

and *Lethe portlandia* did not make their appearance. *Speyeria diana* and *S. cybele* were very rare. The following species appeared in fair numbers: *Epargyreus clarus*, *Achalarus lyciades*, *Thorybes bathyllus*, *T. pylades*, *Polites themistocles*, *Polites manataaqua*, *Atalopedes campestris*, *Lerodea vbermimieri*, *Amblyscirtes vialis*, *Pholisora catullus*, *P. hayhurstii*, *Papilio polyxenes*, *P. cressphontes*, *P. troilus*, *P. philenor*, *P. glaucus*, *Phyciodes tharos*, *Junonia coenia*, *Vanessa antiopa*, *V. atalanta*, *Nathalis iole*, *Colias eurytheme*, *Eurema nicippe* and *E. lisa*. Among the moths, *Xylophanes tersa* and *Herse cingulata* were below average as to normal occurrence, while *Phlegethontius sextus* and *P. quinquemaculatus* exhibited normal flights.

EDWARD C. WELLING and J. PRESKAR collected in Texarkana and Forest City, Arkansas, from June 27 to July 4, and recorded the following species: *Euptychia cymela*; *Adelocephala bicolor*; *Celerio lineata*; *Actias luna*; *Catocala dejecta*; *C. subviridis*; and *Smerinthus jamaicensis*.

No observations on migrations were made for the year 1952 in this area, and the observations on moths were too sparse to allow any significant conclusions.

Contributors: ROBERT BUTLER; R. L. CHERMOCK; C. V. COVELL, JR.; W. M. DAVIDSON; H. A. FREEMAN; J. R. MERRITT; S. S. NICOLAY; JOSEPH PRESKAR; P. S. REMINGTON; E. C. WELLING.

Dept. of Biology, University of Alabama, University, Ala., U. S. A.

7. NORTHEAST — DELAWARE AND PENNSYLVANIA NORTH TO SOUTHERN QUEBEC

by SIDNEY A. HESSEL

The following brief summary was compiled, as in the previous report, from official United States and Canadian weather bureau sources. It treats in generalities over extensive areas. Local experience, at times, would seem to depart somewhat as reported by contributors.

Spring temperatures (March - May 1952) were well above normal, averaging plus 2° for the entire area. Rainfall was about normal in Northern Maine, Southern Quebec and the Maritime Provinces, increasing southward to about double normal in central Pennsylvania (Harrisburg).

Summer temperatures (June - August) continued above normal generally, ranging from plus 2° through Pennsylvania and Delaware to plus 3° or more over New York, New England, Quebec and the Maritime Provinces, with greatest departure towards Quebec City where the average was nearly 4° higher. July in New York City was the warmest calendar month in the history of the weather bureau. Similar records were made or neared at most northeast United States points. Rainfall was above normal along the coast from Delaware to

Nova Scotia, about normal in the interior of New England, New York and Southern Quebec and perhaps slightly below in central and south central Pennsylvania.

Fall temperatures (September - November) maintained the above normal levels of the earlier seasons, being plus 1° - 3° over the entire area except Pennsylvania, where near normal to 1° below normal prevailed. The coastal regions of Canada were about 1° above normal but the area around Quebec was from 1° - 3° below. Rainfall in Delaware, New Jersey and Southeastern Pennsylvania averaged normal to 25% higher, the greater departure towards the south. The balance of the area was about 75% of normal, with the lowest, about 50% around Boston.

Contributions of widely varying length and coverage from approximately twenty sources indicates that the collecting season was poor to normal for diurnals but rather improved over 1951 with respect to most families of moths.

Although mass migrations were not quite as much in evidence for the Monarch as in 1951, almost all other migratory species appeared in greater than normal numbers. Most notable was *Vanessa cardui*, scarce since 1949. LATHAM estimates Long Island numbers equal to 1934, the maximum of very many years of observation, for the season 156 were at light! REMINGTON notes Connecticut numbers in excess of 1949. *Phaebis sennæ* was in much greater evidence in its northern range than for many years. ROZMAN, observing at Chesapeake Beach, Md., found it common at the end of August although unrecorded the year before and uncommon in 1950 at the same point. LATHAM at Orient, Long Island, found it for the first time since 1934, five individuals, all flying west and visiting flowers, were noted between August 29 and October 8. *Euprioieta claudia* was also outstanding for increased numbers.

Of the Sphingidæ, most noteworthy were *Herse cingulata* and *Celerio lineata* in increased numbers, a capture of the first mentioned April 14 on Long Island being particularly early. *Xylophanes tersa* and *Amyna octo* were recorded by KIMBALL on Cape Cod. Detailed summary by regions follows.

MARYLAND

Chesapeake Beach, Maryland, July 27 - August 24, 1952 (ROZMAN): About 39 species of butterflies and skippers are recorded, with *Papilio marcellus*, *Colias eurytheme*, *Everes comyntas*, *Strymon melinus*, *Pholisora catullus*, and *Vanessa virginiensis* noted in reduced numbers. *Mitoura gryneus*, *Libytheana bachmanni*, and *Strymon cecrops* were absent. Only *Phaebis sennæ* of the butterflies was noted in greater than usual numbers. *Ampelæca myron*, *Dolba hylæus*, and most particularly *Celerio lineata* of the moths were in greater evidence. A recently instituted program of DDT spraying of roadsides is suggested as having a particular bearing on the *C. eurytheme* population.

PENNSYLVANIA

Lancaster County (EHLE): Observation of five new species of butterflies brings the total to 91 over a thirteen-year period. These were *Lethe portlandia*, *Incisalis irus*, *I. nippon*, *Erynnis martialis*, and *Lerema accius*. Emergence dates are reported as normal for most species, slightly later than

1951; numbers, on the whole, average. The oft-heard lament of loss of favorite collecting areas along railroad and power lines by virtue of chemical sprays is voiced. Considered of more than routine interest are the following observations. Fresh individuals in fair numbers in early July suggest a second brood of *Euptychia cymela*. *Euphydryas phaeton*: when the host plant, *Chelone glabra*, became exhausted in late May, mature larvæ devoured blossoms of *Valerianella radiata* (Beaked Corn Salad). *Polygonia interrogationis*: many fresh, dark specimens near end of May (first brood?); these appeared again towards the end of June and continued to emerge to the end of August; in the latter month all stages from egg to worn ovipositing females were in evidence; adults were far less plentiful than larvæ; over half of reared pupæ were parasitized. *Polygonia comma*: early dark form, commoner than usual, on wing throughout July and August; light form first observed August 24. *Papilio marcellus* in better numbers, with nice definition of broods; major flights of spring forms observed mid-April and mid-May; a large brood at the end of June was observed through all early stages in the field and in captivity. *Papilio philenor*: fresh individuals in September (partial third brood?). *Colias eurytheme* and *C. philodice* spring broods scarce, abundant in September and October. A tabular comparison with 1951 of the frequency of all species ever recorded is given.

On May 1 at Chiques Rock, 11 specimens of *Anthocaris genutia* were captured and 8 more near Conestoga Creek. On May 4 the former locality yielded 6 more *A. genutia* and three males and one female *Papilio marcellus*, which species had not been seen three days earlier (PRESTONS).

Irwin Area (ACKERMANN): The weather was cold and rainy to mid-April. By April 20 the usual spring flora was in bloom but only *Nymphalis antiopa* was seen on the wing. May continued wet with very few butterflies in evidence. At the end of the month large numbers of larvæ of *Asterocampa clyton* (2nd and 3rd instars) were observed on the lower branches of the Hackberry trees. Of some 40 specimens reared almost two-thirds were females. Not a single female was observed free at the same locality at the time of emergence of the brood.

Sullivan County (ACKERMANN): In the northeastern corner of the state several *Limenitis arthemis x astyanax* were taken August 19.

Centre County (PRESTONS) Spring collecting began about the third week in April after an unusually wet and snowless winter. April was a very wet and dreary month with temperatures slightly higher than normal, and with few clear days. The usually abundant *Lycænopteryx pseudargiolus* was noticeable in its absence from haunts of the previous year. However, *Erynnis* were plentiful with *E. brizo* and *E. juvenalis* being even more plentiful than in 1951, and *E. icelus* becoming common about the beginning of the second week of May. At the same time *Phyciodes tharos*, *Polygonia comma*, and *Boloria toddi* made their appearance. On May 10 at Bear Meadows (elevation 2000 ft.) *Erynnis* were plentiful as were *L. pseudargiolus*. A single *Incisalia angustinus* was captured. A week later the *Erynnis* were on the decline, and *Phyciodes tharos* was plentiful. A few *Papilio glaucus* and *P. troilus* appeared. By the middle of June the collecting around State College was bringing in *Papilio glaucus*, (yellow form), *Euptychia cymela*, *Thorybes pylades*, *Poanes*

hobomok, *Ancyloxypha numitor*, and *Phyciodes tharos*. At Bear Meadows, *P. troilus* was very abundant as was *Limenitis astyanax*. A single *L. astyanax* x *arthemis* was taken. *Melitæa harrisii* was common. *Hesperia sassacus* and *Euptychia cymela* were also in evidence. By mid-August *Colias philodice*, *P. tharos* and *B. toddi* were numerous and fresh. Other species taken were *Cercyonis alope*, *A. numitor*, *Speyeria cybele* and *S. idalia*, *Hesperia leonardus*, *Everes comyntas*, and *Polites themistocles*. By the last week of August, possibly because of drought, collecting was very poor.

NEW YORK

Ithaca (KEJI): A careful and detailed chronicle of Monarch observations is presented, the first recorded being July 6, and the last October 13. Until August 3 only singles appeared and no evidence of concentration until September 13. On the 23rd of the month 127 were counted from 5:20 P. M. to 6:30 P. M. The extensive list notwithstanding, KEJI writes in part, "Monarch season rather poor around here. Probably because food plant of larvae getting scarce close by, due to repeated cutting and clearing of ground. Last such migration witnessed in 1949 . . . a few hundred yards eastward." The capture of some new species and increase in the numbers of others is attributed to the use of six instead of two traps in the woods. Fifty-two species of butterflies and skippers are listed with data on first and last days as well as comment on frequency and time of appearance. A selection of key species is presented herewith. "E" represents earlier, "L" - later and "S" - same with regard to first and last observation dates. The numerals measure such margins in days compared to 1951. "I" - increased, "D" - decreased and "N" - no significant change, compares the number of individuals to 1951. *Euptychia cymela* May 30 - July 7 (36 days: 5L, 4L, 100% I): *Cercyonis alope* July 6 to August 7 (29 days: 2E, 6E, 100% I): *Speyeria cybele* June 24 - September 5 (18 days: S, IL, slight I): *Boloria toddi* May 9 to September 6 (14 days: 18E, 13E, slight I): *Polygonia interrogationis* May 31 to October 12 (79 days: 25E, 19L, great I): *Nymphalis antiopa* April 17 to October 13 (60 days: 13L, 2L, I): *Vanessa cardui* June 7 to October 9 (28 days: absent 1951): *Lycæna phlæas* June 1 to October 22 (71 days: 17E, 4E, large I): *Everes comyntas* June 17 to September 28 (20 days: 15E, 3E, D): *Lycænopsis pseudargiolus* April 18 to August 14 (21 days: 30E, 4L, I): *Papilio glaucus* May 19 to August 7 (47 days: 2E, 7E, I): *Colias eurytheme* June 13 to October 22 (25 days: 3E, 4E, considerable D): *C. philodice* May 22 to November 2 (98 days: 7L, 7L, D): *Pieris rapæ* April 26 to November 14 (156 days: 4E, 19L, large D): *Poanes hobomok* May 24 to July 6 (38 days: 2L, 13L, large I).

Rockland County (SHULGIN): Collecting was for the period June 20 to the end of the year. About 20 diurnals and 47 moths comprise the list of captures. As this was the first year of collecting in the locality, comparisons are unavailable. Dates for the *Catocala* were: *C. amatrix* September 1; *C. concumbens* July 31; *C. cara* August 18, September 23; *C. ultronia* August 25; and *C. vidua* September 14.

Eastern Suffolk County (LATHAM): The majority of species were more common than in 1951 and it was a better collecting season except late in the fall. Most notable increase was *Vanessa cardui* which jumped from near zero

the past two seasons to the maximum of abundance of 1934. First one June 9, they were common by July 1 on flowers of California Privet, when 300 to 400 could be noted in a few hours. They continued common until October. 156 were recorded at light during the season, 7 the most in one evening. On the other hand *V. virginiensis* was more scarce than in 1951. *Danaus plexippus* was slightly less common than in 1951, but the fall migration was near the same in numbers, though more erratic. *Phœbis sennæ* was recorded for the first time since 1934 on the north fork of the Island, five singles between August 29 and October 8, all flying west and visiting flowers. *Papilio ajax*, *P. glaucus*, and *P. troilus* showed increase at normal dates. *Nymphalis antiopa* most frequent since 1945. *Limenitis archippus* increased. *Erynnis brizo*, *E. juvenalis*, and *E. horatius* were common April 20. *Incisalia augustinus* was common April 16 and one *I. nippon* was taken on April 21. All other butterflies were normal, with 1951 dates and numbers, except *Lycæna epixanthe*, which on June 28 fairly flooded one cranberry marsh. It was a day of damp, chilly east wind following three days of heat-wave and high humidity; the whole marsh was covered with them hovering over or resting on the low vegetation. None were seen in extended flight. Up to 8 were taken in one sweep of the net. The numbers were estimated at 6 per square foot over several acres.

Weather for the season: Temperature near normal or above, with very light snow and no extreme cold through winter of 1951-52. A warm spell with temperature in the 80's started April 19, and for several days brought to light a few *Scoliopteryx libatrix*, *Baileya dormitans*, *Xystocheilus rufago* and increased numbers over other years of *Orthosia hibisci*, *Crocigrapha normani*, and *Melanolophia canadaria*. Weather through May and early June was normal, with extremely hot, humid weather the last half of June. The first good light-collecting nights began June 23. July was droughty with normal temperatures. There were heavy rains in August. The fall was dry, with cool to cold weather with poor collecting late in the fall.

Celerio lineata showed marked increase over 1951. *P. sextus* was more common than in years. Other Spingidæ same as 1951. *Hyalophora cecropia*, *Antheræa polyphemus*, *Anisota rubicunda*, *Eacles imperialis* and *Citheronia regalis* showed increase and *Hyalophora promethea*, *Actias luna*, *Automeris io* and *Anisota stigma* appeared in reduced numbers. Arctiinæ were generally more scarce than in 1951. Most of the Cutworm groups showed an increase over 1951. 6 *Loxagrotis acclivis* and one *Protoleucania rubripennis* were again taken. *Pseudaletia unipuncta* was abundant in all three generations; first April 5 and very large flights May 11 and 21, and in the fall to November 25, young larvae were abundant on lawns late May. *Rusina bicolorago* was greatly reduced from last year, while *Alabama argillacea* and *Anticarsia gemmatilis* showed increase. The last was common September 14 to October 16, first September 2. First *A. argillacea* August 31. *Leuconycta dipteroides* decreased and only one *Amphipyra pyramidoides* was seen. *Schinia bifascia* continued same as usual with its very short season. *Catocala* were again scarce and few specimens found. *Doryodes* was notably increased: May 11 to November 3. A large larval colony of *Archanara densa* was found in Pickerelweed. *Malacosoma americana* was again scarce on the east end of the fork but showed increase westward. Most of the Geometridæ were normal in

time and abundance. Of the micros, Nymphulinae, Schoenobiinae, Crambinae and Phycitinae showed increases over 1951, and Tortricidae showed decrease. Of 300 Pitcher-plants examined, only one plant contained larvæ of *Exyra rolandiana* and none any evidence of *Papaipema*.

Nassau County (W. SHOCKLEY) A letter from WILFRED SHOCKLEY, United States Department of Agriculture, reports the capture of *Platyedra vitella* (gelechiid) infesting Hollyhocks at Mineola, Long Island. The insect, native to Iran, is primarily a pest of Hollyhocks but occasionally damages cotton, It is therefore requested that should the moth be observed, or damage to the seeds of Hollyhocks by a lepidopterous larva be discovered that he be advised: P. O. Box 72, Greenfield, Mass.

NEW JERSEY

The reports for this state are sadly deficient, the substantial number of good collectors residing there notwithstanding. Most of these were actively engaged in collecting at distant parts. The few fragments available follow. At Freehold, April 20 several *Anthracis genutia* and *Nymphalis antiopa* (worn) and singles of *Incisalia augustinus* and *Psychomorpha epimenis* were captured (SHULGIN). FRED NAUMANN advises "All of us here agree that so far as day-flyers are concerned, 1952 was the poorest season ever." He noted that moths were about normal and reported the capture of a *Sphinx frankii* by BUCHHOLZ. Two trips to Lakehurst by the author timed to proper season as evidenced by the flora, and with weather favorable, produced a single male *Mitoura hesseli*. I believe not more than one or two others were taken in spite of special trips.

CONNECTICUT

New Haven Area (REMINGTON): "For the fourth consecutive year of observations here, the winter was mild. The spring was one of the rainiest and cloudiest in recent years. April was generally dark and wet. In May the rainfall totalled 5.45 inches (1873-1936 average is 3.70 in.) In May there was 55% of possible sunshine (average 61%), with 9 days clear, 9 partly cloudy, 13 cloudy (average 11, 10, 10). June opened with 2 inches of rain June 1, and a total of 3.17 inches during the 3 day week-end May 30 - June 1 (total average rainfall for all of June is 3.19 inches). Complete weather data are not yet available. Aside from the heavy spring precipitation the principal weather abnormality was an exceptionally hot and dry period in July.

"Field records were made at least once each week (usually oftener) from March 26 through December 6. For example *Papilio glaucus* was recorded on 15 different days from April 30 through July 1.

"Spring flight dates for key butterflies, with 1950 and 1951 comparisons, follow (number of different days recorded in parentheses):

Species	1952	1951	1950	
<i>L. pseudargiolus</i>	11 April - 25 May (12)	13 April - 17 May	19 April - 14 May	3 3/4 - 19
<i>E. brizo</i>	30 April - 24 May (5)	21 April - 13 May	6 May - 13 May	24 Apr - 28 May
<i>E. juvenalis</i>	20 April - 10 June (9)	28 April - 31 May	13 May - 4 June	25 Apr - 11 Jun
<i>A. genutia</i>	20 April - 27 May (4)	28 April - 9 May	3 May - 13 May	24 Apr - 27 Jun
<i>S. melinus</i>	30 April - 24 May (5)	6 May -	6 May -	13 May - 11 Jun
<i>L. hypopbleas</i>	19 May - 17 June (5)	15 May - 26 May	27 May - 23 June	

It is difficult to find satisfactory evidence of a difference between 1952 and 1951 in the start of the season. But quite consistently the flight-periods continued longer in 1952 than in 1951. The data indicate that all spring flight-periods in 1949 were earlier than in the succeeding three years. Some highlights of the spring Lepidoptera were: more *Incisalia augustinus* (30 April - 19 May) and *Hesperia metea* (10-24 May) were found than in 3 earlier years; *Nymphalis antiopa*, none fresh, was abundant 26 March to 19 May (seen 13 days), the first fresh adults appearing May 24; *Mitoura gryneus* was very rare for the third successive spring; *Anthocaris genutia* was probably commoner than in 1950 or 1951; it was a spring of abundance as usual for *Erynnis juvenalis*, *Lycænopsis pseudargiolus*, *Strymon melinus*; *Everes comyntas*, *Phyciodes tharos*, *Boloria toddi*, *Papilio glaucus*, *P. polyxenes*, *P. troilus*, *Achalarus lyciades*, *Hesperia sassacus*, *Poanes hobomok*, and *Euptychia euryta*. *Alypia octomaculata* was abundant April 26 into June. *Malacosoma* larvae were unusually numerous on *Prunus*, few *P. serotina* escaping early defoliation; *Isturgia truncataria* was abundant May 9 and 19; a fresh, fertile ♀ *Prionoxystus macmurtrei* was taken June 2.

"This was a year of greater immigration than the three preceding years. The most prominent species was *Vanessa cardui*, but there were others taken either as immigrants or southern intruders precariously established. The first *Asterocampa clyton* in 4 years was found July 14. *Euptoieta claudia* was found in New Haven (1) June 8, and at Bakersville on August 14, 4 ♂♂ and 1 ♀ in fair condition were taken and another seen. On August 21 in New Haven, 2 fair ♂♂ of *Strymon m-album* were taken a few yards apart. Two fresh *Papilio philenor* were found June 2. A fresh ♂ *Hylephila phylæus* was taken September 28. A *Herse cingulata* ♂ was found in a light trap at Windsor by J. B. KRING. *Danaus plexippus* was seen very early, May 14 and 18, one fresh on June 11, the usual numbers July 1 - September 28, and one fresh as late as October 20, but no conspicuous mass flights were noticed or rumored.

"The immigration of *V. cardui* was apparently even larger than in 1949. Not one specimen was seen in 1950 and 1951. The first record is from New Haven, where five "flown" specimens were taken June 10. A fair ♂ was found at Sharon July 3 and 2 worn and 1 fresh ♂♂ July 14 on West Rock (8 P.M.!). Fresh specimens were found around New Haven on July 18, 26, 28, 30 and August 1, 11, 12, 17, 18, 19, 20, 21, 22, 30. Hundreds were found in an alfalfa field near Amenia Union, July 26, looking fresh but often torn. Fair numbers were found August 14, at Litchfield, Bantam, Harwinton, and Bakersville. Worn specimens were flying at New Haven on September 2, 4, 5. *V. cardui* was fresher and more numerous September 5 at Branford, Madison, and Guilford. One fresh adult was taken on *Aster* in Woodbridge September 28. Essentially all *V. cardui* seen this year were on flowers, so little evidence on rate and direction of movement could be gotten. On August 18, in New Haven, 3 were seen from noon to 2:30 P.M. flying strongly westward 3' to 5' above the ground, but on August 20, 2 were seen at 9:45 A.M. flying strongly eastward, also near the ground. Thistles around New Haven were searched all summer, but no larvæ or nests were found there. However, several recently vacated nests on thistle were found at Salisbury on July 26, and 4 larvæ were taken on thistle at West Hartland on August 14. None of

the infestation of Hollyhocks so typical in Missouri during immigration was noted this year in Connecticut, although some damage to an herb garden was reported.

"Most summer species seemed to have an average year. Some representative flight-periods were as follows:

<i>Cercyonis alope</i>	July 6 - Sept. 5 (11 days)
<i>Euptychia euryta</i>	May 27 - July 26 (15 days)
<i>Letbe eurydice</i>	June 25 - July 26 (5 days)
<i>Euphydryas phæton</i>	June 17 - July 1 (4 days)
<i>Boloria selene</i>	June 17 - July 12 (4 days)
<i>Papilio troilus</i>	May 24 - July 14 (9); Aug. 15 - Sept. 5 (3)
<i>Strymon titus</i>	July 12 - 26 (4 days)
<i>S. falacer</i>	June 24 - July 19 (4 days)
<i>S. edwardsii</i>	June 24 - July 14 (3 days)
<i>S. acadica</i>	July 1 - 26 (8 days)
<i>S. melinus</i>	July 12 - 14 (2 days); Aug. 12 - Sept. 5 (5)
<i>Pholisora catullus</i>	June 14 - 15 (2 days); July 11 - 19 (4);
<i>Ancyloxipha numitor</i>	Aug. 20-22 (2)
<i>Polites verna</i>	June 7 - July 14 (10); July 26 - Sept. 28 (10)
<i>Atrytone conspiciua</i>	July 1 - 26 (5 days)
	July 12 - 26 (3 days)

"Flying from early July to mid-September with no definite gaps were *Everes comyntas*, *Lycæna hypopbleas*, *Phyciodes tharos*, *Eurema lisa*, *Papilio glaucus*. This was the heaviest year in four for *N. antiopa*, with a succession of broods and some defoliation (mainly of *Celtis*) by larvæ. *Erynnis baptisiæ* larvæ were numerous, but this may not be unusual. It was the poorest year in four for *Asterocampa celtis*. *Ctenucha virginica* was unusually common in late June and early July. *Ciseps fulvicollis* was extremely abundant all summer. Larvæ, but not adults, of *Feniseca tarquinius* were found, but the great numbers of 1950 were not approached. *Datana integerrima* defoliated many *Juglans*, but less than in 1951. *Cingilia catenaria* had almost disappeared, following the tremendous numbers of 1951. Several *Hesperia leonardus* were taken September 5.

"Regular records were kept of common moths at light in North Haven after the middle of June. Present in great numbers were:

<i>Itame pustularia</i>	June 23 - end of July
<i>Eugonobapta nivosaria</i>	June 23 - July 20
<i>Nematocampa filamentaria</i>	June 23 - July 13
<i>Euchlæna serrata</i>	June 30 - July 13
<i>Lagoa crispata</i>	June 30 - July 6
<i>Limacodes biguttata</i>	June 22 - July 15
<i>Erannis tiliaria</i>	October 16 - November 18
<i>Alsophila pometaria</i>	November 16 - December 8

Also in pest numbers were *Pseudaletia unipuncta*; *Malacosoma americana*; *Halisidota tessellaris*; *Isia isabella*."

Washington (C. L. REMINGTON, S. A. HESSEL): Some notable moth records June 25 were: *Calledapteryx dryopterata* ♂ and ♀; *Pheosia rimosa* ♀; *Apantesis virguncula* ♀; *Zeuzera pyrina* (num.); *Oreta rosea* (num.).

Having moved from Long Island to this locality in late July with the attending demand on my daylight hours, almost no diurnal collecting was afforded. Using a "CX" 250 watt bulb together with a 15 watt BL fluorescent tube at the house over 220 species of moths, exclusive of micros, were taken from July 23 to the end of the season. Of these about 35 were hitherto unrecorded in the Connecticut list. The actual number of individuals was, however, surprisingly small. Almost all new records were singles or pairs, as were half or more of the general list. Only *Erannis tiliaria* and *Cingilia catenaria* appeared in numbers over fifty in a single evening, about 150 in these cases. Comparisons with other years cannot be made, but the most impressive group were the *Papaipema*, including *maritima*, *impecuniosa*, *nebris* and f. "nitela", *cerina*, *inquiesita* and f. "wyatti", *furcata*, *arctivorens*, *astuta*, *rigida*, *humuli*, *sciata*, *cerussata*, *baptisiae*, *cataphracta*, *pterisii*, and *lysimachiae*. Also well represented was *Graptolitha* with the following at hand: *laticinerea*, *unimoda*, *bethunei*, *baileyi*, *querquera*, *antennata*, *fagina*, and *petulca*.

Greenwich (KLOTS): Spring brood *L. pseudargiolus* as usual, April 16 - May 16; *Pieris virginianensis*, as usual, May 2 - 9; *Erynnis icelus* and *E. juvenalis* May 2 - 16; one very worn *Vanessa cardui* (hibernator?) May 16; one worn *V. atalanta* (hibernator?) May 9.

MASSACHUSETTS

Barnstable (C. P. KIMBALL): The spring was normal through June. During July no rain fell and the temperatures were well above average. August was very rainy and from then on the weather was more or less normal.

"Up to the first of August collecting was somewhat better than in recent years as far as numbers of specimens, the nightly catch of moths several times going over 2000, but the number of species was distinctly less. After August 1st, with the advent of the continuously wet weather, collecting became poor in all respects.

"Certain species were present in above average numbers: *Limenitis astyanax*, *Hyalophora cecropia*, *Automeris io*, *Phlegethontius sextus*, *Sphinx drupiferarum*, *Paonias myops*, *Darapsa pholus*, *Halisidota tessellaris*, *Catocala similis*, *Mocis texana*, many notodontids (especially the females, which was also true to a lesser extent with the Sphingids). *Lambdina pellucidaria* was in excessive abundance; also found were *Metasiopsis ossularia*, *Nomophila noctuella* (abundant), *Mineola vaccinii*, *Dioryctria auranticella*, *Zonaria interruptolineana*, *Argyrotaenia velutinana* and *A. pinatubana*, both abundant.

"In general, Noctuids were scarce, particularly *Feltia* ssp. Also noticeably scarce were *Crambus* spp. Pieridæ were seen on only a few occasions, not more than two or three examples of each of the three common species being observed.

"Strays were infrequent. Only one specimen of *Anticarsia gemmatilis* was seen. Two unusual species turned up, *Xylophanes tersa* and *Amyna octo*. One specimen of *Smerinthus jamaicensis* f. norm. "geminatus" looked more like the southern than the northern form, and may have been a stray. Two other sphingids were present, *Herse cingulata* and *Celerio lineata*, but there

is some question in my mind as to whether they may not have become established in this relatively mild climate, and this is said in spite of the rather severe preceding winter. *C. lineata* is regularly taken in fair numbers during both June and September, and in fresh condition invariably. *H. cingulata* has been taken on three occasions with June and October dates, also in fresh condition, and it has come to my attention that a sweet potato patch has been under cultivation about 10 miles from my house for some years.

"Perhaps the most outstanding feature of the season was the appearance of many Notodontid and Sphingid females, particularly the former. I took females of practically every Notodontid which is recorded for Barnstable, many of which I had never before taken in some 17 years of collecting, in any locality."

General (Mrs. COTTRELL): Monarch observations and marking notes involving Massachusetts, New York, and New Hampshire localities are submitted. No mass movements were in evidence and no marked specimens are mentioned as recovered. Earliest date recorded was July 14, latest date October 9.

VERMONT

Vic. Mt. Equinox (KLOTS, HESSEL, C. L. REMINGTON): May 23-24 *Pieris napi* was common as usual, with *Boloria toddi*. Season 10 days early. (KLOTS).

On June 6 *Amblyscirtes vialis* males numerous and fresh. Also fresh and in fair numbers were *Boloria toddi*, *Hesperia sassacus*, *Poanes hobomok*, *Papilio glaucus*, *Lycæna hypoppleas*. Rather worn male *P. napi* were taken. A few *Ematurga amitaria* (day flying geometer) were at hand.

NEW HAMPSHIRE

White Mountains (LENNOX): "The collecting was poor, generally speaking. The weather was very dry up here, the worst drought in years. *Pieris napi* was plentiful in May but *Speyerias* noticeably scarce as the summer progressed. Colonies of *Nymphalis milberti* were found and reared to maturity, being practically free of parasitism. Reared *Eneis jutta* came through in fine style, producing full sized specimens. A trip was made to the high lands of the mountains for *Eneis semidea* in July. They were normally common. Another interesting catch that day was my first *Apantesis quenseli*, ¹⁰ Moth collecting was productive in my local bog, where I took a good series of *Parasemia parthenos*. Collecting also proved to be exciting near tree-line in Jefferson Notch, where with DOUGLAS FERGUSON we took a good series of *Anomogyna sincera*."

MAINE

Vic. Lincoln (GREY): Spring, as in 1951, was very wet but by mid-summer a drought of serious proportions was at hand. The most serious threat is the long-range one that the water table is dropping rapidly. It was dramatically demonstrated this summer when the bogs, wetter than in many

years, dried out by mid-summer, showing that the surface moisture has nothing much underneath to maintain it. A new locality where *Incisalia lanoraieensis* can be collected "dry shod" is reported. Although *Incisalias* were reported in good quantity, "the year had the dubious distinction of being the poorest season in the east for *Speyeria* ever known within the memory of living collectors". The most unusually abundant diurnal was the skipper *Poanes hobomok*.

Augusta (A. E. BROWER): The snow went off early, but then most of May and June was cold and cloudy and very few butterflies were to be seen. This was followed by very dry weather until the latter part of August when showers came; however few butterflies were to be seen.

Papilio polyxenes was the first seen at Augusta on May 17, while *P. glaucus* was first seen on the preceding day and again on May 24 and at Upton on May 30. May 16 was the date for the first two *Colias philodice* seen at Augusta. On May 9 the first *Pieris rapae* were seen at Augusta and several the next day; one or two each for Richmond and Brunswick on May 10; at Upton on May 30 and Wilson Mills on May 31. *Pieris napi* was seen at Upton on May 30. *Danaus plexippus* was observed at Norridgewock July 13. *Speyeria cybele* was seen in Augusta on July 11. *Polygonia faunus* was seen at Upton on May 30, and at Wilson Mills on May 31. The first fresh *P. faunus* and *P. progne* of the 1952 season were seen at Augusta on July 15, these were both males. The first of the new brood of *Nymphalis j-album* were seen at Belgrade July 11 and at Augusta July 15; the species was taken on Mt. Bigelow on August 2 and 3. *N. milberti* was taken on Mt. Bigelow August 2 and 3. At Augusta on March 22 a *N. antiopa* was seen flying close at hand and watched. The sun was warm, but there was deep snow on the ground. Three specimens were seen at Bar Harbor on May 20. The first of the new brood were seen at Belgrade on July 12. The first *Vanessa atalanta* was seen at Upton May 30 and at Wilson Mills May 31. *Vanessa cardui* or *V. virginiensis* was seen flying at Bar Harbor May 20. On Mt. Bigelow on August 2 and 3, *V. virginiensis* was present in fair numbers, and *V. cardui* was abundant. The first *Limenitis archippus* was seen at Augusta on June 13, and both male and female at Jefferson on June 15. Dates for *Strymon acadica* are Jefferson July 4, Augusta July 11, Belgrade July 12 (a female on Cone Flower). *S. falacer* was seen at Belgrade on July 11, *S. liparops* at Augusta July 26. At Bar Harbor on May 20 the first two or three *Incisalia augustinus* were seen and one was caught; at Grafton Notch it was flying in numbers on May 30 and in small numbers at Wilson Mills on May 31. *Lycænoptis pseudargiolus* was seen at Dryden the last days of April; at Brunswick on May 10; at Bar Harbor May 20, three specimens; at Grafton Notch on May 30 and Wilson Mills May 31. Dates for *Erynnis icelus* are Grafton May 30 and Wilson Mills May 31. The first record of *Erynnis juvenalis* for Mt. Desert Island was made with both male and female taken at Bar Harbor on May 20. *Ancyloxypha numitor* was first seen at Augusta on June 23, another on June 27, and it was common at Berwick in August. The first *Hesperia sassacus* of the season was seen at Augusta on June 7. *Polites themistocles* was first seen at North Belgrade on June 22; *P. peckius* at Benton June 28. *Poanes hobomok* was first seen at Augusta on June 5 and Oakland June 6. At Benton the first *Amblyscirtes vialis* was seen on June 6. *Hemaris diffinis*

was seen at Upton on May 30 and 8 specimens of *H. thysbe* at Benton on June 6. Data on *Amphion nesus* are: Augusta June 5, Benton June 6, Augusta June 16 feeding at Rocket plant 6.50 P.M. in a sunny spot. *Lycomorpha pholus* was seen at Blue Hill on September 2. A number of *Ctenucha virginica* were seen at Belgrade on July 11. *Clemensia albata* was taken at Ashland on July 27. Several *Cygnia tenera* were taken at Jefferson July 4 and 5. *Anarta cordigera* was seen at Grafton May 30 and Wilson Mills May 31. *Graptolitha fagina* was taken at Augusta September 26. The first *Septis finitima* was seen at Augusta June 16, and again seen June 20. *Hyppa xylinoides* was taken at Gardiner June 7. Sidney Bog outside Augusta, the first 5 *Lithacodia bellicula* were seen; at Augusta July 15 *L. muscosula* was taken; at Benton June 28 *L. synnochtis* was first seen. *Capis curvata* was captured in a bog at Alfred August 9. Three *Autographa vaccinii* were taken at golden rod flowers on Mt. Bigelow 4150 ft. elevation August 2. Data on *Catocala* as follows:

C. antinympha at light at Otter Creek Camp Ground, Bar Harbor 3 A.M. on August 17; *C. meskei* was taken at Wilton July 14, the first Maine record; *C. concumbens*, at light on side of house at East Orland August 17; *C. sordida* at light Dennysville July 25; *C. praeclara* at light Otter Creek Camp Ground, Bar Harbor August 16. The first *Euclidina cuspidea* was taken at Jefferson on June 14. *Cænurgina crassiuscula* was taken at Upton May 30, at Wilson Mills on May 31. The first *Zale aeruginos* was taken at Augusta June 7. *Epizeuxis rotundalis* was taken Augusta July 15. The first *Nerice bidentata* of the season was taken at Augusta June 21. At Augusta the first *Porthetria dispar* was seen July 3 and several July 6. May 16 at Belgrade the first *Mesothea incertata* was seen. *Dysstroma truncata* was taken on Mt. Katahdin August 24. *Xanthorhoe emendata* was taken at Lincoln July 23; *X. ferrugata* was first seen on May 28 at Augusta. *Entephria aurata* was taken sitting on a golden rod head on Mt. Bigelow August 2. The first *Euphyia intermediata* was taken at Augusta on June 3. *Perizoma basaliata* were flying in fair numbers on Mt. Bigelow at an elevation of 3500 to 4100 ft. August 2 and 3. *Bapta vestaliata* was first seen at Belgrade May 16. *Eugonobapta nivosaria* was taken July 17. July 16 *Euclæna serrata* was taken at Winthrop. *Æthalura anticaria* was first seen at North Belgrade May 17. *Spodolepis substriataria* was taken at Wilson Mills on May 31, this was a worn female which laid some eggs. *Sabulodes cachexiata (lorata)* was seen at Jefferson June 15, at Augusta June 18. *Abbottana clemataria* was seen at Augusta May 25. Data on *Nomophila noctuella* are: the first at Belgrade May 16, at Bar Harbor May 22, several at Bar Harbor September 30. *Pyrausta fumalis* was taken at Alfred August 9; *P. fumoferalis* was first seen at Jefferson June 15, at Kellyland August 31; *P. funebris* was taken at Jefferson May 25. *Nymphula issusalis* was taken at Ashland July 18 and July 26, at Augusta July 24. *Pyralis constiferalis* was taken at Augusta July 15. At Ashland *Herculia olinalis* was taken. *Mineola tricolorella* was taken at Ashland July 29. At Augusta *Salebria basilaris* was taken July 15. The first *Thiodia radiatana* was taken at Jefferson June 15. *Epinotia apriliana?* was taken on a window screen at Augusta March 29. *E. nanana* was common at Augusta, the first on June 19. At Jefferson the first *Ancyliis comptana floridana* was taken on May 25. The usual form of *Sparganothis xanthoides* was taken at Kellyland on July 29. *Argyrotaenia pinatubana* was taken at Jefferson May 25. *Aristotelia rubi-*

della was taken at Kellyland July 25. At Augusta the first *Plutella porrectella* was seen June 16.

QUEBEC

P. H. H. GRAY had a successful season at Baie d'Urfé, and submitted detailed collecting data for about 250 species. His list is on file with the Society.

Contributors (those reporting directly only): OTTO ACKERMANN; A. E. BROWER; ANNETTE B. COTTRELL; GEORGE EHLE; P. H. H. GRAY; L. P. GREY; S. A. HESSEL; J. A. KEJI; C. P. KIMBALL; A. B. KLOTS; ROY LATHAM; D. J. LENNOX; F. T. NAUMANN; JUNE D. and F. W. PRESTON; C. L., JEANNE E., E. E., and P. S. REMINGTON; ROBERT ROZMAN; MICHAEL SHULGIN.

Nettleton Hollow, Washington, Conn., U. S. A.

8. FAR NORTH

by T. N. FREEMAN

The collections of Lepidoptera made in the Far North during 1952 were so few, and so far removed from previously investigated localities, that comparisons with other years cannot be made. However, to complete the sequence of this report, as it has appeared for other years, the Northern Insect Survey localities will be mentioned, and a few notes on the type and richness of fauna, will be included.

In 1952, parties were established at the following places: Naknek, Alaska; Holman, Victoria Island, Northwest Territories; Mould Bay, Prince Patrick Island, Northwest Territories; Coral Harbour, Southampton Island, Northwest Territories; Ogoki River, northern Ontario; and Sonde Stromfiord, Greenland.

Lepidoptera, particularly butterflies, were scarce at Naknek, those captured were essentially boreal forest species. The Holman collection was fairly rich for an Arctic locality with the usual arctic species being represented. Mould Bay is situated so far north that Lepidoptera are represented only by a few individuals of a few arctic species. Coral Harbour is another arctic locality, that supports a fairly rich lepidopterous fauna. Ogoki River approximates Sir Francis Walker's type locality, Albany River. This region lies well within the boreal forest and supports a rich fauna of boreal Lepidoptera. Sonde Stromfiord, on the west coast of Greenland, at approximately Lat. 68° contained a very limited representation of essentially palaeartic, boreal Lepidoptera. The absence of trees in southern Greenland, and the presence of boreal types of insects, differs remarkably from the situation in northern Canada.

Division of Entomology, Science Service, Ottawa, CANADA