

flexing its wings, then retreated into the densely wooded swamp with the dragonfly in pursuit.

Dr. Clifford B. Knight states in *Basic Concepts of Ecology*, p. 157: "Dragonflies will establish a linear territory along a stream or in the vicinity of a body of water that they patrol and defend against invasion by other members of their species." Territoriality is normally intraspecific—could this unusual behavior suggest another predator for the tasty *Limenitis* or the extension of territoriality to an interspecific activity by the dragonfly?

During the past ten years, I have collected thousands of *Limenitis*. Always these individuals were found in association with water, and in the South with the ever present dragonfly which apparently shares its habitat. In most cases, this appears to be a harmonious relationship.

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#### THE OCCURRENCE OF *VANESSA CARDUI* IN MISSISSIPPI AND TENNESSEE<sup>1</sup>

C. B. Williams (1970, Jour. Lepid. Soc. 24: 157) stated that *V. cardui* "is not often recorded in the southeast, though if this is due to a real rarity or to lack of interest is not certain." Speaking of its occurrence in 1952, he wrote, "There are however no records of abundance from Texas or from any of the Gulf States except Mississippi, where it was said to have been 'abundant'." He concluded with a plea for sharing one's observations. I give here observations made in Mississippi and Tennessee.

*V. cardui* was first recorded from Mississippi by Weed in 1894 as taken by him in the northeastern part of the state during the three previous years. He reported it rarer than *virginiensis*. Mather and Mather in 1958 reported having found it in all months except January, May, June, and December. Records are now available for May, June, and December, leaving only January without records. Localities were known in nine counties in all sections of the state. It is probably their record of 1952 occurrence as "abundant" that is referred to by Williams. All data now available to me for Mississippi occurrences are tabulated below in terms of number of recorded occurrences per month. For the years not listed there are no recorded occurrences.

|                   | F | M | A | M | J | J | A  | S | O  | N | D  |
|-------------------|---|---|---|---|---|---|----|---|----|---|----|
| 1947              | — | — | — | — | — | — | —  | 1 | —  | — | 1  |
| 1948              | — | — | — | — | — | — | —  | 1 | —  | — | 1  |
| 1949              | — | — | 1 | — | — | — | 1  | 1 | 1  | — | 4  |
| 1952              | 1 | 3 | 1 | 2 | — | 1 | 1  | 1 | 3  | 2 | 16 |
| 1953              | — | 2 | — | — | — | — | 1  | — | —  | 1 | 4  |
| 1954              | — | — | 1 | — | — | — | —  | — | 2  | 2 | 5  |
| 1957              | — | — | — | — | — | 2 | 3  | 1 | 1  | — | 7  |
| 1958              | — | — | — | 1 | 2 | 4 | 4  | — | —  | — | 11 |
| 1960              | — | — | — | 1 | — | — | —  | — | 2  | — | 3  |
| 1965 <sup>2</sup> | — | — | — | — | — | — | 2  | 1 | —  | — | 3  |
| 1968 <sup>2</sup> | — | — | 3 | 4 | 1 | — | 1  | 1 | —  | 1 | 11 |
| 1970 <sup>2</sup> | — | — | — | — | 1 | — | 1  | 2 | 1  | 1 | 6  |
|                   | 1 | 5 | 6 | 8 | 4 | 7 | 14 | 9 | 10 | 7 | 72 |

<sup>1</sup> Contribution No. 190, Bureau of Entomology, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville.

<sup>2</sup> Includes data furnished by Mr. Charles T. Bryson, Mississippi State University.

Mr. Harry C. Monk, Nashville, Tenn. has tabulated his observations of the occurrence of *V. cardui* in that area (Davidson County) and has granted me permission to include them in this report. In the following tabulation of number of days in any one month that *V. cardui* was observed, a day is counted regardless of the number of individuals seen or the number of localities at which the species was seen. Data through 1970 are included. He has one December record: 8 December 1952; this is the only year for which there is a December record for Mississippi.

|      | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV |     |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1954 | —   | —   | 1   | 9   | 4   | 24  | 17  | 2   | 57  |
| 1955 | —   | —   | —   | —   | —   | 3   | 3   | —   | 6   |
| 1956 | —   | —   | —   | —   | 2   | 1   | —   | —   | 3   |
| 1957 | —   | —   | —   | 9   | 11  | 19  | 10  | 1   | 50  |
| 1958 | —   | —   | 3   | 13  | 10  | 17  | 1   | 1   | 45  |
| 1959 | —   | —   | 1   | 1   | —   | 2   | —   | —   | 4   |
| 1960 | —   | —   | —   | 4   | 11  | 9   | 5   | —   | 29  |
| 1961 | —   | —   | —   | 2   | 1   | —   | —   | —   | 3   |
| 1962 | —   | —   | —   | —   | 3   | 4   | 2   | 3   | 12  |
| 1963 | —   | —   | 2   | 2   | 7   | 6   | 9   | 1   | 27  |
| 1964 | —   | —   | —   | —   | 2   | 2   | 7   | 1   | 12  |
| 1965 | —   | —   | —   | 1   | 6   | 6   | 2   | —   | 15  |
| 1966 | 1   | 2   | 7   | 1   | 8   | 7   | 12  | 2   | 40  |
| 1967 | —   | —   | —   | —   | —   | —   | 5   | —   | 5   |
| 1968 | 4   | 6   | 10  | 5   | 25  | 13  | 9   | —   | 72  |
| 1969 | —   | —   | —   | —   | —   | —   | 1   | —   | 1   |
| 1970 | —   | —   | 1   | 2   | 4   | 5   | 2   | 1   | 15  |
|      | 5   | 8   | 25  | 49  | 94  | 118 | 85  | 12  | 396 |

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## BOOK REVIEW

THE ENGLISH LEPIDOPTERA OR THE AURELIAN'S POCKET COMPANION, by Moses Harris. 1775, 66 pp. + i-xv, 1 coloured plate. Reprinted 1969 by E. W. Classey Ltd., Hampton, Middlesex. Distributed in North America by Entomological Reprint Specialists, P.O. Box 77971, Dockweiler Station, Los Angeles, Calif. Price \$9.60 U.S.

An introductory section of the book is devoted to the collection, rearing and preservation of moths and butterflies. The remainder of the text is arranged in the form of a table which lists for 415 species of British Lepidoptera: common names, food plants, seasonal periods of pupation and emergence, wing expanses, habitats, and diagnostic macular features. The last column in the table of data lists the Linnaean names for each species and numbers them according to the tenth edition of the *Systema Naturae*. A coloured frontispiece illustrates the numerical system of designating wing veins and cells. The book will be a particular interest to the bibliophile.

D. F. HARDWICK, *Editor*.