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THE BUTTERFLIES OF THE BAHAMA ISLANDS, BRITISH WEST INDIES (LEPIDOPTERA)

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Of all the groups of insects found in the Bahama Islands, the true butterflies and skippers (Papilionoidea and Hesperioidea) are perhaps among the best known. The first faunal list for this group was by Sharpe (1900), who gave a list of butterflies captured by J. L. Bonhote at Nassau. This was followed in "1942" [1943] by a paper on the Lycaenidae of the Bahama Islands by Clench. In 1944, W. P. Comstock gave a check list of all the butterflies for the various islands and island groups of the West Indies, including the Bahama Islands. In addition to these three papers, a number of original descriptions and distributional notes have appeared at various times and places in the literature. It is the purpose of this paper to correlate the above references and to include such new records as are available to bring the list of Bahaman butterflies up to date.

New Bahaman material was collected in the Bimini Islands during 1950 and 1951, and it is from this material that most of the new records are obtained. Collecting was done during June, 1950, by Dr. Mont A. Cazier and the author, and by the following during 1951: Dr. Mont A. Cazier (May, June), Dr. Willis J. Gertsch (May), and Dr. and Mrs. Charles Vaurie (June through August). A general account of the 1950 trip has been given by Cazier (1951). In addition to this material, the collection of the American Museum of Natural History was checked, and

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the data from Bahaman specimens are included whenever applicable. This gives the details of several references in the literature that are merely listed as "Bahama Islands." It might be noted that no other collections have been studied, nor has an exhaustive search of the literature been made. Accordingly, the following list is not necessarily complete.

Fifty-four species or subspecies of butterflies are included in this paper as occurring in the Bahama Islands, representing all the North American families except the Libytheidae. The largest number of species and subspecies belong to the Pieridae and Lycaenidae (13 each), with the Hesperidae (11) and Nymphalidae (9) following rather closely; the Papilionidae (3), Danaidae (2), Satyridae (2), and Riodinidae (1) are rather poorly represented. Twenty named forms occur on the Bimini Islands (38% of the known Bahaman fauna), and, of these, four appear to be new Bahaman records. A total of five apparently new records for the Bahama Islands are given in this paper.

Of the 54 specific records given, two are listed in the literature by specific name only, so it is not possible to assign them to the appropriate subspecies. Of the remaining 52, three are found in common with Florida (6%), 14 in common with other islands of the West Indies (27%), 19 in common with both Florida and the West Indies (36%), while the remaining 31% represent endemics. The last category includes five species (one each in the Pieridae, Satyridae, and Riodinidae, and two in the Lycaenidae) and 11 subspecies (four in the Pieridae, three in the Lycaenidae, and one each in the Papilionidae, Satyridae, Nymphalidae, and Hesperidae). It might be noted in passing that the figures for endemism may change when adequate material is collected and studied, as, for example, several of the endemics were described from single specimens. Much collecting remains to be done in the Bahama Islands, and additional material may change the above figures on relationship considerably.

The author wishes to acknowledge with thanks the opportunity of collecting material on the Bimini Islands, through the kindness and cooperation of Dr. C. M. Breder, Jr., Chairman and Curator, Department of Fishes and Aquatic Biology of the American Museum of Natural History. Excellent laboratory and living quarters were made available at the Lerner Marine Laboratory, and boat transportation to the various islands was supplied whenever needed.

PAPILIONIDAE***Papilio polydamus lucayus* Rothschild and Jordan**

Papilio polydamus lucayus ROTHSCHILD AND JORDAN, 1906, *Novitates Zool.*, vol. 13, p. 521.

A series of nine specimens collected at the southern end of North Bimini Island are very similar to those found in Florida.

TYPE LOCALITY: Nassau and New Providence.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau and New Providence.

NEW RECORDS FOR BAHAMA ISLANDS: New Providence Island, November 11, 1912; North Bimini Island, June 3, 1950.

***Papilio cresphontes* Cramer**

Papilio cresphontes CRAMER, 1777, *Papillons exotiques des trois parties du monde*, vol. 2, pp. 106, 107, pl. 165, fig. A, pl. 166, fig. B.

A single male has been taken and it is referable to this species. Apparently this is a new Bahaman record, although the species is found in both Florida and Cuba.

TYPE LOCALITIES: "L'Amérique Septentrionale, a la Nouvelle-York et dans l'Isle de la Jamaïque, comme aussi dans la Caroline Méridionale."

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: None.

NEW RECORDS FOR BAHAMA ISLANDS: South Bimini Island, May, 1951.

***Papilio andraemon bonhotei* Sharpe**

Papilio bonhotei SHARPE, 1900, *Proc. Zool. Soc. London*, p. 201, pl. 19, fig. 1, 1a-c.

Five specimens were captured flying in heavily wooded areas on South Bimini Island. This subspecies is quite distinct from the nominate one, with the yellow bands of the wings above being much narrower.

TYPE LOCALITY: Nassau.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau and Andros Island (Sharpe, 1900, p. 201).

NEW RECORDS FOR BAHAMA ISLANDS: Andros Island, May-June, 1904 (W. M. Wheeler); Cat Cay, May 13-15, 1940; Los Cayos, Nassau, April 28-May 31; South Bimini Island, June 7-17, 1950, May, 1951.

PIERIDAE

***Ascia monuste eubotea* (Latreille)**

Pieris eubotea LATREILLE, 1819, Encyclopédie méthodique, vol. 9, p. 144.

This terminology follows Comstock (1943, p. 3), where a discussion of the various names is given. In general, the six Bahaman specimens appear to be slightly less heavily marked than those from Cuba, although insufficient material is at hand to compare the populations adequately.

TYPE LOCALITY: None given.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 201, as *Pieris phileta* Fabricius).

NEW RECORDS FOR BAHAMA ISLANDS: Nassau, March 10, 1915; Bimini, March 27–31, 1936; North Bimini Island, June 3, 1950; South Bimini Island, August 14, 1951.

***Phoebis sennae sennae* (Linnaeus)**

Papilio sennae LINNAEUS, 1758, Systema naturae, ed. 10, vol. 1, p. 470.

The seven specimens from the Bimini Islands appear to be rather intermediate between nominate *sennae* and *sennae eubule* Linnaeus, while the examples from Nassau and New Providence are more heavily marked, especially in the female, and agree quite well with other specimens of *sennae sennae* from the Antilles.

TYPE LOCALITY: Jamaica (Brown, 1929, p. 7).

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 200, as *Callidryas eubule* Linnaeus).

NEW RECORDS FOR BAHAMA ISLANDS: Los Cayos, Nassau, May, September, December; New Providence Island, November 10–18, 1912; North Bimini Island, June 5–20, 1950, July 20, 1951.

***Phoebis agarithe antillia* Brown**

Phoebis agarithe antillia BROWN, 1929, Amer. Mus. Novitates, no. 368, p. 15.

One specimen has been taken on the Bimini Islands, and it is tentatively placed under this name until more material can be obtained for further study.

TYPE LOCALITY: Pivert, Haiti.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 201, as *P. agarithe* Boisduval; Comstock, 1944, p. 510).

NEW RECORDS FOR BAHAMA ISLANDS: South Bimini Island, July 30, 1951.

Phoebis statira (Cramer)

Papilio statira CRAMER, 1777, Papillons exotiques des trois parties du monde, vol. 2, p. 35, pl. 120, figs. C, D.

No specimens of this species have been seen from the Bahama Islands.

TYPE LOCALITY: "La côte de Coromandel et à Tranquebar."

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 200).

Kricogonia lyside (Latreille)

Colias lyside LATREILLE, 1819, Encyclopédie méthodique, vol. 9, p. 98.

Two females that agree with the diagnosis given by Comstock (1944, p. 517) were taken. These specimens have the sheen and raised scale line on the under side of the secondaries that characterize this species. The Nassau specimens mentioned by Sharpe are tentatively included here but should be checked.

TYPE LOCALITY: None given.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 200).

NEW RECORDS FOR BAHAMA ISLANDS: North Bimini Island, July, 1951; South Bimini Island, August 4, 1951.

Nathalis iole (Boisduval)

Nathalis iole BOISDUVAL, 1836, Histoire naturelle des insectes, vol. 1, p. 589.

Nineteen specimens of this common and widespread species were taken during the two trips.

TYPE LOCALITY: Mexico.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: None.

NEW RECORDS FOR BAHAMA ISLANDS: North Bimini Island, June 4-20, 1950, July 20, 1951.

Eurema nicippe (Cramer)

Papilio nicippe CRAMER, 1779, Papillons exotiques des trois parties du monde, vol. 3, p. 31, pl. 210, figs. C, D.

No specimens have been taken on the Bimini Islands.

TYPE LOCALITY: Virginia.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: None.

NEW RECORDS FOR BAHAMA ISLANDS: Nassau, March 13, 1930.

Eurema messalina blakei (Maynard)

Terias blakei MAYNARD, 1891, Manual of North American butterflies, p. 216.

No specimens have been taken on the Bimini Islands.

TYPE LOCALITY: Bahama Islands.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 200, as *messalina*).

NEW RECORDS FOR BAHAMA ISLANDS: Nassau, January, February, March, April; New Providence Island, February 19–20, 1929, November 18, 1912.

Eurema lisa euterpe (Ménétries)

Colias euterpe MÉNÉTRIES, 1832, Bull. Soc. Imp. Nat. Moscou, vol. 5, p. 299.

No specimens have been taken on the Bimini Islands.

TYPE LOCALITY: Hispaniola.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: New Providence Island, November 13–18, 1912 (Munroe, 1950, p. 177).

Eurema dina helios Bates

Eurema dina helios BATES, 1934, Occas. Papers Boston Soc. Nat. Hist., vol. 8, p. 133.

No specimens of the Bahaman subspecies were taken on the Bimini Islands.

TYPE LOCALITY: New Providence (Nassau).

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 200); Andros (Bates, 1935, p. 134).

Eurema chamberlaini chamberlaini (Butler)

Terias chamberlaini BUTLER, 1898, Ann. Mag. Nat. Hist., ser. 7, vol. 1, p. 295.

Eurema chamberlaini banksi CLENCH, 1942, Mem. Soc. Cubana Hist. Nat., vol. 16, p. 1.

No specimens of this endemic species or of its subspecies were taken.

TYPE LOCALITIES: Bahamas (?Andros; Munroe, 1950, p. 178); Smoky Point, Cat Island (*banksi*).

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: New Providence, Watling, and Crooked Islands (Munroe, 1950, pp. 178–179).

Eurema chamberlaini inaguae Munroe

Eurema chamberlaini inaguae MUNROE, 1950, Jour. New York Ent. Soc., vol. 58, p. 179.

TYPE LOCALITY: Great Inagua Island.

Eurema chamberlaini mariguanae Bates

Eurema chamberlaini mariguanae BATES, 1934, Occas. Papers Boston Soc. Nat. Hist., vol. 8, p. 135.

TYPE LOCALITY: Mariguana Island.

DANAIDAE**Danaus plexippus plexippus** (Linnaeus)

Papilio plexippus LINNAEUS, 1758, Systema naturae, ed. 10, p. 471.

No specimens from the Bimini Islands.

TYPE LOCALITY: "America septentrionali."

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 198).

Danaus gilippus berenice (Cramer)

Papilio berenice CRAMER, 1779, Papillons exotiques des trois parties du monde, vol. 3, p. 22, pl. 205, figs. E, F.

Four specimens were captured during 1951, and these apparently do not differ from Floridian or Cuban specimens.

TYPE LOCALITY: Jamaica.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Bahamas (Torre y Callejas, 1951, p. 97).

NEW RECORDS FOR BAHAMA ISLANDS: South West Bay, Nassau, March 19, 1930; North Bimini Island, July, 1951; South Bimini Island, June, August 9, 1951.

SATYRIDAE**Calisto herophile apollinis** Bates

Calisto herophile apollinis BATES, 1934, Occas. Papers Boston Soc. Nat. Hist., vol. 8, p. 136.

No specimens have been taken on the Bimini Islands.

TYPE LOCALITY: Clarencetown, Long Island.

RECORDED DISTRIBUTION IN THE BAHAMA ISLANDS: Nassau, New Providence Island (paratypes).

Calisto sibylla Bates

Calisto sibylla BATES, 1934, Occas. Papers Boston Soc. Nat. Hist., vol. 8, p. 136.

No specimens have been captured on the Bimini Islands.
TYPE LOCALITY: Nassau, New Providence.

NYMPHALIDAE

Dryas julia carteri (N. D. Riley)

Colaenis julia carteri N. D. RILEY, 1926, Entomologist, vol. 59, p. 240, pl. 2, fig. 1.

No specimens were captured on the Bimini Islands.

TYPE LOCALITY: Nassau.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 198, as *Colaenis delila* Fabricius).

Agraulis vanillae insularis Maynard

Agraulis insularis MAYNARD, 1889, Contributions to science, Newtonville, Mass., vol. 1, p. 89.

Nine specimens were captured on the Bimini Islands, and these agree quite well with other Bahaman examples.

TYPE LOCALITY: Bahama Islands.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 198, as *A. vanillae* Linnaeus); Andros and New Providence Islands (Michener, 1942, p. 3).

NEW RECORDS FOR BAHAMA ISLANDS: South Bimini Island, June 10–21, 1950, May–August 16, 1951; North Bimini Island, May, 1951.

Euptoieta hegesia hegesia (Cramer)

Papilio hegesia CRAMER, 1779, Papillons exotiques des trois parties du monde, vol. 3, p. 30, pl. 209, figs. E, F.

This species was rather common in the open, cleared areas of South Bimini Island, particularly the northern portion adjacent to the southern tip of North Bimini Island.

TYPE LOCALITY: Jamaica.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 199).

NEW RECORDS FOR BAHAMA ISLANDS: Andros Island, May–

June, 1904 (W. M. Wheeler); South Bimini Island, June 7-22, 1950, June-August 20, 1951; North Bimini Island, May, 1951.

Phyciodes tharos tharos (Drury)

Danaus festivus tharos DRURY, 1773, Illustrations of natural history, vol. 1, index, p. 43, pl. 21, figs. 5, 6.

A single specimen from South Bimini Island appears to be the first Bahaman record for this species.

TYPE LOCALITY: New York.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: None.

NEW RECORDS FOR BAHAMA ISLANDS: South Bimini Island, August 2, 1951.

Phyciodes frisia frisia (Poey)

Melitaea frisia POEY, 1832, Centurie de lépidoptères de l'île de Cuba, no. 2, 3 figs.

No specimens were captured on the Bimini Islands.

TYPE LOCALITY: Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 199).

Anartia jatrophae guatanamo Munroe

Anartia jatrophae guatanamo MUNROE, 1942, Amer. Mus. Novitates, no. 1179, p. 2.

No specimens were seen on the Bimini Islands.

TYPE LOCALITY: San Carlos Estate, Guatanamo, Oriente, Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 199, as *A. iatrophae* Linnaeus; Munroe, 1942, p. 3); New Providence Island (Munroe, 1942, p. 3).

Junonia coenia coenia Hübner

Junonia coenia HÜBNER, "1806" [1822], Sammlung exotischer Schmetterlinge, vol. 2, pl. 32.

No specimens have been captured on the Bimini Islands.

TYPE LOCALITY: Not specified.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Forbes, 1928, p. 316).

***Junonia evarete zonalis* C. and R. Felder**

Junonia zonalis C. AND R. FELDER, 1867, Reise der Österreichischen Fregatte Novara um die Erde, vol. 1, p. 399.

No specimens from the Bimini Islands.

TYPE LOCALITY: "Bahia."

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Inagua Island (Forbes, 1928, p. 316); New Providence, Great Inagua, Watling, Great Abaco, south Eleuthera, and Long Islands (Munroe, 1951, p. 10).

***Anaea echemus* (Doubleday)**

Cymatogramma echemus DOUBLEDAY, 1850, The genera of diurnal Lepidoptera, vol. 2, p. 316, pl. 49, fig. 4.

No specimens have been captured on the Bimini Islands.

TYPE LOCALITY: Honduras.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 199).

RIODINIDAE

***Apodemia carteri* (Holland)**

Charis carteri HOLLAND, 1902, Ann. Carnegie Mus., vol. 1, p. 486.

No specimens were captured on the Bimini Islands.

TYPE LOCALITY: Nassau.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau.

NEW RECORDS FOR BAHAMA ISLANDS: Nassau, January 24, 1929 (D. Fraser).

LYCAENIDAE

***Eumaeus atala* (Poey)**

Eumenia atala POEY, 1832, Centurie de lépidoptères de l'île de Cuba, no. 3, 3 figs.

No specimens from the Bimini Islands. It was not stated whether the Bahama specimens reported below belonged to *atala atala* (Poey) or to *atala florida* Rober.

TYPE LOCALITY: Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Mathiew's Point, Great Abaco Island (Clench, "1942" [1943], p. 53).

Strymon martialis (Herrich-Schäffer)

Thecla martialis HERRICH-SCHÄFFER, 1864, Corresp.-Blatt Zool.-min. Ver. Regensburg, vol. 18, p. 164.

Three specimens were captured near the southwestern end of South Bimini Island.

TYPE LOCALITY: Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: New Providence, Andros, Cat, Conception, and Great Inagua Islands (Clench, "1942" [1943], p. 53); Nassau (Comstock and Huntington, 1943, p. 68).

NEW RECORDS FOR BAHAMA ISLANDS: South Bimini Island, June 16-21, 1950.

Strymon acis armouri Clench

Strymon acis armouri CLENCH, "1942" [1943], Psyche, vol. 49, p. 53.

This endemic subspecies was not captured on the Bimini Islands.

TYPE LOCALITY: Rum Cay.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Cat Island (Clench, "1942" [1943], p. 54).

Strymon maesites maesites (Herrich-Schäffer)

Thecla maesites HERRICH-SCHÄFFER, 1864, Corresp.-Blatt Zool.-min. Ver. Regensburg, vol. 18, p. 165.

No specimens were taken on the Bimini Islands.

TYPE LOCALITY: Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Cat Island (Clench, 1941a, p. 3).

Strymon columella cybira (Hewitson)

Thecla cybira HEWITSON, 1874, Illustrations of diurnal Lepidoptera, p. 161, pl. 63, figs. 435, 436.

Comstock and Huntington (1943, p. 81) place the Bahaman population under this name rather than as nominate *columella*. Five specimens were taken on the Bimini Islands.

TYPE LOCALITIES: Cuba and Jamaica.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: New Providence, southern Eleuthera, and Conception Islands, Rum Cay, and Long Island (Clench, "1942" [1943], p. 55, as *columella*

columella Fabricius). It is possible that *Tmolus salona* Hewitson, recorded from Nassau (Sharpe, 1900, p. 200), is referable here, as this subspecies is known to occur on New Providence Island.

NEW RECORDS FOR BAHAMA ISLANDS: Georgetown, Grand Cayman, March, 1945 (C. B. Lewis); North Bimini Island, June 3, 1950; South Bimini Island, June 10-16, 1950.

***Strymon angelia dowi* Clench**

Strymon angelia dowi CLENCH, 1941, *Torrea*, no. 7, p. 4.

A single worn female has been placed tentatively under this name, pending the receipt of more Bahaman material.

TYPE LOCALITY: Arthurs Town, Cat Island.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 200, as *Tmolus angelia* Hewitson; Clench, 1941a, p. 5); Long Island and Mariguana Island (Clench, 1941a, p. 5).

NEW RECORDS FOR BAHAMA ISLANDS: South Bimini Island, August 14, 1951.

***Leptotes cassius theonus* (Lucas)**

Lycaena theonus LUCAS, 1857, in Sagra, *Histoire physique, politique et naturelle de l'île de Cuba*, p. 611.

Twenty-three specimens were netted in the two years' collecting on the Bimini Islands.

TYPE LOCALITY: Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 199, as *Tarucus cassius* Cramer); North Bimini, New Providence, Cat, southern Eleuthera, Great Inagua, Little Abaco, Crooked, Long, Grand Bahama, and Watling Islands, Rum Cay, and Stranger's Cay (Clench, 1942, p. 244; "1942" [1943], p. 59).

NEW RECORDS FOR BAHAMA ISLANDS: North Bimini Island, June 3, 1950, May, 1951; South Bimini Island, June 10-21, 1950, May-August 20, 1951.

***Hemiargus ammon ammon* (Lucas)**

Lycaena ammon LUCAS, 1857, in Sagra, *Histoire physique, politique et naturelle de l'île de Cuba*, p. 612.

No specimens were taken on the Bimini Islands.

TYPE LOCALITIES: "Les environs de la Havane," Cuba; Yucatan.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau, New Providence Island (Comstock and Huntington, 1943, p. 97).

Hemiargus ammon thomasi Clench

Hemiargus catilina thomasi CLENCH, 1941, Mem. Soc. Cubana Hist. Nat., vol. 15, p. 407.

No specimens were captured on the Bimini Islands.

TYPE LOCALITY: Arthurs Town, Cat Island.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Rum Cay and Great Inagua Island (Clench, 1941b, p. 408).

Hemiargus bahamensis Clench

Hemiargus bahamensis CLENCH, "1942" [1943], Psyche, vol. 49, p. 57.

This species was described from a single male and is apparently known only from this specimen.

TYPE LOCALITY: Crooked Island.

Brephidium barbouri Clench

Brephidium barbouri CLENCH, "1942" [1943], Psyche, vol. 49, p. 58.

No specimens have been taken on the Bimini Islands.

TYPE LOCALITY: Great Inagua Island.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Great Inagua Island and Rum Cay (Clench, "1942" [1943], p. 59).

Brephidium exilis isophthalma (Herrich-Schäffer)

Lycaena isophthalma HERRICH-SCHÄFFER, 1862, Corresp.-Blatt Zool.-min. Ver. Regensburg, vol. 16, p. 141.

No specimens were taken on the Bimini Islands.

TYPE LOCALITY: Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau, New Providence Island (Clench, "1942" [1943], p. 58).

Brephidium pseudofea (Morrison)

Lycaena pseudofea MORRISON, 1873, Bull. Buffalo Soc. Nat. Sci., vol. 1, p. 186.

Forty-eight specimens were taken in one colony on a semi-tidal flat off the bay on North Bimini Island. The specimens agree with Florida examples and apparently constitute a new Bahaman record.

TYPE LOCALITY: Key West, Florida.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: None.

NEW RECORDS FOR BAHAMA ISLANDS: North Bimini Island, June 1–20, 1950, May–August 16, 1951.

HESPERIIDAE

Phocides batabano batabanoides (Holland)

Erycides batabanoides HOLLAND, 1902, Ann. Carnegie Mus., vol. 1, p. 488.

Three specimens were captured during 1950, and they are tentatively referred to *batabanoides*, as there is a fourth specimen from Bimini under this name in the collection of the American Museum. More material is needed before the validity of this name can be established.

TYPE LOCALITY: Nassau.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau, Andros Island (Holland, 1902, p. 489); "Bahamas" (Bates, 1935, p. 203, as *batabano*).

NEW RECORDS FOR BAHAMA ISLANDS: Bimini, October 7, 1947 (J. A. Oliver); South Bimini Island, June 17–21, 1950.

Polygonus lividus savigny (Latreille)

Hesperia savigny LATREILLE, 1822, Encyclopédie méthodique, vol. 9, p. 741.

No specimens from the Bimini Islands.

TYPE LOCALITY: Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 202, as *Acolastus amyntas* Fabricius).

NEW RECORDS FOR BAHAMA ISLANDS: New Providence Island, November 16–18, 1912.

Epargyreus zestos (Geyer)

Proteides zestos GEYER, 1832, Zuträge zur Sammlung exotischer Schmettlinge, vol. 4, p. 9, pl. 106, figs. 615, 616.

Eleven specimens were taken during the two seasons' collecting, and they agree better with other Antillean specimens than they do with examples from Florida.

TYPE LOCALITY: Surinam.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 202).

NEW RECORDS FOR BAHAMA ISLANDS: Los Cayos, Nassau, May 7–9; Nassau, February 16, 1929 (D. Fraser), June, 1947

(C. J. Maynard); Andros Island, May–June, 1904; South Bimini Island, June 16–22, 1950, May–July 25, 1951.

Urbanus proteus (Linnaeus)

Papilio proteus LINNAEUS, 1758, *Systema naturae*, ed. 10, p. 484.

No examples were taken on the Bimini Islands.

TYPE LOCALITY: "In Indiis"; Surinam (Comstock, 1944, p. 545).

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 202).

Urbanus dorantes santiago (Lucas)

Eudamus santiago LUCAS, 1857, in Sagra, *Histoire physique, politique et naturelle de l'île de Cuba*, p. 623.

No specimens from the Bimini Islands.

TYPE LOCALITY: "Les environs de la Havane," Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: "Bahamas" (Bates, 1935, p. 204).

NEW RECORDS FOR BAHAMA ISLANDS: Andros Island, May–June, 1904 (W. M. Wheeler).

Ephyriades brunnea brunnea (Herrich-Schäffer)

Nisoniades brunnea HERRICH-SCHÄFFER, 1864, *Corresp.-Blatt Zool.-min. Ver. Regensburg*, vol. 18, p. 172.

No specimens were captured on the Bimini Islands.

TYPE LOCALITY: Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: "Bahama" (Bates, 1935, p. 215, as *zephodes* Hübner; Comstock, 1944, p. 585; Bell and Comstock, 1948, p. 18).

NEW RECORDS FOR BAHAMA ISLANDS: Nassau, January 21–February 20, 1929 (D. Fraser), June, 1897 (C. J. Maynard); outskirts of Nassau, March 13, 1930 (W. P. Rogers); Los Cayos, Nassau, March, May, August, September; Adelaide, Bahamas, May 5; New Providence Island, November 16–18, 1912.

Hylephila phyleus (Drury)

Plebeius urbicolae phyleus DRURY, 1773, *Illustrations of natural history*, vol. 1, index, p. 25, pl. 13, figs. 4, 5.

This widespread species was not taken on the Bimini Islands.

TYPE LOCALITY: "Antigua, St. Cristopher's, and Nevis, etc."

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 203).

NEW RECORDS FOR BAHAMA ISLANDS: Los Cayos, Nassau, February 15, September 5-23; Nassau, January 28, 1929 (D. Fraser), March 19, 1930 (W. P. Rogers).

Atalopedes mesogramma mesogramma (Latreille)

Hesperia mesogramma LATREILLE, 1823, Encyclopédie méthodique, vol. 9, p. 765.

This species was not taken on the Bimini Islands.

TYPE LOCALITY: None Given.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Bahamas (Comstock, 1944, p. 585).

Wallengrenia otho misera (Lucas)

Hesperia misera LUCAS, 1857, in Sagra, Histoire physique, politique et naturelle de l'île de Cuba, p. 649.

No specimens were taken on the Bimini Islands.

TYPE LOCALITY: Cuba.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Nassau (Sharpe, 1900, p. 203).

NEW RECORDS FOR BAHAMA ISLANDS: New Providence Island, November 12-20, 1912; Nassau, February 11-20, 1929 (D. Fraser), March 19, 1930 (W. P. Rogers).

Panoquina panoquinoides (Skinner)

Pamphila panoquinoides SKINNER, 1891, Ent. News, vol. 2, p. 175.

A single specimen was taken on North Bimini Island during 1950.

TYPE LOCALITIES: Key West, Florida, and Texas.

RECORDED DISTRIBUTION IN BAHAMA ISLANDS: Bahamas (Comstock, 1944, p. 571).

NEW RECORDS FOR BAHAMA ISLANDS: Bimini, March 27, 1938; North Bimini Island, June 3, 1950.

In addition to the above skipper records, Sharpe (1900, pp. 202-203) includes the following from Nassau: three "*Pamphila* sp. inc.," and *Polites thaumas* (Fabricius). The latter is a synonym of *P. themistocles* Latreille, which is apparently confined to the eastern United States. It is possible that this record

may refer to *P. baracoa* (Lucas), which is known to occur from Georgia and Florida to Cuba and Hispaniola. Until material becomes available, the matter must be left undecided.

SELECTED BIBLIOGRAPHY

BATES, MARSTON

1935. The butterflies of Cuba. Bull. Mus. Comp. Zool., Cambridge, Mass., vol. 78, pp. 63-258.

BELL, ERNEST L., AND WILLIAM P. COMSTOCK

1948. A new genus and some new species and subspecies of American Hesperidae (Lepidoptera, Rhopalocera). Amer. Mus. Novitates, no. 1379, pp. 1-23.

BROWN, F. MARTIN

1929. A revision of the genus *Phoebis* (Lepidoptera). Amer. Mus. Novitates, no. 368, pp. 1-22.

CAZIER, MONT A.

1951. The Buprestidae of the Bahama Islands, British West Indies (Coleoptera, Buprestidae). Amer. Mus. Novitates, no. 1517, pp. 1-9.

CLENCH, HARRY K.

- 1941a. Notes on two Bahaman Lycaenidae, with the description of a new subspecies. Torreia, no. 7, pp. 3-7.

- 1941b. A new race of *Hemiargus* for the Bahamas (Lepidoptera: Lycaenidae). Mem. Soc. Cubana Hist. Nat., vol. 15, pp. 407-408.

1942. The identity of the Florida race of *Leptotes* (Lepidoptera, Lycaenidae). Jour. New York Ent. Soc., vol. 50, pp. 243-244.

- "1942" [1943]. The Lycaenidae of the Bahama Islands (Lepidoptera, Rhopalocera). Psyche, vol. 49, pp. 52-60.

COMSTOCK, WILLIAM P.

1943. The genus *Ascia* in the Antilles (Lepidoptera, Pieridae). Amer. Mus. Novitates, no. 1229, pp. 1-7.

1944. Insects of Porto Rico and the Virgin Islands—Rhopalocera or butterflies. Scientific Survey of Porto Rico and the Virgin Islands, New York Acad. Sci., vol. 12, pp. 421-622.

COMSTOCK, WILLIAM P., AND E. IRVING HUNTINGTON

1943. Lycaenidae of the Antilles (Lepidoptera, Rhopalocera). Ann. New York Acad. Sci., vol. 45, pp. 49-130.

FORBES, WILLIAM T. M.

1928. Variation in *Junonia lavinia* (Lepidoptera, Nymphalidae). Jour. New York Ent. Soc., vol. 36, pp. 305-322.

MICHENER, CHARLES D.

1942. A review of the subspecies of *Agraulis vanillae* (Linnaeus). Lepidoptera: Nymphalidae. Amer. Mus. Novitates, no. 1215, pp. 1-7.

MUNROE, EUGENE G.

1950. The dina group of the genus *Eurema* in the West Indies (Lepidoptera, Pieridae). Jour. New York Ent. Soc., vol. 58, pp. 172-191.

1951. The genus *Junonia* in the West Indies (Lepidoptera, Nymphalidae). Amer. Mus. Novitates, no. 1498, pp. 1-16.

SHARPE, EMILY MARY

1900. On a collection of butterflies from the Bahamas. Proc. Zool. Soc. London, pp. 197-203, pl. 19.

TORRE Y CALLEJAS, S. L. DE LA

1951. Notas suplementarias a nuestro trabajo sobre el genero Danaus (Lepidoptera, Rhopalocera). Mem. Soc. Cubana Hist. Nat., vol. 20, pp. 93-103.