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LAC INSECTS.

Mr. B. P. Mann sent me 24 July 1885. two specimens with lac insects from Lavedo, Sonora, collected by Dr. E. Palmer, about 60 miles from Fort Yuma on the Colorado River. One is *Carteria mexicana*, Comstock, Report U. S. Dept. agric. 1881 p. 212; Cornell univ. Exper. stat. 1883, 2d rept. p. 130 no. 125, from the twigs of *Larrea mexicana*. The other from *Pluchea borealis* has much larger lac lumps and seems to be new. Both insects puncture the older stems and the lac is secreted upon them. This gum occurs in great abundance and is used by the Indians to mend their baskets and pots and to fasten the handles into them. Moreover the Indians in their games and walks have foot-balls which they make by coating stones with this lac and kick along before them.

H. A. Hagen.

MIGRATION OF AGANISTHOS ACHERONTA.

Mr. S: H. Scudder having asked me for the details of an observation to which reference is made in the *American naturalist*, April, 1877, v. 11, p. 245, I have turned to my notes made in Brazil, in 1871, and found the following entry:—

“Fr. Feb. 17. . . . Great numbers of No.

1503 followed each other singly at intervals across the meadow in front of the house, migrating apparently, and were very difficult to catch.”

Mr. H. K. Morrison states that my No. 1503 is *Aganisthos acheronta* Fabr. I believe the determination was made for Mr. Morrison by Mr. Herman Strecker.

I remember the occasion of the observation. The butterflies came with powerful rapid, direct flight, perhaps from three to five meters above the level of the meadow, from the direction of a rising ground or small hill near by. After seeing several and noticing the uniformity of their behavior, I ascended the hill, and thus, so far as I recollect, came within reach of them. From how great a distance they came I could not tell, nor can I now say from or to what direction of the compass they flew. The season, as will be noticed, was early fall

B: Pickman Mann.

DURATION OF LIFE IN AN EPHE- MERA.

What is probably *Ephemera (Leptophlebia) cupida*, is common at Providence, R. I., on the banks of the Seekonk about the middle of May. Of four specimens carefully taken, some of them at different times, with a net and allowed to fly into a bottle, and then transferred to a tumbler, one lived about twelve hours, and another 24 and a third 48 hours. A fourth individual was captured Saturday p. m., at five o'clock. It was in the subimago stage, being of a dull slate-gray with none of the reddish hues of the imago. It lived about a day before moulting, when the colors appeared, *i. e.*, flesh tints at the base and on the costa of the fore wings, as well as on the pterostigma. It had moulted Monday and lived a full week after, being observed alive the following Monday morning, but was found dead in the tumbler Monday morning, May, 14, 1888. It had thus lived over eight days, without taking food. Had

it mated soon after casting its subimago pellicle it is probable that it would not have lived but a day or two longer. A. S. Packard.

PAIRING OF XYSTICUS TRIGUTTATUS.

The engraving shows the pairing of one of our most common crab spiders, *Xysticus triguttatus* Keyserling. The spiders were seen on the 5th of June, among the short



grass in an open pasture between Salem and Swampscott, Mass. The female held herself, head downward, on a blade of grass with the abdomen turned away only enough for the male to reach under it with his palpi. There did not appear to be any web on the grass, though there may have been a few threads for the female to hold by. J. H. Emerton.

TROX AT ELECTRIC LIGHT.

The fondness of various species of *Trox* for electric light has increased considerably the list of species known to inhabit Illinois. The following list includes all known to me.

1. *Trox scabrosus* Beauv. Taken at electric light at Springfield 20 June 1885, by Mr. C. A. Hart.
 2. *Trox monachus* Hbst. There is a specimen of this species in the collection of the State entomologist from Union Co. It has also been taken near Pittsfield Ill.
 3. *Trox asper* Lec. One specimen obtained at electric light at Springfield.
 4. *Trox punctatus* Germ. Not uncommon throughout the state.
 5. *Trox tuberculatus* Deg. Specimens in the State entomologist's collection taken at Centralia 22 April.
 6. *Trox erinaceus* Lec. Rather rare but found throughout the state.
 7. *Trox capillaris* Say. Specimens in the State entomologist's collection from La Salle Co.
 8. *Trox unistriatus* Beauv. Quite common throughout the State.
 9. *Trox foveicollis* Har. Rather rare.
 10. *Trox terrestris* Say. I have seen specimens from Pittsfield.
 11. *Trox aequalis* Say. Rare in northern and central Illinois.
 12. *Trox scaber* Linn. Taken at Galesburg.
 13. *Trox atrox* Lec. Recorded by Horn from Illinois.
- Only eight other species are known in the United States.

C. W. Woodworth.

LUMINOUS EGGS OF INSECTS.—E. Mulsant observed and recorded in 1862 the fact that the eggs of *Lampyrus* were luminous. This observation was confirmed by Dr. A. Laboulbène, who published the statement in 1882, but some entomologists have doubted the fact of their luminosity. Wielowiejsky, who published a paper in 1882, that dealt thor-