanus proteus, Polites vibex, Perry, Houston Co., E. lisa, nicippe, Pholisora catullus, P. communis, Panoquina ocala, & Polites vibex. Very similar species were found in Dooley Co., Bibb Co., & Richmond Co. Along Clark Hill Reservoir, Lincoln Co., 12-13 Aug., Reinthal took a good number of species including most of above. On 13 August, Keg Creek State Park, Columbia Co., he had good collecting but added no others not taken previously.

Florida: Zeiger found a mild winter, resulting in the return of some tropical species absent or scarce in north Florida in 1960: Phoebis philea, Eurema दौरa, Loptotes cassius and Danaus gilippus were in fair numbers. Collecting was slow May to September, good in fall to December. At Orange Park, Caly Co., May, Eurystrymon favonius was in large numbers, also Calycopis cecrops,

Panthiades m-album and Atlides halesus; six Callophrys henrici were taken at Gold Head State Park 1-2 April. Zeiger and V. V. Board took a series of Celastrina argiolus at Jacksonville and Gold Head State Park in March and April, including the first authenticated record of a male from Florida. Zeiger reared P. philea (14 males, 23 females) emerging October through December.

Covell, between Wakulla Springs and Key Largo, 23 March - 1 April, recorded: Polites baracoa, Chiefland 25 March; Euphyes aaroni (howardi) & palatka, Yankeetown 27 March; Euptychia areolata, Phyciodes phaon, Panthiades m-album, Asbolus capucinus, Wallengrenis otho, Myakka Park 29 March; Euphyes arpa, Atrytonopsis loammi, nr. Ft. Myers 30 March; Panoquina panoquin & ocala, Brephidium pseudofea, Royal Palm Hammocks 30 March; Phocides batabano, Anartia jatrophae, Hemiargus thomasi, B. pseudofea, Precis zonalis, Ascia monuste, Goodland 30 March; Strymon columella, pyrgus oileus, Agraulis vanillae, Florida City 31 March; Papilio aristodemus (ponceanus), Strymon martialis, Dryas julia, Heliconius charitonius, Phoebis agarithe, Nathalis iole, Polygonus manueli, Phocides batabano, Epargyreus zestos, Leptotes cassius, Hemiargus thomasi, Problema byssus, Oligoria maculata, Key Largo 31 March and near Port St. Lucie, 1 April.

Reinthal, near Crestview, Okaloosa Co., 25 May, found Euptychia areolata and at Marianna, Jackson Co.: B. philenor, C. eurytheme, Eurema nicippe, Copaeodes minima, Hylephila phylaeus, Polites vibex, Wallengrenia otho, Oligoria maculata and Atrytone logan. At middleburg he took in addition Erynnis horatius and Thorybes bathyllus. At Gold Head State Park he added B. philenor G. marcellus, P. palamedes, Calycopis cecrops. At Putnam Co., Nathalis iole, Euptychia sosybaa, and Precis coenig; at Mayport, Duval Co., Calpodus ethlius (larvae on Canna), Danaus plexippus, Ascia monuste, Agraulis vanillae, Urbanus proteus, Oligoria maculata and Atalopedes campestris. He added Brephidium pseudofea at Fort George Island, Duval Co. and at Fort Clinch Park, Nassau Co., P. cresphontes & polyxenes, E. lisa, Phyciodes phaon and larvae of Asterocampa alicia and flora.

Rawson reports a rather poor year for the New Smyrna Beach area, with a very dry spring and late rain in the summer. The winter was mild, without frost. Two attempts were made to establish a colony of Eumaeus atala by releasing individuals near Royal Palm Park, but both failed. Papilio polydamus appeared July - Sept. for the first time in at least five years. One was taken at UV at night. Two Callophrys gryneus (sweadneri) were taken on Juniperus in Sugar Mill Park, a southward range extension. Phoebis sennae and philea were unusually abundant. Ascia monuste and Precis zonalis failed to appear in the usual large fall numbers. Two new records were taken: Asbolus capucinus and Cyamaenes tripunctus. Rawson reported in detail on the 87 species he recorded and noted that 59 of these were seen or taken on the grounds of his residence or on an adjacent lot - an area of about four acres.

Alabama: At Oak Mt. State Park Reinthal on 20 May took B. philenor, P. glaucus, troilus, P. rapae, Euptychia cymela & sosybia, P. interrogationis, V. virginiensis and atalanta, Celastrina argiolus, Thorybes pylades, Achalarus lyciades, Polites themistocles and vibex. At Jamison, Chilton Co., and Valley Creek State Park, Dallas Co., the species were similar, but with A. celtis larvae. At Linden, Marengo Co., he added Everes comyntas and on 21 May at McIntosh, Washington Co., Euptychia areolata, Phoebis sennae, Lerema accius, Wallengrenia otho and Nastra l'herminieri in addition. At Foley, Baldwin Co., 25 May, P. palamedes, Calycopis cecrops, Phyciodes tharos, Copaeodes minima, Atrytone logan, Hylephila phylaeus, Pyrgus communis, Polites vibex, Colias eurytheme, V. virginiensis, Erynnis zarucco and horatius and E. baptisiae. In Jackson Co., the same species with Danaus plexippus, Epargyreus clarus, Polites origines, Ancyloxypha numitor, Euptoieta claudia, Agraulis vanillae, added. In Marshall and Jackson Co., 4 Sept., there were no significant changes in species, except for Limenitis astyanax, Atalopedes campestris, Lerema accius and Speyeria diana.

Mississippi: Reinthal at Lucedale, Georgia Co., took Hylephila phylaeus and Polites vibex and at White Crossing, Stone Co., E. cymela, areolata, and added Wallengrenia otho at Millard, Pearl River Co.

The Mathers and the Roshores, Central Mississippi, found the season above average. Agraulis vanillae and Urbanus proteus were again missing. Atlides halesus, Panthiades m-album, Celastrina argiolus and Strymon melinus were taken 26 Feb.; Anthocharis genutia 26 March, Satyrion liparops and falacer and Autochton cellus in May; Feniseca tarquinius 16 April and 27 August; Poanes yehl and Polygonia comma in October. On typical good collecting afternoons in all months March through October about thirty species were recorded each afternoon. Species taken in 1961 apparently not previously recorded for Mississippi include: Spingidae -

Sphinx fanckii, 19-20 Aug.; Sphecodina abbottii, 18 March; Deidimia inscriptum, 6, 13 May; Geometridae - Lophosis labeculata, Cosymbia serrulata, Horisme intestinata, Semiothisa distribuaris, Protoboarmia porcelaria, and Hyperetis amicarica.

Louisiana: Heitzman and Howe found butterflies rather few: Strymon melinus and Copaoedes minima (Cameron); Euptychia hermes, gemma and areolata, Oligoria maculata, Nastra l-herminieri and Polites vibex (Lake Charles); Limenitis archippus (watsoni), Lerema accius, Polites vibex, N. l-herminieri and Papilio troilus (De Ridder); Rhoebis sennae, Eurema lisa, P. glaucus and palamedes and Battus philenor (General). Only one Colias was seen. Moth collecting was very good, more taken at lights around motels and service stations than at UV: Actias luna, Telea polyphemus, Eacles imperialis, were general; Anisota stigma, Adelocephala quadrolineata and bicolor, Ecpantheria deflorata, Ceratonia catalpae and Isoparce hageni were numerous, and Phlegathontius rustica, Pholus pandorus, Ampeloeca myron, Darapsa pholus, Xylophanes tersa, Cressonia juglandis and Noropsis hieroglyphica were taken at Lake Charles.

Reinthal in Boutte, St. Charles Parish, 22 May, recorded Panoquina ocola and Asterocampa celtis, and at Paradis took A. celtis and clyton, with eggs of both, also Limenitis archippus (watsoni). 23 May he found A. clyton, L. archippus and Calycopis cecrops in Plaquemines Park. In St. Rose, St. Charles and Jefferson Parishes 24 May he found both A. celtis and clyton very scarce but did collect a few eggs, larvae and pupae.

Arkansas: Heitzman and Howe found moth collecting good, with Telea polyphemus, Actias luna and Eacles imperialis general and Sphinx chersis, Phleg. rustica, Ceratonia undulosa, Isoparce hageni, C. catalpae, X. tersa, C. juglandis, Paonias myops and excaecata, Smerinthus jamaicensis and Citheronia regalis taken.

Tennessee: Boscoe and Wilcox at Bristol on 24 June took Phleg. quinquemaculata, Telea polyphemus, Hyalophora cecropia, Ceratonia undulosa, Paonias excaecata and myops, Actias luna, Automeris io, Anisota stigma, Apantesis anna and arge, Calosamia angulifera, Citheronia regalis, Lapara coniferarum, P. sexta, and Herse cingulata. On 2 July they added Sphinx franckii, Celerio lineata, Anisota rubicunda, Pholus pandorus, Paonias astylus and some of the preceding species.

Reinthal reports that spring came early to Knoxville. Vanessa antiopa was seen 14 Feb.; Polygonia interrogationis 5 March; Pieris rapae 8 March; Polygonia comma, Colias philodice and Celastrina argiolus 11 March at Gatlingburg, Sevier Co. On 12 March in the lower elevations of the Smokies P. glaucus, G. marcellus, V. virginiensis, Callophrys niphon, Celastrina argiolus, N. antiopa, Polygonia comma and interrogationis were found. Callophrys augustinus and Phyciodes tharos appeared 8 April; Battus philenor not until the last week in April. Knoxville, 23 April, Anthocharis genutia, Erynnis brizo, juvenalis and baptisiae and Epargyreus clarus. Reinthal gives detailed reports of species encountered at various localities in May, June, August and September, too extensive for inclusion here. June 7 he found many species in numbers at lower elevations in the Smokies, including Colias eurytheme & philodice and Lethe portlandia. Some area, 2 July, he found Speyeria cybele, and aphrodite, Polites verna, and Polygonia faunus (smythi) at higher elevations (5000'). C. eurytheme & philodice, Danaus plexippus and P. interrogationis were seen in Knoxville until the first week in December.

ZONE VII: NORTHEAST - PENNSYLVANIA TO MAINE AND QUEBEC. Coordinator: L. P. GREY.
Contributors: L. Bayer, W. F. Boscoe, A. E. Brower, R. B. Butler, C. Curtis, C.J. Durden, L. P. Grey, J. Muller, A. M. Shapiro.

Maine: Brower describes the season as another marked by a paucity of species and individuals. Snow lingered late; the summer was cold and cloudy. N. antiopa first seen at Readfield 20 April, with snow deep in the woods. First Pieris rapae 12 May, Augusta. Four Euptychia cymela at Scarborough June 17, two more 19 June. Ovipositing female of Danaus plexippus seen near Brewer 20 June. Glaucopsyche lygdamus taken at St. Agatha 26 June, at Allagash 27 June. A few Boloria eunomia near Fort Kent 28 June and Oeneis jutta 30 June in Township 8 Range 5 south of Masardis. Plebejus saepiolus and Hesperia laurentina taken at Crystal 1 July. Epargyreus clarus seen at Augusta 3 July. Oeneis katahdin worn and scarce 25 July. A new butterfly for Maine, Atrytone logan, taken at Biddeford, 31 July, by Robert Gobeil, a high school student. Moth collecting was better; sphingids were in fair numbers but Catocalas were low again.

Apantesis quenselii secured on Mt. Katahdin 25 July. A number of new or rare moths was taken, including the Autographa surina described by the Fernalds from Orono over eighty years ago and not taken since. The arctic Polia rogenhoferi was taken for the first United State record. For the central Penobscot Valley Grey reports the spring season and collecting unusually poor but late summer collecting excellent in some spots with Colias, Cercyonis, Speyeria and Papilio locally common. The Hesperia laurentina outburst died away but a fair number survived. Euphyes bimacula had a notably good year at Passadumkeag. In early July Mt. Katahdin produced its usual showers of greeting (rain rather than Oeneis). Light trap collecting held up well but captures of notable rarities were few.

New Jersey: Butler noted Callophrys irus peaking at Lakehurst May 4-6. Other Callophrys were found April 15-30, more abundant later. C. hesseli seen at Lakehurst 6 May with 9 males taken there 14 May. At the Great Swamp, 15 miles in extent, Morris Co., Chlosyne harrisii was abundant by 11 June. Euptychia cymela was not uncommon. A small colony of Boloria selene was found in the middle of the swamp, fresh in mid-June, worn 17 July when Lethe eurydice was just emerging. At Pluckemin, Somerset Co., Boloria toddi, Speyeria cybele, Lethe eurydice, E. cymela, V. virginiensis, Euphydryas phaeton and Celastrina argiolus were flying 24 June. July 2 Speyeria idalia, with cybele, in larger numbers than in 1960; Satyrium falacer was abundant. Females of idalia were not uncommon in early August, when Papilio spp. were out in numbers. Lakehurst was revisited 25 June. Satyrium falacer was common, S. liparops present in numbers, Lycaena epixanthe abundant. A few worn Euptychia areolata were taken in Lebanon State Forest, Burlington Co., in company with many L. epixanthe, late June. At Springdale, Sussex Co., July 1 Calphelis borealis was taken with Satyrium falacer and caryaevorus, these sitting on young hickory 5 to 10 feet up, fresh and fairly numerous. In all, the rather more severe winter seemed to have little adverse effect on the butterflies; increases were noted in some species. The first harbinger, P. rapae, was seen at Bound Brook, Somerset Co., 26 March. Muller also considers 1961 a good year for diurnals in spite of an abnormally cold and backward spring. He found Thymelicus lineola again and took a series of dark Chlosyne harrisii at High Point State Park 15 June. Examples of Cercyonis pegala were found at Cape May 19 July. The year was rather poor for moths. Catocala in particular were low and light collecting poor even when weather conditions seemed optimum.

New York: Butler reports Speyeria idalis, Chrysophanus titus, Boloria toddi and Lethe portlandia flying July 3 at Mt. Kisco, Westchester Co. At Springfield Center, Otsego Co., Lethe eurydice was as abundant as in 1960, Euphydryas phaeton even more so. Satyrium acadica males were taken July 17 far from the colony discovered in 1960. Specimens were not common though fresh individuals of both sexes were taken to 24 July. Cercyonis pegala fresh and common, females appearing 22 July. Polygonia were not numerous. At Colonie ("Karner", Albany Co.) Lycaeides melissa was found in fair numbers in a scrub oak association, Satyrium edwardsii was abundant and Chrysophanus titus was also taken. Satyrium acadica was taken here and found again 21 July, in poor condition; at this time female Lycaeides melissa were found also. Bayer reports further deterioration of Long Island collecting and more suburban expansions. Satyrium falacer was very common, Papilio, Vanessa and Speyeria were very low, Colias fairly common. A trip to Fahnestock State Park, Putnam Co., with the Cocks brothers, yielded Speyeria cybele and Boloria selene but collecting there was below the 1959 level. A few Ampeloeca myron larvae were found on grape in July; Pholus pandorus, Sphecodina abbotti and Deidamia inscriptum were taken; some myops emerged from pupae of the previous year.

Pennsylvania: Boscoe and Curtis reporting from Philadelphia and Newton and Porters Lake area, found good collecting and list many species. Papilio had an off year; skippers were good but off a bit. Eurema lisa was low; Euchloe olympia was not seen in 1961. Spingids were uncommon except for the commonest species, but Xylophanes tersa was taken and also Paonias astylus and Ceratomia catalpae. Flushing for Catocala in September was fabulous, 28 species reported, several in quantity. Bait and UV gave poor results, the reverse of 1960 (Grey inserts a note, that it has been suggested by others that flushing for Catocala is better in alternate years. - Ed.) The unusually good report of Boscoe and Curtis has perhaps been cut unduly but can be borrowed in its entirety, as can the condensed report of Shapiro. For Philadelphia, Shapiro found D. plexippus much improved, approaching the high 1958 level.

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Euptoieta claudia was unusually common, Speyeria and Polygonia had good year, P. comma the best in three years, Colias were superabundant, Lycaenidae good to abundant, Colias cesonia was noted and seven taken. Eurema lisa very numerous, Pieris above normal, skippers generally normal or above though Erynnis was low. One Panoquina ocola was taken. In the moths, sphingids were low, Catocala lower, Acronycta numerous and fall species were in general excellent, except Xylina. A female Erebia odora was taken 15 Sept. Notodonts were excellent and Geometridae mostly above average. Weather generally was good, rather cool early, mild in the fall, considerable sunshine and few prolonged stormy periods.

Quebec: James Bay Lowlands, Lat. 50 30-50 00 and Long. 78 39-79 31 - from here Durden records 39 species of diurnals from a hitherto uncollected area, of which Hesperia borealis, Erebia disa, Erynnis species, near baptisiae, Colias palaeno and pelidne are most interesting since some probably are new for this Province. Most abundant species were Callophrys augustinus, Celastrina argiolus (lucia), and Boloria freija on the tundra in late June, Erynnis sp. in June and July and Colias interior, Limenitis arthemis (late July), Coenonympha tullia, Speyeria atlantis and Polites mystic (July and August) and Boloria titania (August) in the river forests and flood meadows. Durden has prepared a list for all the diurnals of this region, a valuable document which collectors planning trips to this edge of the Arctic should consult.

ZONE VIII: THE FAR NORTH. Coordinator: LEE D. MILLER. Contributors: J. A. Legge and his son. During the first week in July they visited the Porcupine Ridge Area (Eagle Plains, Lat. 66° 30' N. Long. 138 W., north of Dawson City, Yukon and the Ogilvie Mts., probably the first time this area has been collected. They were able to move about the area freely with the aid of a helicopter and to collect in several places. The average elevations were between 1500' and 3500', conditions quite arctic in the latter elevations. Although the temperatures were up to over 60° collecting was not good since the days were windy and cloudy. Species taken were: Boloria polaris, chariclea, and four distincta, Erebia youngi, fasciata (females only), and worn discoidalis, Colias hecla (worn males, no females), and palaeno (chippewa) (fresh males and no females), Coenonympha tullia (yukonensis), and one badly battered Papilio machaon, plus some Boloria not yet identified.

(Certainly Mr. Legge and his son are to be thanked for this lone contribution, without which there would be no report from Zone VIII. Don't others collect the Far North? How about some contributors for 1962??- Ed.)

ZONE IX: NORTHERN NEOTROPICS - MEXICO, BRITISH HONDURAS, JAMAICA reporting. Coordinator: E. C. WELLING. Contributors: Harry Clench, Gary Ross, C. B. Lewis and E. C. Welling.

[Brief notes for British Honduras and Jamaica are saved for the next News issue.]

Baja California Sur and Sinaloa: Harry Clench and others from the Carnegie Museum at Pittsburgh, Pa. collected here in November. On the western slopes of the Sierra Madre Occidental in south-eastern Sinaloa collecting was good up to 1200 meters in mid-November. In the Sierra Victoria near the southern tip of Baja California Sur, few things were taken due to fall-like conditions up to 1200 meters elevation. Still, Clench considers the harvest good in spite of the lateness, with many new records made and interesting Lycaenidae taken.

Oaxaca: This southern Mexico state was the object of the first of a series of annual collecting expeditions. Collecting from July to November was concentrated on the Gulf Plain of the northern part near the Vera Cruz border, and on the northern slopes of the mountains to the south. Continuous rain and misty weather at higher elevations forced us to concentrate at elevations below 250 meters. Areas 3000 meters were sampled with great difficulty and butterflies were scarce. At 2150 meters, Actinote leucomelas and a few satyrids were common during September. Nocturnal collecting yielded many Notodontidae, Geometridae and Arctiidae, but Sphingidae and Pyralidoidea were scarce. Nightcollecting at 700 meters was fantastic. Diurnals were generally scarce except widespread species such as Pteronymia cotytto, Anartia fatima and Hamadryas februa. Collecting was poor from July to mid-September but improved later. In spite of a poor season, Welling returned with 40,000 specimens.

Yucatan and Quintano Roo: Dry conditions prevailed over the peninsula and native species suffered greatly. Populations of less hardy species were reduced to a minimum; hardier species managed to come through in normal numbers in Quintano Roo. In Yucatan, even hardy species had a bad year, almost not appearing. Rarer species which usually appear in above normal numbers during these off-years were practically absent. Sphingid collecting was poor.