

THE TYPE LOCALITY OF ARGYNNIS ZERENE BOISDUVAL (NYMPHALIDAE): A CORRECTION

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ABSTRACT. *Argynnis zerene* Boisduval was described from material collected by P. J. M. Lorquin during 1850 and/or 1851 in California. The original description gives the locality as the low mountains of California. Dos Passos and Grey restricted the type locality to Yosemite Valley, Mariposa County, California. This is not possible, since Yosemite Valley was not discovered until 1851 and Lorquin could not have collected there before 1856—four years after the published description of *zerene*. The type locality is corrected and redesignated as vicinity of Agua Fria, Mariposa County, California. This taxon is now subjectively placed in the genus *Speyeria*.

Argynnis zerene (a species now subjectively placed in the genus *Speyeria*) was described by Jean Boisduval (1852) from material collected in California in 1850 and/or 1851 by P. J. M. Lorquin. In the original description, Boisduval stated simply that *zerene* occurred in the low mountains of California in June. Dos Passos and Grey (1947), without citing any reasons, restricted the type locality to Yosemite Valley, Mariposa County, California.

This is impossible. The discovery of Yosemite Valley was on 27 March 1851, by a military party under the command of Major J. D. Savage, during the Mariposa Indian War (Farquhar, 1965: 72). Yosemite was not visited again until late June 1855 when J. M. Hutchings led a party of four there. Hutchings is known to have collected butterflies for Henry Edwards at a later time (Edwards, 1878), but certainly did not collect any at this time. The Hutchings Expedition brought publicity to Yosemite and by the close of 1855, total tourist travel to Yosemite had reached 42 (Farquhar 1965: 117-118). The first structure in Yosemite was erected in 1857 with the intent to operate it as a hotel, however it was 1859 before any appreciable travel to Yosemite took place (Farquhar, 1965). If Lorquin ever collected in Yosemite, it is impossible for him to have done so before 1856 and extremely unlikely before 1859.

The exact localities where Lorquin collected in 1850 and 1851 are not known. We do know that he collected in the vicinity of San Francisco and the placer mines of Tuolumne County (cf. Grinnell, 1904). In another paper (Masters, in preparation) I have determined that it is highly probable that he spent the spring and early summer of 1851 in an area bounded by Mokelumne Hill (Calaveras Co.) on the north and Coarsegold (Madera Co.) on the south. An area which includes the mining towns of Murphys and Angel's Camp (Calaveras Co.), Sonora

and Columbia (Tuolumne Co.), and Agua Fria (Mariposa Co.). He could have been in any of these towns, or in several of them.

Of these possibilities, Agua Fria is the closest to Yosemite. As it is quite possible that Lorquin could have been in Agua Fria, I hereby designate it as the corrected type locality for *Argynnis zerene*. There is nothing left of Agua Fria now, but in 1850 and '51 it was a booming placer gold camp and the county seat of Mariposa County. The town was located on Agua Fria Creek just west of the present town of Mariposa and some 35 miles southwest of Yosemite Valley.

Dos Passos and Grey (1947) considered *Argynnis monticola* Behr (types taken in Yosemite Valley in 1863 by the California Geological Survey) a subjective synonym of *Speyeria zerene*. Considering Yosemite Valley as the type locality for *S. zerene* facilitated this conclusion. The correction of the type locality to Agua Fria should not upset the taxonomic conclusions of Dos Passos and Grey and will not change any of the synonymies per contemporary usage. Agua Fria is in the same biotic province as Yosemite Valley and it is unlikely that any future systematist would consider populations from the two localities as separate and distinct subspecies.

The type specimen of *Argynnis zerene* is in the U.S. National Museum in Washington, *ex* collection Barnes, *ex* collection Oberthur, *ex* collection Boisduval.

LITERATURE CITED

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