

COLLECTING ALONG THE ALASKA HIGHWAY

by P. S. REMINGTON

Ever since one of our married daughters moved with her family to Alaska several years ago, we have toyed with the idea of making the trip along the famous Alaska Highway. Each time an article appeared about the Highway in some periodical it was eagerly read. Of course, not the least attractive part of the idea was the prospect of collecting many of the northern species of Lepidoptera which I had never collected before. Finally in the spring of 1951 it began to seem really possible to make the trip, and definite plans were laid. We bought a Nash car because we liked the built-in bed which can be quickly made and we were not sure what sort of accommodations could be secured on the Highway. Maps and highway information were obtained from the Canadian government and camping and collecting gear were assembled.

On June 28 we left St. Louis heading for Boulder, Colorado, and almost did not get thru Kansas because of the floods. At Boulder we stayed with our good friend DONALD EFF and found Dr. CHARLES REMINGTON and his family, who were returning from a trip to California. Our first camp after leaving Boulder was at Nash Fork Picnic Ground in the Snowy Range of southern Wyoming. The range proved to be well-named, for there were ten-foot snow banks right beside the camping spot, and it was the coldest camp of our entire trip. No butterflies whatever were seen, altho in previous years I had found very good collecting here. It was not until we were on our way down the western slopes of the Snowy Range, in the Medicine Bow National Forest that we saw a few familiar butterflies—*Erebia epipsodea* Butl., *Glaucopsyche lygdamus oro* Scud., and a species of *Erynnis*.

Our next collecting spot was near Moran, Wyoming, in the Teton National Forest, and here we took *Erebia callias* Edw., *Oeneis chryxus* Dbldy. & Hew., *Coenonympha haydenii* Edw., *Anthocharis sara* Bdv., and many *Plebeius saepiolus* Bdv. We also saw several of the gorgeous day-flying saturniid moth, *Pseudobasis*, but failed to net any. I have caught these in quantity several hundred miles to the south at Rabbit Ears Pass in Colorado. No collecting was attempted in Yellowstone Park because of the law prohibiting it. After leaving the Park, I saw a number of *Oeneis chryxus* flying over a rock-slide near Bozeman, Montana, and caught a few.

We crossed the Canadian border at Coutts, Alberta, and drove north to Calgary, then east for a side trip to Banff and Lake Louise. This is a classic collecting spot made famous by THOMAS BEAN and others who collected Lepidoptera there late in the nineteenth century. However, it rained or threatened to rain the whole time we were there, and I saw no Lepidoptera on the wing. The beauty of Lake Louise well repaid our time and effort and we were much impressed with the efficient way the Canadian National Parks are run.

We went back to Calgary and north to Edmonton, which we reached in a blinding rain-storm. Seldom have I seen it rain so hard, and it was an omen of what lay ahead of us before we could reach Mile Zero on the Alaska Highway at Dawson Creek. Leaving Edmonton on July 7 we did a little

collecting at Smith, Alberta, where we saw our first northern *Colias*, a rather large, swift species, possibly *C. gigantea* Stkr., All of the *Colias* taken on the trip are now being studied at the Osborn Zoological Laboratory at Yale University, and definite identification is not yet possible. After a very anxious time plowing thru the muddy roads between Smith and Dawson Creek, we reached the famous "Milepost Zero" in the main street of the latter town, which is the official beginning of the Alaska Highway.

Few people realize that, of the 1527 miles from Dawson Creek, British Columbia, to Fairbanks, Alaska, 1221 miles are in Canada. For the benefit of those who may feel the urge to try this trip, I can say that the Alaska Highway itself is a broad, well-gravelled, marvellously engineered road, passable in all weather. The approaches to it on either end are something else, but if you hit them in dry weather, you will have no trouble. Because the Highway is gravel at present, high speed is not advisable, and the driver should not plan to cover more than 300 to 350 miles per day. Ft. Nelson, a little highway settlement at mile 300, is the last sign of permanent habitation, except for highway lodges, until one gets to Whitehorse, Yukon Territory, at mile 919. You will see no farms, no village, and you will obtain no fresh fruit, fresh vegetables, milk, or meat. The road passes thru an extremely wild section of the North Canadian Rockies, but it is so laid out that the highest point on it is at only 4250 feet elevation. Yet in Alaska you will pass mountains over 19,000 feet high. It is densely forested thru much of the route, with aspen and evergreens, and there are vistas of surpassing grandeur at every turn. The beauty of most of our camping spots will long remain in our memory and seems to persist after the discomforts of mosquitoes and dust are forgotten, so that in retrospect the trip becomes better and better. The many streams and lakes along the route are teeming with trout and grayling, and game is often seen along the road. A breakdown of your car might be serious were it not for the fact that every passing car stops and offers assistance. The greatest distance between lodges or gas stations is about 50 miles, which compares favorably with roads I have taken in Wyoming. Gasoline was high in price, 60¢ a gallon at Whitehorse, but this is Imperial gallons (five quarts), and it has to be hauled so far that the price does not seem out of line.

T. N. FREEMAN, in his article "Northern Canada and Some Northern Butterflies" (*Lep. News*, vol. 5: pp. 41-42) shows a map on which the Alaska Highway is traced and indicates that until approaching the Alaska border, the arctic tundra zone is not encountered to any great extent. He writes: "The arctic tundra, altho inhospitable at times, supports countless thousands of specimens of a few butterfly species, and at times it is possible to collect over 200 specimens of a single species in a day." I cannot say that I was ever fortunate enough to find such an abundance of butterflies. I tried the muskeg at many points, but found very few butterflies, often none at all. Perhaps I was a little late for their best season. Certainly the tundra seemed very dry, and it was over 90° F. when we crossed into Alaska.

Much of my collecting was done along the Highway at spots which would doubtless be classed as Canadian Life Zone ecologically. *Papilio glaucus canadensis* R. & J. was seen along the roadside frequently until about mile 800, and at intervals in a belt extending from mile 600 to mile 825 a few *Papilio machaon alaska* Scud. were seen. At Rancheria Hotel, mile 710, I

took several of these along the bank of the lake at a spot where sewage from the hotel was seeping into the lake. We stopped frequently at likely looking spots, and my notes show that at mile 107 (there is a mile post every mile so that one can identify his locality very easily), the northern *Colias* became more plentiful and I took many *Colias palaeno chippewa* Kby. (probably); also *Pieris napi* L., *Euchloe creusa* Dbdly. & Hew. and a form of *Euphydryas anicia* Dbdly. & Hew. At mile 159 I took one *Boloria frigga saga* Staud. and saw several more. *Erebia epipsodea* was found all along the route, gradually evolving until at Burwash Landing in the Yukon Territory, we found a geographical form which may be worthy of a separate name.*

As one goes further north the days in summer become longer. In fact, there is practically no darkness at all in July and early August, and we were told that each year a baseball game is played at Fairbanks at midnight without artificial lighting. It is difficult to get used to this. This explains why I collected butterflies at mile 325 as late as 7:30 in the evening, including *Limenitis arthemis* Dru., *Nymphalis antiopa* L. and *N. milberti* Godt., *Boloria selene* Schiff., *Phyciodes tharos* Dru., *Plebeius saepiolus*, and *Colias palaeno chippewa*. Also seen flying at this time of day was a species of the sphingid moth *Hemaris*. At Rancheria Hotel, mile 710, I hiked around the little lake back of the lodge and found two species of *Boloria*, *B. selene* and *B. freija* Thun., and saw a *Carterocephalus palaemon* Pall. At mile 791 I took several *Hesperia* and a number of beautiful little Aegeriid moths, not yet identified, feeding on Yarrow flowers.

One of the best collecting spots found was near Burwash Landing, Kluane Lake, Yukon Territory. Here there were some swales very much like those found in Michigan or New England. But even here there was no riot of butterflies. Besides the distinctive form of *Erebia epipsodea* mentioned above, I took one *Oeneis jutta alaskensis* Holl., one *Coenonympha* (possibly *inornata* Edw.), *Phyciodes tharos*, *Plebeius (scudderii* Edw.?), *P. saepiolus*, *Colias* sp. A little further along I found the *Colias* more common, two species, and a very dark *Pieris napi*.

On July 13 we crossed the Alaska line and left the Highway at Tok Junction where we took the cut-off to the Glenn Highway which goes into Anchorage. Here they were working on the road, and the going was very rough and hazardous: 29 miles in four hours. Forty miles down this road we took what was later to be our commonest butterfly of the trip, *Boloria titania*, near *grandis* B. & McD. On Compositae along the road we took *Plebeius (scudderii?)*, *Colias* sp., *Phyciodes* sp., and *Lycaena helloides* Bvd. This was muskeg area. These five species constituted just about the roster of collecting around Mendeltna Lodge at mile 153 of the Glenn Highway, where we stayed for two weeks. It rained frequently. I tried collecting near Sheep Mountain on the way to Anchorage, but nothing was flying at what looked like an ideal spot.

On the way home from Alaska we found *Boloria titania grandis* everywhere, especially at mile 340 on August 3, where we caught over 50 in 20 minutes. Curiously enough we saw *Nymphalis antiopa* even as far north as

*Note: Since this was written the *Erebia* has been named *E. epipsodea remingtoni* Ehrlich.

mile 1416, within about 100 miles of Fairbanks. They were always flying high and fast across the road, as if bound for some place. Near Dawson Creek on August 4 we saw our first *Speyeria* in Canada, apparently *S. atlantis lais* Edw. This was the last significant collecting we did on the trip, for our time was running out, and we were due back in St. Louis.

My impressions of the trip, from the standpoint of butterfly collecting, are largely disappointment at the relative scarcity of specimens and also one of wanting to go back and try again. If one could travel along the Alaska Highway as slowly as he pleased, searching thoroly, and take a whole summer to do it, he might turn up important things. Surely the weather could not be so bad again! At one place we stopped, at Lesser Slave Lake, a man told us they had not had so much rain in 16 years. At any rate, it was a marvellous trip, and one to add to our store of pleasant memories.

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NOTES ON *ANTHOCHARIS SARA* AND *REAKIRTII*

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When a series of *Anthocharis reakirtii* Edw., which were the offspring of a female *A. reakirtii*, emerged in February and March, 1942, I was puzzled about the relation of this form to *A. sara* Bdv. Within the next eight years I reared several more broods of *A. reakirtii* obtaining the same results as with the first lot. Most of them emerged after ten or eleven months in the pupal stage; a few remained in this stage twenty-two months, and two as long as thirty-four months.

In May, 1950, two confined *A. sara* oviposited. One of these was collected in La Tuna Canyon, Verdugo Mountains; the other, in the Santa Monica Mountains: both localities in Los Angeles County, California. These ova hatched in four or five days, and the larvae pupated in late June. From these chrysalids, seven male and nine female *A. reakirtii* emerged in February, March, and April, 1952. The majority are slightly larger and have more yellow on the under side between the orange patch and the apex of the primary than any of the offspring of *A. reakirtii*.

The results of these rearings seem to indicate that there are two types of *A. reakirtii*: one, the offspring of *A. reakirtii*; the other, the offspring of *A. sara*. I presume that a mating of a pair of the *A. reakirtii* which were offspring of *A. sara* would have produced a brood of *A. sara* that might have emerged this May when *A. sara* was unusually abundant in this canyon. The only *A. sara* I have reared emerged May 9, 1941, only sixteen days after pupation of the larva which was collected on *Descurainia pinnata* at Dume Point, Los Angeles County. Is it possible that the majority of the *A. sara* spend only a few weeks in the pupal stage?

Since the male parent was unknown in every brood of *Anthocharis* with which I worked, no definite conclusions can be drawn. Only extensive breeding experiments can solve the problems involving *A. sara* and *reakirtii*.

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