The first *Nymphalis californica* migration since 1945 appeared in late August. Not many individuals reached as far north as Wellington. Around Victoria in early September they appeared quite common. All specimens taken were worn and tattered.

No Saturniidae were seen, and no Sphingidae except a few *Hemaris diffinis.* Nearly all Arctiidae were scarce or absent, including the usually abundant species. An exception to this trend was *Leptarctia californiae,* which was seen quite frequently during collecting at high altitudes. In previous years I have always failed to find it in the same locality. One adult and one larva of *Halisidota argentata* were found, these the first seen for several years.

July was the only month favourable for Phalaenidae. August and September nights were frequently cool. During July, *Cerura scolopendrina* came to light quite frequently, this species previously represented in my collection by two specimens taken in 1948. *Autographa celsa* appeared fairly abundant, and largely replaced the usually common *A. californica.*

In Geometridae a very noticeable circumstance was the decline in *Mesoleuca gratulata,* usually an excessively abundant diurnal species.

Only very few autumn-flying geometrids were seen. During December the weather was exceptionally mild, but *Erannis vancouverensis* failed to appear, after having been seen last year. *Operophtera occidentalis* had a wonderful season, still around at time of writing, December 23, a full month after its first appearance.

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3. ROCKY MOUNTAINS — ALBERTA, MONTANA, WYOMING, UTAH, COLORADO, NEW MEXICO

by J. DONALD EFF

The winter of 1951-52 was an excellent one, with sufficient moisture throughout most of the area. The Big Horn area of north central Wyoming had a dry, early spring, but Colorado and New Mexico opened the collecting season about on schedule. Both states enjoyed good rainfall. The month of May in the Denver area was about the wettest in a good many years, giving the earth a luxuriant coat of green which should have provided the larvae of the earlier species with a plentiful supply of their favorite food plants. However, unlike New Mexico which enjoyed fairly good rainfall

throughout the summer, Colorado was extremely dry during the month of June, with only .77 of an inch of rain being recorded for the entire month.

WYOMING

DUKE DOWNEY of Sheridan in the Big Horn Mt. region reported that things were 2 to 3 weeks early there with such things as *Anthocaris sara, Euchloe ausonides,* and *Papilio multicaudatus* appearing at the beginning of May instead of late in the month, their normal period of emergence. *Vanessa cardui* was abundant; others more common than usual included *Coenonympha tullia, Plebeius saepiolus, Phyciodes tharos* and *Pyrgus communis. Speyeria* were a little more plentiful than in the past, and *Euphydryas bernadetta* was found for the first time in several years. *Papilio rutulus* and *P. multicaudatus* were scarce and *P. eurymedon* entirely absent. Some of DOWNEY'S better catches for that area, aside from *E. bernadetta,* were *Oeneis uhleri, Boloria selene,* and *Nymphalis californica* which, while common in some areas, is not considered so in the Rocky Mt. Region.

In the moths, the Saturniidae were below normal, and the *Catocala* were scarcer than in years. *Celerio lineata* was common, and *Pachysphinx modesta* showed an increase over its usually scarce numbers.

UTAH

The only report from that state is my own, which because of my unfamiliarity with the fauna and collecting conditions, is of a very incomplete nature. At Arches National Monument near Moab, Utah, we found *Pieris beckeri* along the road leading into the Monument fairly commonly, but it was the only species seen, aside from one *Mitoura siva* which I was unable to capture. The next collecting was at Zion National Park. Conditions were very dry here, and the only things found in any numbers were *Hemiargus isola* and *Leptotes marina.*

COLORADO

Collecting in this state apparently was better as a whole than at any time in the last several years. With plenty of snow in the mountains and abundant moisture in May, the ingredients for the start of a good season at least were present. FLOYD and JUNE PRESTON collected in the southwest corner of the State at Mesa Verde National Park, at Durango, at South Mineral Creek Camp near Silverton, on Monarch Pass in Chaffee County, Wolf Creek Pass and then farther north in the general Denver area, on Berthoud Pass, and Loveland Pass and in my company on the Poudre Canyon, north of Fort Collins in Larimer County. Brother JOHN J. RENK of Regis College in Denver collected the Denver area, as well as Boulder County (my back yard!) and also spent a little time at Fraser, Colorado, just over Berthoud Pass, on the western slope, and on Grand Mesa near Grand Junction. I collected briefly along the LaPlata River near Durango, in Poudre Canyon north of Fort Collins, on Mt. Evans, Clear Creek County, but mostly in Boulder County. All of us found the collecting excellent with a couple of exceptions.

In the northern part of the state the only spot collected was Poudre Canyon, a place that gave high promise. *Melitaea arachne* was found here in good numbers, the first specimens I've seen here since GEORGE W. RAWSON and I took specimens of a second brood in 1948. It still is absent from the Boulder area. Also much more common in Poudre Canyon than in the Boulder area was *Speyeria halcyone. Ochlodes sylvanoides* was abundant there, and many worn specimens of *Ochlodes snowi* were seen. Along the Continental Divide the alpine collecting, while good, was not of the best, at least with respect to such things as *Erebia magdalena, Lycaena snowi,* and *Melitaea damoetas. Oeneis lucilla* showed an increase, as did *Erebia callias* which practically swarmed in places. Most of the other alpine inhabitants were present in near-normal numbers. At the lower elevations there appeared to be an increase in the number of *Strymon melinus* and *Callipsyche behrii. Incisalia mossii schryveri* seemed also to be definitely on the upswing; I took 15 specimens this year compared with the 2 or 3 seen for the past couple of years. *Callophrys sheridani* was less common than usual, but *Incisalia polios* seems to be gaining in numbers also. *Colias alexandra* males were so plentiful that they turned the areas in the vicinity of roadside mud-puddles into a sea of yellow. Blues also swarmed there, with the most notable increase being in the numbers of *Plebeius acmon.* Others that showed increases are *Oeneis uhleri,* which Brother RENK reported as practically swarming in Gregory Canyon which is about ¼ mile from my house, and *Oeneis chryxus* and *Neophasia menapia,* also *Nathalis iole.* Still scarce were *Phyciodes mylitta barnesi* and *P. tharos.*

To the west, over the Divide, Brother RENK found *Anthocaris sara, Polygonia satyrus, Glaucopsyche lygdamus, Euchloe ausonides, Pieris napi,* and *Boloria freija* common in the vicinity of Fraser in June, and in July such things as *Oeneis chryxus, Parnassius smintheus, Plebeius melissa, Lycaena rubidus,* and three species of *Speyeria.* Also he reported *Tharsalea arota* common on Grand Mesa. While no report has been received from W. C. MINOR of Fruita, Colorado, near Grand Junction, personal correspondence has provided me with the fact that *Mitoura siva* fairly swarmed in that area this summer, and that *Minois masoni* was quite common in Devil's Canyon and on Black Ridge in Mesa County. On our way to Utah we stopped to make the personal acquaintance and visit with this combination collector-writer-photographer and all-round naturalist. In company with Mr. MINOR and HANS ACKERMAN of Wheatridge, Colorado, we paid a visit to Coal Mine Point on Black Ridge, the type locality for *Papilio indra minori.* Although present at the correct time, we saw no *P. minori* at all. In the sagebrush however, we found *Euphydryas anicia* fairly common.

In the southern part of Colorado we are indebted almost entirely to the records of FLOYD and JUNE PRESTON. At Mesa Verde collecting was poor with only *Vanessa cardui* and *Minois oetus* being present in any numbers. At Durango the only things found commonly were *Hypaurotis crysalus* and *Speyeria edwardsi,* the latter being in worn condition. At South Mineral Creek Camp near Silverton they found the following abundant: *Speyeria eurynome, Parnassius smintheus, Erebia epipsodea, Plebeius aquilo, Oeneis chryxus, Plebeius saepiolus,* and *Pieris napi.* Inclement weather allowed almost no collecting at Red Mt. Pass in Ouray County, but at Monarch Pass in Chaffee County they found good variety but little abundance of any species

except *Vanessa cardui* and *Celerio lineata. Colias scudderii, Lycaena helloides,* and *Oeneis chryxus* were among the more numerous. Wolf Creek Pass between Pagosa Springs and Monte Vista provided excellent collecting and good numbers of many things. This was one of the few spots where apparently *Phyciodes tharos* was fairly plentiful. *Speyeria* were rather common here also. On August 23 and 24 I made a trip to the Wet Mts. west of Pueblo, Colorado, and collected in the vicinity of Wetmore and Beulah. I was after *Polygonia hylas* in particular but apparently never located their "locale", as I only took a couple. However, I was surprised to find *Polygonia faunus* here and the commonest of the three species of *Polygonia* to be taken. Most of the collecting was done on Bigelow Summit which is a low pass in the foothills, and surprisingly enough the collecting was very good here for as late in the season as it was. *Hesperia harpalus* was a common species, along with *Phyciodes camillus* and *Lycaena rubidus.*

NEW MEXICO

In this state we are indebted to O. D. STANDARD, of Belen, and the PRESTONS, who collected in the Sandias. As previously mentioned, New Mexico enjoyed a good summer, a blessing after the drought conditions of 1951. The change was apparent in that nearly all species showed a partial increase in numbers, one exception being *Papilio polyxenes* which was common in 1951, scarce in 1952. The one surprising thing was the fact that after the hordes of *Celerio* caterpillars that appeared in 1951, there seemed to be no appreciable increase in the number of adults. *Papilio multicaudatus* showed a noticeable increase this year. Also noted is an increase in *Dictyosoma elsa,* which STANDARD took for the first time in 1948, and then only one specimen. Then no more until 1951 when 4 were captured, and this year 4 more were taken and a couple more were seen. In the Sandia Mts. the PRESTONS found *Neophasia menapia* and *Atlides halesus* fairly common at the Doc Long Picnic Area. All specimens were on cone-flowers in a dry stream bed. At Tree Spring Toboggan Area and Capulin Picnic Area, elevation 9500 ft. they found *Pieris napi* and *Euptychia henshawi.*

UNUSUAL RECORDS

The most interesting and unusual records were for the reappearance of *Euphydryas bernadetta* in Wyoming and a hybrid *Hyalophora gloveri-cecropia* also captured by DOWNEY. Brother RENK, collecting on the Russian Olive trees at Regis campus, took *Libytheana bachmanii* and *Agraulis vanillae.* Also at Fraser he took another specimen of *Oeneis jutta reducta.* My best capture for this state was a couple of females of *Apodemia mormo* taken in Poudre Canyon. The PRESTONS also took one in South St. Vrain Canyon, Boulder County, on August 1. And on Loveland Pass, they took 10 males and a female of the form "brucei" among 70-some *Erebia epipsodea.* It is well to note that he collected these *E. epipsodea* at an approximate elevation of 11,900 ft., which is 3000 ft. higher than they usually are to be found. Neither do I know of any other passes where it is to be found at this elevation. STANDARD'S records of *Dictyosoma elsa* were at Vaughn and Belen, New Mexico.

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