

A "HIT AND RUN" TRIP TO TEXAS AND NEW MEXICO

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In the spring of 1959 a series of circumstances led us to plan a four day expedition to various areas of Texas and New Mexico. The STALLINGS-TURNER clan was interested in working on the biology of several species of *Megathymus* and *Agathymus* and EHRLICH was badly in need of southern snakes infected with a blood parasite (*Hæmogregarina serpentium*) to use in studies of disease transmission by mites. Our main objective, however, was to explore the Sandia Mountains of New Mexico in search of a new species (representing a new genus or subgenus) of Hairstreak. This search had been triggered by EHRLICH's discovery of a very unusual, tail-less, *Mitoura*-like thecline from this locality, in the collection of NOEL MCFARLAND, a student at the University of Kansas.

Because of pressing business, we were limited to a short foray (May 16-19 inclusive). The members of our party were VIOLA and JACK STALLINGS, Mrs. R. C. TURNER, and the authors.

Leaving Caldwell, Kansas, early on the 16th, we headed south under cloudy skies. The weather was clear, however, when we made our first collecting stop just after noon near Pampa, Texas. There early, dwarfed *Megathymus texanus* Barnes & McDunnough were taken on the wing.

Later we stopped at Elida, New Mexico, where larvæ of *Megathymus yuccæ coloradensis* Riley were examined in *Yucca intermedia* var. *ramosa*, and some pictures were taken of a trio of Pronghorn Antelopes.

At dusk a stop near Elkins, New Mexico produced some 200 oak feeding larvæ of an unidentified *Hemileuca* species, which yielded some 150 pupæ.

Driving late, we reached White City at the entrance of Carlsbad Caverns National Park, where we spent what was left of the night.

Early the next morning, after securing the necessary permits, we began to collect the mesa area, carefully dodging the needle sharp spines of the ubiquitous *Agave lechuguilla*, which, in spite of our precautions, often penetrated our boots. The larvæ of *Agathymus maria* Barnes & Benjamin were abundant in this plant, while only eight larvæ of *Megathymus violæ* Stallings & Turner were found in scattered plants of *Yucca torreyi*. The high temperature kept most snakes under cover, but a number of butterfly species other than "megs" were taken, including: *Papilio polyxenes* Fabricius, *Nathalis iole* Boisduval, *Eurema nicippe* Cramer, *Pieris protodice* Boisduval & Leconte, *Euptoieta claudia* Cramer, *Melitæa definita* Aaron, *Strymon melinus* Hübner, *Mitoura siva* Edwards, *Plebejus acmon* Westwood & Hewitson, *Leptotes marina* Reakirt, *Hemiargus isola* Reakirt, *Everes comyntas* Godart, *Thorybes pylades* Scudder, *Pyrgus communis* Grote, *Celotes nessus* Edwards, *Atrytonopsis vierecki* Skinner, and *Amblyscirtes eos* Edwards.

Late in the afternoon we drove to the vicinity of Nickle, Texas, where the larvæ of *Agathymus carlsbadensis* Stallings & Turner were collected from

Agave parryi. More excitement was provided, however, by "Herman", a four and one-half foot *Crotalus atrox* (Western Diamond-backed Rattlesnake), which was retrieved from under a huge boulder after an hour's hard digging. Herman proved to be infected with hæmogregarines, as demonstrated by the somewhat "sporty" procedure of taking a blood-smear from a vein in the roof of his mouth.

That night we traveled north to Albuquerque.

The morning of the 18th found us madly chasing *Megathymus streckeri* Skinner on the lower western slopes of the Sandia Mountains, just north of Albuquerque. These were soon ignored, however, with the capture of our first specimen of the new Hairstreak. Diligent collecting in the lower reaches of La Cueva Canyon produced another dozen. General collecting later that day was rather good, especially along the road south of Placitas (east slope of the Sandias). The day's catch included: *Papilio rutulus* Lucas, *Papilio multicaudatus* Kirby, *Nathalis iole* Boisduval, *Pieris protodice* Boisduval & Leconte, *Pieris napi* Linné, *Euptoieta claudia* Cramer, *Limenitis bredowii* Geyer, *Apodemia mormo* Felder & Felder, *Atlides halesus* Cramer, *Strymon melinus* Hübner, *Mitoura spinetorum* Hewitson, *Mitoura siva* Edwards, *Leptotes marina* Reakirt, *Hemiargus isola* Reakirt, *Everes comyntas* Godart, *Glaucopsyche lygdamus* Doubleday, *Epargyreus clarus* Cramer, *Pyrgus communis* Grote, *Erynnis martialis* Scudder, *Erynnis propertius* Scudder & Burgess, *Hesperia viridis* Edwards, *Hesperia pahaska* Leussler, *Atrytonopsis vierecki* Skinner, and *Amblyscirtes ænus* Edwards.

We were back at the new species locality at dawn on the 19th. While waiting for the sun's warmth to start the bugs flying we discussed the fact that this *Mitoura*-like insect seemed to associate itself with bear-grass (*Nolina microcarpa*) rather than the locally abundant juniper. The belief in this association was strengthened by the discovery (JS) of a specimen of the insect still at rest deep in the foliage of the plant. The association was confirmed minutes later by the discovery (PRE) of a number of *Mitoura*-like larvæ feeding on the bloom of a bear-grass plant. Nearly 150 larvæ were discovered in a one-hour search, and eggs and egg-shells were later found on the plant. A number of the larvæ were brought back to Kansas where they commenced to pupate within the next three days. On June 6 adults began to emerge.

In addition to the living and preserved larvæ, some 25 adults of the species were taken in the two days. The present authors will describe the life history and habits in a subsequent paper, while the insect itself will be named shortly by EHRlich and H. K. CLENCH.

At 11:30 A.M. we were forced to head for home. We arrived at Caldwell just before midnight, having traveled some 2000 miles in four days.

In total we worked with 38 butterfly species, of which 22 were placed in fixative for use in studies of internal morphology. Of three snakes captured, two were infected with hæmogregarines. Every objective of the field trip was achieved.

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