

# RECORDS OF MINOR FAMILIES OF COLEOPTERA FROM OKLAHOMA

William D. Shepard

Oklahoma Biological Survey, 770 Van Vleet Oval, Norman, Oklahoma

Seventy-seven species representing twenty-six minor families of Coleoptera are listed from Oklahoma. Publications concerning Oklahoma Coleoptera in general are cited.

As with many states, information concerning the Coleoptera of Oklahoma is relatively scant and generally centered upon economically important families or larger and more conspicuous beetles. Two notable exceptions are the works of Dr. Harley P. Brown (University of Oklahoma) in the area of aquatic dryopoid beetles and those of Dr. William A. Drew (Oklahoma State University) with several minor families.

To increase our knowledge of minor families in Oklahoma, an effort has been made over the past year to record those species which are present and which have received little attention. Taxa mentioned herein are represented by specimens either in the Entomology Range of Stovall Museum of Science and History at the University of Oklahoma or in the author's collection. Specimens from central Oklahoma make up the bulk of the records. Although many of the collections constitute new state records, this is due mainly to the lack of attention paid to these groups in the past and not due to recent migration into Oklahoma. Table 1 lists the species with months of collection and any ecological information available with the specimens. The inclusion or deletion of particular minor families is more a result of choice than of any intrinsic character of those families. Most attention was given to families with which the author was most familiar. Additional records will be presented as time permits. This list is not meant to be considered as complete but only as a starting point for most of the families. It is hoped that it will serve to stimulate further work with minor families of Coleoptera in Oklahoma.

To avoid repetition of other works and to assess what has been done with beetles in Oklahoma, a listing of publications concerning the Coleoptera of Oklahoma was prepared and is given in Table 2. The many reviews and revisions for various families for the whole United States that mention Oklahoma were deleted so as to make the list manageable.

TABLE 1. *Oklahoma Coleoptera*

Taxa	Months of collection	Ecological data
Cupedidae		
<i>Cupes concolor</i> Westw.	VI — IX	LT <sup>a</sup>
Silphidae		
<i>Necrophorus cardinus</i> Linn.	IV, V	on mushroom
<i>N. marginatus</i> Fab.	III, IV, X	
<i>N. obscurus</i> Kby.	IV	
<i>N. orbicollis</i> Say	VI, VIII	
<i>N. pustulatus</i> Herschel	VII	
<i>N. tomentosus</i> Web.	V, VI	on carrion
<i>Philus truncata</i> Say	VII	
<i>Silpha americana</i> Linn.	IV, VI	
<i>S. inaequalis</i> Fab.	III, IV, VI	
<i>S. novemboracensis</i> Forst.	V, VI	on carrion
<i>S. surinamensis</i> Fab.	V — VIII	on carrion, LT
Leptodiridae		
<i>Catops basilaris</i> Say	V, VI	LT
<i>C. terminans</i> LeC.	II	in <i>Neotoma</i> nest
<i>Ptomaphagus fesus</i> Horn	VI	LT
Scaphidiidae		
<i>Scaphidium quadriguttatum</i> Say	III — VI, IX, X	in rotten log, in fungi

Taxa	Months of collection	Ecological data
<b>Eucinetidae</b>		
<i>Encinetus morio</i> LeC.	IV, VI, VII	LT
<i>E. terminalis</i> LeC.	V — IX	LT
<b>Ptilodactylidae</b>		
<i>Ptilodactyla angustata</i> Horn	VI — IX	LT
<i>P. serricollis</i> (Say)	V — X	LT
<b>Chelonariidae</b>		
<i>Chelonarium lecontei</i> Thomson	VI	
<b>Rhipiceridae</b>		
<i>Zenoa picea</i> (Beauvois)	VII, VIII	in rotten log, LT
<b>Sandalidae</b>		
<i>Sandalus niger</i> Knoch	VII	at light, on ground
<b>Cebrionidae</b>		
<i>Scaptolentus lecontei</i> (Salle)	VIII — X	flying, LT
<i>Selonodon antennatus</i> Schfr.	VII	
<i>S. compositus</i> Fall	VI, VII	
<b>Throsidae</b>		
<i>Trixagus chevroleti</i> (Bonvouloir)	V — VIII	in <i>Neotoma</i> nest, LT
<b>Phengodidae</b>		
<i>Phengodes fusciceps</i> LeC.	VI — VIII	LT
<b>Lycidae</b>		
<i>Celetes basalis</i> LeC.	VI	
<i>Calopteron discrepans</i> (Newman)	V, VI	flying
<i>C. reticulatum</i> (Fab.)	XI	flying
<i>C. terminale</i> (Say)	IV	flying
<b>Nosodendridae</b>		
<i>Nosodendron unicolor</i> Say	V — VII, X	in elm wound, LT
<b>Euglenidae</b>		
<i>Elonus basalis</i> (LeC.)	VII	LT
<i>E. nebulosus</i> (LeC.)	VI, VIII, IX	LT
<i>E. princeps</i> Casey	VI — IX	LT
<i>Phomalus saginatus</i> Casey	VI — IX	LT
<i>Pseudariotes notatus</i> (LeC.)	V	LT
<i>Scanylus luteolus</i> Casey	VII, IX	LT
<i>Zonantes ater</i> (LeC.)	VIII, IX	LT
<i>Z. subfasciatus</i> (LeC.)	IV — X	LT
<b>Rhizophagidae</b>		
<i>Monotoma parallela</i> LeC.	VIII	
<b>Sphindidae</b>		
<i>Sphindus trinitifer</i> Casey	VI, VII	LT
<b>Byturidae</b>		
<i>Byturus</i> sp.	IV, V	in flowers of <i>Rubus</i> , and of <i>Ruellia strepan</i>
<b>Languriidae</b>		
<i>Pharaxonotha kirschi</i> Reitter	VIII	LT
<b>Trogositidae</b>		
<i>Airora cylindrica</i> (Serville)	IV, V, X	under bark
<i>Temnochile virescens</i> (Fab.)	VI, VII	
<i>Tenebroides americanus</i> (Kirby)	V	LT
<i>T. bimaculatus</i> (Melsh.)	VI	
<i>T. corticalis</i> Melsh.	I, IV, V, X, XI	
<i>T. laticollis</i> (Horn)	IV, XII	
<i>T. marginatus</i> (Palisot de Beauvois)	IV	
<i>T. mauritanicus</i> (Linn.)	IV	
<i>T. nanus</i> (Melsh.)	X	
<b>Rhipiphoridae</b>		
<i>Macroasiagon octomaculatum</i> (Gerst.)	VI	
<i>M. dimidiatum</i> (Fab.)	VI, VII	
<b>Erotylidae</b>		
<i>Ischyryus quadripunctatus</i> Oliv.	IV, VI, IX	in bracket fungus, LT
<i>Megalodacne fasciata</i> Fab.	III — V, VII — IX	under bark, LT
<i>Triplax flavicollis</i> LeC.	IV, VI	LT
<i>T. macra</i> LeC.	X, XI	
<i>T. puncticeps</i> Casey	II, X	ex <i>Pleurotus</i> , in <i>Neotoma</i> nest
<i>Triatoma angulata</i> Say	V	in gill fungus

Taxa	Months of collection	Ecological data
<i>T. atriventris</i> LeC.	I, V, X	in rotten fungus, in gill fungus, in <i>Neotoma</i> nest
<b>Endomychidae</b>		
<i>Endomychus biguttatus</i> Say	I, IV, V, XII	on bracket fungus, under bark
<i>Lycoperdina ferruginea</i> LeC.	II, III	ex <i>Lycoperda</i>
<i>Rbanis unicolor</i> (Zieg.)	II	in <i>Neotoma</i> nest
<b>Mycetophagidae</b>		
<i>Litargus balteatus</i> LeC.	VI — VIII	in rotten fungus, LT
<i>L. didesmus</i> (Say)	IV	ex <i>Pleurotus</i>
<i>L. sexpunctatus</i> (Say)	IV, VII, VIII, X	in bracket fungus, LT
<i>Mycetophagus melscheimeri</i> LeC.	V	LT
<i>M. obsoletus</i> (Melsh.)	IV	ex <i>Pleurotus</i>
<i>M. pluripunctatus</i> LeC.	IV — VI, X	ex <i>Pleurotus</i> , in rotten fungus, in bracket fungus, LT
<i>M. punctatus</i> Say	III, IV, VII, X	
<i>M. serrulatus</i> (Casey)	VII	LT
<i>Typhaea stercorea</i> Linn.	I — XII	under bark, LT, in fungus
<b>Colydiidae</b>		
<i>Colydium lineolum</i> Say	VI	LT
<b>Brentidae</b>		
<i>Arrhenodes minutea</i> Drury	IV — VI	LT

<sup>a</sup>LT = in white light trap

TABLE 2. Publications Concerning Oklahoma Coleoptera

- D. H. ALEXANDER, *A preliminary survey of the Cerambycidae of Oklahoma*, Proc. Okla. Acad. Sci. 38: 43-52 (1958).
- D. C. ARNOLD, *Blister Beetles of Oklahoma*, Okla. Agr. Exp. Sta. Tech. Bull. T-145, 68 pp. (1976).
- D. BOTTRELL and W. A. DREW, *The Languriidae of Oklahoma (Coleoptera)*, Proc. Okla. Acad. Sci. 43: 71-73 (1963).
- D. BOTTRELL and W. A. DREW, *The Erotylidae of Oklahoma*, Southwest. Nat. 10: 73-74 (1965).
- H. P. BROWN, *Riffle beetles in Oklahoma*, Proc. Okla. Acad. Sci. 36: 38 (1955).
- H. P. BROWN, *Oklahoma riffle beetles II. Additional county records*, Proc. Okla. Acad. Sci. 40: 25-26 (1959).
- H. P. BROWN, *Oklahoma riffle beetles (Coleoptera: Dryopoidea) V. New state and county records, with notes on ecology*, Proc. Okla. Acad. Sci. 46: 27-28 (1965).
- H. P. BROWN and H. C. McDANIEL, *A preliminary survey of sedentary invertebrates in an Oklahoma pond*, Proc. Okla. Acad. Sci. 33: 115-121 (1952).
- H. P. BROWN and C. M. SHOEMAKE, *Oklahoma riffle beetles (Coleoptera: Dryopoidea) III. Additional state and county records*, Proc. Okla. Acad. Sci. 44: 42-43 (1964).
- H. P. BROWN and C. M. SHOEMAKE, *Oklahoma riffle beetles (Coleoptera: Dryopoidea) IV. Ecology*, Proc. Okla. Acad. Sci. 44: 44-46 (1964).
- W. J. BROWN, *Notes on the Oklahoma species of Onthophagus*, Proc. Okla. Acad. Sci. 5: 99-101 (1925).
- W. J. BROWN, *An annotated list of the coprophagous Scarabeidae known to occur in Oklahoma*, Proc. Okla. Acad. Sci. 7: 24-28 (1927).
- W. A. DREW and H. W. VANCLEAVE, *The tiger beetles of Oklahoma (Cicindelidae)*, Proc. Okla. Acad. Sci. 42: 101-122 (1962).
- F. A. FENTON, *The insect record for Oklahoma-1937*, Proc. Okla. Acad. Sci. 18: 38-43 (1937).
- F. A. FENTON, *The insect record for Oklahoma-1938*, Proc. Okla. Acad. Sci. 19: 71-77 (1938).
- F. A. FENTON, *The insect record for Oklahoma-1940*, Proc. Okla. Acad. Sci. 21: 25-28 (1941).
- F. A. FENTON, *The insect record for Oklahoma-1941*, Proc. Okla. Acad. Sci. 22: 45-51 (1942).
- F. A. FENTON, *The insect record for Oklahoma-1942 and 1943*, Proc. Okla. Acad. Sci. 24: 20-25 (1944).
- M. H. HATCH, *Coleoptera from southeastern Oklahoma*, Proc. Okla. Acad. Sci. 6: 142-148 (1926).
- M. H. HATCH, *Records and new species of Coleoptera from Oklahoma and western Arkansas with subsidiary studies*, Publ. Univ. Okla. Biol. Surv. 2 (1): 15-26 (1930).
- M. H. HATCH and A. I. ORTENBURGER, *Records and new species of Coleoptera from Oklahoma*, Publ. Univ. Okla. Biol. Surv. 2 (1): 7-14 (1930).
- H. M. HEFLEY, *Ecological studies on the Canadian River floodplain in Cleveland County, Oklahoma*, Ecol. Monogr. 7: 345-402 (1937).
- R. E. MCKINLEY, R. PRINS and L. E. JECH, *Occurrences and distribution of arthropods in Travertine Creek, Platt National Park, Murray Co., Oklahoma*, Proc. Okla. Acad. Sci. 52: 49-52 (1972).
- A. I. ORTENBURGER and M. H. HATCH, *Notes of Coleoptera from southeastern Oklahoma with a few records from adjacent portions of Texas and Arkansas, including a new species*, Proc. Okla. Acad. Sci. 6: 142-148 (1926).
- W. K. REISEN, *The ecology of Honey Creek Oklahoma: Spatial and temporal distributions of the macroinvertebrates*, Proc. Okla. Acad. Sci. 55: 25-31 (1975).
- M. S. SANDERSON and H. P. BROWN, *Records of Oklahoma riffle beetles and a description of the larva of Hexacylloepus (Coleoptera: Dryopoidea)*, Proc. Okla. Acad. Sci. 37 (for 1956): 67-72 (1959).

- K. F. SCHAEFER and W. A. DREW, *The Omophronidae of Oklahoma*. Southwest. Nat. 9: 314-315 (1964).
- K. F. SCHAEFER and W. A. DREW, *The Heteroceridae of Oklahoma*. Proc. Okla. Acad. Sci. 45: 69-71 (1965).
- M. W. SHACKELFORD, *Seasonal variations in the invertebrate populations of a central Oklahoma prairie, November 1933 to November 1934*. Proc. Okla. Acad. Sci. 15: 69-72 (1935).
- M. W. SHACKELFORD and V. G. DAVIDSON, *Diurnal variations in the vernal invertebrate populations of a central Oklahoma prairie*. Proc. Okla. Acad. Sci. 9: 54-59 (1929).
- J. H. SHADDY and W. A. DREW, *Oklahoma leaf beetles of the subfamilies Donaciinae, Criocerinae, Clytrinae, Chlamisinae, Eumolpinae and Chrysomelinae (Chrysomelidae, Coleoptera)*. Proc. Okla. Acad. Sci. 47: 139-153 (1966).
- W. D. SHEPARD, *Records and notes concerning Derodontus maculatus (Mels.) (Coleoptera: (Derodontidae)*. Southwest. Entomol. 1: 168-170 (1977).
- A. STONER, D. E. BRYAN and W. A. DREW, *A partial inventory of the insect population in tallgrass prairie pastures in north central Oklahoma*. Proc. Okla. Acad. Sci. 42: 143-157 (1961).
- F. WALLACE and W. A. DREW, *The Scarabaeinae of Oklahoma (Coleoptera: Scarabaeidae)*. Proc. Okla. Acad. Sci. 45: 82-93 (1965).