

**New Locality Records in the Genus *Chrysops*
(Diptera: Tabanidae) in Indiana**

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Abstract

Collection data including 35 new Indiana county records of deer flies (*Chrysops*) are reported.

Introduction

Burton (2) has provided the most recent list of Indiana *Chrysops* and a convenient base on which to add locality records. We have assembled 35 new county records resulting from state survey and extension activities.

Most of these *Chrysops* were collected by sweeping at head level with a net; nearly all collections were made at brief stops while traveling to other destinations, which accounts for the small size of the catch at each location.

In reporting, the county will be listed first, followed by the date (if 1975, that will be omitted), the number of ♀♀, other species of large biting flies taken with it, and the specific site. If the site is unusual or otherwise requires elaboration, a description follows only the first mention of it. New county records will be marked with an asterisk.

Chrysops aestuans Wulp, 1867. Jennings*, 18 VII 1974, 1, with *C. pikei*, *C. sequax* var. *tau*. Little Graham Creek joins Graham Creek just east of San Jacinto and near the junction of county roads 230S and 675E. All catches were made on Little Graham at this point. The banks here are steep, the bottom sandy. This record represents a considerable range extension of this species in Indiana; Burton (1) collected 2 specimens in Lake Co., and records it from Kosciusko Co. He felt less than confident about two published Kentucky records, but this present record would make them more probable.

Chrysops callidus Osten Sacken, 1875. Steuben, 10 VI 1970, 1. Whitley, 9 VI 1970, 1; 4 VI, 1, with *C. cineticornis* near a gravel pit which always has water in it in Columbia Twp., Sect. 32. Kosciusko, 9 VI 1970, 1. Pulaski, 29 VII 1974, 2, with *C. flavidus*, *C. montanus*, *C. pikei*, *C. vittatus*, Winamac Fish and Game Area. White*, 4 VI, 2, with *C. cineticornis* near Buffalo on Indiana 16 between the Tippecanoe River and Monon Creek, in the vicinity of a littered gravel pit. Grant*, 27 V, 1, near 800E and Indiana 26. Ripley, 18 VII 1974, 1, Versailles State Park. Jackson, 30 V 1974, 1. Washington*, 20 V, 1. Harrison*, 20 V, 1, Jerome Davis farm. Dubois, 19 V, 1, with *C. pikei* and *C. niger*. Pike*, 10 VI, 1, with *Tabanus molestus* and *T. mularis*, Patoka Fish and Game Area. All catches were made in the southernmost portion of this fish and game area, which can be reached by turning at the first entrance leading east after leaving Indiana 64. This portion of the park appears to have been converted from a strip mine to a park; the

waters are discolored, and vegetation, except for patches of trees, is sparse. Gibson, 10 VI, 1, with *C. pikei* and *C. flavidus*, a swampy area north of 125S on Indiana 65. Warrick, 19 V, 1, with *C. pikei*.

Chrysops cincticornis Walker, 1848. Whitley*, 4 VI, 1, with *C. callidus*, Columbia Twp., Sect. 32, gravel pit. A specimen was also sent to the Extension Office for determination, from this county. No other data were available except date, 6 VI 1973. White*, 4 VI, 1, with *C. callidus*, near Buffalo (site as described above).

Chrysops flavidus Wiedemann, 1821. Pulaski, 29 VII 1974, 1, with *C. callidus*, *C. montanus*, *C. pikei*, *C. vittatus*, Winamac Fish and Game Area. Gibson, 10 VI, 1, with *C. callidus*, *C. pikei*, a swampy area North of 125S on Indiana 65.

Chrysops impunctus Kröber, 1926. Warren, 4 VII 1973, 1, Black Rock Park. This record was reported earlier (2). Parke*, 8 VII 1974, 2, at roadside rest stop on Indiana 59.

Chrysops indus Osten Sacken, 1875. Steuben, 12 VI 1974, 1, swept from grass in Jackson Twp., Section 27. Kosciusko, 9 VI 1970, 1. Fulton*, 29 V, 1 sent in with 4 *C. niger* to the Extension Service by a woman who claimed allergic reactions following bites by either or both species. Grant*, 14 VI 1972, 1, collected from dog on farm at junction of Indiana 26 and 450E.

Chrysops macquarti Philip, 1961. Clay*, 17 VI 1974, 1. Franklin, 28 V, 1, junction Indiana 101 and Union Co. line, with *Symphoromyia pleuralis*. Ripley*, 11 VI, 2, with *C. montanus*, Otter Creek where it goes under US. 50. Jennings*, 19 VI 1974, 3; 11 VI, 2, all 5 from Little Graham Creek. Jackson*, 5 VI 1972, 1, Jackson Twp., Sect. 14E, east of Seymour.

Chrysops moechus Osten Sacken, 1875. White*, 22 VII 1974, 2, with *C. sequax*, Jct. Indiana 16 and Metamonong Creek. Tippecanoe, 28 VI 1970, 1; taken in large numbers by G. Finni and H. R. Lawson. Jennings*, 20 VI 1973, 3, Little Graham Creek; 19 VI 1974, 1, same site; 14 VIII 1974, 1, with *C. vittatus*, same site. Harrison*, no date, collected by K. Shepard of Hardinsburg, R. R. 1, where they were numerous. Martin*, 10 VI 1972, 2, Crane Naval Ammunition Depot grounds.

Chrysops montanus Osten Sacken 1875. Pulaski, 29 VII 1974, 1, with *C. callidus*, *C. flavidus*, *C. pikei*, and *C. vittatus*, Winamac Fish and Game Area. Ripley, 11 VI, 1 with *C. macquarti*, Otter Creek where it goes under US. 50. Brown*, 24 VII 1974, 1, T. C. Steele State Memorial Park.

Chrysops niger Macquart, 1838. Steuben, 12 VI 1974, 1, Jackson Twp., Section 27. St. Joseph, 12 VI 1974, 1, Union Twp. Section 29. Kosciusko, 9 VI 1970, 1. Fulton, 29 V, 1, sent to the Extension service with *C. indus* with complaints of allergic reaction to bites of one or both species. Cass*, 9 VI 1970, 1. Ripley*, 21 V, 1, Elrod. Jackson*, 12 VI 1970, 1, accused of causing allergic reaction by individual who sent it to Extension service; 24 V 1973, 1, Jackson Twp. Section 14E; 15 V, 4. Dubois*, 13 V, 2. Daviess*, 18 V, 2.

Chrysops pikei Whitney, 1904. Carroll*, 11 VI 1974, 1, Delphi city park. Pulaski, 29 VII 1974, 1 with *C. callidus*, *C. flavidus*, *C. montanus* and *C. vittatus*, Winamac Fish and Game Area. Randolph, 4 VI 1974, 1, Mississinewa River at Indiana 1. Delaware, 9 VIII 1971, collected by C. Pace, who complained of a large population. Union, 24 VII 1974, 1, waterworks west of Liberty. Howard, no date, collected by G. Kull, Kokomo, who complained of large numbers of bites producing welts, sent to the Extension Service. Shelby*, 28 V, 1, Big Blue River at Indiana 44. Bartholomew, 24 VII 1974, 1, a few miles west of Columbus on Indiana 46. Tippecanoe, 31 VII 1970, 1; 5 VII 1973, 1, collected by H. R. Lawson in BL trap Purdue Entomological Research Area. Warren*, 15 VII 1974, 1, Kent Twp.; 7 VIII 1974, 1, with *C. vittatus* and *Tabanus sackeni*, Kent Twp. Putnam, 12 VIII 1974, 1, with *C. vittatus*, Russell Twp. Section 1; 19 VIII 1974, 1, with *C. vittatus*, same site. Jennings*, 17 VI 1974, 1; 18 VI 1974, 1, with *C. sequax* var. *tau*, *C. aestuans*, both dates Little Graham Creek. Jefferson*, 17 VII 1974, 1, with *C. univittatus*. Dubois, 19 VII 1973, 1, near Huntingburg; 17 VII 1974, 1, Robert Buchta roadside park; 19 V, 4, with *C. callidus* and *C. niger*. Warrick, 16 VII 1974, 1, Millersburg; 19 V, 1, with *C. callidus*. Gibson, 19 VI, 1, with *C. callidus*, *C. flavidus*, north of 125S and Indiana 65.

Chrysops sequax Williston, 1887. Newton*, 31 VIII 1970, 1, near Roselawn. White, 20 VIII 1971, 7, very numerous 5 miles west of Brookston, 22 VII 1974, 1, with *C. moechus*, Indiana 16 and Metamonong Creek. Parke*, 7 VIII 1974, 1, Green Twp. Section 7, junction Indiana 236 and Indiana 59.

Chrysops sequax variety *tau*, Philip, 1955. Jennings*, 18 VII 1974, 1, with *C. pikei* and *C. aestuans*, Little Graham Creek.

Chrysops vittatus Wiedemann, 1821. Marshall, 1 VIII 1974, 1, Old Tipp Town park. Pulaski, 29 VII 1974, 7, with *C. callidus*, *C. flavidus*, *C. montanus*, *C. pikei*. Howard, 9 VII 1974, Center. Hancock*, 25 VII 1974, 2. Bartholomew, 24 VII 1974, 1, with *C. pikei*, west of Columbus; 24 VII 1974, 3, Clifty Twp., a half mile east of Newbern. Tippecanoe, 14 VIII 1970, 1, Purdue Entomological Research Area, collected by H. R. Lawson. Warren, 15 VII 1974, 2, junction Indiana 28 and Indiana 63; 7 VIII 1974, 5, with *C. pikei* and *Tabanus sackeni*, Kent Twp. Montgomery, 10 VII 1974, 7; 23 VII 1974, 18, 7 VIII 1974, 2, all Scott Twp., Section 32. Putnam, 23 VII 1974, 1, junction U.S. 36 and U.S. 231; 12 VIII 1974, 17, with *C. pikei*, Russell Twp.; 19 VIII 1974, 10, with *C. pikei*. Parke, 8 VII 1974, 2, with *C. impunctus*, on Indiana 59, roadside table; 15 VII 1974, 1, same site. Owen, 23 VII 1974, 1, Montgomery Twp., Section 21, 1.4 miles north of junction Indiana 67 on Indiana 43, just south of Carp; 23 VII 1974, 1. Switzerland*, 18 VII 1974, 2. Jennings*, 14 VIII 1974, 1, with *C. moechus*, Little Graham Creek. Jackson, 29 VII 1970, 1.

Literature Cited

1. BURTON, J. J. S. 1975. The deer flies of Indiana (Diptera: Tabanidae: *Chrysops*). Gr. Lakes Entomol. 8(1):1-19.
2. MEYER, ROBERT W. 1973. [In] Cooperative Economic Insect Report 23(28):449.

