Indiana vs. Indian Territory: Misinterpreted Locality Citations

LELAND CHANDLER, Purdue University

Abstract

A number of insect species have been erroneously recorded from Indiana, whereas the localities are actually in Oklahoma. An examination of locality labels on some of these specimens show the abbreviation [Ind.]. Whether some designation of Territory was included originally and removed, or perhaps not printed originally, is not known. Several zoogeographic interpretations are based on these resulting in erroneous conclusions.

Modern systematic treatments include data from numerous disciplines. Thence, by analysis of these data, certain zoogeographic, ecological, and phylogenetic concepts are derived. A basic source of these data is the locality label.

This paper is devoted, in part, to a clarification of one series of locality labels which has been misinterpreted. Fortunately, reinterpretation does not result in major changes for most of the species involved.

Mitchell (4) recorded the leaf-cutter bee, Megachile p. parallela Smith, from South McAlister, the site listed as an Indiana locality. Since this bee does occur in the state, no significance was attached to this specific place. Stephen (6) recorded the silk bee, Colletes mandibularis Smith, from Macalester, also credited to Indiana. This species, likewise, occurs throughout the state. La Berge (3) recorded three species of bees from Indiana as follows: Svastra (as Melissodes) o. obliqua (Say) from McAllister; Svastra (as Melissodes) p. petulca (Cresson) from South McAlester; and Melissodes c. communis Cresson from South McAllester. Of the three species, S. petulca is the only one not known to occur, being of more southern and western distribution. Deleting the Indiana record from the distributional map [(3), fig. 9, pg. 1010] results in a somewhat different configuration. On this basis, it would be predicted that this species is, however, likely to occur within the state in the Lower Wabash Valley or "Pocket" Biotic Unit (2).

As the number of references to this locality increased, in addition to the various spellings, it became important to discover the exact location and the reasons for the interpretations. With but meagre facts to substantiate the conclusions, it was reasonable to accept the idea that all records should be attributed to McAlester, Oklahoma. This would mean that labels read as "Indiana" were in fact "Indian Territory."

Confirmation that such an idea was correct has been found in the recent publications by Campbell (1) and Quate and Thompson (5). Campbell recorded *Lobopoda nigrans* (Melsheimer) from South McAlester and Atoka, both localities given as being in Indiana. The inclusion of Atoka, also an Oklahoma locality, further represents a label misinterpretation.

The reference by Quate and Thompson strangely does not have reference to Indiana, but to Arkansas. It does, however, give complete label information as follows: "Vinita, Ind. T., June 7-8, '99, Wickham." The species referred to is *Melanotus lanei* Quate and the locality is cited as being in Arkansas.

It has become apparent that one or more collections of beetles and of bees contains materials with labels that can be misread. Assuredly, all references to Atoka, McAlester (and its derivative spellings), and Vinita are Oklahoma localities, not Indiana or Arkansas.

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