

Note on the Invertebrate Fauna of Soldado Rock

By JOHANNA DARLINGTON

31 Windmill Lane, Hull Road, York YO1 3LG, England.

I visited Soldado Rock on 9-10 July 1966 in company with Richard French and collected a small number of invertebrates which were later identified.

Two species of cockroaches seemed to be well established. The American cockroach *Periplaneta americana* (L.) (Blattinae) was numerous especially in the gully. The much larger and more sluggish cockroach *Blaberus discoidalis* Serville (Blaberinae) was represented by three adult females caught at night. These were removed to U.W.I. and successfully cultured, adult offspring being obtained after six months for males and seven months for females. Princis and Kevan (1956) recorded a probable specimen of *B. discoidalis* collected on Soldado Rock in 1931 by J.G. Myers, but they considered the colour pattern on the pronotum to be atypical.

Several predators were collected at night, hunting in the open. Two species of scolopendrid centipede were identified by R.L. Hoffman of Radford College, Virginia, USA. *Scolopendra angulata* (Newport) (Scolopendrinae) is a large, robust species identified from two specimens. *Rhysida nuda* (Newport) (Ostostigminae) was identified from a single juvenile. A small solifugid (Chelicerata; Solpugidae) 2 cm long was identified by D.J. Clark of the British Museum (Natural History), London, as *Ammotrechella geniculata* (C.L. Koch). This species is also known from the Bahamas, Guadeloupe, St. Vincent and Venezuela.

I also found two live queens of the bachac ant *Atta cephalotes* L. on the shore above high water mark. There was no sign of a nest on the island. The queens had probably flown from Trinidad with the help of a following wind (Cherrett, 1969).

The shore was rocky and exposed with quantities of driftwood and dead land plants cast ashore. The crab *Grapsus grapsus* (L.) and the snail *Littorina zic-zac* Gmelin were abundant, as was also a robust isopod identified by T.E. Bowman of the Smithsonian Institute, Washington, D.C., U.S.A., as *Ligia (Hirtiligia) baudiniana* Milne Edwards, a species with known distribution from Miami to Rio de Janeiro.

Brown (1947) mentioned seeing and collecting "a number of remarkable moths" on Soldado Rock, but did not describe them. V.C. Quesnel (pers. comm.) identified them as *Urania leilus* L. (Hesperioidea, Uraniidae), a conspicuous black and green moth resembling a swallowtail butterfly (See Addendum). Quesnel (1982) in his account of a T&T.F.N.C. visit mentioned grasshoppers, spiders, ants, black dung beetles and pill bugs, none of which have been identified, so there is still plenty of work to be done by later visitors.

References

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Addendum By VICTOR C. QUESNEL

Records of the Imperial College of Tropical Agriculture preserved in the library of the University of the West Indies at St. Augustine show that Leslie Brown was a student at ICTA during the academic year 1939 - 1940. Although in the section of his book that deals with Trinidad and Tobago he gives no dates, he states that his second visit to Soldado Rock completed his expedition to Trinidad's bird islands. It was of this visit that he states "there were also a number of remarkable moths, and Peter Paine caught some" and it was these moths that I identified as *Urania leilus*. There is bound to be some uncertainty in an identification made without seeing the specimens and years after their collection but the circumstantial evidence is compelling.

Brown's first visit to the country's bird islands (St. Giles in Tobago) was on a carnival weekend which can now be precisely dated with reference to Ash Wednesday, which was 7 Feb., 1940. He visited Little Tobago at Easter, 24 March 1940. Since he went to Soldado twice, with the second visit two weeks after the first, that second visit could not have taken place earlier than 14 April. However, this timetable assumes that his two visits to Saut d'Eau took place between the two visits to Tobago. This is unlikely since on his second visit to Saut d'Eau some of the pelicans had almost full-grown chicks, which, from information in French (1973), would have required an egg-laying date some 12 weeks earlier. Thus, if that visit had been made on 17 March the eggs could not have been laid much after 23 Dec. 1939. But French (1973) states that the pelican "breeds annually from February to April". This I interpret to mean an earliest egg-laying date of 1 Feb. and the earliest possible date for Brown's visit as 26 April. If this supposition is correct, his second visit to Soldado could not have taken place before mid May. In fact, from his descriptions of the nesting of the terns and martins on Soldado, it is reasonable to conclude that his visit took place in June.

Brown's account gives few facts about the moths, but we do know that they were: 1) numerous; 2) "remarkable", i.e. conspicuous or attractive, or both; 3) day-flying; 4) far from the Trinidad mainland on an island where only five species of plants grow, and with the possibility of one of these being the larval food plant almost non-existent. Thus, we can conclude 5) that the moths were on some sort of dispersal flight. There is only one Trinidad moth, so far as I know, that qualifies on all counts, *Urania leilus*. The taxonomy of *Urania* is problematical but Smith (1972) divides the genus into two species, *U. fulgens* occupying Central America and north-western South America, and *U. leilus* occupying north-eastern South America (including Trinidad) and the Amazon. Both species migrate in the same year though not necessarily at the same time. *U. fulgens* migrated in Panama in July-August 1940 (Smith 1972) and *U. leilus* almost certainly did here as well, though documentary evidence for this has not been obtained. The June data for Brown's visit to Soldado brings it close to the time of the *Urania* migration in Panama and makes it extremely likely that the moths recorded by Brown were *U. leilus* in the early days of migration.

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References

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