

PROCEEDINGS
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BIOLOGICAL SOCIETY OF WASHINGTON

OCCURRENCE OF A EUROPEAN SOLITARY BEE (*ANDRENA WILKELLA* KIRBY) IN THE EASTERN UNITED STATES.

BY J. R. MALLOCH.

I have always been particularly careful in my publications on North American insects to guard against the danger of recording any European species as occurring here without actual comparison of specimens emanating from the different continents. I can not help but believe that some of my fellow entomologists consider my attitude towards certain records of Diptera pertaining to species supposed to occur here and in Europe to be rather one of natural perversity than of caution, but I certainly feel that a conservative attitude should be maintained in the matter of widening the published range of species because of the confusion an error in identification may create in future references to such species even after the error has been rectified in print.

When insects feed upon particular plants it frequently occurs that in the transportation of their host plant the associated insect species are carried from one part of the country to another or from one country or continent to another, and the natural distribution of the insects is thus, by artificial means, very materially enlarged. Scavenging species in various orders find in the commercial vessel plying between ports in different parts of the world a ready means of distribution, and many such insects are of world-wide occurrence.

We have in the past had statements of the occurrence of several European species of *Andrena* in North America, but these records were subsequently suppressed, and attributed to errors in identification. That some European species of this genus

probably do occur in this country has been my belief for a considerable time because of the evident possibility of some of the early spring species having been shipped here in winter or early spring, either in earth used as ballast or around potted plants, during the period when such imports were uninspected on arrival.

Provided a species obtained access to this country under such conditions it could establish itself very readily if the plants upon which it depended for pollen were available. Most of the early spring species of western Europe, and particularly of Britain, depend upon willow, dandelion, coltsfoot, furze, and various fruit blossoms, for their food supply. Most of these plants are found in New England, and, in fact, throughout the United States, so that conditions in so far as food supply is concerned are favorable. It is of course improbable that specimens of imported species would come singly, as they usually nest in colonies, and a spadeful of earth may carry twenty specimens and contain both sexes.

The species which I record herewith is one that occurs throughout Europe and is one of the earliest visitors to willow flowers. I have dug imagines of both sexes out of a sand bank in Scotland before the middle of March. They were at a depth of about eight inches.

Saunders uses for this species Kirby's name *wilkella*, differing from Schmiedeknecht, who used the same author's species name *xanthura*. The species is known in this country under the name *winkleyi* Viereck.

I have before me a series belonging to my own collection, obtained in Britain, which I have compared with a long series submitted for identification from Cornell University, obtained at Ithaca, Rochester Junction, Rock City, and McLean Bogs, New York. The species is intermediate between Robertson's subgenus *Trachandrena* and *Andrena*, the male having the third antennal joint very much shorter than the fourth, and the hypopygium very similar to that of *claytoniae* and allied species. The metathoracic enclosure is similar to that of *cressoni* Robertson, and the female resembles the latter very strikingly. The abdomen has the surface so closely and coarsely shagreened that it has the appearance of having a secondary punctuation at base and apex of each dorsal segment in addition to the large punc-

tures, and the basal nervure is very much proximad of the median transverse nervure—characters which readily separate the species from any other known to me occurring in the eastern United States.

Viereck describes *winkleyi* from Branford, Conn., and records it from New Haven, Conn. He gives records of its visiting flowers of quince, raspberry, and gooseberry.

A male from the collection of N. Banks, taken at Ithaca, bears the record, "Wild cherry."

Occurs from May 14 to June 28 according to data on specimens.



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