

June, '07]

ENTOMOLOGICAL NEWS.

231

An Entomological Journey in Mexico, with Special  
reference to Odonata.

By PHILIP P. CALVERT.

As the manuscript on the Odonata for the *Biologia Centrali-Americana* drew near completion, in July, 1906, it seemed desirable to see some of the insects in their native haunts. Mrs. Calvert and I therefore undertook the journey here described with these two objects in view: to obtain a general idea of Mexico and to make some collections of Odonata, more especially in the northern part of the plateau, that being an odonatologically unknown region. Owing to the limited time at our command, the first of the these objects prevented our remaining long in one place so that our collections must be very incomplete, even for that time of year, while our second object took us to some localities at which we otherwise would not have stopped.

The present article will give our itinerary, for future reference, and some notes and suggestions which may be useful to other entomologists visiting the same country. It should be observed that our tour was made in the rainy season and that by common report the rains were heavier than usual. Partly for this cause, the trains on which we traveled were frequently delayed, the total amount of time thus lost between El Paso and Mexico City being 54 hours. Most of this loss occurred in such situations and at such times (after nightfall) as to prevent utilization. We shall not soon forget waiting under the open sky near the station at Aguascalientes from midnight to 4.30 A. M. for a train that was momentarily "expected," through trains here, as in many other places, being one in every twenty-four hours. After Mexico City we had few delays until on the Southern Pacific in Texas. We found the "Excursion into Mexico" of the 1904 edition of Baedeker's "United States" very useful.

The data on the Odonata which we obtained have been incorporated in a Supplement in the *Biologia* volume. Other insects, incidentally gathered, have been placed in the Academy of Natural Sciences of Philadelphia and in the University of Pennsylvania.



## ITINERARY.

July 25-27, 1906. At Colorado Springs.

July 29-Aug. 3. At Grand Canyon of the Colorado River, Arizona.

Aug. 4, 5. El Paso, Texas.

Aug. 6. El Paso, or rather Ciudad Juárez on the opposite bank of the Rio Grande, to Guzman, Chihuahua, 78 miles in four-and-a-half hours by the Ferrocarril Rio Grande, Sierra Madre y Pacifico. Guzman consists of a railroad station and Chinese-kept hotel combined (accommodations poor) and about a dozen adobe houses close to the Lago, or Laguna, de Guzman. The muddy lake is permanent although its area shrinks in the dry season. It has no outlet. Its banks, near the "town" at least, are chiefly of porous andesite lava in whose cavities were great numbers of the Amphipod, *Hyaletta knickerbockeri* var. *inermis*.<sup>\*</sup> A small stream from a spring or well enters the lake near the station; along this stream were nine species of Odonata, including *Plathemis subornata*. Surrounding country largely desert, but there is some grazing land. Long-eared jack rabbits, horned toads, the large Diplopod *Spirobolus*, 6-7 inches long, and *Pepsis* conspicuous members of the fauna.

Aug. 7. Returned to El Paso in the afternoon. The south-bound train to Casas Grandes, the termination of the line, runs on Mondays, Wednesdays and Fridays, the north-bound on Tuesdays, Thursdays and Saturdays.

Aug. 9. El Paso to Nogales, Arizona.

Aug. 10. Nogales to Hermosillo by the Sonora Railway, returning Aug. 11. Hermosillo very hot (96° F. at 5 P. M., 91° F. at 3 A. M.) and depressing. Rio Sonora almost entirely dried up. Very few insects visible, only one species of dragon-fly found—the wide-spread *Orthemis ferruginea*, and that in the irrigated plaza in front of the principal church. Good hotel (Arcadia, kept by Americans), electric lights and mule trams on the principal streets, mounted police, etc. Were I to repeat

<sup>\*</sup>For the identification thanks are due to Prof. S. J. Holmes, of the University of Wisconsin.



this part of our excursion, I should try Magdalena or Santa Ana, between Nogales and Hermosillo. Information about Sonora train connections to Hermosillo, etc., was almost unobtainable at El Paso, even at the Southern Pacific ticket agency.

Aug. 12. At the Mexican town of Nogales (Hotel Modern, fair, French). River dried up. A very small cow pond at the southern end of the town furnished six species of Odonata. A fair number of other insects gathered in grassy fields, and under electric light before sunrise of next day.

Aug. 13. Returned to El Paso.

Aug. 15. El Paso to Chihuahua City by Mexican Central.

Aug. 16-18. Chihuahua City (Casa Robinson, American kept; local report would make Hotel Palacio better). Rain interfered much with collecting, dragonflies scarce (2 spp.). Many wild flowers in blossom, butterflies and beetles abundant west of city, beyond the Santuario (tram-car from chief plaza), which seemed to be the best collecting ground near at hand. Great individual variation in colors of the Scarabaeid, *Cotinis mutabilis*, in same spot, both here and at Santa Rosalia.

Aug. 19, 20. Santa Rosalia. The warm sulphur springs, or baños (Gran Hotel de la Cueva, fair, chiefly patronized by Americans) three miles above the town, on the Rio Conchos, reached by stage, afforded one of the best collecting grounds for dragonflies (12 spp.; northern limit of *Erythrodiplax con-nata*; *Libellula flavida* Hagen = *L. comanche* nobis, see Ent. News, May, 1907, page 201, new to Mexico) of our trip. Much cotton is raised in the vicinity.

Aug. 21. Torreon (excellent new hotel Salvador) as a base for

Aug. 22. San Pedro in Coahuila. At the railroad station (Monterey division of Mexican Central) are several ponds wherein Odonata breed; imagoes of 10 species taken. Between Torreon and San Pedro, a great cotton-raising district.

Aug. 23. En route for Zacatecas.

Aug. 24, 25. Zacatecas, a quaint and picturesque town in the midst of barren, silver-producing mountains, with almost no insects.



Aug. 26, 27. Aguascalientes City. (Hotel Washington, good). Ponds at the public baths near the railroad and also a little farther westward, but on the eastern edge of the town, yielded most of our Odonata (7 spp.)

Aug. 28. Queretaro.

Aug. 29.-Sept. 1. On or near Lake Chapala, chiefly at Ocotlan (Hotel Central, small, unpretending, Spanish, good), also at Chapala (Hotel Arzapalo, excellent). The stage-route from Atcuiza to Chapala was out of service, the road being impassable from mud. A steamboat runs every other day, except Sunday, from Ocotlan to Chapala, returning the next day, but the schedule is unreliable. The lake is largely encroached upon by the water-hyacinth (*Eichhornia*). Twelve species of Odonata at these two localities; *Aeshna luteipennis* and *Miathyria marcella* abundant, the former especially so in the streets of the town of Chapala on Aug. 30, between 5 P. M. and sunset, chasing gnats.

Sept. 1-4. In Guadalajara (Hotel Garcia, good) and immediate vicinity. No attention paid to insects as the locality has been worked over by Messrs. Schumann, McClendon and Tower.

Sept. 4. En route Guadalajara to Mexico City. A delay of four hours at Yurecuaro enabled us to gather a few insects (9 spp. Odonata) along the ditches near the station before heavy rain fell.

Sept. 5-7. Mexico City and vicinity. No collecting attempted as others have done much here.

Sept. 8. To Orizaba (Hotel France, excellent, French). No collecting done.

Sept. 9. Back to Irolo and thence to

Sept. 10-13. Jalapa (Gran Hotel, excellent, Spanish).

Grand views of snow-capped Orizaba and of nearer Cofre de Perote in the early mornings. *Hetaerina tolteca*, previously known from a unique type, found associated with *H. cruentata* along forest stream. First acquaintance with living Heliconids, *Callicore*, *Morpho*, etc., the number and variety of beautiful Lepidoptera at times fairly bewildering. *Chrysina macropus*, that fine green Scarabæid with violet legs, found under electric



lights in the Plaza and also seen flying in bright sunlight. Sept. 13. Mostly at Xico in the coffee district, reached by rail, and at the fine water-fall at Texolo. Near this last a swarm of several hundred whitish and yellow butterflies, observed to alight repeatedly on the same damp spot, of about one square foot in area, for at least two hours, proved to be composed of four species of *Terias* (*fabiola*, *tenella*, *proterpia*, *mexicana*) and a *Catopsilia*.

Sept. 14-18. Mexico City and vicinity.

Sept. 17. Popocatepetl Park or Cedral (good but expensive English hotel), a short distance beyond Amecameca. Insects few; Odonata very rare, none taken. Fine views of Popocatepetl and Istaccihuatl on the way down, but peaks cloud-covered for hours in middle of day.

Sept. 18-20. Toluca (Hotel Andueza; there are several others), very clean city, beautiful scenery. Nevada de Toluca cloud-covered entire time of our stay. Walked to villages just north of city on Sept. 19, where a few (4) species of Odonata were fairly abundant around pools in the midst of fields of maguey and maize. Butterflies scarce, many humming-birds and lizards. The drainage of Toluca is conveyed by an open ditch to a field, several miles from the city, for subsidence and evaporation. Swifts abundant over this standing water, the only dragonfly here being *Ischnura denticollis* in grass along the water's edge.

Sept. 20, 21. En route to Saltillo.

Sept. 22. Collected in the morning at the Baños de San Lazaro y la Asuncion, on north edge of Saltillo, and in the afternoon near river, opposite the town, by pools along the railroad near the Panteon. The desert near at hand. Nine species of Odonata in all, a single *Enallagma semicirculare* beaten out of the grass at the latter locality. The dining room of the American-built Hotel Coahuila at which we stopped swarmed with *Blattella*, a few of which also invaded our sleeping room on the third floor.

Sept. 23. Left Mexico at Nuevo Laredo en route to Galveston, thence by steamship to New York.







In all 100 records for Odonata were obtained; 85 of these are new, *i. e.* all those from all localities at which any collecting was done excepting Queretaro, Jalapa and Xico. The 100 records represent 43 species, 31 species being taken or identified from the localities visited north of the twenty-first parallel of north latitude. This number does not indicate a very rich Odonate fauna for the northern Mexican plateau, although, no doubt, many additions are yet to be made to the list.