

PEALE'S *LEPIDOPTERA AMERICANA* AND THE
CORRECT NAME FOR *PAPILIO MULTICAUDATUS*

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Whether the large yellow Tiger Swallowtail of western North America should be called *Papilio multicaudatus* or *P. daunus* has puzzled lepidopterists for several years. The indecision about the correct name of this butterfly has had an interesting historical background, and this year (1957-1958) while on a Fulbright Scholarship at Oxford University, I have had the opportunity of gaining access to some rare books and documents which solve this problem. This task has been made most pleasant by the cooperation and help I have had from Mrs. AUDREY SMITH of the Hope Department of Entomology and from the British Museum. I also wish to acknowledge the assistance of Mr. C. F. DOS PASSOS of Mendham, New Jersey, and Dr. J. F. GATES CLARK of the United States National Museum.

In 1836, BOISDUVAL described this species calling it *Papilio daunus*, but as HOLLAND (1929-1930) pointed out, BARNES and BENJAMIN (1926) in their check-list noted that this name was unavailable because CRAMER (1779) had given it to a skipper butterfly, which is now called *Thorybes bathyllus* (J. E. Smith). In their revision of the American *Papilio*, ROTHSCILD and JORDAN (1906) published the only known synonym, *P. multicaudata* Kirby. The reason they credited KIRBY as author was because he had mentioned the name in a publication (1884) describing a copy of the little known book, *Lepidoptera Americana*, part of which had been published by PEALE in 1833. In his description of this copy, KIRBY said that it included a black and white plate of four figures, two bearing the name *Papilio multicaudata*, and two bearing the name *Papilio lewisii* ($\equiv P. eurymedon$ *), and he thereby became the first to publish these two names. Due to the rarity of this book and because ROTHSCILD and JORDAN had noted that the name *Papilio multicaudata* was "ex Peale, ined.", HOLLAND concluded that no part of PEALE's proposed book was published. This is incorrect, and HOLLAND's mistake arose from the fact that KIRBY did not realize that he was describing PEALE's personal copy of *Lepidoptera Americana* which had with it the unpublished plate of the two *Papilio* species as well as several other plates which PEALE made but never published. The published part ("Vol. 1 — No. 1") consisted only of four plates (and accompanying text), of PEALE's originally intended one hundred. These four are colored and are of "Saturnia Promethea Female", "Saturnia Promethea, male", "Lasiocampa Io", and "Danaus Plexippus". They include larvæ, pupæ, and/or cocoons, as well as foodplants. It is almost certain that the copy which KIRBY described was originally PEALE's because the British Museum has preserved the following handwritten extract of a letter received by KIRBY from C. R. OSTEN-SACKEN, October 14, 1884:

* I have been unable to ascertain whether BOISDUVAL or LUCAS first described *P. eurymedon* and *P. rutulus* in 1852.

"You published not long ago a notice on Peale's Lepidoptera of North America in *Papilio*. You may be interested in having the history of the copy you mention. Many years ago it was given to me by Titian R. Peale, the author. When I returned to Europe in 1877, I thought I could not make a better use of such a rarity than by making a present of it to old Zeller. With the sale of his books it probably came in the bookseller's hands, and afterwards in the British Museum. I am very glad it got there, because it is the best place for it."

In addition to this copy, I was able to locate a bound one in the Hope Entomological Library at Oxford University which consists only of "Vol. 1 — No. 1" with the four colored plates and text mentioned above. Final confirmation that no more numbers were published arises from the fact that J. O. WESTWOOD, Hope Professor of Entomology from 1861 to 1892, wrote on the cover of this copy, undersigned with his initials, "(No more published)". At least two other copies of "Vol. 1 — No. 1" exist. One is in the Academy of Natural Sciences in Philadelphia, and the other is in the University of Michigan library at Ann Arbor.

Because of its exceptional quality and for the sake of historical interest, it is unfortunate that PEALE never published the plate of the two western Swallowtails. If he had, "*Papilio lewisii*" (= *P. eurymedon*) would have eternally recalled the famous explorations of LEWIS and CLARK, which undoubtedly are the source of PEALE's name for this butterfly. The male *P. eurymedon* and female *P. multicaudatus* on which he based his drawings are apparently no longer in existence.

In conclusion, the name of the largest species in the *Papilio glaucus* group is *P. multicaudata* Kirby (1884). As HOLLAND pointed out, the specific name should be corrected to *P. multicaudatus* because *Papilio* is a masculine noun.

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