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DESIGNATION OF A LECTOTYPE OF *NISONIADES SOMNUS* AND NOTES ON THE OCCURRENCE OF *ERYNNIS ICELUS* IN FLORIDA (HESPERIIDAE)

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ABSTRACT. *Nisoniades somnus* Lintner was described in 1881 from one male and one female from "Indian River, Florida." Neither specimen was identified as the holotype, therefore a lectotype and paralectotype are hereby designated. Dubious reports of *Erynnis icelus* from Florida also are examined.

Additional key words: *Erynnis brizo*, type locality, paralectotype.

Over a century ago, J. A. Lintner described a distinctive Floridian skipper as *Nisoniades somnus* (Lintner 1881). This taxon currently is considered a subspecies of *Erynnis brizo* (Boisduval & LeConte) and is restricted to the Florida peninsula (Burns 1964). The description was based on one male and one female from "Indian River, Florida" (given ambiguously as "Florida" by Miller and Brown [1981]) deposited in the collection of W. H. Edwards. The types were undoubtedly collected by Dr. William Wittfeld (1827–1913) and/or his daughter Annie M. Wittfeld (1865–88) of Georgiana, Brevard County, Florida, who were regular correspondents of Edwards and the source of his "Indian River" records. The Wittfelds began collecting Lepidoptera for Edwards in 1880 (dos Passos 1951), thus the specimens probably were captured during the spring of 1880 or 1881.

In his original description, Lintner compared *somnus* almost exclusively to *Erynnis icelus* (Scudder & Burgess), rather than *E. brizo*. As a result, subsequent authors (e.g., Edwards 1884, Skinner 1898, Dyar 1902, Smith 1891, 1903) associated *somnus* more closely with *E. icelus*, alluding to a relationship between the two. This perceived relationship is surprising considering that Lintner (1881) himself revealed in the same paper that males of both *somnus* and *E. brizo* lack hair tufts on the hind tibiae, a structure present in *E. icelus*. Blatchley (1902) summarized the general opinion regarding these taxa when he remarked that *somnus* was "closely allied" to *E. icelus* and "may be only a large southern form."

For many years following its original description, *somnus* was known from very few localities and most authors (e.g., French 1885, Maynard 1891, Skinner 1898) continued to list this taxon only from the type locality. An exception was Scudder (1889) who listed "*Thanaos brizo*"

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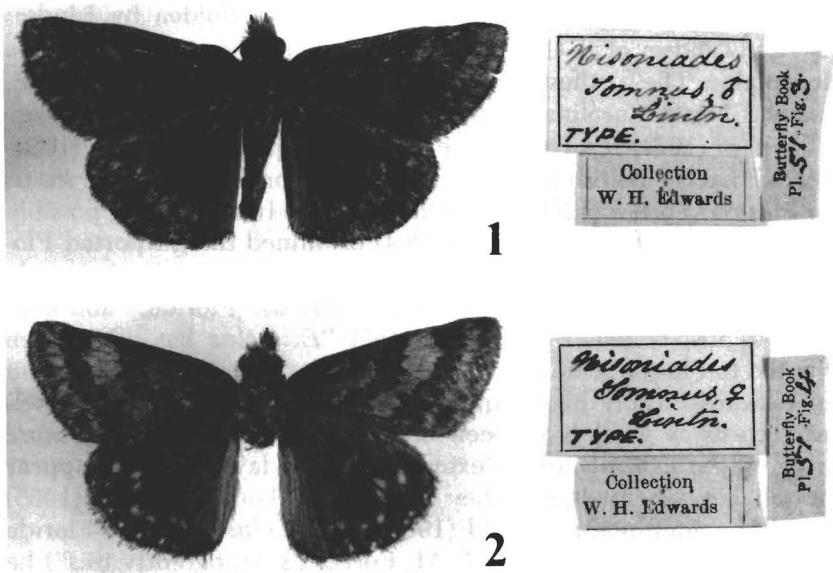
from Florida and included the additional locality of "Haulover." This record was provided by E. A. Schwarz, probably as a result of his visits to Florida in 1875 and 1876 (Schwarz 1888). This reference is especially interesting because Haulover formerly existed in northern Brevard County, approximately 22 km north of Georgiana, where the type specimens of *N. somnus* probably originated. Schwarz obviously recognized the similarity of his specimens to *E. brizo* and identified them as such. This was the first glimpse into the true relationship between these taxa.

Dyar (1905) was the first to openly suggest that *somnus* was "perhaps but a dark form of *brizo*" and noted the resemblance of their genitalia. This notion was supported by Skinner (1914) who also commented on the similarity of their genitalia. F. E. Watson (in Grossbeck 1917) more confidently submitted that *somnus* is "probably a subspecies of *brizo*." Following the acceptance of *somnus* as a subspecies of *E. brizo* by Barnes and McDunnough (1917), this taxonomic status was generally adopted. However, Holland (1931) stated that he was "unable to agree with this opinion" and retained the mistaken belief that *somnus* was "much nearer to *T. icelus*."

Lintner (1881) did not designate either of his specimens of *Nisoniades somnus* as the holotype. Miller and Brown (1981) were unaware of the location of Lintner's syntypes although Skinner (1914) stated that they were deposited in the Carnegie Museum of Natural History, where they remain today. These specimens were figured by Holland (1931: plate 51, figs. 3–4) who identified each as "type." Both specimens lack antennae (the male retains a portion of the left antenna) which were noticeably drawn onto the Holland figures. The specimens are in good condition, except the abdomen of the female is now detached and pinned with the specimen in a dry vial. The male specimen (Fig. 1) (left forewing length, base to apex = 15 mm) is hereby designated as the lectotype. It bears three labels: "Nisoniades/Somnus, ♂/Lintn./ TYPE." in Lintner's hand; "Collection/W. H. Edwards" printed; and "Butterfly Book/Pl. 51 Fig. 3," printed and handwritten. I have affixed a red label declaring the specimen as the lectotype. The female specimen (Fig. 2) (left forewing length, base to apex = 16 mm) is designated as a paralectotype. It also bears three labels: "Nisoniades/ Somnus, ♀/Lintn./ TYPE." in Lintner's hand; "Collection/W. H. Edwards" printed; and "Butterfly Book/Pl. 51 Fig. 4," printed and handwritten. A red label has been affixed to indicate its status as paralectotype. The type locality is restricted to Georgiana, approximately 5 km south of the city of Merritt Island, Brevard County, Florida. An additional male specimen of *E. b. somnus* was figured by Holland (1898, 1931:plate 48, fig. 2). This specimen, from the W. H. Edwards collection, is labelled



FIGS. 1–2. *Nisoniades somnus* Lintner. **1**, Lectotype male; **2**, Paralectotype female.

in Edwards' hand as "somnus/♂/Ind. Riv." and is considered a topotype.

Unlike most of Edwards' specimens, the types of *N. somnus* do not possess locality data. Edwards did not place labels on his individual specimens until he sold his collection to W. J. Holland in the late 1880's (Brown 1964). At that time, he prepared labels that typically included the name of the species, sex of the specimen and a brief (sometimes cryptic) mention of the location of capture. Edwards probably did not affix such labels to the *N. somnus* types because Lintner's labels already were present.

The difficulty experienced by most nineteenth century lepidopterists in recognizing distinct differences between *E. b. somnus* and *E. icelus* contributed to confusion over the distribution of *E. icelus* that haunted the literature for 80 years. Edwards (1884) casually listed *E. icelus* from "Fla," regardless of the fact that his closest record was from Illinois. Subsequent authors, including French (1885), Maynard (1891), Skinner (1898) and Holland (1898) followed Edwards and continued to include Florida within the range of *E. icelus*. Scudder (1889) implied a reluctance to accept Florida reports when he remarked that "Edwards also gives it from Florida." Apparently, Scudder had not seen any specimens of *E. icelus* from Florida, nor had he received any such reports from his many correspondents. Blatchley (1902) reported that he collected "several" *E. icelus* (supposedly determined by H. Skinner) in the spring of 1889 at Ormond, Volusia County, Florida (he listed *E. b. somnus*

separately). Not until the treatises on the Hesperioidea by Lindsey (1921) and Lindsey et al. (1931) did the Floridian reports finally become unacceptable. The furthest south from which these authors reported *E. icelus* was North Carolina. However, the saga continued when Macy and Shepard (1941) resurrected the Floridian reports and Evans (1953) indicated that the British Museum (Natural History) contained *E. icelus* from Florida. Forbes (1960) also listed *E. icelus* from Florida, possibly on the authority of Evans. Burns (1964) examined the purported Floridian specimen of *E. icelus* in the British Museum, a dateless male from the R. Oberthür collection marked only as "Floride," and considered it mislabelled. Burns added that "*E. icelus* has often been attributed to Florida, chiefly in older literature; the error seems to stem from Edwards. Many highly questionable locality records (and foodplant records as well) have been uncritically repeated, in literature bearing on the *Erynnis*, to the extent that nowadays they may appear to be reliable, when actually they are not." Although Kimball (1965) included a contemporary record (1961) of *E. icelus* from the Florida panhandle (determined by W. T. M. Forbes as "apparently this") he retorted "I am much in doubt as to whether this species is really native to Florida."

The basis of the early reports of *E. icelus* in Florida probably can be traced to a small female specimen of *E. b. somnus* from the W. H. Edwards collection labelled "Nisoniades/icelus(?)/Lintn./♀/Ind. Riv." in Edwards' hand. The specimen was undoubtedly collected by the Wittfelds at Georgiana, Brevard County, Florida at about the same time the types of *Nisoniades somnus* were collected (ca. 1880). This supports Skinner (1914) who suggested that Floridian records of *E. icelus* may actually be *E. b. somnus*. Improperly identified skippers are epidemic within early collections and even remotely similar species were confused. This problem is exemplified by H. G. Dyar who determined as *E. b. somnus* a Mississippi specimen of *Erynnis zarucco* (Lucas) (Burns 1964). However, this inherent identification problem does not entirely solve the Floridian *E. icelus* dilemma.

Six male specimens of *E. icelus*, bearing handwritten and printed labels reading "Fla" from the W. J. Holland collection, are deposited in the Carnegie Museum of Natural History (identifications verified by genitalic examination). Three of these specimens also possess handwritten labels reading "Morrison," apparently in reference to the nineteenth century collector Herbert K. Morrison. Morrison collected in Florida in 1883, 1884 and 1885 (Essig 1931). Morrison also visited at least ten other states between 1874 and 1883 (Essig 1931), all of which possess valid records of *E. icelus* (Burns 1964). Morrison was a prolific collector and such zeal increases the potential for accidental mislabel-

ling. Nonetheless, the validity of these specimens is difficult to ascertain, especially since no similarly labelled specimens in the Carnegie Museum are thought to be mislabelled (J. E. Rawlins pers. comm.). These six specimens are probably the basis for Holland's (1898, 1931) inclusion of Florida within the range of *E. icelus*.

There is a very remote possibility that *E. icelus* occurred (or occurs) in northern Florida, especially the panhandle where habitats of more northern affinities occur. However, valid specimens of this species are not known from south of northern Georgia (Burns 1964, Opler & Krizek 1984). Unless additional evidence is revealed, the six Floridian specimens of *E. icelus* will remain an enigma.

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