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THE GREAT LAKES ENTOMOLOGIST

NEW RECORDS OF OHIO LONG-HORNED BEETLES (COLEOPTERA: CERAMBYCIDAE)

Robert A. Androw¹ and George D. Keeney²

ABSTRACT

Recorded from Ohio for the first time are eleven species of Cerambycidae: Arhopalus rusticus obsoletus, Tetropium schwarzianum, Parelaphidion aspersum, Anthophylax attenuatus, Acmaeops proteus proteus, Goes variegatus, Ataxia brunnea, Styloleptus biustus, Eutrichillus biguttatus, and Oberea flavipes. Confirming records are given for four other species: Tilloclytus geminatus, Lepturges pictus, Lepturges angulatus and Plectrodera scalator. Tetropium cinnamopterum is tentatively recorded from Ohio from one specimen with questionable data. New biological information is presented for several of the species recorded herein.

The family Cerambycidae has been well studied in Ohio over the years, most notably by Josef N. Knull of The Ohio State University. Knull (1946) listed 262 species then known or suspected to occur in the state. Of the total, only 222 represented confirmed Ohio records. The new records presented herein increase that total to 237 species confirmed for the state.

Revisions of the family by Linsley (1962a, 1962b, 1963, 1964) and Linsley and Chemsak (1972, 1976, 1984, 1995) treated all of the species in North America north of Mexico, reiterating some of Knull's records for Ohio, but giving very few individual records for the state. Their range maps often showed no Ohio records while indicating many records from neighboring states. This may reflect the generality of many of Knull's records, as he often listed species as being "common in Ohio" or "abundant throughout the state" without listing any specific localities of occurrence.

Since Knull's work, little has been published specifically on the Cerambycidae of Ohio, and extensive collecting in recent years by the authors has produced many additional records and observations. A search of several institutional collections in Ohio produced little new information as most were well studied by Knull and a very small amount of new material has been added since his studies. However, a closer study of the Ohio State University Collection provided several of the new records, by the correction of misidentifications. Some of these may have been present during Knull's study of the material, but as most involved the taxonomically difficult genus *Lepturges* it is understandable how the specimens could have been misidentified, as they often are in many large collections of Cerambycidae. From these observations, we are certain that some of the specimens considered by Knull to be

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THE GREAT LAKES ENTOMOLOGIST Vol. 32, No. 1 & 2

Lepturges confluens (Haldeman) were in fact Lepturges angulatus (LeConte). We also conclude that most, if not all, of the published Ohio records for Parelaphidion incertum (Newman) represent specimens of Parelaphidion aspersum (Haldeman), a species common in Ohio. The authors have not yet seen a specimen of P. incertum from the state.

The following abbreviations have been used for the collections in which the specimens have been deposited: RAAC = the Robert A. Androw Collection; GDKC = the George D. Keeney Collection; OSUC = the Ohio State University Collection; CMNH = Carnegie Museum of Natural History Collection; JAGC = Joseph A. Green Collection; EGCC = the Eric G. Chapman Collection; SJSC = Steven J. Schott Collection; MJSC = the Michael J. Silvaggio Collection. Following each collection record are parentheses containing the number of specimens taken on that date and the collection in which the specimens have been deposited. Unless otherwise stated, specimens were collected by the owner of the collection in which they are deposited.

RESULTS AND DISCUSSION

Subfamily Aseminae

Arhopalus rusticus obsoletus (Randall). Knull (1946:150) referred to this species as "sure to occur in Ohio". Linsley (1962a:75) gave the range as "Boreal North America west to Rocky Mountains . . .". We confirmed the presence of this species in Ohio by the capture of five specimens, four at white light, one at UV light.

NEW STATE RECORD. Hocking County: Hocking Hills State Park, 8 August 1993, Norm Brown, coll. (1-SJSC); 7 miles south of Logan, KOA Campground on Route 664, 18 August 1994, at light (1-EGCC). **Ross County:** Scioto Trail State Park, 12 August 1985 (1-RAAC). **Scioto County:** Shawnee State Park, 12 August 1985 (1-RAAC), 27 July 1990, MV light (2-JAGC). **Vinton County:** Lake Hope State Park, 27 July 1995, UV light (1-RAAC).

Tetropium schwarzianum Casey. Knull (1946) recorded *Tetropium velutinum* LeConte as likely to occur in Ohio, but that species as it is currently known is confined to the Pacific coast and northern Rocky Mountains (Linsley 1962a). The species to which Knull referred is most likely *Tetropium schwarzianum* Casey, although this is impossible to determine from his short description.

Tetropium schwarzianum can be found on freshly cut trunks of pines, generally near the base of logs, often on the underside. While the individuals of many species of Cerambycidae fly or drop when disturbed, individuals of *T*. *schwarzianum* run erratically along the trunk for a short distance, then abruptly hide under shards of bark and remain motionless to avoid capture.

While most specimens are piceous in coloration, one male collected was pale testaceous. This specimen did not appear to be teneral, nor did it possess any structural differences from the rest of the specimens seen.

NEW STATE RECORD. Ashland County: Mohican State Park, 10 September 1978 (2-RAAC), 31 May 1980 (1-RAAC), 7 June 1981 (1-RAAC), 30 May-13 June 1987 (5-JAGC), 19 June 1987 (2-RAAC), 27 June 1987 (2-RAAC), all on cut *Pinus strobus* L.

Tetropium cinnamopterum Kirby. Knull (1946) commented that this species could occur in the northeastern part of Ohio. Linsley (1962b) indi-

THE GREAT LAKES ENTOMOLOGIST

3

cated that this boreal species ranges from Alaska to eastern Canada and the northeastern United States.

One specimen in the Ohio State Collection identified as *Tetropium* schwarzianum Casey is actually a specimen of *Tetropium cinnamopterum* Kirby. The specimen was collected in Tuscarawas County, 12 March 1957 and bears a label reading, "Reared from wood in home". If the label is correct then this specimen is a new state record for the species. However, since we have seen only the one specimen, and the source of the wood is uncertain, we list the species as tentatively occurring in Ohio at this time.

Subfamily Cerambycinae

Parelaphidion aspersum (Haldeman). Linsley (1963:96) commented on the confusion surrounding the identity of this species in many collections, as it has been misidentified often as the superficially similar Parelaphidion incertum (Newman). Undoubtedly, many of Knull's records for *P. incertum* were actually from specimens of *P. aspersum*. While *P. incertum* appears to be rare in Ohio, if it occurs there at all, we have found *P. aspersum* to be quite common, leading to our opinion that most of the material examined by Knull was most likely *P. aspersum*.

NEW STATE RÉCORD. Ashtabula County: Rome Township, Pallister State Nature Reserve, Callender Road, 27 August 1996 (1-EGCC). Franklin County: Blendon Township, 14 July 1936 (2-OSUC); Columbus, no further data (1-OSUC). Meigs County: Forked Run State Park, 16 August 1994 (1-EGCC). Muskingum County: Dillon State Park, 25 May 1990, reared from dead Carya sp. (1-RAAC). Ottawa County: Bay Point, 18 July 1934, E.S.Thomas & D.Smith (1-OSUC); South Bass Island, June 1980, B.D.Valentine, coll. (1-RAAC); Richland County: Mansfield, 3 July 1978, reared from dead Quercus sp. (1-RAAC). Vinton County: Lake Hope State Park, 25 July 1981 (1-RAAC), 1 August 1981 (1-RAAC), 13 July 1982 (1-RAAC), 27 June 1987 (1-RAAC), 29 June 1987 (1-RAAC), 7 July 1987 (2-RAAC), 15 July 1988 (1-RAAC), 20 July 1994 (9-RAAC). Wayne County: 8 June 1941, collector unknown (1-RAAC) Wooster, 10 June 1942, R.W.Rings (1-OSUC).

Tilloclytus geminatus (Haldeman). This species was " [r]ecorded as breeding in dead branches of oak, sour gum, hickory, grape, and dogwood and will occur in Ohio" (Knull 1946:227). We confirm its occurrence in the state and add a new host record as specimens were reared from small, dead branches of elm, *Ulmus americana* L., from southern Ohio.

CONFIRMING RECORD. Franklin County: Columbus, 5 June 1970 (1-RAAC). Scioto County: Portsmouth, April 1991, reared from *Ulmus americana* L. (5-GDKC), 8 May 1988 (1-GDKC).

Subfamily Lepturinae

Anthophylax attenuatus (Haldeman). Knull (1946) suspected this species to occur in Ohio, and Linsley and Chemsak (1972) gave its range as the northeastern states to Virginia, showing a record for southwestern Pennsylvania on their range map. We extend the range of this species to northern Ohio by the collection of six specimens. Of the specimens seen, two were in flight, another was taken while sweeping, still another as it was ovipositing on a standing dead maple, *Acer* sp.

NEW STATE RECORD. Ashland County: Mohican State Park, 29

THE GREAT LAKES ENTOMOLOGIST Vol. 32, No. 1 & 2

May 1980 (1-RAAC), 24 May 1986 (1-RAAC), 25 May 1981 (1-RAAC). Ashtabula County: Morgan Township, Sweitzer Road, Grand River Terraces, 1 June 1994 (1-EGCC). Geauga County: Chardon, August 1928, R.Dean, coll. (1-OSUC). Lake County: Madison Twp., Strong's Woods at 4855 Emerson Road, 17 May 1995 (1-MJSC).

Acmaeops proteus proteus (Kirby). Knull (1946:180) stated that this small lepturine could occur in the state, while Linsley and Chemsak (1972:98) gave its range as, "Montane coniferous regions of Canada and the United States." In Ohio adults appear in mid-May and can be found on freshly cut trunks and slash of white pine, *Pinus strobus* L. Adults are very active and run rapidly along tree trunks and branches. In cloudy or cool weather they can be found in bark crevices, often on the underside of the host logs. This species is relatively common in areas of pine.

This species is quite variable in color and all color forms described by Linsley and Chemsak (1972) have been collected together in Ohio. Although most males seen have been entirely black, the females are variously black, testaceous or vittate.

NEW STATE RECORD. Ashland County: Mohican State Park, 21 July 1979 (1-RAAC), 31 May 1980 (2-RAAC), 5 June 1980 (2-RAAC), 22 July 1980 (1-RAAC), 16 July 1981 (1-RAAC), 7 June 1982 (3-RAAC), 13 June 1987, J.A.Green (4-JAGC), 12 May 1990 (1-RAAC). All collected on cut white pine, *Pinus strobus* L.

Subfamily Lamiinae

Plectrodera scalator (Fabricius). Knull (1946:240) cited the single known "Ohio" locality for this species as "Blennerhasset Island, July 1939, O.R.Kiracofe". This locality, an island in the Ohio River, is actually within the state boundaries of West Virginia. Technically speaking, the Ross County records given below are a new Ohio state record but we have opted not to "split political hairs" and consider the new locality, which lies nearly in the center of Ohio, as a confirming record for the species. This species has been recorded as breeding in the boles of living cottonwood, *Populus deltoides* Marsh., and willow, *Salix* spp. (Knull, 1946). In Ohio, adults have been observed feeding on the terminal shoots of cottonwood saplings. One specimen was taken on the foliage of willow, but no feeding has been observed on this plant. Adults can be very active in sunny weather, and we have observed the males on several occasions flying around the host trees, apparently in search of females.

CONFIRMING RECORD. Ross County: 1 mile south of Chillicothe, along the Scioto River, 22 July 1995 (1-GDKC), 16 August 1995 (1-GDKC), 19 August 1995 (1-GDKC), 7 July 1995 (4-RAAC), 1 August 1995 (7-RAAC), 8 August 1995 (2-RAAC), 14 July 1996 (4-RAAC), 26 July 1997 (10-JAGC).

Goes variegatus Linsley and Chemsak. Two of the collection localities cited by Linsley and Chemsak (1984) were DeKalb County, Georgia and Colleton County, South Carolina, these being until now the most northern records for this recently described species (Linsley and Chemsak, 1984). The capture of two specimens in southern Ohio extends the range of this species approximately 950 kilometers to the north.

NEW STATE RECORD. Scioto County: Shawnee State Park, 20 June 1990 (1-RAAC), 3 July 1990 (1-GDKC), both at mercury vapor light.

THE GREAT LAKES ENTOMOLOGIST

Ataxia brunnea Champlain and Knull. Linsley and Chemsak (1984:128) gave the range of this prairie endemic species as, "Minnesota to Illinois, Texas" and further remarked that the species was rare in collections and all available material was from the Chicago area.

One specimen was attracted to UV light in Ohio, extending the known range of this species approximately 560 kilometers eastward from the Chicago records.

NEW STATE RECORD. Richland County: 10 miles south of Mansfield, 11 July 1984 (1-RAAC).

Eutrichillus biguttatus (LeConte). Knull (1946) mentioned that this southern species breeds in pines and that it could occur in Ohio. Our collections indicate that it occurs well into Ohio. Although Dillon (1956b) recorded it from Michigan, we have not yet seen any specimens from the northern parts of Ohio.

We have beaten specimens from dead branches of pine, and have taken the species at both mercury vapor and UV light.

NEW STATE RECORD. Scioto County: Shawnee State Park, 16 July 1988 (1-RAAC). Vinton County: Lake Hope State Park, 25 June 1988 (3-RAAC), 15 June 1988 (2-RAAC), 25 June 1988 (1-JAGC), 23 June 1989 (1-JAGC), 26 June 1989 (1-RAAC), 24 July 1989 (1-JAGC), 26 June 1992 (2-JAGC), 2 July 1993 (1-RAAC), 7 July 1993 (1-JAGC), 18 June 1994 (1-JAGC), 11 July 1997 (1-JAGC).

Lepturges pictus (LeConte). This species was described by LeConte (1852) from Ohio and Dillon (1956a) gave its range as Ohio and western Pennsylvania. However, Knull (1946) did not record the species from Ohio. Upon examination of the Ohio State University Collection, we found eleven specimens curated under the name Lepturges pictus (LeConte), six being correctly identified and the other five being Lepturges symmetricus (Haldeman). Four of the L. pictus were collected in July of 1912 and one specimen was collected by Knull on – June 19 + with no further data given, but since no determination or accession labels are present on the individual specimens, it is impossible to determine whether the specimens were present in the collection when it was studied by Knull.

This species has been collected by beating dead branches of hackberry, *Celtis occidentalis* L., in Ohio. The species has been reared from this host as well, emerging from second year dead branches 3-4 inches in diameter. Larvae bore and pupate in the sapwood of branches, unlike many other species of *Lepturges* that bore under the bark and pupate in an oval depression between the sapwood and bark.

CONFIRMING RECORD. Delaware County: 2 June 1953, D.J. and J.N. Knull (1-OSUC). **Erie County:** Cedar Point, July 1912 (4-OSUC). **Franklin County:** Columbus, 19 June, J.N.Knull (1-OSUC). **Ottawa County:** North Bass Island, 19 August 1985, B.D.Valentine, coll (1-RAAC); South Bass Island, 8 July 1992, beaten from hackberry, *Celtis occidentalis* L., K.W.Will, coll. (1-RAAC). **Ross County:** Scioto Trails State Park, 7 July 1995, beating dead *Celtis occidentalis* L. (1-JAGC), 1 mile south of Chillicothe, Route 50 at Scioto River, 14 July 1996, beating dead hackberry, *Celtis occidentalis* L. (2-RAAC), 17-21 May 1997, emerged from dead *Celtis occidentalis* L. (6-RAAC), 21-25 May 1997, emerged from dead *Celtis occidentalis* L. (8-RAAC). **OHIO:** no further data, from Henry Ulke Collection (2-CMNH).

Lepturges angulatus (LeConte). Dillon (1956a) recorded this species from Ohio, but a more specific locality was not given. Knull (1946) did not

mention the species in his treatment of Ohio species, even though it is fairly common in the southern half of the state.

In the Ohio State University Collection, 70 specimens were curated under the name *Lepturges angulatus* (LeConte), of which 62 specimens were correctly identified, containing nine records for Ohio. The remaining specimens included four *Lepturges confluens* (Haldeman) and four *Lepturges infilatus* Bates. In addition, seven specimens of *Lepturges angulatus* were found misplaced under *Lepturges symmetricus* (Haldeman).

Several specimens were beaten from the dead branches and living foliage of hackberry, *Celtis occidentalis* L. and a series was reared from dead logs of hickory, *Carya sp.*.

CONFIRMING RECORD. Athens County: 14 July 1934, J.N.Knull (1-OSUC). **Delaware County:** 21 June 1953, D.J. and J.N.Knull (1-OSUC), 12 July 1960, D.J. and J.N.Knull (1-OSUC), 12 August 1960, D.J. and J.N.Knull (3-OSUC). **Erie County:** Sandusky, Cedar Point, July 1912 (2-OSUC). **Franklin County:** Columbus, 19 June, J.N.Knull (1-OSUC). **Ross County:** 1 mile south of Chillicothe, Route 50 at Scioto River, 4 July 1989 (4-RAAC), 14 July 1996 (10-RAAC), 20 July 1996 (17-RAAC), all beaten from hackberry, *Celtis occidentalis* L. **Scioto County:** Shawnee State Park, 1-21 June 1990, reared from *Carya* sp. (10-RAAC). **Vinton County:** Lake Hope State Park, 16 July 1988, at UV light (1-RAAC). **OHIO:** no further data, from Henry Ulke Collection (2-CMNH).

Styloleptus biustus (LeConte). A single, diminutive specimen of this species was found in the collection of George Keeney. While there is no ecological information on the specimen's label, it was most likely taken at light. The species is common in the southern parts of the United States and it could be established as far north as southern Ohio.

NEW STATE RECORD. Scioto County: Portsmouth, 23 June 1979 (1-GDKC)

Oberea flavipes Haldeman. This species, first described from Pennsylvania, is newly recorded for Ohio. Linsley and Chemsak (1995) give the range of the species as northeastern North America to Manitoba. Specimens taken in Ohio were found in association with cultivated garden phlox in a suburban garden. In addition to the records listed, individuals were observed in flight during the last week of June and the first week of July, 1995 (pers. comm. from Richard Maxey).

In the Ohio State University Collection we found a single specimen under the name *Oberea flavipes*, but the specimen is actually a strongly infuscated individual of *Oberea tripunctata* (Swederus).

NEW STATE RECORD. Franklin County: Sharon Township, Columbus, 17 June 1993 (4-GDKC), 18 June 1993 (3-RAAC), 18 June 1993 (2-GDKC), 27 June 1993 (4-GDKC), 30 June 1993 (2-GDKC), 1 July 1993 (1-GDKC), 24 June 1994 (5-GDKC), 17 June 1996 (3-GDKC), 24 June 1996 (2-GDKC), all R. Maxey, coll.

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THE GREAT LAKES ENTOMOLOGIST

7

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