

***Proteides mercurius grenadensis* Pinchon & Enrico (Hesperiidae)
in Grenada, with notes on *Nyctelius nyctelius* Latreille (Hesperiidae)
and other Lepidoptera observed, October 1995.**

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INTRODUCTION

On a visit to Grenada, 4-5 October 1995, I spent just over one hour collecting butterflies. This collection of 36 specimens represented 12 species, of which seven were Hesperiiidae. Butterflies were collected along a roadside, and in a patch of scrub and degraded forest on a hillside overlooking the Ramada Renaissance Hotel, Grande Anse, between 06.30 and 08.00 on 5 October, 1995. Several specimens were taken at the flowers of a legume tree which was not familiar to me, but reminiscent of an *Acacia* sp. (woolly, pale yellow flowers).

***PROTEIDES MERCURIUS GRENADENSIS*
PINCHON & ENRICO**

Pinchon and Enrico (1969) described ssp. *grenadensis* on the basis of a single specimen they collected in Grenada in 1967. I have not seen their publication, but the relevant information from their work is summarised in Smith *et al.* (1994), together with information on the other Caribbean subspecies of this large skipper. The Grenada specimen resembles subspecies *angasi* Godman and Salvin, except for the presence of only a single discal hyaline spot F, where ssp. *angasi* has spots in spaces 1B, 2, 3 and cell, similar to those of the mainland ssp. *mercurius* which is found in Trinidad and Tobago (Cock 1986). As Smith *et al.* (1994) state, further material from Grenada would be desirable to see if this is a consistent form, justifying Pinchon and Enrico's designation of a new subspecies.

The recorded distribution of ssp. *angasi* is Dominica, St. Lucia, Tobago and probably Martinique. If this were correct, the Grenada population would represent a distinct entity within the range of *P. mercurius angasi*. However, as I have pointed out (Cock 1986) the Tobago specimen of ssp. *angasi* in the Natural History Museum, London, is almost certainly a mis-labelled specimen from Dominica. Therefore the Grenada population occurs between the known range of *P. mercurius angasi*

and that of *P. m. mercurius*.

I collected a female *P. mercurius* at flowers of a legume tree, and saw at least one more. My specimen has only one discal hyaline spot F, a broad one in space 2 just beyond the origin of vein 3 (Fig. 1). It also has a small costal spot level with the beginning of the club, which Smith *et al.* (1994) do not mention. The UNH of my Grenada specimen matches *P. m. vincenti* as illustrated by Smith *et al.* (1994, plate 26.9), but the UNF is darker (Plate 2). This capture would seem to endorse the opinion of Pinchon and Enrico (1969) that the Grenada population is distinct.



Fig. 1. Female UPS *Proteides mercurius grenadensis* Pinchon & Enrico, Grenada, Grande Anse 5.x.1995 (M.J.W. Cock). Scale bar in mm.



Fig. 2. UNS as for Fig. 1.

NYCTELIUS NYCTELIUS LATREILLE

During my visit to Grenada this was a common species and five males and a female were collected. The males rested on vegetation at around 2m above the ground in scrub forest clearings, two or three to one sunlit patch.

This species is reported to occur in two subspecies: *nyctelius* which is widespread in Central and South America and much of the Caribbean, and *agari* Dillon from Dominica and St. Lucia (Evans 1955). Subspecies *agari* was described from Dominica (Dillon 1947) and distinguished from the mainland form (Brazil, Venezuela and Guyana specimens) by (1) the darker colouring UPS, (2) larger hyaline spots in mid F (spaces 2, 3 and cell?), (3) indistinct UNS markings, (4) basal half of costa UNF fulvous, (5) UNH fringe ("flying scales of disk") fulvous, (6) much darker UNS, (7) broader dark median band UNH, and (8) ochreous colouring UNS head and fore femora. Dillon (1947) based his description on a series of ten males, and gives the wing expanse as 33-41mm (but does not suggest this ssp. is smaller than the nominate one). Dillon also comments that Cuban specimens seem to be intermediate between *agari* and the mainland ssp.

Evans (1955) restricts ssp. *agari* to the populations of Dominica and St. Lucia, noting that the fringes of the nominate subspecies are grey whereas in ssp. *agari* they are dark ferruginous, and that ssp. *agari* is darker with narrower markings (not larger as Dillon stated). Riley (1972) largely follows Evans, and notes that this form occurs sporadically outside Dominica and St. Lucia, but is doubtful as to its validity as a subspecies. Smith *et al.* (1994) note that ssp. *agari* compared to ssp. *nyctelius* is smaller, much darker above, dark purplish on the underside, and with reddish brown fringes and ochreous palpi, and that this form has been found from Antigua to Grenada and Barbados, but again are uncertain as to its status and the limits to its range. They suggest that comparison of a good fresh series from the Lesser Antilles with mainland material might throw light on the status of ssp. *agari*.

Here, I compare my Grenada material with photographs of specimens from Dominica in the United States National Museum, and specimens in my collection: a male and four females from Trinidad and a male from Tobago. The size of the Grenada males is not constant, the fore wing length varying from 15 to 17mm (expanse 35-40mm); the Trinidad male measures 17mm (expanse 40mm) and the Tobago male 16mm

(expanse 39mm). These measurements are within the range given by Dillon for ssp. *agari* (33-41mm), and hence there is no support from this small sample for the suggestion of Smith *et al.* (1994) that populations can be distinguished by size.

(1) Darker UPS. The upper surface colouring of Grenada material is a good match to Trinidad and Tobago material of the same age. It should be remembered that museum specimens of Hesperinae lose their fresh blackish brown colour over time, to become brown. This takes ten years or more, but if fresh specimens are compared with old ones, this difference is obvious. I have not seen this observation published, but it must be widely known amongst those who work with this group. Hence, noting that Dillon (1947) was working with fresh material collected in 1944, undoubtedly this would have appeared darker than many museum specimens. Thus, UPS colour is unlikely to be reliable for distinguishing these populations when working with short series of variable age.

(2) Size of hyaline spots middle F. I can see no significant differences in the F spot sizes between the four islands, but longer series would be needed to be confident of this.

(3) Indistinct UNS markings. The UNS markings in all male material seem equally distinct, but the Dominica and Grenada material has the pale areas a darker purple, so that the markings are less contrasting. In some Trinidad female specimens the markings are less distinct.

(4) Basal half of costa UNF fulvous. The Grenada and Trinidad specimens have this area brown, differing from the Dominica material in this regard.

(5) UNH fringe fulvous. The wing fringes of the Grenada specimens vary from light brown to brown and are comparable with Trinidad and Tobago specimens in this regard. The photographs of Dominica material before me show fulvous fringes in the male, but those of the female are not so clearly different.

(6) Much darker UNS. The most striking difference between these populations is that Grenada and Dominica males have a consistent heavy purple flush to the paler markings UNH (partially overlaid with ochreous scales in fresh specimens), whereas in Trinidad material this area has at most a lilac flush. The two populations are easily distinguished by this character, yet Dillon (1947) only referred to the UNH as being much darker.

(7) Broader dark median band UNH. This seems slightly broader in Dominica and Grenada males than

in Trinidad and Tobago males.

(8) Ochreous colouring UNS head and fore femora. The colouring of the basal portion of the forelegs, the ventral surface of the head, and the palpi is variable in the Grenada material; at one extreme, these areas are close to white, while at the other, they are clearly ochreous, and in one specimen the anterior portion of the palpi is dark. Trinidad material also varies, although no specimens with these portions ochreous have been noted. The range of variation of the Grenada material includes that of the Dominica photographs.

I have noted one other minor difference between the Grenada specimens and Trinidad material, at the base of the UNF. In Trinidad and Tobago specimens, vein 12 within the costa is white, whereas in Grenada material it has at most a few ochreous scales. Confusingly, the basal part of vein 12 in Dominica specimens is also pale. Thus, there are differences in markings between the specimens from Dominica and Grenada and Trinidad and Tobago. The heavy purple flush UNS in specimens from Dominica and Grenada is the most obvious of these and supports the view that there is a distinct but variable colour form of this species in the Lesser Antilles, which is most clearly marked in material from Dominica and St. Lucia. The southern boundary of the range of this form lies between Grenada and Tobago. This tentative conclusion will need to be assessed against material of *N. nyctelius* from its wider range, including other Caribbean islands before the Caribbean form can be considered to merit subspecies status.

NOTES ON OTHER SPECIES

None of the following records are unusual or unexpected, but help to build up the picture of frequency and phenology of the Grenada butterflies.

Sphingidae

Pseudosphinx tetrio Linnaeus. One adult was observed at light at the Ramada Renaissance Hotel lights, 5.x.1995, and several full-grown larvae were noted in the grounds in the vicinity of a frangipani tree (the recorded food-plant). No specimens were taken.

Nymphalidae

Mestra cana Erichson. One male collected, a few others seen.

Junonia genoveva Cramer. One male collected, others seen. This specimen has a broader orange band UPH than that illustrated by Smith *et al.* (1994),

resembling *J. evarete* Stoll in this regard.

Anartia jatrophae Linnaeus. Two males collected, others seen.

Lycaenidae

Electrostrymon angerona Godman & Salvin. One male collected at flowers of legume tree.

Pieridae

Appias drusilla monomorpha Hall. A common species in scrub, at roadside and at flowers. Three males collected.

Ascia monuste monuste Linnaeus. One female collected by roadside.

Hesperiidae

Polygonus manueli punctus Bell and Comstock. Several were seen at flowers of a legume tree, but only one male collected. The spot at the base of space 7 UNH is distinct, resembling Trinidad material in this regard, although the UPF spots are considerably smaller.

Urbanus obscurus Hewitson. This species was quite common in scrub and at flowers of a legume tree where it was easy to capture. Two males and three females collected.

Chiomara asychis grenada Evans. Not uncommon; two males collected at flowers of a legume tree, and a female at rest in a forest clearing.

Pyrgus orcus Stoll. Occasional along roadside; one male and one female collected.

Polites dictynna Godman and Salvin. This was the commonest skipper, and seven males and two females were collected. The males rested on low vegetation (c. 1m) along the roadside and in forest clearings, sometimes two or three in one clearing. The flight is much weaker than that of *Polites vibex* in Trinidad.

Calpodus ethlius Stoll. One seen but not caught.

Panoquina sylvicola woodruffi Watson. One observed at flowers of legume tree but not caught.

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