

Scudder's Names

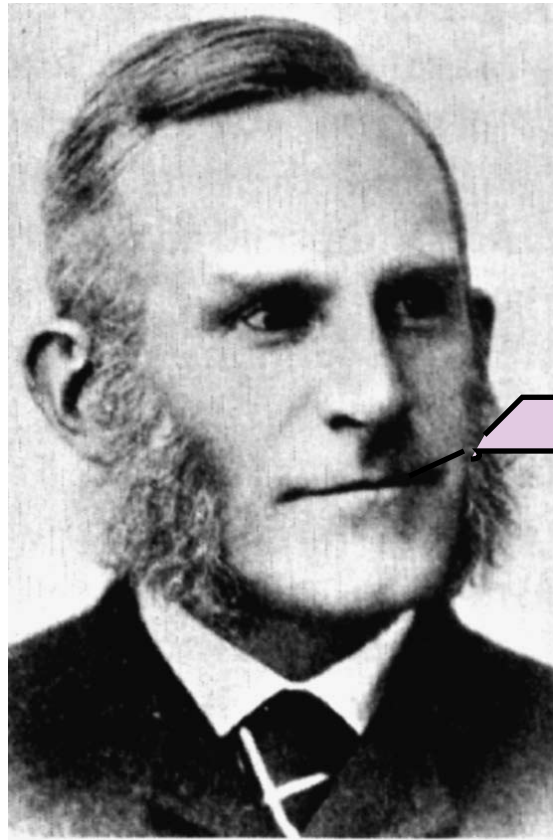
by Harry Zirlin

*Is there anything whereof it may be said,
See, this is new? it hath been already of
old time, which was before us. Ecclesiastes
1:10*

When the great American lepidopterist and taxonomist Samuel Hubbard Scudder (1837-1911) published his *Systematic Revision of American Butterflies* in 1872, he set off a wave of protest and resentment from other lepidopterists. Scudder was working on his monumental *The Butterflies of New England*, (1886) and his revision was intended to stabilize the nomenclature in advance of its debut. It did nothing of the sort. Rather, it served to polarize the community of lepidopterists and, more broadly, entomologists, who had spent decades in an effort to bring American entomology on a level with its European counterpart.

Scudder's revision threatened that effort, according to his critics, because his use of "new" and unfamiliar names would make it nearly impossible for newcomers to the science to understand the prior literature. Scudder, you see, was a splitter, especially with respect to genera. More, he was a stickler for the "law of priority," which meant he used scientific names from obscure European sources to replace better-known names if the publication of the obscure names pre-dated the publication of the familiar names. Thus, many species in his revision had either different generic names, different specific names, and sometimes both, compared to the names in prior usage in America.

His critics also complained that collections would have to be laboriously relabeled if Scudder's nomenclature became accepted. Moreover, they argued, his changes were often based on minor differences in the reproduc-



tive organs of butterflies that were not visible without a microscope. This last fact received the most disdain from William Henry Edwards (1822-1909), who, at first, admired the younger Scudder, only to become one of his chief detractors. To Edwards, Scudder's focus on microscopic differences in the "tails" of butterflies, as he derisively (and unscientifically) referred to their reproductive structures, neglected the living animal's environment and entire life history in favor of just one part (even though a very important part) of the adult animal's anatomy.

The criticism, however, that rings truest to modern ears is that Scudder based his taxonomic decisions on appearances (whether outward or inward) as opposed to Darwinian notions of common descent. Here, Edwards and his supporters had Scudder in a position where Scudder's belief in the law of priority was at odds with modern theory. Scudder, for example, resurrected obscure genera created by the German collector Jacob Hübner, but

Hübner created those genera at the beginning of the 1800s, long before Darwin's theories of natural selection and common descent had revolutionized taxonomic thinking.

Hübner's work entirely, saying, "I couldn't admit Hübner anywhere." Edwards compared Hübner's taxonomy to that of a child putting striped toys in one pile and solid-colored toys in another. (For these historical insights, I am once again indebted to the fine book "Brethren of the Net" by W. Conner Sorensen, University of Alabama Press 1995.)

In wrestling with the decisions of which named taxa were good species, Edwards and his associates realized that without accurate life history data, knowledge of food plants, caterpillar appearance, and similar details, there would be both too few species

described in some cases, such as when the adults of distinct species are similar but their caterpillars and foodplants reveal that they are distinct, and too many species, as when individuals of a polymorphic species are considered distinct, but life history information would prove them the offspring of an earlier brood. As the entomologist Benjamin

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Hübner often grouped butterflies in genera based on likenesses in color, size, or some other superficial feature, rather than on whether the species were closely related in a biological sense. Indeed, when Henry Edwards was making his own taxonomic decisions for his books he rejected



Scudder described a number of North American species, including Boloria montinus, Purplish Fritillary. Aug 4, 1998. Osborne Mountain, WY.

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