

REMARKS, CRITICAL AND SUGGESTIVE, ON THE GENUS
LIMENITIS EAST OF THE MISSISSIPPI.

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Demonstrations from examples taken by me during the past three years, and from examples taken in Farmington, Conn., twenty years ago, give indubitable evidence that our *Limenitis* are plastic forms of one species, accommodating themselves readily to the environment, assuming colors from climatic effect or different seasons and localities, or for purposes of protection—the form *L. disippus* being mimetic of *plexippus*, as already suggested by authors. My conclusions are drawn from the following observations: Near the Hudson River I find *ursula* and *proserpina* in close association, each partaking of the markings of the other, evidently one brood, alighting on the same heap of pomace; expansion of wings three to three and a half inches. About six miles from the river *ursula* and *proserpina* are equally abundant, with a few *arthemis* and rarely a *disippus*. Expansion of the wings of the four about two and a half inches; all found in one glade. From this to the highest tables of the Helderberg Hills, *ursula* gradually disappears and only *proserpina* and *arthemis* are found, the latter most abundant. In the low lands *disippus*, *ursula* and *proserpina* are only found; in intermediate broken lands *ursula*, *proserpina* and *arthemis* are chiefly found; at the highest altitudes only *proserpina* and *arthemis* are found, and examinations of many examples from the different localities show that these forms approach each other very closely.

In December, 1877, I sent a melanitic form of *disippus* to W. H. Edwards, Esq., for his examination, and in a communication written to Mr. Edwards at the time, I ventured the assertion of all being one species. As Mr. Edwards did not notice it in a future communication, I took it as a gentle way of dealing with an absurdity. From captures made since I am convinced that all our *Limenitis* have one origin. In proof I have in my collection a *disippus* without the division line on secondaries; some with narrow and others with broad mesial lines. In one example the dividing line is extended to a broad band, with blue crescents in marginal, and red lunules in submarginal band. An *arthemis* from the white band to margin is the exact counterpart of it; in one example, on the under surface of secondaries inside of mesial line, are white lunules.