PHYCIODES BATESII (NYMPHALIDAE) IN MISSISSIPPI: AN EXAMINATION OF THE PROBABILITY OF OCCURRENCE

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Before publication of "The Butterflies of Mississippi" (Mather and Mather, 1958), the possibility of the occurrence of *Phyciodes batesii* (Reakirt) in Mississippi was considered, and we concluded that it was so remote as not to merit mention. It was thus with considerable surprise that I learned, through the kindness of Mr. Harry K. Clench, of the statements in Hall (1930, pp. 38–39) as follows: "*P. batesii* Reak. . . . *Habitat.*—Eastern United States, New York, New Jersey, Pennsylvania, Maryland, Ohio, Virginia, West Virginia, Mississippi. An obscure species, . . . In the British Museum there are specimens from Virginia, 'United States,' and an unusually dark \diamond from Livingstone [sic], Mississippi."

On learning of this, I wrote to Mr. N. D. Riley at the British Museum (Natural History) who replied as follows: "The specimen is in the collection and quite recognizable. The data labels are four in number and are as follows: (1) Printed label 'Livingston / Mississipi / F.D.Godman,' (2) M.S. label: 'Livingston / Mississipi / F.D.G.,' (3) M.S. label: 'ALABAMA,' and (4) Printed label: 'Phycoides batesii Reak. / Godman-Salvin Coll. 1915-3." Riley added that the third label was almost certainly written and put on the pin by H. T. G. Watkins. He also added: "I took the liberty of comparing the specimen with our series standing under the name campestris and as a result I am not at all satisfied that this alleged Mississippi batesii is a batesii at all. The pattern of the hindwing is much more like that of *campestris*. . . . We have three campestris labelled 'Texas' which match it very well. . . ." Later Mr. Riley wrote again advising that Dr. Lionel Higgins who has been working on Phyciodes had also examined the specimen and agreed that it was campestris. Riley added: "It appears to have been collected by Godman himself . . . and he was most careful about data. I have not been able to find any record of journeys of his in the Mississippi area, but there is a possibility that I might find something out from one of his two daughters. . . ." Mr. Riley finally forwarded me a letter he received from Miss C. Edith Godman who wrote: "We have no records of my Father's journeys but we find in the Introduction to the Biologia the following, which might easily have given an opportunity of his collecting a butterfly in Mississippi. He writes that in Autumn of 1887

'Crossing the Atlantic to New York I took the train to Mexico City, then a 6-day journey' and later 'We left Mexico in the spring of 1888 having been absent from home for about 5 months, and returned to England via California and New York.' He also mentions in connection with specimens for the *Biologia*, 'On arrival in England the various consignments were opened—every specimen labelled with its exact location and the name of the collector attached.'—so this would corroborate the accuracy of the labelling on the specimen which you mention. I hope that these quotations may help to resolve any doubts which you may have had."

So far as I can determine the only place in Mississippi that is named Livingston (or Livingstone) is a post office substation so designated because of its proximity to Livingston Park in the city of Jackson. There is a Livingston in Alabama, located about 12 miles east of the Mississippi–Alabama boundary. On the possibility that a collector might have given the locality name Livingston to a specimen taken somewhat west of there in Mississippi, I wrote to Dr. Ralph L. Chermock at the University of Alabama, explained the circumstances, and invited his comments. His reply included the following: "I would strongly suspect that the specimen . . . has been mislabeled. . . . Livingston, Alabama would be way out of the range for *batesii* or *campestris* . . . there is a Livingston in Montana which would be in the range of *campestris*."

Livingston, Montana is on the main line of the Northern Pacific Railway and is the junction point for the branch line to Yellowstone Park. Elrod (1906) recorded "*Phyciodes pratensis* Behr" and *Phyciodes camillus* Edwards from localities in Montana not far from Livingston. The former is now regarded (dos Passos, 1964) as a synonym of *campestris* and the latter as a subspecies of *campestris*.

From this examination I conclude:

(1) Hall (1930) unfortunately published an erroneous record because of its apparent authenticity.

(2) Watkins probably established that there was no "Livingston" in Mississippi and attempted, incorrectly, to correct the state named on the label.

(3) Someone, possibly Godman, perhaps concluding from the indicated, incorrect, locality label that the specimen came from too far east to be *campestris*, misidentified it as *batesii*.

(4) The original, unfortunate, error occurred when Godman, in what was a most unusual lapse for him, recorded the locality as "Mississipi" when it was not. One is reminded of the difficulties resolved by Burns (1964, pp. 124, 189) concerning the recorded occurrence of two species

in Montana by establishing that the locality labels on the specimens read "Mo." which he noted is "our somewhat irrational abbreviation" for Missouri.

(5) The specimen is almost certainly *P. campestris*¹ and most likely was taken at Livingston, Montana.

(6) No change is indicated in the conclusion that the possibility of the occurrence of *Phyciodes batesii* in Mississippi is so remote as not to merit mention on our faunal lists.

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A NEW SPECIES OF *GLAUCINA* (GEOMETRIDAE) FROM TEXAS

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While making genitalic slides of male *Glaucina* specimens, I discovered two which did not agree with any described by F H. Rindge in his revision of the genus (1959). As the color of the wings of these two specimens is of a more neutral, ashy gray than is the case for most *Glaucina*, and paying attention to the course of the t. p. line, it was easy to select five more male specimens which proved to have similar genitalia. Dr. Rindge, to whom I submitted a sketch of the rnale genitalia, confirmed my impression that I was dealing with a new species. A description of it follows:

Glaucina mayelisaria A. Blanchard, new species

MALE: *Head*: Vertex gray, front rough scaled, gray except dorsolaterally swollen areas covered with black scales; dorsolateral areas more swollen where they meet at top of front than at midlevel of front where they diverge almost reaching eyes, faint indication of ridges laterally along the eyes in lower half of front; palpi long, extending beyond front about half of diameter of eyes, with blackish scaling.

¹ On 24 September 1965, while I was visiting at the British Museum, London, Mr. Riley kindly showed me the series of *P. batesii* in that collection. We noted that the Godman specimen was no longer there. Further examination disclosed that the specimen had been moved to the portion of the collection with *P. campestris*. The Godman specimen closely resembles other *P. campestris* from Montana, which are in the British Museum.