

NOTES OF MARYLAND LEPIDOPTERA. 5.
A NEW SUBSPECIES OF *POANES MASSASOIT* (HESPERIIDAE)

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On 19 June 1962, one of us (WAA) captured two unusual specimens of *Poanes massasoit* Scudder in New Bridge, Dorchester County, Maryland. Upon seeing these specimens and learning of their origin, Simmons suggested that they might be representatives of a new subspecies, and further collecting trips were planned. On 12 July 1962, 28 additional specimens were collected from the same locality, and all were noted to differ considerably from both *P. m. massasoit* Scudder and *P. m. hughi* Clark, the previously described northeastern subspecies.

Our collections contain many examples of *P. m. hughi* Clark from northcentral Maryland including its type locality. Morphological comparisons of our eastern shore specimens with those of *P. m. hughi* and *P. m. massasoit* indicate that important taxonomic differences exist between the three entities. A distributional study reveals that our new specimens (Figs. 1-10) represent the most southeastern end of a cline, in which *P. m. massasoit* is the most northerly taxon, with *hughi* representing an intergrade between our new subspecies and *P. m. massasoit*.

The apparent differences noted as one studies the cline from north to south are that the specimens become somewhat larger and there is a progressive loss of areas of yellow scales, especially on the underside of the hindwing of both sexes and on the upper surface of the wings of the female. In this study we will make comparisons with *P. m. hughi* alone as Clark (1932) has already very adequately compared *P. m. massasoit* and *P. m. hughi*.

We name this new subspecies after our late, good friend Franklyn H. Chermock, who plied us with specimens, good humor and many interesting stories about collecting and collectors.

***Poanes massasoit chermocki* Andersen and Simmons new subspecies**

Figs. 1-4, 9-10

Holotype. Male: Forewing length 14.7 mm. Upper surface, forewing: plain, unmarked, color dark, blackish brown with faint mahogany iridescence.

Upper surface, hindwing: same as forewing.

Under surface, forewing: dark brown generally with slightly lighter brown scales at apical area and just inside costal and outer margins. Three small, sub-apical, yellow-brown spots at costal margin in spaces between veins R-3 and R-4, R-4 and R-5, and R-5 and M-1.

Under surface, hindwing: tan at outer margins, brown centrally. Five yellow, submarginal spots arranged in a rough semicircle paralleling outer margin. A small yellow spot also in discal cell. Between this spot and two of the submarginal spots is a well-defined area of tan scales.

Allotype. Female: Forewing length 16.0 mm. Upper surface, forewing: ground color is the same as in male. Three subapical yellow spots extending in a line inward from costal margin. In postmedian area between veins M-2 and M-3, and and M-3 and Cu-1 are two larger yellow spots, the lower one squarish.

Upper surface, hindwing: same as in male. In rare specimen, only a faint suggestion of one yellow spot in postmedian area.

Under surface, forewing: as in male except with addition of two postmedian spots corresponding to those of upper surface.

Under surface, hindwing: same as in male.

Type localities. Holotype: New Bridge, Dorchester County, Maryland, June 19, 1962. Allotype: same locality, July 6, 1963.

The types are deposited in the U. S. National Museum, Washington, D.C. Male and female paratypes will be deposited in the American Museum of Natural History, New York and in the Carnegie Museum, Pittsburgh, Pennsylvania.

Differences between *P. m. chermocki* and *P. m. hughii*

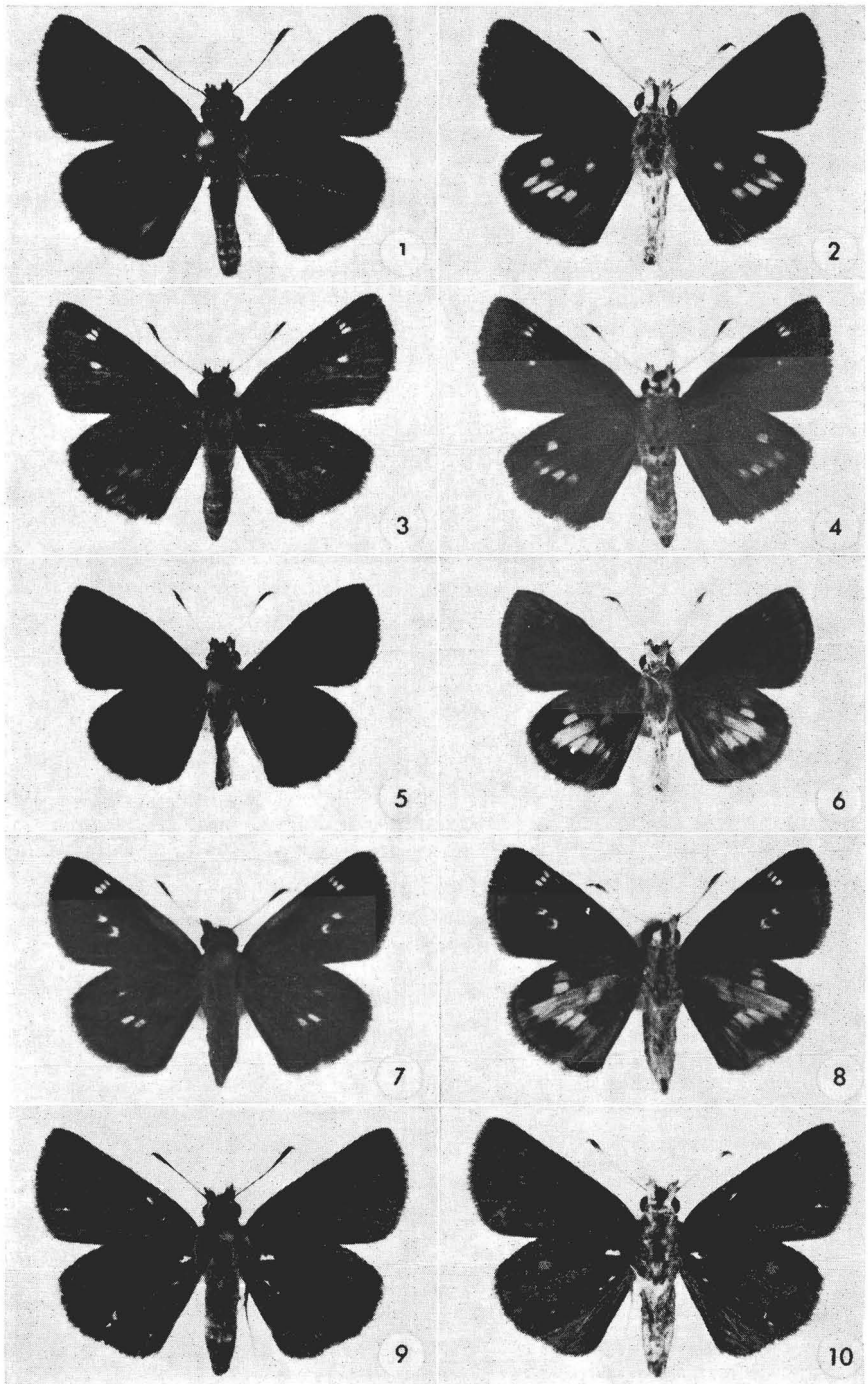
1. The most striking difference is in the under surface of the hindwing where the extensive yellow marking (extending from the discal cell outward to include the submarginal yellow band) of *hughii* is reduced to the narrow yellow submarginal, roughly semi-circular band of individual spots of *chermocki*.
2. The maculation of the *chermocki* female is much reduced on the upper surfaces, so that in half the specimens the forewing is immaculate on the upper surface.
3. The size of *chermocki* is somewhat larger, averaging about 0.5 mm larger per forewing.

DISCUSSION

The locality of New Bridge, Dorchester County, is in the southernmost section of the eastern shore of the Chesapeake Bay, 80 miles due south of the nearest known colony of *P. m. hughii* in Cecil County. Cecil County is the northernmost county on the eastern shore of Maryland. It is divided between coastal plain in its southern portion and piedmont in its northern. The specimens of *P. m. hughii* from Cecil County were

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Figs. 1-10. *Poanes massasoit* subspecies from Maryland. Left side dorsal surfaces; right, ventral surfaces. 1-4, *P. m. chermocki* (subsp. nov.), New Bridge, Dorchester County: (1 & 2) holotype, male, 19 June 1962; (3 & 4) allotype, female, 6 July 1963. 5-8, *P. m. hughii*: (5 & 6) male, Towson, Baltimore County, 3 July 1954; (7 & 8) female, Beltsville, Prince Georges County, 20 July 1967. 9-10, *P. m. chermocki*, form "suffusa", New Bridge, Dorchester County, 6 July 1963.



collected in the piedmont area. Much collecting on Maryland's eastern shore coastal plain between the two areas has not produced any closer colonies. This deme in Dorchester County is thus geographically somewhat isolated from the nearest population of *P. m. hughi* and at the present time this population represents the only one known to us from this region.

The specimens of *P. m. chermocki* are rather homogeneous in their maculation and size as compared with *P. m. hughi* populations. The under surface of the hindwings of specimens of *chermocki* are strikingly similar and there is only slight variation in the spots of the upper surfaces in the female. In our *hughi* specimens, on the other hand, the upper surfaces of the female vary from being spotted on both wings to some having none on either wing, this being in agreement with Clark's description of his subspecies. The underside of the hind wing is similarly varied. Clark (1932) himself described one specimen from Beltsville, Maryland, which is very like *chermocki* and he pictured another such specimen in the frontispiece of his *Butterflies of Virginia* (Clark & Clark, 1951). We note that in our collections of *hughi* from north central Maryland forms similar to *chermocki* occur at a rate of approximately 4 per cent. The form "suffusa" also occurs in this new subspecies. In our series its incidence is about the same as in *hughi*, i.e., 1 in 10.

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