

## Annotated checklist of the longhorned beetles (Coleoptera: Cerambycidae and Disteniidae) occurring in Missouri

Ted C. MacRae  
Novo Nordisk Entotech, Inc.  
1497 Drew Ave.  
Davis, California 95616

### Abstract

The distribution, seasonal occurrence, relative abundance, and host associations of the six subfamilies, 42 tribes, 108 genera, and 219 described species and subspecies of Cerambycidae and one described species of Disteniidae known to occur in Missouri are presented and discussed. Distribution within the state is cited by counties or, for some species, by more specific locality data. Information is also presented on collecting techniques. Of the species discussed here, 66 represent new state records, and seven species previously recorded from or purportedly collected in Missouri are excluded from the state's fauna.

### Introduction

The Coleoptera of Missouri have received much attention recently. Riley and Enns (1979) presented an annotated checklist of the Chrysomelidae of the state, and this author presented an annotated checklist and keys to the species of Buprestidae occurring in Missouri (MacRae 1991). The cerambycid fauna of Missouri has also received attention. Rice and Enns (1981) presented an annotated checklist and keys to 72 Missouri species in the subfamily Lamiinae, and Rice (1982, 1989) recorded occurrences within the state and host plant associations of additional species of Cerambycidae. For North America as a whole, the family has been well-studied in the monographs of Linsley (1961, 1962a, 1962b, 1963, 1964) and Linsley and Chemsak (1972, 1976, 1984). Regional treatments of North American cerambycids have been presented for Indiana (Blatchley 1910), California (Garnett 1918), Pennsylvania (Kirk and Knull 1926), Ohio (Knull 1946), Georgia (Fattig 1947; Turnbow and Franklin 1980), the Chiricahua Mountains of Arizona (Linsley *et al.* 1961), the Panamint Mountains of California (Tyson 1970), the Pacific Northwest (Hatch 1971), Michigan (Gosling 1974; Gosling and Gosling 1977), North Dakota (Stein and Tagestad 1976), the Hualapai Mountains of Arizona (Lewis 1979), southern Texas (Hovore *et al.* 1987), and north-central Texas (Lingafelter and

Horner 1993). This paper presents information on the distribution, seasonal occurrence, relative abundance, adult and larval hosts, and collecting techniques for the longhorned beetles occurring in Missouri.

The data presented were gleaned from 18,496 specimens examined by the author. The bulk of these reside in the author's private collection and that of the University of Missouri-Columbia. The private collection of Dr. Marlin E. Rice (Ames, Iowa) also contributed significantly to this study. Additional data were taken from specimens loaned or donated by the individuals and institutions listed in the acknowledgements. The nomenclature used here follows Chemsak *et al.* (1992), except that genera are arranged phylogenetically (Chemsak and Linsley 1982; Linsley and Chemsak 1984; Skiles 1985). No taxonomic or nomenclatural changes are made in this paper. Species that represent new state records are so designated. Under each species discussion, information is presented on Missouri counties in which the species has been collected, seasonal activity, and relative abundance. Complete collection data is given for species that were encountered infrequently in the state. For brevity, abbreviations are used for certain locality data as follows: NA = Natural Area; NF = National Forest; RS = Recreation Site; SF = State Forest; SP = State Park; WA = Wildlife Area. Specimens for which complete collection data are given are retained by

# The Natural Divisions of Missouri

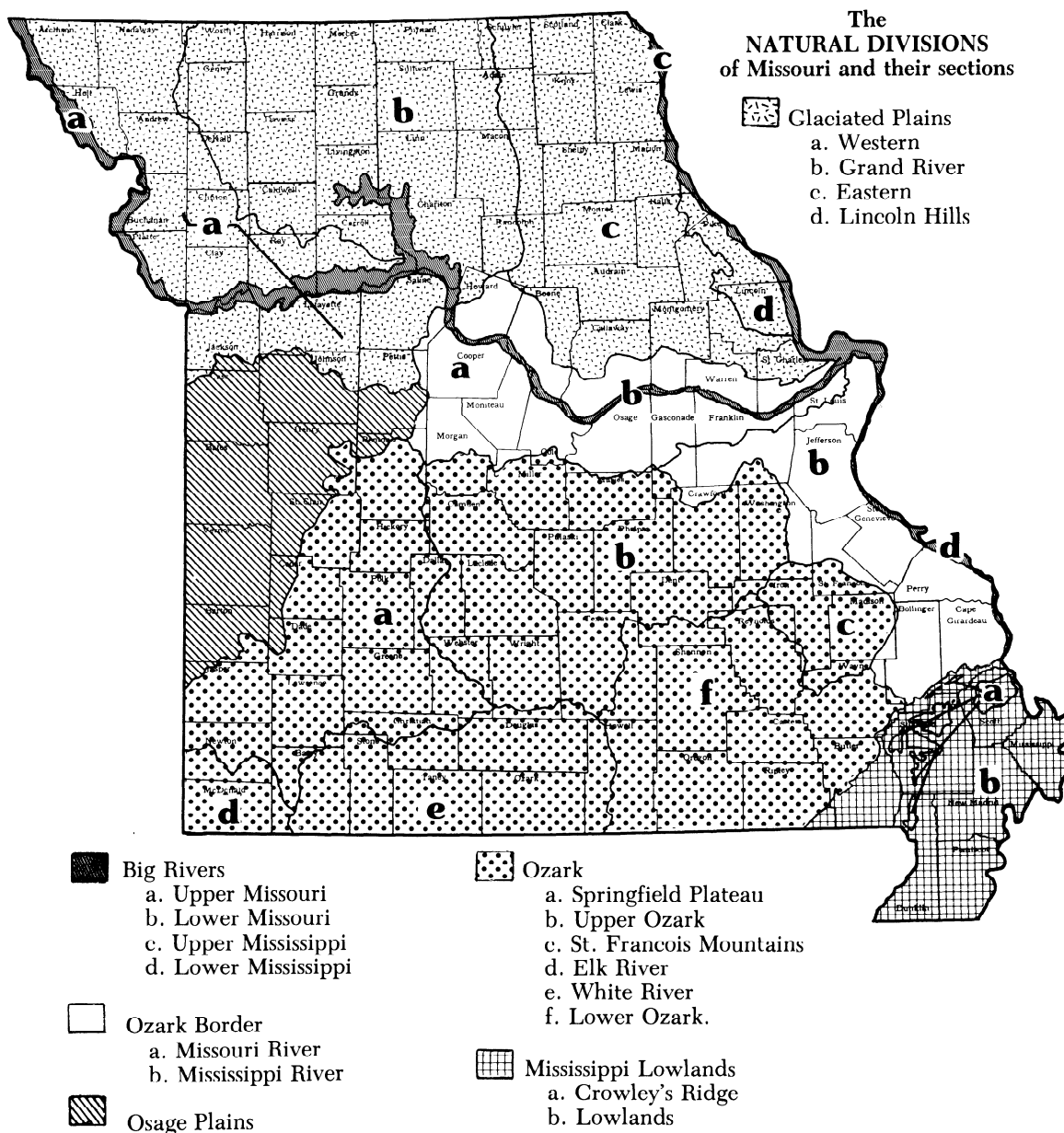


Figure 1. The Natural Divisions of Missouri and their sections (Thom and Wilson 1980).

the collector unless indicated otherwise. Collection codens used are as listed in Arnett *et al.* (1993) or as designated in the acknowledgments. For species in the subfamily Lamiinae, only information that supplements or emends that already given by Rice and Enns (1981) is presented (except the genus *Sternidus*). Where available, information is provided on host associations and collecting techniques. Unless otherwise noted, discussions of host associations are limited to those determined from Missouri specimens. The term **larval host** indicates plants from which adults have emerged or been cut, **adult host** indicates plants on which adults have been collected (Nelson *et al.* 1981). Adult hosts may or may not serve as larval hosts. Although many of the host associations discussed here likely represent new host records, no attempt has been made to designate them as such. Host plant nomenclature follows that of Yatskievych and Turner (1990).

## General Information

Thom and Wilson (1980) identified the natural divisions of Missouri (Figure 1). These include the Ozarks (Ozark and Ozark Border), Big Rivers, Mississippi Lowlands, Osage Plains, and Glaciated Plains. Within the state, collecting has occurred most extensively in the Ozarks. This region is a plateau characterized primarily by dry to dry-mesic, upland forests (Nelson 1985). Dominant woody plant species are oaks (*Quercus* spp.) and hickories (*Carya* spp.), along with maples (*Acer* spp.), elms (*Ulmus* spp.), flowering dogwood (*Cornus florida*), eastern redbud (*Cercis canadensis*), and serviceberry (*Amelanchier arborea*). Shortleaf pine (*Pinus echinata*) is common in the more southern and eastern forests (pineywoods). The plateau is highly dissected by dry-mesic to mesic bottomland forests along small, spring-fed streams and rivers, where woody plants such as black walnut (*Juglans nigra*), hackberries (*Celtis* spp.), willows (*Salix* spp.), river birch (*Betula nigra*), eastern hop hornbeam (*Ostrya virginiana*), blue beech (*Carpinus caroliniana virginiana*), and common alder (*Alnus serrulata*) occur commonly. Cottonwood (*Populus deltoides*) is abundant in the larger river valleys of the plateau, as well as the Big Rivers. Most of the above plant species were found to be important larval hosts for longhorned beetles, and accordingly, the greatest diversity of species was collected in the Ozarks. The Osage Plains contains savannah and remnants of natural prairie habitats. Although yielding a relatively lower diversity of longhorned beetle species, some species that utilize herbaceous plants as larval hosts were collected

only in this region. Little collecting has been done in the Glaciated Plains. This region has been largely converted to agriculture and contains only scattered remnants of natural habitat.

The use of ultraviolet (UV) light was an important collecting technique. "Blacklighting" was most productive when lights were placed in small forest openings or along forest edges away from other lights. Cloudy or moonless, humid nights with temperatures above 75°F resulted in the most activity. "Flower picking" was a productive collecting method for Lepturinae and certain Cerambycinae. Small populations of flowers in woodland openings or along forest or lake margins were more productive than large, open fields of flowers. "Rearing" was the most important method for determining larval hosts. Dead wood showing signs of larval infestation (e.g. sawdust piles, holes in the bark, etc.) was caged and examined periodically for adult emergence. In many cases, potential hosts plants were located, cut or girdled within a few months of adult activity, and left *in situ* until late the following winter to allow oviposition and larval development to occur. These presumably infested plants were then retrieved and caged. Adult host associations were determined by "beating" and examining dead wood, including logpiles and slash left from wood-cutting operations. Selected woodpiles were examined over the course of a season, often attracting different species during the day than at night or as the season progressed. Species associated with herbaceous plants (e.g. *Ataxia*, *Dectes*, and *Mecas*) were collected by sweeping in suitable habitats. Fermenting bait traps (Champlain and Knull 1932) were productive for species in genera such as *Orthosoma*, *Eburia*, *Parelaphidion*, *Purpuricenus*, and *Distenia*. USDA-type Japanese beetle traps captured low numbers of a wide variety of species.

This study records 216 described species (plus three subspecies) of Missouri cerambycids in 108 genera, 42 tribes, and six subfamilies and one described species of Missouri disteniid. Missouri specimens were examined for all except nine of the species presented here, which are included on the basis of literature records. Sixty-six of the species included here represent new records for Missouri, and two additional forms which may represent undescribed species are discussed. While the species list presented here is presumed to be fairly comprehensive, there are a number of species not included that might occur in Missouri. Some likely possibilities are: *Archodontes melanopus serrulatus* (Linnaeus), *Prionus (Ilomaesthis) palparis* Say, and *P. (Homaesthis) simplex* (Casey), recorded

from, respectively, northwestern Arkansas, eastern Kansas, and northeastern Oklahoma (Linsley 1962a); *Obrium howdeni* Knull, described from Obion Co. in northwestern Tennessee (Knull 1955); *Callidium texanum* Schaeffer, recorded from eastern U. S. west to Arizona, Utah, and Nevada (Linsley 1964); *Xylotrechus aceris* Fisher, collected at Cahokia Mounds, Illinois (near St. Louis) [UMRM]; *Typocerus deceptus* Knull, recorded from the sand prairies of western Illinois (Bouseman 1977); and *Eupogonius subarmatus* (LeConte), recorded from eastern U. S. to Kansas (Linsley and Chemsak 1984).

Four species previously recorded from Missouri are considered here not to be members of the state's fauna. Say (1823, 1824) gave "Missouri Territory" as the type locality for *Moneilema annulatum* and *Prionus cilipes* (= *Archodontes melanopus* (Linnaeus)), respectively. This territory then encompassed much of central and southern U. S., and it is doubtful that either of these species occur in present-day Missouri. *M. annulatum* reaches the eastern limit of its distribution in Kansas (Linsley and Chemsak 1984), while *A. melanopus* is restricted to the coastal plain of southeastern U. S. (Linsley 1962a). Leng (1890) recorded *Acmaeops ligata* LeConte (= *Cortodera longicornis* (Kirby)) from "Mo" and *Stictoleptura canadensis* (Olivier) from "Missouri." However, the former species is limited to the Pacific Northwest and northern Rocky Mountain states (Linsley and Chemsak 1972), while the latter is found in the boreal coniferous zone of North America (Linsley and Chemsak 1976).

While examining collections around the state, single specimens of *Derobrachus geminatus* LeConte and *Tragosoma depsarius* (Linnaeus) and four specimens of *Monochamus scutellatus* (Say) were found labeled as collected in Missouri. However, the known distributions of these species make their establishment in Missouri unlikely. These captures likely represent hitchhikers imported in cut wood, or possibly erroneous labeling (all were found in collections contributed to by students).

Family CERAMBYCIDAE  
Subfamily PARANDRINAE  
Tribe PARANDRINI  
Genus *Parandra*  
Subgenus *Archandra*

*Parandra polita* Say - **New state record.** 2 specimens: MISSISSIPPI CO., Big Oak Tree SP, 3-VII-1986 (2), UV light, T. C. MacRae.

Subgenus *Neandra*

*Parandra brunnea brunnea* (Fabricius) - 156 specimens collected in Barry, Boone, Buchanan, Callaway, Clay, Cooper, Franklin, Jackson, Jefferson, Johnson, Lawrence, Pettis, Pike, Randolph, St. Charles, St. Louis, Stoddard, Sullivan, Vernon, and Wayne Counties. Seasonal occurrence: 9 March-12 November, most common during July and August. Most of the specimens were collected in Japanese beetle traps, others were attracted to UV light. A few adults emerged and were chopped from decayed logs, including those of *Acer* sp.

Subfamily PRIONINAE

Tribe MACROTOMINI

Genus *Stenodontes*

Subgenus *Orthomallodon*

*Stenodontes dasytomus dasytomus* (Say) - 6 specimens: BOONE CO., 1-X-1968, J. Justus [TCMC]; CAPE GIRARDEAU CO., Jackson, 26-VI-1969, L. Whitler [SEMS], IX-1977 (2), "ex: elm stump" [UMRM]; NEW MADRID CO., Portageville, 8-VII-1966 (2) [TCMC, UMRM]. Say (1824) gave "Lower Missouri River" as the type locality for this species.

Tribe MALLASPINI

Genus *Derancistrus*

Subgenus *Sphenostethus*

*Derancistrus taslei* Buquet - 5 specimens, including: BOONE CO., Ashland WA, 13-VII-1971, D. Palmer [UMRM], 11-VIII-1976, UV light, J. R. Heitzman [TCMC]; JACKSON CO., VI-1955, R. H. Pine [TCMC]. The two remaining specimens were collected in Boone (reared from oak) and Warren Counties (Rice 1982).

Tribe PRIONINI

Genus *Orthosoma*

*Orthosoma brunneum* (Forster) - 363 specimens collected in Adair, Andrew, Atchison, Benton, Bollinger, Boone, Buchanan, Butler, Callaway, Cape Girardeau, Carter, Clark, Clay, Cole, Cooper, Crawford, Dade, Dent, Douglas, Franklin, Greene, Holt, Iron, Jackson, Jasper, Jefferson, Johnson, Laclede, Linn, Madison, Maries, Miller, Mississippi, Morgan, New Madrid, Nodaway, Ozark, Pemiscot, Pettis, Phelps, Pike, Polk, Randolph, Reynolds, Ripley, St. Clair, St. Louis, Ste. Genevieve, Scott, Shannon, Stoddard, Stone, Taney, Washing-

ton, Wayne, and Wright Counties. Seasonal occurrence: 3 May-5 November, abundant during July and August. Adults were commonly attracted to lights and fermenting bait traps. Several specimens emerged from decayed logs of *Cercis canadensis* and *Robinia pseudo-acacia*.

### Genus *Prionus* S. Str.

*Prionus laticollis* (Drury) - 4 specimens: BOONE CO., Columbia, 17-IX-1958, A. Towson [UMRM]; CARTER CO., Grandin, 11-IX-1955, W. M. Wallard [UMRM]; OSAGE CO., Linn, 20-VII-1938, H. R. Starr [UMRM]; ST. LOUIS CO., Kirkwood, VII-1956, R. E. Hughes [UMRM]. Linsley (1962a) recorded this species from southwestern Missouri, and Walsh and Riley (1868, 1869) recorded this species boring through roots of grape and apple in Missouri.

*Prionus pocularis* Dalman - **New state record.** 5 specimens: CARTER CO., Mark Twain NF, Pinewoods Lake RS, 6-VIII-1983 (2), UV light, T. C. MacRae, 30-VII-1986, UV light, J. R. Heitzman [TCMC]; TANEY CO., 2 mi W Ridgedale, 7-VII-1989, UV light, G. H. Nelson; ST. LOUIS CO., no date, F. Schwarz [UMRM]. The first two localities are pineywoods.

### Subgenus *Neopolyarthron*

*Prionus debilis* Casey - 15 specimens, including: BARTON CO., Liberal, 23-VI-1959, R. Roselle [UMRM]; CLAY CO., 8-XI-1970 [CMSU]; DOUGLAS CO., Ava, 8-XI-1949, L. Hezzam [UMRM]; JASPER CO., Joplin, 20-VI-1931 (2), UV light, R. C. Smith [KSUC]; NEWTON CO., S of Joplin, 26-VI-1984, UV light, T. C. MacRae. Other specimens were seen from Boone, Cass, and Vernon Counties (Rice 1982).

*Prionus imbricornis* (Linnaeus) - 274 specimens collected in Benton, Bollinger, Boone, Butler, Callaway, Camden, Cape Girardeau, Carter, Clay, Cole, Crawford, Dade, Dallas, Dent, Douglas, Dunklin, Franklin, Greene, Iron, Jackson, Jasper, Jefferson, Laclede, Madison, Miller, Montgomery, Morgan, New Madrid, Oregon, Ozark, Pemiscot, Pettis, Polk, Ralls, Randolph, Reynolds, Ripley, St. Clair, St. Francois, St. Louis, Ste. Genevieve, Scott, Shannon, Stoddard, Stone, Washington, Wayne, Webster, and Wright Counties. Seasonal occurrence: 29 April-1 November, abundant late June to mid-August. The majority of the specimens were collected at lights. Several were collected in Japanese beetle traps. Riley (1880) recorded larvae of

this species boring through grape roots and feeding upon roots of herbaceous plants in Missouri.

### Subgenus *Antennalia*

*Prionus fissicornis* Haldeman - No Missouri specimens were seen. Linsley (1962a) recorded this species from extreme southwestern Missouri.

## Subfamily ASEMINAE

### Tribe ASEMINI

#### Genus *Arhopalus*

*Arhopalus foveicollis* (Haldeman) - **New state record.** A single specimen was collected in BOONE CO., Columbia, 1951, K. Compton [UMRM].

*Arhopalus rusticus obsoletus* Randall - 36 specimens collected in Boone and Carter Counties. Seasonal occurrence: 12 July-29 September. Adults emerged from dead *Pinus sylvestris* and were collected at UV light in pineywoods.

#### Genus *Asemum*

*Asemum striatum* (Linnaeus) - **New state record.** 31 specimens collected in Boone, Carter, Chariton, Jefferson, Reynolds, and Wayne Counties. Seasonal occurrence: 16 April-14 June. Adults were collected on dead logs of *Pinus echinata* and *P. sylvestris* and emerged from the former.

### Tribe ATIMIINI

#### Genus *Atimia*

*Atimia confusa confusa* (Say) - 99 specimens collected in Benton, Boone, Cape Girardeau, Franklin, Jefferson, Polk, St. Louis, Taney, and Wayne Counties. Seasonal occurrence: 3 April-13 June; 28 August-14 November. The occurrence of this species is apparently bimodal in Missouri, however, all of the late-season dates are from reared specimens. Adults were beaten and emerged exclusively from dead branches of *Juniperus virginiana*. A few adults were collected at UV light.

## Subfamily CERAMBYCINAE

### Tribe SMODICINI

#### Genus *Smodicum*

*Smodicum cucujiforme* (Say) - 308 specimens collected in Atchison, Barry, Benton, Boone, Cape Girardeau, Clay, Cole, Cooper, Crawford, Dent, Franklin, Holt, Jackson, Jefferson, Mississippi, Phelps, Platte, Pulaski, Randolph, St. Charles, St. Louis, Ste. Genevieve, Shannon, Stoddard, Vernon, and Wayne Counties. Seasonal occurrence: 7 June-

16 September, common late June through July. Most of the specimens were attracted to UV light. Adults were also collected on dead logs of *Acer saccharinum*, *Carya ovata*, *Quercus* sp., and *Q. alba*.

### Tribe METHIINI

#### Genus *Oeme*

*Oeme rigida rigida* (Say) - 43 specimens collected in Barry, St. Louis, and Taney Counties. Seasonal occurrence: 8 June-28 August. Many of the specimens were collected in Japanese beetle traps in St. Louis. A large series emerged from dead branch of *Juniperus virginiana*.

#### Genus *Tessaropa*

*Tessaropa tenuipes* (Haldeman) - **New state record.** A single specimen was collected in OR-EGON CO., Mark Twain NF, Greer Crossing RS, 14-V-1984, beating *Carya tomentosa*, T. C. MacRae.

### Tribe TORNEUTINI

#### Genus *Knulliana*

*Knulliana cincta cincta* (Drury) - 252 specimens collected in Benton, Boone, Butler, Callaway, Clark, Clay, Cole, Cooper, Dallas, Dent, Douglas, Franklin, Greene, Howell, Jackson, Jasper, Jefferson, Johnson, Laclede, Lawrence, Lincoln, Linn, Marion, Miller, Mississippi, Moniteau, Morgan, Newton, Nodaway, Oregon, Ozark, Pike, Platte, Polk, Randolph, Ray, Reynolds, St. Louis, Saline, Stone, Vernon, Washington, Wayne, and Wright Counties. Seasonal occurrence: 15 March-25 September, common early April through June. The "banded hickory borer" was commonly collected at UV light. Adults were collected on and emerged from dead branches of *Carya* sp., *C. glabra*, *C. ovata*, and *Cercis canadensis*. One adult was chopped dead from the 2½" diameter trunk of dead *Acer saccharum*. Adult hosts include dead branches of *Quercus* sp., *Q. alba*, and *Q. marilandica*.

*Knulliana* sp. - 49 specimens collected in Benton, Boone, Cape Girardeau, Carter, Cedar, Crawford, Jackson, Jefferson, Laclede, Mississippi, Ozark, Phelps, St. Louis, Ste. Genevieve, Shannon, Stoddard, Wayne, and Wright Counties. Seasonal occurrence: 10 May-5 September. All of the specimens were collected at UV light. They differ from *K. cincta cincta* (Drury) in the ochraceous coloration, resembling *K. cincta ochracea* (Bates), which occurs in Florida and extreme southern Georgia. In addition, the adults are most commonly collected in

Missouri from late June through July, versus April through June for *K. cincta cincta*. Specimens resembling these have also been examined from Arkansas, northern Georgia, northern Mississippi, Tennessee, and southeastern Virginia. They differ from typical *K. cincta ochracea* by having faint indications of the oblique elytral fascia usually found in the nominate subspecies and the greatly expanded distribution across southeastern U. S. This form may represent a distinct species or may simply be a color morph of either *K. cincta cincta* or *K. cincta ochracea*.

### Tribe HESPEROPHANINI

#### Genus *Tylonotus*

*Tylonotus bimaculatus* Haldeman - 90 specimens collected in Boone, Callaway, Cape Girardeau, Clay, Cooper, Gentry, Jackson, Jefferson, Johnson, Pike, Platte, Randolph, St. Louis, Vernon, and Wayne Counties. Seasonal occurrence: 12 June-6 August. Nearly all of the specimens were collected at UV light (Rice 1982), and one specimen was collected on *Fraxinus* sp.

*Tylonotus masoni* Knull - 17 specimens, including: BARRY CO., 3 mi S Roaring River SP, scenic overlook on Sugar Camp Rd., 2-VII-1984, E. G. & M. A. Riley, 3-VII-1986, E. G. Riley; BOONE CO., Columbia, 28-VI-1977, UV light, S. E. Thewke [UMRM], 20-VII-1977, UV light, E. G. Riley; FRANKLIN CO., River Round WA, 1-VII-1983 (2), UV light, T. C. MacRae; JEFFERSON CO., Hillsboro, 1-VII-1967 (2), UV light, A. Littahorsky [TCMC]; ST. LOUIS CO., 18-, 20-VI-1977, 9-VII-1978, 4-VII-1979, all UV light, A. Littahorsky [TCMC]. Specimens were also seen from Jackson Co. [GHNC].

#### Genus *Hesperophanes*

*Hesperophanes pubescens* (Haldeman) - **New state record.** 6 specimens: BARRY CO., 3 mi S Roaring River SP, scenic overlook on Sugar Camp Rd., 3-VII-1986 (2), UV light, E. G. Riley; SHANNON CO., Mark Twain NF, Logger's Lake RS, 21-VI-, 4-VII-1985 (3), UV light, T. C. MacRae.

#### Genus *Eburia*

*Eburia haldemani* LeConte - No Missouri specimens were examined. Linsley (1962b) recorded this species from northwestern Missouri.

*Eburia quadrigeminata* (Say) - 383 specimens collected in Andrew, Atchison, Bates, Boone, Butler, Callaway, Cape Girardeau, Christian, Clark, Clay, Clinton, Cole, Cooper, Crawford, Dunklin, Franklin, Greene, Holt, Jackson, Jasper, Jefferson, Johnson, Lawrence, Lincoln, Mississippi, Montgomery, Nodaway, Platte, Putnam, Ralls, Randolph, Ray, St. Clair, St. Louis, Worth, and Wright Counties. Seasonal occurrence: 21 April-30 September, abundant early July through August. This species was strongly attracted to fermenting bait and sugar traps, accounting for the majority of the specimens collected. Occasional specimens were collected in Japanese beetle traps and at UV light.

### Tribe ELAPHIDIINI

#### Genus *Psyrassa*

*Psyrassa unicolor* (Randall) - **New state record.** 75 specimens collected in Atchison, Barry, Benton, Boone, Callaway, Cape Girardeau, Carter, Cooper, Crawford, Douglas, Franklin, Greene, Jackson, Jefferson, Mississippi, Ozark, Pike, Platte, Polk, Reynolds, St. Louis, Ste. Genevieve, Shannon, Stoddard, Wayne, Webster, and Wright Counties. Seasonal occurrence: 29 May-24 August, more common mid-June through July. Nearly all of the specimens were collected at UV light. One specimen emerged from dead branch of *Carya* sp. [MERC].

#### Genus *Stenosphenus*

*Stenosphenus notatus* (Olivier) - 234 specimens collected in Benton, Bollinger, Boone, Callaway, Cole, Crawford, Dent, Jackson, Jefferson, Lincoln, Platte, Polk, St. Louis, Stone, Wayne, and Wright Counties. Seasonal occurrence: 26 March-5 July, collected mostly late April to mid-May. Most specimens of this early season species were collected on dead logs of *Carya* sp., *C. cordiformis*, *C. ovata*, and *C. tomentosa* and emerged from the latter two. Another was collected on flower of *Hydrangea arborescens*.

#### Genus *Aneflomorpha*

*Aneflomorpha subpubescens* (LeConte) - 7 specimens: BOONE CO., Three Creeks WA, 11-VI-1988, A. Schreiber; BUTLER CO., 11-VI-1971, J. Brown [UMRM]; near Wappapello, 1984, D. W. Day [UMRM]; CARTER CO., Mark Twain NF, Pinewoods Lake RS, 25-VI-1983, 4-VI-1984, UV light, T. C. MacRae; RANDOLPH CO., Rudolf Bennitt WA, 5-VIII-1967, UV light, R. L. Heitzman; WAYNE

CO., 2.5 mi SW Patterson, 15-VI-1987, UV light, H. M. Webber [TCMC]. Rice (1982) recorded a specimen from Callaway Co.

#### Genus *Enaphalodes*

*Enaphalodes atomarius* (Drury) - 411 specimens collected in Atchison, Benton, Boone, Butler, Callaway, Camden, Cape Girardeau, Carter, Cass, Clay, Cole, Cooper, Crawford, Dent, Douglas, Franklin, Greene, Grundy, Holt, Howell, Iron, Jackson, Jasper, Jefferson, Johnson, Laclede, Lafayette, Linn, Madison, Miller, Montgomery, Morgan, Osage, Ozark, Pemiscot, Pettis, Phelps, Platte, Randolph, Reynolds, Ripley, St. Charles, St. Clair, St. Louis, Shannon, Shelby, Taney, Texas, Vernon, Wayne, Webster, and Wright Counties. Seasonal occurrence: 16 May-11 October, abundant mid-June to late August. The majority of the specimens were collected at UV light, and several were collected in Japanese beetle traps. A few were attracted to fermenting bait traps or taken on girdled *Quercus* sp.

*Enaphalodes cortiphagus* (Craighead) - **New state record.** A single specimen was collected in CAPE GIRARDEAU CO., Trail of Tears SP, 19-VII-1985, UV light, T. C. MacRae. Craighead (1923) reported this species damaging timber in "the Ozark mountains," however, it was not specified whether this record referred to Missouri or to Arkansas.

*Enaphalodes hispicornis* (Linnaeus) - 74 specimens collected in Boone, Butler, Callaway, Camden, Cape Girardeau, Carter, Cass, Jackson, Jefferson, Johnson, Madison, Miller, Morgan, Pike, St. Louis, Vernon, Washington, and Wayne Counties. Linsley (1963) recorded this species from southwestern Missouri. Seasonal occurrence: 26 May-18 September, primarily mid-July to mid-August. Most of the specimens were collected at UV light.

*Enaphalodes rufulus* (Haldeman) - 149 specimens collected in Atchison, Benton, Boone, Callaway, Cape Girardeau, Carter, Cooper, Crawford, Dent, Douglas, Franklin, Greene, Jackson, Jefferson, Johnson, Laclede, Oregon, Phelps, Platte, Pulaski, Randolph, Reynolds, Ripley, St. Charles, St. Clair, St. Louis, Ste. Genevieve, Shannon, Taney, Texas, Warren, Wayne, and Webster Counties. Seasonal occurrence: 16 May-27 October, common late June through July. This species has a two-year life cycle (Hay 1969), and most adults were collected in Missouri during odd-numbered years, usually at UV light.

### Genus *Elaphidion*

*Elaphidion mucronatum* (Say) - 332 specimens collected in Barry, Bates, Boone, Cape Girardeau, Carter, Christian, Cole, Crawford, Franklin, Holt, Jackson, Jasper, Jefferson, Lafayette, Lawrence, Miller, Mississippi, Morgan, New Madrid, Ozark, Perry, Platte, Randolph, Reynolds, St. Charles, St. Clair, St. Francois, St. Louis, Stoddard, Vernon, Wayne, Webster, and Wright Counties. Seasonal occurrence: 18 April-9 October, abundant June through August. This species was commonly collected at UV light and in fermenting bait traps, and occasionally in Japanese beetle traps. Adult hosts include dead branches of *Acer saccharinum*, *A. saccharum*, *Carya* sp., and *Juglans nigra*. Adults emerged from dead branches of *Acer saccharum*, *Asimina triloba*, *Cercis canadensis*, *Cornus florida*, *Juniperus* sp. (ornamental variety), *Liquidambar styraciflua*, *Prunus* sp., *P. americana*, *Salix* sp., *S. caroliniana*, and *Ulmus americana*.

### Genus *Parelaphidion*

*Parelaphidion aspersum* (Haldeman) - 95 specimens collected in Atchison, Barry, Boone, Callaway, Cole, Crawford, Dent, Franklin, Jackson, Jefferson, Lincoln, Linn, Morgan, Ozark, Platte, Randolph, St. Louis, Ste. Genevieve, Shannon, Stoddard, Taney, and Wayne Counties. Seasonal occurrence: 14 June-3 October, more common during July and August. Most of the specimens were captured at UV light, and a large series was attracted to fermenting bait traps. A few adults were collected on dead *Quercus* sp. and *Q. velutina*.

*Parelaphidion incertum* (Newman) - 6 specimens: BOONE CO., Columbia, 15-VII-1954, M. C. Grabau [UMRM]; COLE CO., Jefferson City, 30-VI-1960, T. Schroeder [UMRM]; JACKSON CO., Raytown, 30-VI-1978, UV light, G. H. Nelson; RANDOLPH CO., 1 mi E Moberly, 5-VII-1975, E. G. Riley; ST. CHARLES CO., St. Charles, 16-VIII-1898, G. W. Bock [UMRM]; ST. LOUIS, 11-VIII-1936, Japanese beetle trap [UMRM].

### Genus *Anelaphus*

*Anelaphus moestus moestus* (LeConte) - **New state record.** 3 specimens: JACKSON CO., Independence, 5-VIII-1968, UV light, R. L. Heitzman [TCMC]; Raytown, 9-, 24-VIII-1971, UV light, G. H. Nelson. This species normally occurs in south-central U. S.

*Anelaphus parallelus* (Newman) - 525 specimens collected in Adair, Atchison, Barry, Benton, Boone, Butler, Callaway, Camden, Cape Girardeau, Carter, Clay, Cooper, Crawford, Dallas, Dent, Douglas, Franklin, Greene, Howell, Jackson, Jasper, Jefferson, Johnson, Laclede, Lawrence, Lincoln, Moniteau, Montgomery, Morgan, Nodaway, Oregon, Osage, Ozark, Platte, Randolph, Reynolds, St. Charles, St. Clair, St. Francois, St. Louis, Ste. Genevieve, Saline, Stoddard, Taney, Vernon, Warren, Wayne, and Wright Counties. Seasonal occurrence: 19 March-2 August, abundant late April through early June. Adults of this species are often incorrectly identified as *A. villosus* (Fabricius). Gosling (1978, 1981) regarded this species to be the true "twig pruner" instead of *A. villosus*, observing the latter emerging in Michigan only from larger, "unpruned" bolts of dead wood. Missouri specimens of *A. parallelus* emerged from both pruned twigs (*Carya glabra*, *C. laciniosa*, *C. tomentosa*, *Platanus occidentalis*, *Quercus coccinea*, and *Q. imbricaria*) and larger, unpruned, dead branches (*Acer saccharum*, *Celtis occidentalis*, *Ostrya virginiana*, and *Ulmus alata*). Adults were also collected nocturnally on dead branches of *Carya ovata* and *Quercus alba*, and the species was collected abundantly at lights. It is possible that specimens assigned to this species and *A. villosus* form a complex with as yet unrecognized species, although no distinguishing characters could be found to separate adults that emerged from pruned twigs versus unpruned branches in either species.

*Anelaphus pumilus* (Newman) - 129 specimens collected in Adair, Barry, Benton, Boone, Callaway, Cape Girardeau, Carter, Clay, Crawford, Douglas, Franklin, Hickory, Jasper, Montgomery, Oregon, Phelps, Platte, Randolph, St. Francois, St. Louis, Ste. Genevieve, Stoddard, Taney, and Wayne Counties. Rice (1982) recorded this species from Jackson Co. Seasonal occurrence: 9 April-21 July, more common late May to mid-June. Nearly all of the specimens were collected at UV light. Two specimens were collected on dead *Quercus* sp.

*Anelaphus villosus* (Fabricius) - 150 specimens collected in Barry, Barton, Benton, Boone, Butler, Callaway, Cape Girardeau, Carter, Clark, Clay, Cole, Crawford, Franklin, Greene, Hickory, Holt, Jackson, Jefferson, Lawrence, Macon, Maries, Oregon, Osage, Polk, Randolph, Ray, St. Louis, Shannon, Stone, Vernon, Warren, Washington, Wayne, and Wright Counties. Seasonal occurrence: 24 April-23 July, common late May through June. Gosling (1981) observed this species emerging only



from larger, unpruned, dead branches rather than pruned twigs as has been commonly attributed to this species in the literature (see discussion under *A. parallelus* (Newman)). In Missouri, as for *A. parallelus*, adults of this species emerged both from pruned twigs and from larger, unpruned, dead branches, although they emerged primarily from the latter. Two specimens emerged from pruned *Cercis canadensis* twigs, and one emerged from a pruned *Platanus occidentalis* twig. Several adults emerged from larger, unpruned, dead branches of *Acer saccharum*, *Amelanchier arborea*, *Cercis canadensis*, and *Quercus rubra*. One adult was collected on dead *Juglans nigra* (Rice 1982). Adults were collected frequently at UV light.

### Genus *Micranoplium*

*Micranoplium unicolor* (Haldeman) - **New state record.** 15 specimens: BARRY CO., 3 mi S Roaring River SP, scenic overlook on Sugar Camp Rd., 2-VII-1984, E. G. & M. A. Riley; BOONE CO., Columbia, 10-VI-1978, UV light, S. E. Thewke [UMRM], 10-VII-1967, UV light [UMRM]; CARTER CO., Mark Twain NF, Pinewoods Lake RS, 4-VI-1985, UV light, T. C. MacRae; FRANKLIN CO., River Round WA, 1-VII-1983 (2), UV light, T. C. MacRae; MONTGOMERY CO., Graham Cave SP, 22-VI-1974, UV light, S. E. Thewke [UMRM]; RANDOLPH CO., 1 mi E Moberly, 5-VII-1975, 17-VII-1977, E. G. Riley; ST. LOUIS, no date (2) [SHAW]; ST. LOUIS CO., Concord Village, 15-VI-1987, UV light, T. C. MacRae; SHANNON CO., Mark Twain NF, Logger's Lake RS, 21-VI-1985, UV light, T. C. MacRae; WAYNE CO., Mark Twain NF, Markham Spring RS, 5-VI-1985, UV light, T. C. MacRae; Sam A. Baker SP, 26-V-1987, UV light, J. R. Heitzman [TCMC].

### Tribe IBIDIONINI

#### Genus *Heterachthes*

*Heterachthes ebenus* Newman - **New state record.** 14 specimens: BOONE CO., Columbia, 2-VI-1940, R. C. Froeschner [TCMC], 9-VI-1922 (3), K. C. Sullivan [UMRM], 16-V-1939 (2), W. R. Enns [UMRM], 20-VI-1944, V-1957 [UMRM]; COLE CO., Jefferson City, 1-VI-1937, C. F. Adams [MODA]; DOUGLAS CO., Vanzant, 21-V-1976, W. S. Craig [UMRM]; ST. LOUIS, 19-VI-1935, Japanese beetle trap [UMRM]; WRIGHT CO., Mountain Grove, 15-V-1950 (3), G. W. Thomas [UMRM].

*Heterachthes quadrimaculatus* (Haldeman) - 49 specimens collected in Boone, Butler, Callaway, Cape Girardeau, Carter, Clay, Jackson, Johnson, Platte, Polk, Randolph, Reynolds, Scott, and St. Louis Counties. Seasonal occurrence: 14 May-21 August. A few specimens were collected at UV light, and several adults were collected by beating *Carya* sp. and *C. glabra*. Adults emerged from dead branches of *Carya* sp. and *C. illinoensis*.

### Tribe CURIINI

#### Genus *Curius*

*Curius dentatus* Newman - **New state record.** A single specimen was collected in ST. LOUIS CO., Lemay, 29-VII-1970, A. Littahorsky [TCMC].

### Tribe OBRIINI

#### Genus *Obrium*

*Obrium maculatum* (Olivier) - **New state record.** 54 specimens collected in Barry, Boone, Cape Girardeau, Carter, Christian, Cooper, Dent, Douglas, Franklin, Henry, Iron, Jackson, Jasper, Jefferson, Lewis, Morgan, St. Louis, and Ste. Genevieve Counties. Seasonal occurrence: 14 May-8 August. A few adults were beaten from *Celtis occidentalis* and dead branches of *C. laevigata*. Many adults emerged from dead branches of *Amelanchier arborea*, *Carya cordiformis*, *C. laciniosa*, *C. ovata*, *Celtis tenuifolia*, *Cercis canadensis*, *Gleditsia triacanthos*, and *Morus alba* (ornamental variety). A few specimens were collected at UV light.

*Obrium rufulum* Gahan - **New state record.** 27 specimens collected in Boone, Franklin, Jackson, Mississippi, and St. Louis Counties. Seasonal occurrence: 20 May-28 August. Most of the specimens were collected at UV light.

### Tribe MOLORCHINI

#### Genus *Molorchus*

*Molorchus bimaculatus bimaculatus* Say - **New state record.** 363 specimens collected in Adair, Barry, Benton, Boone, Camden, Cape Girardeau, Carter, Christian, Clay, Crawford, Franklin, Jackson, Jefferson, Morgan, Newton, Oregon, Pettis, Phelps, Pike, Randolph, Reynolds, St. Charles, St. Francois, St. Louis, Ste. Genevieve, Saline, Shannon, Taney, Vernon, Warren, and Wayne Counties. Seasonal occurrence: 28 March-10 July, abundant late April and early May. Adults are highly attracted to white flowers, especially those of rosaceous plants. Flower records include *Amelanchier*

*arborea*, *Cercis canadensis*, *Cornus drummondii*, *C. florida*, *Crataegus* sp., *Daucus carota*, *Malus* sp., *Physocarpus opulifolius intermedius*, *Prunus* sp., *P. americana*, *P. angustifolia*, *P. serotina*, *Pyrus* sp., *Salix* sp., *S. exigua*, *Spiraea x vanhouttei*, *Viburnum* sp., and *V. rufidulum*. Other adult hosts include *Quercus velutina* and dead branches of *Acer saccharum*. Adults emerged from dead branches of *Acer saccharinum*, *Betula nigra*, *Carpinus caroliniana virginiana*, *Carya cordiformis*, *C. glabra*, *Cornus florida*, and *Diospyros virginiana*.

*Molorchus bimaculatus corni* Haldeman - **New state record**. 2 specimens: ST. LOUIS CO., Lemay, 28-VIII-1951, A. Littahorsky [TCMC]; Oakville, 7-IV-1986, T. C. MacRae.

### Tribe STENOPTERINI

#### Genus *Callimoxys*

*Callimoxys sanguinicollis sanguinicollis* (Olivier) - 55 specimens collected in Boone, Cass, Christian, Clay, Franklin, Jackson, Jefferson, Phelps, St. Louis, and Taney Counties. Seasonal occurrence: 7 April-12 July. Adults were most often collected on flowers of *Cornus drummondii* and *Daucus carota*. Other adult hosts include *Carya* sp. and *Cellis occidentalis*. Rice (1982) recorded standing dead *Carya* prob. *tomentosa* as a larval host.

### Tribe CALLICHROMATINI

#### Genus *Plinthocoelium*

*Plinthocoelium suaveolens suaveolens* (Linneaus) - 24 specimens: Hopkinsville, 30-VII-1932 [MODA]; BOONE CO., Columbia, IX-1958, D. Miller [UMRM]; Hartsburg, 11-VIII-1969, feeding on lilac sap, P. Sanderson [EGRC]; CAMDEN CO., 12 km N Climax Spring, 14-VII-1981, C. D. Michner [SEMC]; GREENE CO., Springfield, 8-VII-1937, C. W. Wingo [UMRM]; HICKORY CO., Pomme de Terre SP, 16-VII-1976, J. L. Wilson [MERC]; JEFFERSON CO., Hillsboro, 12-VII-1964 (2), fermenting bait trap, A. Littahorsky, 26-VIII-1957, E. P. Meiners [UMRM]; Pevely, 7-VII-1911 [UMRM]; MORGAN CO., Gravois Mills, 1-VII-1957, 30-VI-1958, D. Easterla; ST. CLAIR CO., VIII-1970, L. D. Gates [TCMC]; Iconium, VIII-1975, M. E. Rice; ST. LOUIS, 3-VIII-1935, 25-VII-1939, no date (2), all Japanese beetle trap [MODA, TCMC, UMRM]; ST. LOUIS CO., 10-VII-1939, C. W. Wingo [UMRM], no date, R. C. Lange [UMRM], no date, A. Wilkins [UMRM]; Allenton, 4-IX-1908, UV light [UMRM], no date, E. P. Meiners [UMRM]; Ranken, 26-VII-

1931, E. P. Meiners [UMRM]. Despite the number of specimens collected of this strikingly beautiful species, the only Missouri host information recorded was "feeding on lilac sap."

### Tribe DRYOBIINI

#### Genus *Dryobius*

*Dryobius sexnotatus* Linsley - 7 specimens: BOONE CO., Columbia, 26-VI-1967, S. E. Thewke [MERC]; 24-V-1982, 14-IV-1984, D. Bentlage [& TCMC]; CEDAR CO., Stockton, no date, A. Schreiber; JASPER CO., 2-VII-1970, on log, Hood [TCMC]; ST. LOUIS CO., no date, R. C. Lange [UMRM]; Tyson Research Center, 29-VI-1980, B. DeMarko & K. M. Kohl [TCMC]. The Missouri Department of Conservation accorded this species "rare" status in Missouri (Anonymous 1991).

### Tribe CALLIDIINI

#### Genus *Hylotrupes*

*Hylotrupes bajulus* (Linneaus) - **New state record**. 2 specimens: BOONE CO., Columbia, 26-II-1964, in box springs brought in from North Carolina [UMRM]; ST. CHARLES CO., St. Charles, emerged IX-1972 from severely damaged bed slab [UMRM]. Either of these specimens could represent an importation, however, the occurrence of this species in Missouri is not unexpected.

### Genus *Semanotus*

*Semanotus ligneus ligneus* (Fabricius) - **New state record**. 6 specimens: BOONE CO., Columbia, 21-IV-1943, F. P. Baster [UMRM], 13-, 26-IV-1978, R. C. Malin [EGRC]; COLE CO., St. Martin, emerged 7-III-1978 (2) from firewood in house, A. Speck [MERC]; JACKSON CO., Kansas City, 20-III-1980, emerged from Arkansas cedar indoors [UMRM].

### Genus *Callidium*

*Callidium antennatum antennatum* Newman - **New state record**. 3 specimens: BOONE CO., Columbia, 26-IV-1983, S. A. Garnett [TCMC]; TANEY CO., Branson, 16-V-1955, W. V. Miller [GHNC]; WAYNE CO., Sam A. Baker SP, 8-IV-1987, J. R. Heitzman [TCMC]. Another specimen was examined from Douglas Co., Kansas (near Kansas City).

*Callidium frigidum* Casey - **New state record**. 200 specimens collected in Bates, Boone, Dent, Franklin, Jasper, Jefferson, Laclede, Montgomery, Oregon, St. Francois, St. Louis, and Stone Coun-

ties. Seasonal occurrence: 7 April-20 June. The great majority of the specimens emerged from dead trunks and branches of *Juniperus virginiana*. A small series was collected in Japanese beetle traps.

*Callidium violaceum* (Linnaeus) - **New state record.** A single Missouri specimen was collected in ST. LOUIS CO., no date, R. C. Lange [UMRM].

### Genus *Phymatodes*

*Phymatodes aereus* (Newman) - 1 specimen was examined from RANDOLPH CO., 1 mi E Moberly, 21-V-1978, E. G. Riley. Rice (1982) recorded 2 specimens collected in Boone Co. from dead *Quercus* sp. logs on 7 & 11 May.

*Phymatodes amoenus* (Say) - **New state record.** 23 specimens collected in Audrain, Boone, Cape Girardeau, Clay, Dade, Dent, Lewis, Randolph, St. Louis, and Warren Counties. Seasonal occurrence: 17 April-5 June. Several specimens emerged from dead vines of *Vitis* sp. Adult hosts include *Acer saccharum*, *Crataegus crus-galli* and *Quercus imbricaria*.

*Phymatodes testaceus* (Linnaeus) - 248 specimens collected in Boone, Cole, Crawford, Jackson, Jefferson, St. Louis, and Saline Counties. Seasonal occurrence: 7 April-2 June. Most of the specimens were collected as large series on logs of *Quercus* sp. and *Q. alba*. Several adults emerged from logs of *Quercus* sp. cut for firewood.

*Phymatodes varius* (Fabricius) - 101 specimens collected in Boone, Cape Girardeau, Carter, Cole, Crawford, Dent, Howell, Jackson, Jefferson, Laclede, Lincoln, Maries, Montgomery, Pike, Reynolds, St. Louis, Saline, and Wayne Counties. Seasonal occurrence: 15 April-25 May. Adults were collected on dead logs of *Quercus* sp. and *Q. alba*. A few specimens emerged from logs of dead *Quercus* sp. cut for firewood.

### Genus *Physocnemum*

*Physocnemum brevilineum* (Say) - 14 specimens collected in Boone, Callaway, Jackson, Oregon, St. Louis, and Vernon Counties. Rice (1982) recorded Platte Co. Seasonal occurrence: 7 April-23 July. One adult was collected on dead log of *Ulmus americana*.

*Physocnemum violaceipenne* Hamilton - **New state record.** 2 specimens: JEFFERSON CO., Victoria Glades NA, 29-IV-1985, on dead branch *Quercus velutina*, T. C. MacRae; Valley View Glades NA, 13-V-1987, on dead log *Quercus alba*, T. C. MacRae.

### Tribe CLYTINI

#### Genus *Megacyllene*

*Megacyllene caryae* (Gahan) - **New state record.** 158 specimens collected in Adair, Andrew, Atchison, Benton, Boone, Cape Girardeau, Carroll, Clay, Cole, Cooper, Dekalb, Franklin, Greene, Holt, Jackson, Jefferson, Johnson, Laclede, Lincoln, Macon, Miller, Moniteau, New Madrid, Nodaway, Osage, Pike, Polk, Ray, St. Charles, St. Louis, Saline, Shannon, Vernon, and Wright Counties. Seasonal occurrence: 30 March-15 June, common during April. Adults were collected on dead branches of *Carya* sp., including a long series on *C. ovata*. Adults commonly emerge in houses during winter when hickory firewood is brought indoors. Occasional specimens were collected at UV light.

*Megacyllene decora* (Olivier) - 60 specimens collected in Adair, Boone, Buchanan, Cape Girardeau, Holt, Lewis, Livingston, Pike, St. Louis, Scott, Stoddard, and Wayne Counties. Seasonal occurrence: 18 August-26 September. This species was sporadically encountered, however, fair series were collected at Big Lake SP (Holt Co.) on flowers of *Solidago* sp. and *Amorpha fruticosa*. Rice (1989) recorded *A. fruticosa* as a larval host for this species in eastern Kansas (Pottawatomie Co.). A series collected in extreme northwestern Arkansas (Washington Co.) was collected on flowers of *Eupatorium* sp. [JRH].

*Megacyllene robiniae* (Forster) - 352 specimens collected in Adair, Andrew, Atchison, Boone, Callaway, Cape Girardeau, Chariton, Dekalb, Holt, Jackson, Jasper, Jefferson, Johnson, Livingston, Maries, Miller, Newton, Nodaway, Ozark, St. Charles, St. Louis, and Wright Counties. Seasonal occurrence: 26 July-1 November, abundant early September through mid-October. The "locust borer" was commonly associated with *Robinia pseudo-acacia*, especially "globe" varieties grown in nurseries and urban landscapes. Larvae were observed boring in the trunk and lower branches of this plant, especially in the graft area. Adults were collected abundantly on flowers of *Solidago* sp. and *S. nemoralis*.

#### Genus *Glycobius*

*Glycobius speciosus* (Say) - **New state record.** A single Missouri specimen was collected in DENT CO., Montauk SP, 1954 [TCMC]. The species is known to attack trunks of living *Acer saccharum*.

### Genus *Calloides*

*Calloides nobilis nobilis* (Harris) - **New state record.** 6 specimens: BOONE CO., Columbia, 1-VII-1950 [UMRM]; JEFFERSON CO., Hillsboro, 20-V-1964, fermenting bait trap, A. Littahorsky; PIKE CO., Louisiana, 30-X-1928 [UMRM]; ST. LOUIS, 1-VI-1903, 2-VI-1906, G. W. Bock [UMRM], 19-VI-1939, Japanese beetle trap [TCMC].

### Genus *Sarosesthes*

*Sarosesthes fulminans* (Fabricius) - **New state record.** 14 specimens: BOONE CO., Ashland WA, 8-VI-1979, G. Ulmer [MERC]; Columbia, 21-V-1941, G. A. Rutel [UMRM], 5-VII-1949, J. W. Hamilton [UMRM], 24-VI-1950, G. W. Thomas [UMRM]; BUTLER CO., Poplar Bluff, VIII-1950 [UMRM]; DENT CO., 18-VI-1973, M. P. Roling [UMRM]; JEFFERSON CO., Hillsboro, 10-VI-1978, fermenting bait trap, A. Littahorsky [TCMC]; ST. LOUIS, 1-VII-1903, G. W. Bock [UMRM], 15-30-V-1927 (2), E. P. Meiners [UMRM], 2-VI-1939, Japanese beetle trap [MODA], no date (3) [SHAW].

### Genus *Xylotrechus*

*Xylotrechus annosus annosus* (Say) - No Missouri specimens were seen. Say (1826) described this species from "Missouri," and Leng (1887) repeated this record. Its occurrence in Missouri, however, represents a significant southern extension of the range given by Linsley (1964) for this species, thus its occurrence in the state needs to be verified.

*Xylotrechus colonus* (Fabricius) - 383 specimens collected in Adair, Atchison, Benton, Bollinger, Boone, Callaway, Camden, Cape Girardeau, Carter, Christian, Clay, Cole, Cooper, Crawford, Dent, Franklin, Gasconade, Greene, Henry, Holt, Howard, Jackson, Jasper, Jefferson, Johnson, Lincoln, Linn, McDonald, Miller, Morgan, New Madrid, Nodaway, Platte, Randolph, St. Clair, St. Francois, St. Louis, Ste. Genevieve, Shannon, Stoddard, Taney, Vernon, Wayne, Webster, and Wright Counties. Seasonal occurrence: 2 April-23 October, abundant late May through August. Adults were commonly collected at UV light. Adult hosts include dead branches of *Acer saccharum*, *Carya* sp., *C. ovata*, *C. tomentosa*, *Liquidambar styraciflua*, *Quercus* sp., and *Q. alba*. Adults emerged only from dead *Quercus* sp. and *Q. rubra*.

*Xylotrechus convergens* LeConte - **New state record.** 6 specimens: BOONE CO., Columbia, 13-VI-1978, rotten banana bait, D. Legg [MERC]; JACKSON CO., Raytown, emerged 5-I-, 3-VII-1969, 9-I-1970 from dead *Crataegus* sp., wood collected 13-X-1968, 4-VI-1971, 27-V-1974, beating *Crataegus* sp., all G. H. Nelson.

*Xylotrechus sagittatus sagittatus* (Germar) - **New state record.** 11 specimens: BOONE CO., Ashland WA, 17-VII-1982, J. C. Pershing; Columbia, 10-X-1964, L. Newby [UMRM], 28-VI-1982, on *Pinus sylvestris*, J. C. Pershing; CARTER CO., Friendship, 21-VIII-1963, dead *Pinus* sp., E. J. Ford, Jr. [GHNC]; Mark Twain NF, Pinewoods Lake RS, emerged 4-IX-, 7-, 8-X-1984, 24-IX-1986 from trunk large, dead *Pinus echinata*, chopped 9-VIII-1986 from trunk large, dead *Pinus echinata*, 6-VIII-1983, all T. C. MacRae, 22-VII-1984, UV light, J. R. Heitzman.

### Genus *Neoclytus*

*Neoclytus acuminatus acuminatus* (Fabricius) - 328 specimens collected in Adair, Barry, Boone, Callaway, Cape Girardeau, Carter, Cass, Clay, Cole, Cooper, Dent, Franklin, Greene, Henry, Hickory, Holt, Jackson, Jasper, Jefferson, Johnson, Lincoln, McDonald, Mississippi, New Madrid, Moniteau, Nodaway, Ozark, Pettis, Platte, Polk, Randolph, Ray, St. Clair, St. Francois, St. Louis, Ste. Genevieve, Saline, Shannon, Taney, Texas, Vernon, and Wright Counties. Seasonal occurrence: 13 March-14 November, abundant May through August. The "redheaded ash borer" was collected on dead *Fraxinus americana* and *F. pennsylvanica* and emerged from logs of the former. Despite its common name, however, it is one of the most polyphagous of the Missouri cerambycids. Adults emerged from dead branches of *Acer saccharum*, *Amelanchier arborea*, *Carpinus caroliniana virginiana*, *Carya glabra*, *C. tomentosa*, *Cercis canadensis*, *Koelreuteria paniculata*, *Magnolia acuminata*, *Morus alba*, *Prunus americana*, *Salix caroliniana*, *Ulmus americana*, *U. rubra*, and *Vitis* sp. Adults were also collected on *Quercus palustris*, dying *Robinia pseudo-acacia*, and dead branches of *Acer saccharinum*, *Carya* sp., *C. ovata*, *Maclura pomifera*, and *Q. alba*. Occasional specimens were collected at UV light.

*Neoclytus approximatus* (LeConte) - 23 specimens collected in Boone, Callaway, Carter, Franklin, Jackson, Morgan, Pettis, Pike, and St. Louis Counties. Seasonal occurrence: 14 June-16 August. Most specimens of this uncommon species were

collected in Japanese beetle traps. One specimen was collected on dead branch of *Pinus echinata* [TCMC], another was labeled "*Monarda* sp." [UMRM].

*Neoclytus caprea* (Say) - 136 specimens collected in Boone, Chariton, Cole, Jasper, Jefferson, Johnson, Livingston, Moniteau, Montgomery, New Madrid, Nodaway, Oregon, Osage, St. Francois, and St. Louis Counties. Seasonal occurrence: 18 March-13 June, more common during April. Many of the specimens were collected on and emerged from dead logs of *Fraxinus americana*. Like *Megacyllene caryae* (Gahan), this species commonly emerges from infested firewood brought indoors during winter.

*Neoclytus fulguratus* Casey - **New state record.** 2 specimens: BOONE CO., Columbia, 23-IV-1958, D. Easterla [TCMC]; DENT CO., Clark (= Mark Twain) NF, 13-20-VII-1973, J. A. Gagne [UMRM]. Hoffman (1988) proposed Casey's name to be a junior synonym of *N. horridus* (LeConte), but this was not recognized by Chemsak *et al.* (1992).

*Neoclytus jouteli* ssp. - Rice (1982) recorded 2 specimens from Crawford and Polk Counties. Seasonal occurrence: July-20 August. The Polk Co. specimen emerged from dead *Carya* sp.

*Neoclytus mucronatus mucronatus* (Fabricius) - 103 specimens collected in Adair, Bates, Benton, Boone, Callaway, Cass, Christian, Cole, Franklin, Henry, Jackson, Jefferson, Johnson, Morgan, Newton, Pettis, Randolph, St. Louis, Scotland, Stoddard, and Vernon Counties. Seasonal occurrence: 14 April-31 October, more common during July and August. Many of the specimens were collected on dead and dying branches of *Carya* sp., *C. ovata*, and *C. tomentosa*. Other adult hosts include *Acer rubrum* and *Quercus* sp.

*Neoclytus scutellaris* (Olivier) - **New state record.** 73 specimens collected in Barry, Boone, Butler, Callaway, Cape Girardeau, Carter, Cole, Dent, Franklin, Henry, Howard, Jefferson, Lawrence, Perry, Pettis, Pike, Polk, Randolph, St. Charles, St. Louis, Scott, and Vernon Counties. Seasonal occurrence: 1 May-21 October, more common during July and August. Several adults were collected on dead or dying *Quercus* sp., *Q. alba*, and *Q. palustris*, and a few adults emerged from dead *Quercus* sp.

## Genus *Clytoleptus*

*Clytoleptus albofasciatus* (Laporte & Gory) - **New state record.** 10 specimens: Sibley, 11-VII-1957 (2), F. E. Wood [UMRM]; RANDOLPH CO., 1 mi W Moberly, 1-VII-1972, E. G. Riley [MERC]; ST. LOUIS, no date (6) [UMRM]; ST. LOUIS CO., JCT I-270 & Riverside Blvd., 9-VII-1986, Japanese beetle trap, T. C. MacRae.

## Tribe TILLOMORPHINI

### Genus *Eudercus*

*Eudercus picipes picipes* (Fabricius) - 337 specimens collected in Adair, Barry, Boone, Buchanan, Callaway, Carter, Christian, Clay, Cole, Crawford, Dent, Douglas, Franklin, Gasconade, Henry, Holt, Jackson, Jefferson, Johnson, Lafayette, Lewis, Lincoln, Maries, Miller, Montgomery, Morgan, Ozark, Phelps, Pike, Randolph, Reynolds, St. Charles, St. Francois, St. Louis, Ste. Genevieve, Saline, Shannon, Stoddard, Taney, Texas, Warren, and Webster Counties. Seasonal occurrence: 15 April-27 August, abundant mid-May through late June. Adults were collected on flowers of *Apocynum cannabinum*, *Asclepias viridiflora*, *Buxus* sp., *Ceanothus americanus*, *Cornus drummondii*, *Daucus carota*, *Philadelphus coronarius*, *Physocarpus opulifolius intermedius*, *Ptelea trifoliata*, *Rhus glabra*, *Rosa carolina*, *R. setigera*, *Rubus* sp., *Rudbeckia hirta*, *Salix exigua*, *Sambucus canadensis*, and *Zizia aurea*. Adults were beaten from *Carya* sp., *Celtis* sp., *Cercis canadensis*, *Juglans nigra*, *Quercus* sp., *Q. stellata*, *Q. velutina*, and *Robinia pseudo-acacia* and were collected on dead branches of *Ulmus* sp. Adults emerged from dead branches of *Amelanchier arborea*, *Carya* sp., *C. ovata*, *Cercis canadensis*, and *Ostrya virginiana*.

*Eudercus picipes occidentalis* Linsley - 63 specimens collected in Boone, Callaway, Cape Girardeau, Carter, Cass, Jefferson, Oregon, St. Francois, Ste. Genevieve, Scott, Stoddard, and Wayne Counties. Turnbow and Hovore (1979) recorded this subspecies from Callaway and Stone Counties. Seasonal occurrence: 23 April-17 July, most common during late May. Adults were collected on flowers of *Abelia* sp., *Amorpha fruticosa*, *Ceanothus americana*, *Cornus drummondii*, *Daucus carota*, *Hydrangea arborescens*, *Physocarpus opulifolius intermedius*, *Ptelea trifoliata*, *Rosa carolina*, *R. setigera*, and *Sambucus canadensis*. Adults were beaten from *Diospyros virginiana*, *Quercus palustris*, and *Q. stellata* and emerged from dead branches of *Carya*

*illinoensis*, *Celtis occidentalis*, *Fagus americana*, *Juglans nigra*, and *Ostrya virginiana*.

*Euderces pini* (Olivier) - 88 specimens collected in Bollinger, Butler, Cape Girardeau, Carter, Christian, Dade, Greene, Jasper, Jefferson, Platte, St. Louis, Ste. Genevieve, Saline, Stoddard, Taney, and Wright Counties. Seasonal occurrence: 27 March-30 June. Adults were collected on *Crataegus crus-galli*, dead branches of *Acer saccharinum*, *Gleditsia triacanthos*, *Quercus palustris*, and *Ulmus* sp., and flowers of *Daucus carota*, *Ptelea trifoliata*, *Rubus* sp., and *Spiraea* sp. One adult was collected 9-IX under bark. Larval hosts include "twig pruner pruned" branch of *Carya laciniata* and dead branches of *Amelanchier arborea*, *Celtis occidentalis*, and *Juglans nigra*.

*Euderces reichei reichei* LeConte - **New state record.** 61 specimens collected in Dade, Henry, Jackson, Jefferson, Lewis, St. Charles, St. Louis, Stoddard, Stone, Taney, Vernon, and Wayne Counties. Seasonal occurrence: 9 May-17 June. Most of the specimens were collected at Hercules Glades Wilderness (Taney Co.) on flowers of *Cornus drummondii*. Other adult hosts include *Crataegus crus-galli*, *Diospyros virginiana*, dead branches of *Celtis laevigata* and *Quercus imbricaria*, and flowers of *Buxus* sp. and *Prunus* sp. One adult emerged from dead branch of *Acer saccharinum*.

### Tribe ANAGLYPTINI

#### Genus *Cyrtophorus*

*Cyrtophorus verrucosus* (Olivier) - **New state record.** 43 specimens collected in Boone, Buchanan, Clay, Crawford, Franklin, Gasconade, Jefferson, Johnson, Lewis, Phelps, St. Louis, Ste. Genevieve, Saline, Shannon, Taney, and Wayne Counties. Seasonal occurrence: 12 April-27 June. Adults were collected on *Malus* sp., *Quercus imbricaria*, *Q. palustris*, and flowers of *Cornus drummondii*, emerged from dead branches of *Fagus americana* and *Prunus americana*, and were attracted to UV light and malaise, sticky, and fermenting bait traps.

### Tribe RHOPALOPHORINI

#### Genus *Rhopalophora*

*Rhopalophora longipes* (Say) - 185 specimens collected in Barry, Boone, Cape Girardeau, Cole, Crawford, Franklin, Holt, Jackson, Jefferson, Lafayette, Morgan, Newton, Ozark, Polk, St. Francois, St. Louis, Stoddard, Stone, Taney, Texas, Washington, and Wayne Counties. Say (1824) gave the type locality as "Fort Kennedy, on Barek Creek,

Missouri Territory." Seasonal occurrence: 10 May-5 August, common late-May through June. Adults were collected on flowers of *Abelia* sp., *Asclepias syriaca*, *A. viridis*, *Ceanothus* sp., *C. americanus*, *Cornus* sp., *C. drummondii*, *C. amomum obliqua*, *Daucus carota*, *Hydrangea arborescens*, *Parthenium integrifolium*, *Prunus* sp., *Ptelea trifoliata*, *Rosa* sp., *Rubus* sp., *Taenidia integerrima*, *Toxicodendron radicans*, and *Thaspium barbinode*. Adults were also collected on and emerged from dead branches of *Cercis canadensis*. Additional adult hosts include *Quercus* sp., *Robinia pseudo-acacia* and *Ulmus rubra*.

### Tribe TRACHYDERINI

#### Genus *Purpuricen*

*Purpuricen axillaris* Haldeman - 70 specimens collected in Boone, Callaway, Carter, Clay, Jefferson, and Wayne Counties. Seasonal occurrence: 28 May-5 August. This species was rarely encountered in Missouri except for 66 specimens collected in fermenting bait traps at Victoria Glades NA and Valley View Glades NA (Jefferson Co.) [TCMC]. One of the specimens has the basal elytral band reduced to small lateral spots behind the humeri. Rice (1982) recorded dead *Carya* sp. as a larval host.

*Purpuricen humeralis* (Fabricius) - 39 specimens collected in Boone, Callaway, Carter, Franklin, Jefferson, Lincoln, Moniteau, Morgan, Newton, Pulaski, St. Louis, and Wright Counties. Seasonal occurrence: 19 May-16 August. Adults were attracted to fermenting bait traps. A few specimens emerged from dead branches of *Acer saccharum* and *Carya ovata*, other adults were collected on logpiles of *Carya* sp., *C. ovata*, and trunks of fire-injured *Quercus* sp. A specimen from eastern Kansas (Johnson Co.) was collected on flower of *Rhus* sp. [JRHC].

*Purpuricen* sp. - 34 specimens collected in Jefferson Co. Seasonal occurrence: 22 May-23 July, mostly in June. These specimens were taken with the above two species exclusively in fermenting bait traps located at the edge of dolomitic glades surrounded by dry-mesic, oak/hickory forest. This species appears to be closely related to *P. axillaris* but differs consistently in size, coloration, punctuation, and characters of the pronotum.

### Genus *Tragidion*

*Tragidion coquus* (Linneaus) - 130 specimens collected in Adair, Audrain, Barry, Boone, Callaway, Camden, Cape Girardeau, Cole, Franklin, Greene, Jackson, Jasper, Johnson, Laclede, Lafayette, Lewis, Linn, Monroe, Morgan, New Madrid, Newton, Nodaway, Perry, Phelps, Pike, Randolph, St. Louis, Saline, Shannon, Texas, and Wright Counties. Seasonal occurrence: 13 June-8 November, common during September and early October. Adults were collected on *Quercus* sp., dead *Ulmus* sp., flowers of *Arisaema triphyllum*, *Erigeron* sp., and *Eupatorium* sp., and in Japanese beetle traps. One adult emerged from dead branch of *Cercis canadensis*. Adults were especially attracted to ripe fruit, having been collected in fermenting bait traps and feeding on "ripe grapes," "broken grape canes," and "tomatoes."

### Genus *Batyle*

*Batyle ignicollis ignicollis* (Say) - 73 specimens collected in Barry, Boone, Carter, Crawford, Howard, Howell, Jasper, Lawrence, Maries, Miller, Montgomery, Newton, Phelps, Pulaski, Randolph, Reynolds, St. Clair, St. Louis, Ste. Genevieve, Taney, and Texas Counties. Seasonal occurrence: 6 April-22 August. As recorded by Rice (1982), main stems of living *Hypericum sphaerocarpaceum* were found to serve as a larval host. Adults were collected on flowers of *Achillea millefolium*, *Coreopsis lanceolata*, *Pycnanthemum tenuifolium*, and *Rudbeckia hirta*.

*Batyle suturalis suturalis* (Say) - 523 specimens collected in Adair, Barry, Barton, Benton, Boone, Butler, Callaway, Camden, Cape Girardeau, Carter, Cass, Christian, Clay, Clinton, Crawford, Dallas, Dent, Franklin, Gasconade, Greene, Henry, Hickory, Holt, Howell, Iron, Jackson, Jasper, Jefferson, Johnson, Lafayette, Lawrence, Madison, Maries, McDonald, Miller, Moniteau, Montgomery, Morgan, Newton, Oregon, Pettis, Phelps, Pike, Pulaski, Ralls, Randolph, Reynolds, St. Charles, St. Clair, St. Francois, St. Louis, Ste. Genevieve, Saline, Scott, Shannon, Stoddard, Stone, Taney, Texas, Vernon, Warren, Washington, Wayne, and Wright Counties. Seasonal occurrence: 27 April-15 September, abundant during June and July. Adults were collected on flowers of *Achillea millefolium*, *Asclepias tuberosa interior*, *Cacalia muhlenbergii*, *Carduus nutans*, *Ceanothus americanus*, *Cirsium vulgare*, *Coreopsis lanceolata*, *C. palmata*, *Daucus carota*, *Erigeron annuus*, *Helianthus hirsutus*, *H.*

*tuberosus*, *Heliopsis helianthoides*, *Hydrangea arborescens*, *Leucanthemum vulgare*, *Parthenium integrifolium*, *Ratibida pinnata*, *Rudbeckia hirta*, *Senecio glabellus*, *Silphium integrifolium*, *S. perfoliatum*, *Solidago juncea*, *Taraxacum officinale*, and *Verbesina helianthoides*. Larval hosts include dead *Celtis tenuifolia*, *Quercus coccinea*, and *Salix* sp.

### Genus *Crossidius*

*Crossidius pulchellus* LeConte - No Missouri specimens were seen. Linsley and Chemsak (1961) recorded ten specimens collected in Ozark Lake, 20-IX-1939. This species is more normally collected in Arizona, New Mexico, and surrounding areas.

## Subfamily LEPTURINAE

### Tribe DESMOCERINI

#### Genus *Desmocerus*

*Desmocerus palliatus* (Forster) - 194 specimens collected in Andrew, Barry, Benton, Boone, Buchanan, Callaway, Camden, Cass, Crawford, Douglas, Franklin, Gasconade, Holt, Jackson, Jasper, Jefferson, Lincoln, Madison, Moniteau, Newton, Phelps, Pike, Polk, St. Charles, St. Louis, Shannon, Stoddard, Stone, Washington, and Wayne Counties. Seasonal occurrence: 20 May-21 July. Adults were commonly found on flowers and foliage of *Sambucus canadensis*, a known larval host.

### Tribe NECYDALINI

#### Genus *Necydalis*

*Necydalis mellita* (Say) - 8 specimens: BOONE CO., C. W. Green WA, 10-VI-1978, M. E. Rice; 4 mi N Ashland, 12-VI-1979, M. E. Rice; Three Creeks WA, 11-VI-1988, A. Schreiber; BUTLER CO., VI-1977, J. Carpenter [UMRM]; GASCONADE CO., 17-VI-1971, T. R. Yonke [UMRM]; GREENE CO., JCT Sac River & Hwy 65, 10-VI-1975, E. G. Riley & S. E. Thewke [EGRC]; JACKSON CO., Lake Jacomo, 16-VI-1969, on *Carya* sp., G. H. Nelson; RANDOLPH CO., 1 mi E Moberly, 1-VI-1975, E. G. Riley.

### Tribe LEPTURINI

#### Genus *Centrodera*

*Centrodera sublineata* LeConte - **New state record.** 23 specimens collected in Boone, Cedar, Clay, Jackson, Johnson, Nodaway, Platte, St. Louis, and Wayne Counties. Seasonal occurrence: 17 April-20 August, mostly late April to early May.

Most specimens were collected at UV light, and one adult was collected on flower of *Spiraea* sp.

### Genus *Stenocorus*

*Stenocorus cinnamopterus* (Randall) - **New state record.** 271 specimens collected in Atchison, Benton, Boone, Cape Girardeau, Carter, Clay, Franklin, Jackson, Jefferson, Johnson, Lafayette, Ozark, Platte, Polk, St. Charles, St. Louis, Stoddard, Taney, and Wayne Counties. Seasonal occurrence: 1 April-24 June, common mid-May to early June. Most of the specimens were attracted to UV light. Adults were also collected on flowers of *Cornus drummondii*, and single specimens were beaten from *Diospyros virginiana* and *Juglans nigra*.

*Stenocorus cylindricollis* (Say) - **New state record.** 7 specimens: JACKSON CO., Kansas City, no date [UMRM]; JEFFERSON CO., Sunridge Tower Park, 24-VI-1985, fermenting bait trap, T. C. MacRae; RANDOLPH CO., N of Moberly, Camp Thunderbird, 18-VI-1977, S. E. Thewke [MERC]; ST. LOUIS, 3-VI-1894, 14-VIII-1896 (3) [UMRM].

*Stenocorus shaumi* (LeConte) - 8 specimens: BOONE CO., Columbia, 15-V-1988, D. G. LeDoux; COLE CO., Jefferson City, 1-VIII-1930 [MODA]; JEFFERSON CO., Victoria Glades NA, 11-VI-1984, T. C. MacRae; LACLEDE CO., 3-VI-1978, E. J. Franklin [MERC]; ST. LOUIS, no date [SHAW]; ST. LOUIS CO., Glencoe, 7-VI-1978, D. Gilberg [MERC]; WAYNE CO., Mark Twain NF, Markham Spring RS, 7-VI-1984, UV light, J. R. Heitzman. The remaining specimen was taken on trunk of *Juglans nigra* (Rice 1982).

*Stenocorus trivittatus* (Say) - No Missouri specimens were examined. Linsley and Chemsak (1972) recorded it from "Missouri," but its occurrence in the state needs to be verified.

### Genus *Rhagium*

*Rhagium inquisitor* (Linnaeus) - **New state record.** 103 specimens collected in Boone, Carter, Dent, Douglas, Jefferson, and Ste. Genevieve Counties. Seasonal occurrence: 8 April-18 May. Adults were collected on dead trunks of *Pinus echinata* and could be found abundantly in their pupal cells beneath the trunk-bark of dead *P. echinata* trees during late winter.

### Genus *Gaurotes*

*Gaurotes cyanipennis* (Say) - 15 specimens, including: DOUGLAS CO., Mark Twain NF, Noblett Lake RS, 22- (2), 23-VI-1985, on flower *Hydrangea arborescens*, T. C. MacRae; FRANKLIN CO., Meramec SP, 22-V-1982, T. C. MacRae; MARIES CO., 9mi S Vienna, 27-V-1979, E. J. Arnold [UMRM]; ST. LOUIS CO., Ranken, 27-V-1934, 6-VI-1937, 5-VI-1938 (2), all E. P. Meiners [UMRM]; STE. GENEVIEVE CO., Hawn SP, 27-V-1989 (3), on flower *Cornus drummondii*, T. C. MacRae. Other specimens were seen from Boone Co. (Rice 1982).

### Genus *Acmaeops*

*Acmaeops discoideus* (Haldeman) - **New state record.** A single specimen was collected in STE. GENEVIEVE CO., Hawn SP, 13-VI-1981, J. R. Heitzman [TCMC].

### Genus *Brachysomida*

*Brachysomida bivittata* (Say) - 92 specimens collected in Adair, Barry, Boone, Franklin, Iron, Jefferson, Newton, St. Francois, St. Louis, Stone, Taney, and Wayne Counties. Seasonal occurrence: 14 April-26 June. Adults were collected on flowers of *Barbarea vulgaris*, *Blephilia ciliata*, *Physocarpus opulifolius intermedius*, *Rhus aromatica*, and *Rubus* sp. Single specimens were collected on *Quercus stellata* and dead branch of *Carya ovata*.

### Genus *Metacmaeops*

*Metacmaeops vittata* (Swederus) - **New state record.** 11 specimens: CAPE GIRARDEAU CO., Trail of Tears SP, 27-V-1985 (7), on flower *Cornus drummondii*, G. Balogh [TCMC]; JEFFERSON CO., Whip-Poor-Will Valley, 17-VI, on flower *Cornus drummondii*, J. M. Sullivan (pers. observation); ST. LOUIS, 14-VI-1908 (2), G. W. Bock [UMRM], no date [UMRM].

### Genus *Strangalia*

*Strangalia bicolor* (Swederus) - **New state record.** 63 specimens collected in Boone, Carter, Dent, Douglas, Jefferson, St. Louis, Ste. Genevieve, Shannon, Stone, and Wayne Counties. Seasonal occurrence: 23 May-19 July. Adults were collected on flowers of *Hydrangea arborescens*, *Rosa carolina*, and *R. setigera*.

*Strangalia famelica solitaria* Haldeman - 272 specimens collected in Adair, Barry, Benton, Bollinger, Boone, Butler, Callaway, Camden, Cape Girardeau, Carter, Clay, Crawford, Dent, Douglas,



Franklin, Holt, Iron, Jefferson, Montgomery, Morgan, Oregon, Phelps, Randolph, St. Francois, St. Louis, Ste. Genevieve, Shannon, Stoddard, Taney, Texas, Wayne, and Wright Counties. Seasonal occurrence: 2 May-9 August, common during June. Adults were most commonly collected on flowers of *Rosa carolina*, *R. setigera*, and *Rudbeckia hirta*. Other adult hosts include flowers of *Carduus nutans*, *Ceanothus americanus*, *Cornus drummondii*, *Daucus carota*, *Hydrangea arborescens*, *Pycnanthemum tenuifolium*, and *Rhus glabra*. One adult was beaten from *Quercus* sp. Occasional specimens were attracted to fermenting bait traps, Japanese beetle traps, and UV light. A series of specimens with the pronotum entirely black was collected in BARRY CO., 2.5 mi S Roaring River SP, 25-VI-1978 (18), on flower *Ceanothus americanus*, G. H. Nelson [& TCMC].

*Strangalia luteicornis* (Fabricius) - 470 specimens collected in Adair, Barry, Boone, Buchanan, Callaway, Camden, Cape Girardeau, Carter, Crawford, Dent, Douglas, Franklin, Gasconade, Holt, Iron, Jackson, Jefferson, Montgomery, Pike, Randolph, St. Clair, St. Francois, St. Louis, Ste. Genevieve, Shannon, Stoddard, Texas, Warren, and Wayne Counties. Seasonal occurrence: 12 May-18 August, abundant during June and July. Adults were collected on flowers of *Achillea millefolium*, *Ampelopsis cordata*, *Carduus nutans*, *Ceanothus americanus*, *Cornus* sp., *C. drummondii*, *Daucus carota*, *Hydrangea arborescens*, *Pycnanthemum muticum*, *Rosa carolina*, and *R. setigera*. One adult was beaten from *Carya* sp. Large series were collected in malaise traps and Japanese beetle traps, and occasional specimens were collected in fermenting bait traps and at UV light.

*Strangalia sexnotata* Haldeman - 179 specimens collected in Barry, Barton, Boone, Camden, Carter, Cass, Clay, Crawford, Franklin, Gasconade, Henry, Howell, Iron, Jackson, Jasper, Jefferson, Johnson, Lawrence, Morgan, Newton, Oregon, Pettis, Phelps, Randolph, St. Clair, Shannon, Stoddard, Stone, Taney, Texas, Vernon, and Wayne Counties. Seasonal occurrence: 14 May-21 August, more common during late June and early July. Adults were collected most often on flowers of *Rudbeckia hirta*. Additional adult hosts include flowers of *Achillea millefolium*, *Asclepias tuberosa interior*, *Daucus carota*, *Erigeron* sp., *Helenium flexuosum*, *Hydrangea arborescens*, and *Leucanthemum vulgare*.

### Genus *Bellamira*

*Bellamira scalaris* (Say) - **New state record.** 6 specimens: BOONE CO., Columbia, 28-IX-1954, J. E. Douglas [UMRM]; ST. CLAIR CO., 17-VI-1958, A. Littahorsky [TCMC]; STODDARD CO., Duck Creek WA, 12-V-1985 (3), chopped from rotten wood, M. Hrabovsky; WAYNE CO., Sam A. Baker SP, 3-VI-1986, UV light, J. R. Heitzman.

### Genus *Analeptura*

*Analeptura lineola* (Say) - **New state record.** 19 specimens: CAPE GIRARDEAU CO., Trail of Tears SP, 27-V-1985 (2), G. Balogh [TCMC]; DENT CO., Bunker, 6-VI-1977 (2), S. E. Theke [UMRM]; JEFFERSON CO., Pacific Palisades WA, 24-V, on flower *Smilacina racemosa*, J. M. Sullivan (pers. observation); Whip-poor-will Valley, 20-VI, on flower *Hydrangea arborescens*, J. M. Sullivan (pers. observation); REYNOLDS CO., Hwy 72 SE of Salem, 9-VI-1971, S. E. Thewke [UMRM]; Johnson's Shut-Ins SP, 12-VI-1981, J. R. Heitzman [TCMC]; ST. LOUIS CO., 2-VI-1901, G. W. Bock [UMRM], no date [UMRM]; Creve Coeur Lake, 7-VI-1899, G. W. Bock [UMRM]; WAYNE CO., Mark Twain NF, Markham Spring RS, 5-VI-1985 (5), on flower *Ceanothus americanus*, 18-VI-1988 (4), on flower *Hydrangea arborescens*, all T. C. MacRae.

### Genus *Charisalia*

*Charisalia americana* (Haldeman) - **New state record.** 9 specimens: DENT CO., Salem, 2-V-1956, 9-V-1957, malaise trap, W. D. Buchanan [UMRM]; JEFFERSON CO., Victoria Glades NA, 22-V-1986, T. C. MacRae; ST. LOUIS, no date (2) [UMRM]; ST. LOUIS CO., Creve Coeur Lake, 7-VI-1899, 8-VI-1911, G. W. Bock [UMRM]; Ranken, 30-IV-1933, E. P. Meiners [UMRM]; Tyson Research Center, 4-12-V-1985, malaise trap, M. Arduser [TCMC].

### Genus *Grammoptera*

*Grammoptera exigua* (Newman) - **New state record.** 3 specimens: BOONE CO., Rock Bridge SP, 28-V-1988, D. G. LeDoux; JACKSON CO., Raytown, 27-V-1974, on *Aesculus glabra*, G. H. Nelson; ST. LOUIS, 2-VI-1901, G. W. Bock [UMRM].

*Grammoptera haematites* (Newman) - **New state record.** 8 specimens: BARRY CO., Roaring River SP, 16-V-1978, E. G. Riley [MERC]; ST. LOUIS CO., Ranken, 29-V-, 5-VI-1938 (6), E. P. Meiners [UMRM].

### Genus *Judolia*

*Judolia cordifera* (Olivier) - **New state record.** 39 specimens collected in Boone, Carter, Dent, Douglas, Franklin, Reynolds, Ste. Genevieve, and Wayne Counties. Seasonal occurrence: 25 May-25 June. Adults were collected on flowers of *Ceanothus americanus*, *Cornus drummondii*, *Daucus carota*, *Erigeron* sp., *Hydrangea arborescens*, *Parthenium integrifolium*, *Physocarpus opulifolius intermedius*, and *Rhus glabra*.

### Genus *Typocerus*

*Typocerus acuticauda acuticauda* Casey - **New state record.** 85 specimens collected in Barton, Boone, Callaway, Cape Girardeau, Crawford, Holt, Jefferson, Lewis, Oregon, Pike, Randolph, St. Charles, St. Clair, St. Louis, Stoddard, Warren, and Wayne Counties. Seasonal occurrence: 12 May-10 September, more common mid-June through early July. Adult hosts include flowers of *Asclepias perennis*, *Cephalanthus occidentalis*, *Cicuta maculata*, *Daucus carota*, *Hydrangea arborescens*, and *Rosa* sp. Many of the specimens were collected in Japanese beetle traps in St. Louis during the 1930's.

*Typocerus confluens* Casey - **New state record.** 65 specimens collected in Barton, Crawford, Jackson, Jefferson, Johnson, Lawrence, Morgan, Pettis, Phelps, St. Louis, and Vernon Counties. Seasonal occurrence: 4 June-30 July. Adults were collected on flowers of *Chicorium intybus*, *Daucus carota*, *Parthenium integrifolium*, *Pycnanthemum tenuifolium*, *Ratibidapinnata*, and *Rudbeckia hirta*.

*Typocerus lugubris* (Say) - 48 specimens collected in Barry, Carter, Dent, Douglas, Franklin, Iron, Jefferson, Phelps, St. Louis, Shannon, Vernon, and Wayne Counties. Seasonal occurrence: 1 June-15 July. Adults of this fairly uncommon species were collected on flowers of *Ceanothus americanus*, *Cornus drummondii*, *Daucus carota*, *Hydrangea arborescens*, and *Rhamnus caroliniana*.

*Typocerus lunulatus lunulatus* (Swerderus) - 118 specimens collected in Barry, Boone, Butler, Camden, Carter, Crawford, Douglas, Franklin, Jefferson, Miller, Phelps, St. Francois, St. Louis, Ste. Genevieve, Stoddard, Texas, and Wayne Counties. Seasonal occurrence: 14 May-5 August, common during June. Adult hosts include flowers of *Carduus nutans*, *Ceanothus americanus*, *Daucus carota*, *Parthenium integrifolium*, *Rhamnus caroliniana*, *Rosa setigera*, and *Rudbeckia hirta*.

Several adults were collected in Japanese beetle traps.

*Typocerus lunulatus texanus* Linsley & Chemsak - **New state record.** 2 specimens: BARRY CO., 2.5 mi S Roaring River SP, 25-VI-1978, on flower *Ceanothus americanus*, G. H. Nelson; DOUGLAS CO., Mark Twain NF, Noblett Lake RS, 23-VI-1985, on flower *Hydrangea arborescens*, T. C. MacRae.

*Typocerus octonotatus* (Haldeman) - 415 specimens collected in Adair, Barry, Benton, Boone, Buchanan, Butler, Callaway, Camden, Carter, Christian, Clay, Cooper, Crawford, Gasconade, Greene, Henry, Holt, Howell, Iron, Jasper, Jefferson, Johnson, Lawrence, Maries, McDonald, Miller, Moniteau, Morgan, Newton, Oregon, Ozark, Pettis, Phelps, Polk, Pulaski, Randolph, St. Clair, St. Louis, Ste. Genevieve, Shannon, Stoddard, Stone, Taney, Texas, and Vernon Counties. Seasonal occurrence: 23 May-7 August, abundant mid-June through early July. This species was found most often on flowers of *Rudbeckia hirta*. Other adult hosts include flowers of *Achillea millefolium*, *Asclepias variegata*, *Callirhoe* sp., *Coreopsis lanceolata*, *Daucus carota*, *Echinacea pallida*, *Erigeron* sp., *Leucanthemum vulgare*, *Ratibida pinnata*, and *Schrankia nutallii*.

*Typocerus velutinus velutinus* (Olivier) - 266 specimens collected in Adair, Andrew, Barry, Barton, Boone, Callaway, Cape Girardeau, Carter, Crawford, Dent, Douglas, Franklin, Gasconade, Henry, Holt, Iron, Jefferson, Johnson, Lincoln, McDonald, Montgomery, New Madrid, Newton, Oregon, Osage, Phelps, Platte, Randolph, St. Francois, St. Louis, Ste. Genevieve, Shannon, Stoddard, Texas, Warren, Wayne, and Wright Counties. Seasonal occurrence: 14 May-6 September, abundant during June and July. Adults were collected commonly on flowers of *Daucus carota*, *Hydrangea arborescens*, *Rosa carolina*, and *R. setigera*. Other adult hosts include flowers of *Asclepias syriaca*, *Carduus nutans*, *Ceanothus americanus*, *Cephalanthus occidentalis*, *Echinacea purpurea*, *Heydotis nigricans*, *Ipomoea pandurata*, *Melilotus alba*, *Schrankia nutallii*, *Trifolium pratense*, *T. repens*, and *Viburnum prunifolium*. Large series of adults were captured in Japanese beetle traps, and occasional specimens were attracted to UV light.

*Typocerus zebra* (Olivier) - **New state record.** 32 specimens collected in Boone, Carter, Dent, Marion, St. Louis, Ste. Genevieve, Shannon, and Wayne Counties. Seasonal occurrence: 12 May-9

August. Several adults were collected on and emerged from trunks of dead *Pinus echinata*. Other adults were collected in pineywoods on flowers of *Achillea millefolium*, *Ceanothus americanus*, *Centaureum maculosum*, *Daucus carota*, *Parthenium integrifolium*, *Rhamnus caroliniana*, *Rosa setigera*, *Rubus* sp., and *Sambucus canadensis*.

### Genus *Nealosterna*

*Nealosterna capitata* (Newman) - No Missouri specimens were examined. Leng (1890) lists this species from "Mo." but its occurrence in the state needs to be verified.

### Genus *Pseudostrangalia*

*Pseudostrangalia cruentata* (Haldeman) - **New state record.** 5 specimens: BOONE CO., Ashland WA, 24-V-1977, UV light, E. G. Riley [MERC]; DENT CO., Montauk SP, 8-11-V-1989, D. G. LeDoux; FRANKLIN CO., Meramec SP, 19-V-1988, on flower *Rubus* sp., T. C. MacRae; ST. LOUIS CO., Ranken, 13-V-1934, E. P. Meiners [UMRM]; WAYNE CO., 2.5 mi SW Patterson, 12-V-1987, UV light, H. M. Webber [TCMC].

### Genus *Leptura*

#### Subgenus *Megaleptura*

*Leptura emarginata* Fabricius - 8 specimens: BOONE CO., Columbia, 28-IV-1951, G. Schroeder [UMRM], 21-X-1955, C. L. Alber [UMRM]; BUTLER CO., Poplar Bluff, 1-VIII-1954, H. L. Sackett [TCMC]; DENT CO., 28-VI-1973, M. P. Rolling [UMRM]; MORGAN CO., Gravois Mills, 9-VIII-1957, D. Easterla; PIKE CO., Louisiana, 21-VII-1922, in white oak [UMRM]; ST. CLAIR CO., Osceola, 8-VI-1959, on flower *Eupatorium altissimum*, J. R. Heitzman; ST. LOUIS, 29-VI-1936, Japanese beetle trap [UMRM]; ST. LOUIS CO., Ranken, 6-VII-1941, E. P. Meiners [UMRM].

### Genus *Strangalepta*

*Strangalepta abbreviata* (Germar) - **New state record.** 35 specimens collected in Barry, Boone, Carter, Crawford, Douglas, Franklin, St. Louis, Ste. Genevieve, Saline, and Wayne Counties. Seasonal occurrence: 25 May-9 July. Adults were collected on flowers of *Ceanothus americanus*, *Hydrangea arborescens* and *Ptelea trifoliata*.

*Strangalepta pubera* (Say) - **New state record.** 3 specimens: ADAIR CO., Big Creek SF, 28-VI-1984, A. Schreiber [TCMC]; Thousand Hills SP, 19-V-1987, M. Arduser [TCMC]; CARTER CO., Mark

Twain NF, Pinewoods Lake RS, 6-VI-1984, J. R. Heitzman.

### Genus *Trigonarthris*

*Trigonarthris atrata* (LeConte) - **New state record.** 11 specimens: ANDREW CO., 5 mi NW Savannah, 10-13-VI-1985 (3), on flower *Viburnum prunifolium*, B. G. & D. S. Montgomery [& TCMC]; BOONE CO., 10 mi S Columbia, 15-VI-1978, on flower *Daucus carota*, M. E. Rice; CRAWFORD CO., Steelville, 7-VI-1979, 12-VI-1980 (4), R. A. McKinney [EGRC, MERC]; STE. GENEVIEVE CO., Hawn SP, 27-V-1989, on flower *Cornus drummondii*, T. C. MacRae; TANEY CO., Hercules Glades Wilderness, 23-V-1987, on flower *Cornus drummondii*, T. C. MacRae.

*Trigonarthris minnesotana* (Casey) - **New state record.** 7 specimens: BARRY CO., 2.5 mi S Roaring River SP, 25-VI-1978, on flower *Ceanothus americanus*, G. H. Nelson; BOONE CO., Ashland WA, 8-VI-1979, G. Ulmer [MERC]; Columbia, 12-VI-1993, W. S. Craig [UMRM]; CLARK CO., Revere, 4-VI-1981, A. Schreiber [TCMC]; STODDARD CO., Duck Creek WA, 12-V-1985 (3), M. Hrabovsky [TCMC].

*Trigonarthris proxima* (Say) - 2 specimens: BOONE CO., Columbia, 3-VI-1974, UV light, S. E. Thewke [UMRM]; BUCHANAN CO., St. Joseph, 15-VI-1932 [MODA].

### Genus *Brachyleptura*

*Brachyleptura rubrica* (Say) - 82 specimens collected in Andrew, Atchison, Barry, Boone, Crawford, Dent, Douglas, Franklin, Jackson, Jefferson, Reynolds, St. Louis, Ste. Genevieve, Shannon, Stoddard, and Wayne Counties. Seasonal occurrence: 14 May-9 August, more common during June. Adults were collected most often on flowers of *Hydrangea arborescens*, but also on those of *Ceanothus americanus*, *Cornus drummondii*, *Daucus carota*, and *Parthenium integrifolium*.

*Brachyleptura vagans* (Olivier) - **New state record.** 51 specimens collected in Barry, Carter, Dent, Douglas, Franklin, Reynolds, Ste. Genevieve, Shannon, and Wayne Counties. Seasonal occurrence: 28 May-5 July. Adults were collected most often on flowers of *Ceanothus americanus*, but also on those of *Daucus carota*, *Hydrangea arborescens*, *Parthenium integrifolium*, and *Rhamnus caroliniana*.

## Genus *Strophiona*

*Strophiona nitens* (Forster) - 12 specimens: BOONE CO., Ashland WA, 28-V-1991, malaise trap, J. Cardozo I. [UMRM]; 5 mi E Ashland, T. S. Baskett Wildlife Research Area, 18-23-V-1991, malaise trap, R. S. Gagne [UMRM]; Columbia, 5-VI-1972, D. D. Kopp [UMRM]; CALLAWAY CO., Hols Summit, 16-VI-1978, UV light, M. E. Rice; CRAWFORD CO., Mark Twain NF, Red Bluff RS, 8-VI-1985, UV light, T. C. MacRae; Steelville, 7-VI-1979 (2), R. A. McKinney [JCPC]; JACKSON CO., Kansas City, 18-VI-1920, W. Benedict [SEM]; JEFFERSON CO., Victoria Glades NA, 5-VI-1986, on flower *Ceanothus americanus*, T. C. MacRae; OZARK CO., Big Piney River, 13-VI-1981, G. W. Kirfman [TCMC]; WAYNE CO., Sam A. Baker SP, 6-VI-1987, on flower *Hydrangea arborescens*, T. C. MacRae.

## Subfamily LAMIINAE

### Tribe MONOCHAMINI

#### Genus *Hebestola*

*Hebestola nebulosa* (Haldeman) - 2 specimens examined. Additional record: STODDARD CO., Otter Sough WA, 1-VI-1985, beating *Quercus phellos*, T. C. MacRae.

#### Genus *Plectrodera*

*Plectrodera scalator* (Fabricius) - 154 specimens examined. Additional records: Cole, Crawford, Jefferson, Pemiscot, Platte, and St. Charles Counties. J. M. Sullivan observed adults feeding on *Salix exigua* saplings.

#### Genus *Monochamus*

*Monochamus carolinensis* (Olivier) - 109 specimens examined. Additional records: Barry, Carter, Cole, Crawford, Iron, Jefferson, St. Louis, and Shannon Counties. Most common early June to early July. Adults were collected nocturnally on and emerged from dead logs and branches of *Pinus echinata* and *P. sylvestris*.

*Monochamus titillator* (Fabricius) - 44 specimens examined. Additional records: Barry, Boone, Carter, Christian, Greene, Jackson, Reynolds, Ste. Genevieve, Shannon, Wayne, and Wright Counties. Like *M. carolinensis* (Olivier), adults were collected nocturnally on and emerged from dead logs of *Pinus echinata*. One adult was collected on dead *P. sylvestris*, and Riley (1880) recorded this plant as a larval host in St. Louis. Rice and Enns (1981) speculated that this species is restricted in

Missouri to the eastern part of the state, but both it and *M. carolinensis* occur throughout pineywoods across southern Missouri.

#### Genus *Goes*

*Goes debilis* LeConte - 13 specimens examined. Additional records: SHANNON CO., Mark Twain NF, Logger's Lake RS, 27-VI-1981, 21-VI-1985, UV light, T. C. MacRae.

*Goes pulcher* (Haldeman) - 16 specimens examined. Additional records: Adair, Atchison, Jefferson, St. Louis, Shannon, and Wayne Counties.

*Goes pulverulentus* (Haldeman) - 40 specimens examined. Additional records: Benton, Bollinger, Cape Girardeau, Carter, Clay, Douglas, Randolph, St. Clair, Shannon, Stoddard, and Wayne Counties.

*Goes tessellatus* (Haldeman) - 20 specimens examined. Additional records: Douglas, Greene, Jackson, and Ste. Genevieve Counties. The specimen reported by Rice and Enns (1981) from Randolph County is actually *G. tumifrons* Linsley and Chemsak, which was undescribed at that time.

*Goes tigrinus* (Degeer) - 28 specimens examined. Additional records: Atchison, Bollinger, Grundy, Johnson, and Wayne Counties.

*Goes tumifrons* Linsley & Chemsak - 5 specimens examined. Linsley and Chemsak (1984) included a specimen collected in Butler Co. in the paratype series. Additional records: CLAY CO., Liberty, 30-VII-1987, L. Stephens [TCMC]; RANDOLPH CO., Rudolf Bennitt WA, 25-VII-1970, UV light, J. R. Heitzman [TCMC]; ST. FRANCOIS CO., S-Bar-F Ranch, no date, R. S. Thoma [TCMC]; WASHINGTON CO., 30-VII-1981, M. E. Brown [TCMC].

*Goes variegatus* Linsley & Chemsak - **New state record.** 2 specimens: ST. LOUIS, 6-VII-1938, Japanese beetle trap [TCMC]; STODDARD CO., Holly Ridge SF, 4-VII-1986, UV light, T. C. MacRae.

### Tribe DORCASHEMATINI

#### Genus *Dorcascema*

*Dorcascema alternatum* (Say) - 144 specimens examined. Additional records: Adair, Atchison, Bates, Buchanan, Clay, Jefferson, Johnson, Newton, St. Clair, and Stoddard Counties.

*Dorcascema cinerea* (Olivier) - 170 specimens examined. Additional records: Atchison, Carter, Hickory, Holt, Platte, St. Francois, Ste. Genevieve, Shannon, and Wayne Counties. Adults were beaten

from *Morus rubra* and *Quercus* sp., and two adults emerged from *Carya ovata*.

*Dorcaschema nigrum* (Say) - 64 specimens examined. Additional records: Callaway, Chariton, Jefferson, Ste. Genevieve, and Scott Counties. Adults were beaten from *Carya ovata*, and large series were collected on cut logs of *C. glabra* and *C. tomentosa*. Adults emerged from dead branches of *C. glabra* and *C. illinoensis*.

*Dorcaschema wildii* Uhler - 30 specimens examined. Additional records: Buchanan, Christian, Crawford, Platte, Randolph, and Wayne. Adults were collected on *Maclura pomifera* and at UV light.

### Tribe APOMECCYNINI

#### Genus *Dorcasta*

*Dorcasta cinerea* (Horn) - 13 specimens examined. Additional record: JACKSON CO., VI-1955 (2), R. H. Pine [SEMC]. Adults were collected as late as October.

### Tribe PTEROPLIINI

#### Genus *Ataxia*

*Ataxia brunnea* Champlain & Knull - 10 specimens examined. Additional records: RANDOLPH CO., 1 mi E Moberly, 26-VI-1972, 14-15-VI-1980, E. G. Riley [MERC].

*Ataxia crypta* (Say) - 16 specimens examined. Additional records: Adair, Boone, Franklin, and Jackson Counties. Adults were collected as early as 7 April. One specimen was collected at UV light.

*Ataxia hubbardi* Fisher - 59 specimens examined. Additional records: Bates, Benton, Greene, Jasper, Morgan, Newton, Ozark, Pettis, and Platte Counties. Several adults were collected at UV light. Fifteen specimens collected at Victoria Glades NA (Jefferson Co.) are smaller, narrower, darker, and less pubescent than typical specimens. They were collected on flower stalks of *Silphium terebinthinaceum*.

### Tribe RHODOPININI

#### Genus *Eupogonius*

*Eupogonius pubescens* LeConte - **New state record.** 5 specimens: ST. LOUIS CO., Kirkwood, near Sugar Creek Valley, 18-V-1987, 1-VI-1988, 6-VI-1989, 27-V-, 6-VI-1991, all porch light, R. S. Thoma [& TCMC].

*Eupogonius tomentosus* (Haldeman) - 51 specimens examined. Additional records: Carter, Jefferson, St. Louis, Ste. Genevieve, and Shannon Counties. Adults were collected as late as 7 September, and several were collected at UV light. A large series was collected in Carter Co. on small, dead branches of *Pinus echinata*, and one adult emerged from this plant.

*Eupogonius vestitus* (Say) - 54 specimens examined. Additional records: Bollinger, Cape Girardeau, Clinton, Franklin, Gasconade, Henry, Hickory, Jackson, Lafayette, Lewis, Platte, Wayne, and Wright Counties. Adults were collected on *Carya* sp., *Celtis occidentalis*, *Cercis canadensis*, and at UV light. Specimens emerged from small, dead branches of *Carya glabra*, *C. ovata*, *Liriodendron tulipifera*, and *Rhus glabra*.

#### Genus *Psenocerus*

*Psenocerus supernotatus* (Say) - 186 specimens examined. Additional records: Adair, Carter, Clinton, Howell, Nodaway, Ray, and Saline Counties. Adults were collected as early as 2 April and were common during April. Single specimens were collected on *Cercis canadensis*, *Diospyros virginiana*, and *Crataegus* sp. One adult emerged from dead branch of *Liriodendron tulipifera*.

### Tribe POGONOCHERINI

#### Genus *Ecyrus*

*Ecyrus dasycerus dasycerus* (Say) - 123 specimens examined. Additional records: Barry, Carter, Crawford, Dent, Douglas, Greene, Hickory, Platte, Ste. Genevieve, Saline, Scott, Shannon, Stoddard, Wayne, and Wright Counties. This species was common at UV light. Adults were collected on dead *Celtis* sp. and *Cercis canadensis*. A small series emerged from dead *Celtis occidentalis*.

#### Genus *Pogonocherus*

##### Subgenus *Eupogonocherus*

*Pogonocherus mixtus* Haldeman - A single specimen was examined from ST. LOUIS CO., 26-VI-1980, D. L. Caldwell [UMRM]. Rice and Enns (1981) recorded this species from St. Charles Co.

## Tribe ONCIDERINI

Genus *Oncideres*

*Oncideres cingulata cingulata* (Say) - 306 specimens examined. Additional records: Andrew, Camden, Carter, Cooper, Jasper, Lewis, New Madrid, Perry, and Wayne Counties. Adults girdled *Cercis canadensis* on two occasions, and emerged from girdled branches of *Carya glabra*, *C. tomentosa*, and *Ulmus americana*. A few adults were attracted to UV light.

## Tribe AGAPANTHIINI

Genus *Hippopsis*

*Hippopsis lemniscata* (Fabricius) - 67 specimens examined. Additional records: Jefferson, Platte, St. Louis, and Wright Counties. Adults were collected at UV light. J. M. Sullivan observed adults on foliage of *Ambrosia artemisifolia*, *Melilotus alba*, and *Polymnia canadensis*, and another adult was collected on *A. trifida*.

## Tribe ACANTHODERINI

Genus *Aegomorphus*

*Aegomorphus modestus* (Gyllenhal) - 88 specimens examined. Additional records: Atchison, Barry, Butler, Camden, Clay, Crawford, Dent, Franklin, Greene, Hickory, Jefferson, Linn, St. Louis, Ste. Genevieve, Shannon, Wayne, and Wright Counties. Adults were common at UV light, and a few adults were collected in fermenting bait traps. Single specimens were collected on *Quercus* sp. and *Salix* sp.

*Aegomorphus morrisoni* (Uhler) - No Missouri specimens seen. This species was recorded from "Missouri" by Leng and Hamilton (1896) and Blatchley (1910), although Rice and Enns (1981) did not include it in their checklist. Its occurrence in the state needs to be verified.

*Aegomorphus quadrigibbus* (Say) - 10 specimens examined. Additional records: Andrew, Clay, Scott, and Warren Counties.

## Tribe ACANTHOCINI

Genus *Tylocerina*

*Tylocerina nodosus* (Fabricius) - **New state record.** 2 specimens: CARTER CO., Mark Twain NF, Pinewoods Lake RS, 22-VI-1984, J. R. Heitzman, 4-VI-1985, T. C. MacRae, all UV light in pineywoods.

Genus *Neacanthocinus*

*Neacanthocinus obsoletus* (Olivier) - 4 specimens examined. Additional records: CARTER CO., 10 mi NW Eminence, 2-VI-1976, on *Pinus echinata*, G. H. Nelson; Mark Twain NF, Pinewoods Lake RS, 14-VI-1986, on dead log *Pinus echinata*, T. C. MacRae. Another specimen was collected at UV light.

Genus *Ceratographis*

*Ceratographis biguttatus* (LeConte) - **New state record.** 20 specimens: CARTER CO., Mark Twain NF, Pinewoods Lake RS, 25-VI-1983 (8), 3-4-VI- (3), 6-VII-1985, 14-VI-1986 (2), all UV light, T. C. MacRae, 8-VI-1984 (2), UV light, J. R. Heitzman [TCMCJ]; SHANNON CO., Mark Twain NF, Logger's Lake RS, 26-VI-1982, 21-VI-1985 (3), UV light, T. C. MacRae. Both localities are pineywoods.

Genus *Graphisurus*

*Graphisurus despectus* LeConte - 52 specimens examined. Additional records: Atchison, Barry, Benton, Cape Girardeau, Crawford, Hickory, Holt, Jackson, Jefferson, Morgan, Ray, and St. Louis Counties. Most of the specimens were collected at UV light.

*Graphisurus fasciatus* (Degeer) - 271 specimens examined. Additional records: Atchison, Barry, Benton, Clay, Cooper, Crawford, Franklin, Greene, Jefferson, Linn, Macon, Nodaway, Platte, Ripley, St. Francois, and Stoddard Counties. Adults were collected as late as 18 October and were very common at UV light. Adults were collected on *Carya* sp., *C. ovata*, *Celtis* sp., *Quercus* sp., and *Q. velutinus*, trunk of fire-injured *Quercus* sp., and dead *Acer saccharinum*, *Q. alba*, and *Q. rubra*. One adult emerged from dead log of *Quercus* sp.

*Graphisurus triangulifer* (Haldeman) - 45 specimens examined. Additional records: Cooper, Platte, St. Louis, and Wayne Counties. Adults were collected 7 May-11 October. Most of the specimens were collected at UV light.

Genus *Astyliidius*

*Astyliidius versutus versutus* Casey - 16 specimens examined. Additional records: Jackson and St. Louis Counties. Adults were beaten from *Quercus* sp., *Tilia* sp., and dead branch of *Ulmus* sp., and two specimens emerged from dead branch of *Aesculus glabra*.

### Genus *Amniscus*

*Amniscus collaris* Haldeman - **New state record.** 2 specimens: ATCHISON CO., Brickyard Hill WA, 8-VII-1985, UV light, J. R. Heitzman [TCMC]; SHANNON CO., Mark Twain NF, Logger's Lake RS, 21-VI-1985, UV light, T. C. MacRae.

*Amniscus macula* (Say) - 46 specimens examined. Additional records: Benton, Lewis, St. Louis, Ste. Genevieve, Taney, and Wayne Counties. Adults were collected as late as 8 August. One adult was taken on *Carya* sp., and a large series of adults emerged from dead branch of *Carpinus caroliniana virginiana*.

*Amniscus sexguttata* (Say) - 86 specimens examined. Additional records: Carter, Crawford, Douglas, Jefferson, St. Clair, St. Louis, Ste. Genevieve, and Shannon Counties. Adults were collected 14 May-30 August. Many adults were collected nocturnally on dead branches of *Pinus echinata* and *P. sylvestris*, and a large series emerged from the former. Adults were also commonly collected at UV light.

### Genus *Leptostylus*

*Leptostylus transversus transversus* Gyllenhal - 268 specimens examined. Additional records: Camden, Carter, Cooper, Crawford, Dent, Jackson, Montgomery, Nodaway, Oregon, Platte, Pulaski, Reynolds, St. Louis, Shannon, Vernon, and Wright Counties. Adult activity is bimodal in Missouri. Most of the specimens were collected from early April through June, and early September through October, with virtually no captures in July or August. Adults were common at UV light, and were collected on *Fraxinus americana* and nocturnally on dead branches of *Carya ovata* and *Quercus alba*. Adults emerged from dead branches of *Amelanchier arborea*, *C. ovata*, *Juniperus virginiana*, *Pinus echinata*, and *P. sylvestris*. It is remarkable that this species was reared abundantly both from angiosperm and gymnosperm hosts.

### Genus *Sternidius*

The taxonomy of this group has been unstable due to the tremendous intraspecific variation exhibited by members of this genus and the resultant difficulties in defining species limits. Rice and Enns (1981) assigned Missouri specimens to either *Sternidius alpha misellus* (LeConte) or *S. fascicularis fascicularis* (Harris) based on Dillon (1956). However, Lewis (1986) greatly narrowed species limits within this genus, and recent collect-

ing has made much additional Missouri material available for study, including many series of reared specimens. Using Lewis' concepts, Missouri specimens were segregated as follows:

*Sternidius alpha* (Say) - **New state record.** 73 specimens collected in Benton, Boone, Callaway, Cape Girardeau, Carter, Christian, Crawford, Franklin, Jackson, Jefferson, Lafayette, Lawrence, Randolph, St. Francois, St. Louis, Wayne, and Wright Counties. Seasonal occurrence: 30 April-26 August, more common early to mid-June. Many adults were attracted to UV light, others were taken on *Quercus velutina* and dead *Carya* sp. and *Juglans nigra*. Large series of adults emerged from dead branches of *Rhus* sp. and *R. typhina*.

*Sternidius fascicularis* (Harris) - 262 specimens collected in Barry, Benton, Boone, Butler, Callaway, Carter, Christian, Clay, Clinton, Crawford, Dade, Dekalb, Franklin, Gasconade, Henry, Hickory, Jackson, Jefferson, Johnson, Lincoln, Mississippi, Pettis, Pike, Platte, Polk, Randolph, St. Charles, St. Clair, St. Francois, St. Louis, Ste. Genevieve, Shannon, Stoddard, Taney, Vernon, Wayne, and Wright Counties. Seasonal occurrence: 10 May-2 August, abundant from late May through June. Many specimens were attracted to UV light. Adults were collected on *Celastrus scandens*, *Maclura pomifera*, *Morus alba*, *Robinia pseudo-acacia*, and *Toxicodendron radicans* and on dead branches of *Celtis laevigatus*, *C. occidentalis*, and *Gleditsia triacanthos*. A large series of adults emerged from dead branches of *Celtis occidentalis*, and other larval hosts include dead *Carya ovata*, *Gleditsia triacanthos*, and *Morus alba*.

*Sternidius floridanus* (Hamilton) - 5 specimens: JEFFERSON CO., Festus, emerged 7-, 8-VI-, 6-VII-1984 from dead twigs *Quercus coccinea* pruned by "twig pruner," wood collected IX-1983, T. C. MacRae; RANDOLPH CO., 1 mi E Moberly, 14-15-VI-1980, E. G. Riley [TCMC]; ST. LOUIS CO., Concord Village, 13-VI-1987, UV light, T. C. MacRae. Lewis (1986) recorded this species from central Missouri.

*Sternidius misellus* (LeConte) - 86 specimens collected in Atchison, Barry, Boone, Callaway, Camden, Carter, Christian, Clay, Cooper, Crawford, Douglas, Franklin, Hickory, Holt, Jackson, Jasper, Jefferson, Phelps, Randolph, Reynolds, St. Clair, St. Louis, Ste. Genevieve, Shannon, Stoddard, Stone, Taney, Vernon, and Wayne Counties. Seasonal occurrence: 12 May-23 August, more common during June. Most of the specimens were attracted to

UV light. Others were collected on *Celtis* sp. and *Quercus stellata* and dead branches of *Gleditsia triacanthos* and *Q. coccinea*. Larval hosts include dead branches of *Carpinus caroliniana virginiana* and *Carya* sp. and "twig pruner"-pruned branch of *Q. coccinea*.

*Sternidius punctatus* (Haldeman) - 84 specimens collected in Boone, Callaway, Carter, Franklin, Hickory, Jasper, Jefferson, Johnson, Montgomery, Nodaway, Shannon, St. Louis, Ste. Genevieve, Taney, and Wayne Counties. Lewis (1986) recorded this species from west-central Missouri. Seasonal occurrence: 3 May-12 July, most of the specimens obtained from rearing cages emerged throughout May. In addition to being attracted to UV light, adults were collected on dead branches of *Acer saccharinum*, *Celtis* sp., *Fraxinus pennsylvanica* and *Juglans nigra*. Large series of adults emerged from dead branches of *Amelanchier arborea*, and other larval hosts include dead branches of *Acer saccharum*, *Carpinus caroliniana virginiana*, *Carya laciniata*, *Celtis occidentalis*, and *Diospyros virginiana*.

*Sternidius rusticus* (LeConte) - 25 specimens collected in Franklin, Jackson, Jefferson, Montgomery, and St. Louis Counties. Lewis (1986) recorded this species from south-east Missouri. Many of the adults were collected on and emerged from dead branches of *Acer saccharum*. A few adults emerged from dead branches of *Amelanchier arborea*.

*Sternidius vittatus* Dillon - **New state record.** 3 specimens: STE. GENEVIEVE CO., Hawn SP, emerged 30-V-1988 (2) from dead branch *Carpinus caroliniana virginiana*, wood collected III-1988, T. C. MacRae; WAYNE CO., Mark Twain NF, Markham Springs RS, 5-VI-1985, UV light, T. C. MacRae.

### Genus *Astyleiopus*

*Astyleiopus variegatus* (Haldeman) - 261 specimens examined. Additional records: Adair, Atchison, Barry, Clay, Cooper, Dent, Franklin, Jasper, Lewis, Mercer, Morgan, Newton, Nodaway, Phelps, Pike, Platte, Polk, St. Francois, Shannon, Stoddard, Taney, and Wayne Counties. Adults were commonly collected at UV light, and one adult emerged from dead *Juniperus virginiana*. Like *Leptostylus transversus transversus* Gyllenhal, this species apparently utilizes both angiosperms and gymnosperms as larval hosts.

### Genus *Dectes*

*Dectes sayi* Dillon & Dillon - 73 specimens examined. Additional records: Adair, Andrew, Clark, Jackson, Lewis, Newton, Osage, Pemiscot, Pike, and Stoddard Counties. Several adults were collected on *Ambrosia trifida*.

*Dectes texanus texanus* LeConte - 167 specimens examined. Additional records: Buchanan, Callaway, Jefferson, Macon, Mississippi, Moniteau, and Polk Counties. Adults were collected on *Ambrosia trifida*, *Glycine max*, and *Helianthus* sp. Hatchett *et al.* (1975) studied the biology of this species on soybean in Missouri.

### Genus *Lepturges*

*Lepturges angulatus angulatus* (LeConte) - 81 specimens examined. Additional records: Benton, Callaway, Cape Girardeau, Carter, Christian, Crawford, Franklin, Henry, Jackson, Jasper, Jefferson, Polk, St. Francois, and Wayne Counties. Adults were collected 27 May-24 July. Several adults were collected on *Celtis occidentalis*, dead *Quercus* sp., and at UV light. Large series emerged from small, dead branches of *Gleditsia triacanthos*.

*Lepturges confluens* (Haldeman) - 284 specimens examined. Additional records: Adair, Atchison, Barry, Benton, Callaway, Cape Girardeau, Carter, Christian, Clay, Cole, Crawford, Franklin, Gasconade, Henry, Hickory, Jasper, Jefferson, Johnson, Lawrence, Mississippi, Monroe, Ozark, Platte, Ralls, Reynolds, St. Clair, St. Francois, Scott, Shannon, Taney, Texas, and Wayne Counties. Adults were collected abundantly at UV light, beaten from *Carya glabra*, and collected on dead branches of *C. tomentosa* and *Quercus coccinea*. Adults also emerged from small, dead branches of *C. illinoensis* and *C. ovata*.

*Lepturges pictus* (LeConte) - 9 specimens examined. Additional records: Jefferson, St. Louis, Taney, and Wayne Counties. Specimens were beaten from *Celtis* sp. and dead *C. laevigata* and collected at UV light.

*Lepturges symmetricus* (Haldeman) - 23 specimens examined. Additional records: Callaway and Henry Counties. Many of the specimens were collected at a porch light near Sugar Creek Valley in Kirkwood (St. Louis Co.) by R. S. Thoma [& TCMC] as early as 18 May, and several were beaten from dead *Celtis occidentalis*.



### Genus *Maculurges*

*Maculurges regularis* (LeConte) - 8 specimens examined. Additional record: ST. LOUIS CO., Lemay, 17-X-1959, A. Littahorsky [GHNC].

### Genus *Urgleptes*

*Urgleptes facetus* (Say) - 24 specimens examined. Additional records: Jackson, Ste. Genevieve, and Taney Counties. Single specimens were collected on *Celtis occidentalis*, *Cercis canadensis*, *Fraxinus americanus*, *Physocarpus opulifolius intermedius*, *Quercus* sp., and *Q. prinoides*. One adult emerged from small, dead branch of *Amelanchier arborea*.

*Urgleptes querci* (Fitch) - 103 specimens examined. Additional records: Barry, Carter, Christian, Dent, Franklin, Jackson, Jefferson, Lewis, St. Louis, Ste. Genevieve, Saline, and Wayne Counties. Adults were attracted to UV light and collected on dead branches of *Acer saccharinum*, *Carya glabra*, *C. tomentosa*, *Celtis occidentalis*, *Cercis canadensis*, *Juglans nigra*, and *Quercus* sp. Adults emerged from small dead branches and twigs of *Juglans nigra*, *Ostrya virginiana*, and *Ulmus americana*.

### Genus *Hyperplatys*

*Hyperplatys aspersa* (Say) - 16 specimens examined. Additional records: Adair, Franklin, Johnson, St. Charles, Shannon, and Wayne Counties.

*Hyperplatys maculata* Haldeman - 83 specimens examined. Additional records: Franklin, Jackson, Ste. Genevieve, and Texas Counties. Single specimens were beaten from *Gleditsia triacanthos* and *Quercus* sp., and a large series emerged from dead branch of *Carpinus caroliniana virginiana*.

### Genus *Nyssodrysinia*

*Nyssodrysinia haldemani* (LeConte) - No Missouri specimens were examined. Craighead (1923) described the larva of this species from specimens "taken from *Celtis* sp. in Missouri," although Rice and Enns (1981) did not include it in their checklist.

### Tribe CYRTININI

#### Genus *Cyrtinus*

*Cyrtinus pygmaeus* LeConte - 4 specimens examined.

### Tribe SAPERDINI

#### Genus *Saperda*

*Saperda calcarata* Say - 22 specimens examined. Additional records: Cape Girardeau, Platte, Randolph, and Wayne Counties.

*Saperda candida candida* Fabricius - 45 specimens examined. Additional records: Barry, Bollinger, Cape Girardeau, Crawford, Morgan, Platte, St. Louis, and Saline Counties. This species was found attacking ornamental crabapples (*Malus* cultivars) at several nurseries throughout the state.

*Saperda discoidea* Fabricius - 69 specimens examined. Additional records: Atchison, Cape Girardeau, Carter, Cass, Jackson, Jefferson, Morgan, Ste. Genevieve, Shannon, and Wayne Counties. Adults of this sexually dimorphic species were collected frequently at UV light.

*Saperda imitans* Felt & Joutel - 17 specimens examined. Additional records: Carter, Clay, Jackson, Oregon, Platte, and Wayne Counties. Two specimens emerged from dead *Carya cordiformis*.

*Saperda inornata* Say - A single specimen was examined: BOONE CO., Columbia, 11-VI-1939, T. E. Birkett [UMRM]. Rice and Enns (1981) recorded this species (as *S. concolor* LeConte) from Stone Co.

*Saperda lateralis* Fabricius - 93 specimens examined. Additional records: Atchison, Butler, Carroll, Carter, Crawford, Franklin, Jefferson, Laclede, Morgan, Pettis, Platte, Ste. Genevieve, Stoddard, and Wayne Counties. Adults were collected at UV light, beaten from *Crataegus* sp., and collected on dead *Carya* sp., *C. cordiformis*, *C. glabra*, *C. ovata*, and *Ulmus rubra*.

*Saperda mutica* Say - No Missouri specimens were seen. Rice and Enns (1981) did not record this species for Missouri. Say (1823) gave "Missouri" as the type locality of this species, a record which was repeated by Leng and Hamilton (1896) and Felt and Joutel (1904). However, Say's "Missouri" included a territory much larger than the present state, thus the occurrence of this species in the state needs to be verified.

*Saperda obliqua* Say - A single specimen was collected in STE. GENEVIEVE CO., Hawn SP, along Pickle Creek, 27-VI-1981, UV light, G. Balogh [TCMC]. Alder (*Alnus* spp.) is a known host for this species, and *A. serrulata* is abundant at the collection site. Say (1826) gave "Missouri" as the type locality (see discussion under *S. mutica*), but Rice and Enns (1981) did not list it.

*Saperda puncticollis* Say - 33 specimens examined. Additional records: Franklin and Johnson Counties.

*Saperda tridentata* Olivier - 261 specimens examined. Additional records: Andrew, Atchison, Barry, Bates, Buchanan, Carter, Cooper, Crawford, Jasper, Lewis, Linn, Macon, New Madrid, Nodaway, Ozark, Polk, Saline, Stone, Worth, and Wright Counties. Adults were collected as late as 26 October and were abundant at UV light. Single adults were collected on *Ulmus alata* and under bark of dead *U. americana*.

*Saperda vestita* Say - 10 specimens examined.

### Tribe PHYTOECINI

#### Genus *Oberea*

*Oberea bimaculata* (Olivier) - 91 specimens examined. Additional records: Adair, Clay, Dent, Franklin, Howard, Jackson, Jefferson, Ozark, Pettis, Phelps, St. Charles, St. Francois, St. Louis, Ste. Genevieve, Stone, Taney, and Wayne Counties.

*Oberea delongi* Knull - 122 specimens examined. Additional record: Clay Co. Most of the specimens (66) were collected in Japanese beetle traps in St. Louis in the 1930's.

*Oberea ocellata* Haldeman - 40 specimens examined. Additional records: Carter, Franklin, Iron, Jasper, and Johnson Counties.

*Oberea praelonga* Casey - **New state record.** 2 specimens: JEFFERSON CO., Festus, 22-V-1987, beating *Populus deltoides*, T. C. MacRae; STE. GENEVIEVE CO., Hawn SP, 27-V-1989, beating *Ostrya virginiana*, T. C. MacRae.

*Oberea ruficollis* (Say) - 11 specimens examined. Additional records: Boone, Jefferson, St. Francois, and Texas Counties.

*Oberea shaumi* LeConte - 43 specimens examined.

*Oberea tripunctata* (Swederus) - 143 specimens examined. Additional records: Barry, Callaway, Cole, Hickory, Jackson, Jefferson, Lincoln, Montgomery, St. Charles, St. Clair, Ste. Genevieve, and Wayne Counties. Riley (1880) recorded *O. mandarina* (Fabricius) breeding in *Populus monilifera* (= *P. deltoides monilifera*) in St. Louis, a record that may refer to this species.

#### Genus *Mecas* S. Str.

*Mecas cana saturnina* (LeConte) - 10 specimens examined. Additional record: Mississippi Co. Most of the specimens were collected in Japanese beetle traps in St. Louis in the 1930's.

*Mecas cineracea* Casey - 14 specimens examined. Additional records: Adair, Barry, Carter, Moniteau, and Stoddard Counties. Specimens were collected as late as 25 July, mostly by sweeping in dolomitic glades and small forest openings.

*Mecas pergrata* (Say) - 55 specimens examined. Additional records: Adair, Barry, Carter, Christian, Cole, Howard, Jefferson, Lawrence, and Madison Counties. Most of the specimens were collected by sweeping in dolomitic glades and small forest openings.

### Tribe TETRAOPINI

#### Genus *Tetraopes*

*Tetraopes femoratus* LeConte - 126 specimens examined. Additional records: Adair, Andrew, Franklin, Jackson, Jasper, Jefferson, Johnson, Lincoln, Macon, Monroe, Nodaway, Pike, Ray, St. Clair, St. Francois, Sullivan, Taney, and Warren Counties. Adults were collected as late as 9 October on *Asclepias hirtella*, *A. incarnata*, *A. syriaca*, *A. tuberosa interior*, *A. viridiflora*, and *A. viridis*. Rice (1989) recorded this species from Hickory and Polk Counties, speculating *A. hirtella* as the probable larval host.

*Tetraopes quinque maculatus* Haldeman - 80 specimens examined. Additional records: Adair, Barry, Christian, Cole, Jefferson, Phelps, and Wright Counties. Most of the adults were collected on *Asclepias tuberosa interior*, but a few were collected at Holly Ridge SF (Stoddard Co.) on *A. amplexicaulis*. Rice (1989) recorded it from Hickory and St. Clair Counties on *A. hirtella*, *A. tuberosa*, and *A. viridiflora*, speculating *A. hirtella* as the likely larval host.

*Tetraopes tetrophthalmus* (Forster) - 806 specimens examined. Additional records: Andrew, Barton, Benton, Cass, Chariton, Cole, Franklin, Howard, Jasper, Jefferson, Johnson, Knox, Lafayette, Lewis, Lincoln, Livingston, Macon, Madison, Monroe, Montgomery, Morgan, Newton, Perry, Phelps, Platte, Saline, Scott, Sullivan, Warren, and Washington Counties. The vast majority of adults were collected on *Asclepias syriaca*, however, J. M. Sullivan observed adults feeding on *A. sullivantii*.

*Tetraopes texanus* Horn - 7 specimens: JEFFERSON CO., Victoria Glades NA, 18-VI- (2), 2-, 6- (2), 9-VII-1987, all on *Asclepias viridiflora*, T. C. MacRae; IRON CO., Enough Pine Plantation, 7-VIII-1986, H. M. Webber [TCMC]. Rice (1989) recorded adults of this species from Polk Co. on *A. viridiflora*.

### Genus *Phaea*

*Phaea monostigma* (Haldeman) - 41 specimens examined. Additional records: Barry, Jefferson, Shannon, Stoddard, Texas, Wayne, and Wright Counties.

### Tribe HEMILOPHINI

#### Genus *Hemierana*

*Hemierana marginata* (Fabricius) - 51 specimens examined. Additional records: Andrew, Franklin, Jefferson, Lincoln, St. Charles, and St. Clair Counties.

### Family DISTENIIDAE

#### Genus *Distenia*

*Distenia undata* (Fabricius) - **New state record.** 115 specimens collected in Atchison, Boone, Buchanan, Butler, Callaway, Cape Girardeau, Carter, Clay, Cole, Dent, Franklin, Howell, Jackson, Jefferson, Johnson, Mississippi, Newton, Ozark, Pike, Polk, Ray, Reynolds, St. Francois, St. Louis, Saline, Stoddard, Warren, and Wayne Counties. Seasonal occurrence: 5 June-20 September, common late June through July. Many specimens were collected in fermenting bait traps and at UV light. Adults were also collected on *Robinia pseudo-acacia* and nocturnally on dead branches of *Carya* sp. and *Cercis canadensis*. A single specimen emerged from dead root of *C. canadensis*.

### Acknowledgements

I would like to thank the following for the loan or donation of specimens: M. S. Arduser, St. Louis; Dr. G. J. Balogh, Kalamazoo, Michigan; Dr. N. L. Braasch, Southeast Missouri State University, Cape Girardeau [SEMS]; Dr. R. W. Brooks, University of Kansas, Lawrence; Dr. D. W. Brzoska, Lawrence, Kansas; W. Davit, Shaw Arboretum, Gray Summit [SHAW]; J. E. Francka, Missouri Department of Agriculture, Jefferson City [MODA]; R. D. Gass, Jefferson City; J. R. Heitzman, Independence [JRHIC]; J. H. Hunt, University of Missouri, St. Louis; G. W. Kirfman, Woodland, California; D. G.

LeDoux, Columbia; R. Letsinger, Sarcoxie; A. Littahorsky, Ottawa, Ontario; B. G. Montgomery, Savannah; R. A. Nabors, Delta Extension Center, Portageville; Dr. G. H. Nelson, Pomona, California; J. C. Pershing, Webster Groves [JCPC]; Dr. M. E. Rice, Ames, Iowa [MERC]; E. G. Riley, College Station, Texas; Dr. J. H. Shaddy, Northeast Missouri State University, Kirksville; Dr. A. Schreiber, Washington, D. C.; K. B. Simpson, University of Missouri, Columbia; Dr. D. Stearn, University of Missouri, Kansas City; Rev. J. M. Sullivan, New Haven; R. S. Thoma, Kirkwood; Dr. H. G. Townsend, State Fruit Experiment Station, Mountain Grove; H. M. Webber, Cabool; and Dr. S. W. Wilson, Central Missouri State University, Warrensburg [CMSU].

Sincere appreciation is given to Rev. J. M. Sullivan, who provided numerous host plant determinations during the course of this study.

I thank the Missouri Department of Conservation and the Missouri Department of Natural Resources for permission to collect on lands under their stewardship.

Special thanks are extended to Dr. J. A. Chemsak, University of California, Berkeley, F. T. Hovore, Newhall, California, and Dr. A. E. Lewis, Burbank, California for numerous species determinations and verifications and for the many helpful comments they have provided over the course of this study.

Finally, I thank Dr. J. A. Chemsak for reading and offering helpful criticism of this manuscript.

### Literature Cited

- Anonymous.** 1991. Rare and endangered species checklist. Missouri Dep. Conservation, Jefferson City, Missouri, 43 pp.
- Arnett, R. H., Jr., G. A. Samuelson, & G. M. Nishida.** 1993. The insect and spider collections of the world (2nd ed.). Flora & Fauna Handbook No. 11. Sandhill Crane Press, Inc., Gainesville, Florida, 310 pp.
- Blatchley, W. S.** 1910. An illustrated descriptive catalogue of the Coleoptera, or beetles (exclusive of the Rhynchophora), known to occur in Indiana with bibliography and descriptions of new species. Indiana Dep. Geol. Nat. Resources Bull., 1:1-1386.

- Bouseman, J. K.** 1977. *Typocerus deceptus* Knull in Illinois, with discussion of habitat (Coleoptera: Cerambycidae). *Coleopt. Bull.*, 31(2):179-180.
- Champlain, A. B. & J. N. Knull.** 1932. Fermenting baits for trapping Elateridae and Cerambycidae (Coleop.). *Entomol. News*, 43(10):253-257.
- Chemsak, J. A. & E. G. Linsley.** 1982. Checklist of the Cerambycidae and Disteniidae of North America, Central America, and the West Indies (Coleoptera). Plexus, Medford, New Jersey, 138 pp.
- Chemsak, J. A., E. G. Linsley, & F. A. Noguera.** 1992. Listados faunísticos de México. II. Los Cerambycidae y Disteniidae de Norteamérica, Centroamérica y las Indias Occidentales (Coleoptera). Univ. Nac. Autónoma de México, Inst. de Biología, México, D.F., 204 pp.
- Craighead, F. C.** 1923. North American cerambycid larvae. A classification and the biology of North American cerambycid larvae. Canada Dep. Agric. Tech. Bull., 27(n.s.):1-239.
- Dillon, L. S.** 1956. The Nearctic components of the tribe Acanthocini (Coleoptera: Cerambycidae). Part II. *Ann. Entomol. Soc. Am.*, 49(3):207-235.
- Fattig, P. W.** 1947. The Cerambycidae or long-horned beetles of Georgia. *Emory Univ. Mus. Bull.*, 5:1-48.
- Felt, E. P. & L. H. Joutel.** 1904. Monograph of the genus *Saperda*. New York St. Mus. Bull., 74(Entomol. 20):1-86.
- Garnett, R. T.** 1918. An annotated list of the Cerambycidae of California. (Col). *Can. Entomol.*, 50:172-177, 205-213, 248-252, 281-284.
- Gosling, D. C. L.** 1974. An annotated list of the Cerambycidae of Michigan (Coleoptera) Part I, introduction and the subfamilies Parandrinae, Prioninae, Spondylinae, Aseminae, and Cerambycinae. *Great Lakes Entomol.* (1973), 6(3):65-84.
- Gosling, D. C. L.** 1978. Observations on the biology of the oak twig pruner, *Elaphidionoides parallelus*, (Coleoptera: Cerambycidae) in Michigan. *Great Lakes Entomol.*, 11(1):1-10.
- Gosling, D. C. L.** 1982. Correct identity of the oak twig pruner (Coleoptera: Cerambycidae). *Great Lakes Entomol.* (1981), 14(4):179-180.
- Gosling, D. C. L. & N. M. Gosling.** 1977. An annotated list of the Cerambycidae of Michigan (Coleoptera) Part II, the subfamilies Lepturinae and Lamiinae. *Great Lakes Entomol.*, 10(1):1-37.
- Hatch, M. H.** 1971. pp. 90-157. *In: The beetles of the Pacific Northwest Part V: Rhipiceroidae, Sternoxi, Phytophaga, Rhyncophora, and Lamellicornia.* Univ. Wash. Publ. Biol., 16:1-662.
- Hatchett, J. H., D. M. Daugherty, J. C. Robbins, R. M. Barry, & E. C. Houser.** 1975. Biology in Missouri of *Dectes texanus*, a new pest of soybean. *Ann. Entomol. Soc. Am.*, 68(2):209-213.
- Hay, C. J.** 1969. The life history of a red oak borer and its behavior in red, black, and scarlet oak. *Proc. North Central Br. Entomol. Soc. Am.*, 24(2):125-127.
- Hoffman, R. L.** 1988. The status of the names *Clytus horridus* LeConte and *Clytus leucozonus* Castelnau & Gory (Coleoptera: Cerambycidae). *Insecta Mundi*, 2(1):66-75.
- Hovore, F. T., R. L. Penrose, & R. W. Neck.** 1987. The Cerambycidae, or longhorned beetles, of southern Texas: a faunal survey (Coleoptera). *Proc. Calif. Acad. Sci.*, 44(13):283-334.
- Kirk, H. B. & J. N. Knull.** 1926. Annotated list of the Cerambycidae of Pennsylvania (Coleoptera). *Can. Entomol.*, 58:21-46.
- Knull, J. N.** 1946. The long-horned beetles of Ohio (Coleoptera: Cerambycidae). *Ohio Biol. Surv. Bull.*, 39 (5):133-354.
- Knull, J. N.** 1955. A new species of *Obrium* from Tennessee. (Coleoptera: Cerambycidae). *Entomol. News* 66:139.
- Leng, C. W.** 1887. Synopses of Cerambycidae. *Entomol. Am.*, 3(1-3):4-8, 23-24, 44.
- Leng, C. W.** 1890. Synopses of Cerambycidae. *Entomol. Am.*, 6:9-13, 65-69, 97-98, 104-110, 156-160, 185-200, 213-214.

- Leng, C. W. & J. Hamilton.** 1896. The Lamiinae of North America. *Trans. Am. Entomol. Soc.*, 23:101-178.
- Lewis, A. E.** 1979. A list of Cerambycidae from the Hualapai Mountains, Mojave County, Arizona (Coleoptera). *Pan-Pac. Entomol.*, 55(1):21-26.
- Lewis, A. E.** 1986. The *Sternidius* of America north of Mexico (Coleoptera: Cerambycidae). *Pan-Pac. Entomol.*, 62(3):171-202.
- Lingafelter, S. W. & N. V. Horner.** 1993. The Cerambycidae of north-central Texas. *Coleopt. Bull.*, 47(2):159-191.
- Linsley, E. G.** 1961. The Cerambycidae of North America, Part I. Introduction. *Univ. Calif. Publ. Entomol.*, 18:1-135.
- Linsley, E. G.** 1962a. The Cerambycidae of North America, Part II. Taxonomy and classification of the Parandrinae, Prioninae, Spondylinae and Aseminae. *Univ. Calif. Publ. Entomol.*, 19:1-102, pl. 1.
- Linsley, E. G.** 1962b. The Cerambycidae of North America, Part III. Taxonomy and classification of the subfamily Cerambycinae, tribes Opsimini through Megaderini. *Univ. Calif. Publ. Entomol.*, 20:1-188.
- Linsley, E. G.** 1963. The Cerambycidae of North America, Part IV. Taxonomy and classification of the subfamily Cerambycinae, tribes Elaphidionini through Rhinotragini. *Univ. Calif. Publ. Entomol.*, 21:1-165.
- Linsley, E. G.** 1964. The Cerambycidae of North America, Part V. Taxonomy and classification of the subfamily Cerambycinae, tribes Callichromatini through Ancylocerini. *Univ. Calif. Publ. Entomol.*, 22:1-197.
- Linsley, E. G. & J. A. Chemsak.** 1961. A distributional and taxonomic study of the genus *Crossidius* (Coleoptera, Cerambycidae). *Misc. Publ. Entomol. Soc. Am.*, 3(2):25-64, pls. 1-3.
- Linsley, E. G. & J. A. Chemsak.** 1972. Cerambycidae of North America, Part VI, No. 1. Taxonomy and classification of the subfamily Lepturinae. *Univ. Calif. Publ. Entomol.*, 69:1-138, pls. 1-2.
- Linsley, E. G. & J. A. Chemsak.** 1976. Cerambycidae of North America, Part VI, No. 2. Taxonomy and classification of the subfamily Lepturinae. *Univ. Calif. Publ. Entomol.*, 80:1-186.
- Linsley, E. G. & J. A. Chemsak.** 1984. The Cerambycidae of North America, Part VII, No. 1: taxonomy and classification of the subfamily Lamiinae, tribes Parmenini through Acanthoderini. *Univ. Calif. Publ. Entomol.*, 102:1-258.
- Linsley, E. G., J. N. Knull, & M. Statham.** 1961. A list of Cerambycidae from the Chiricahua Mountain Area, Cochise County, Arizona (Coleoptera). *Am. Mus. Novitates*, 2050:1-34.
- MacRae, T. C.** 1991. The Buprestidae (Coleoptera) of Missouri. *Insecta Mundi*, 5(2):101-126.
- Nelson, P. W.** 1985. The terrestrial natural communities of Missouri. Missouri Natural Areas Committee, Jefferson City, Missouri, 197 pp.
- Nelson, G. H., D. S. Verity, & R. L. Westcott.** 1981. Additional notes on the biology and distribution of Buprestidae (Coleoptera) of North America. *Coleopt. Bull.*, 35(2):129-151.
- Rice, M. E.** 1982. Notes on Cerambycidae from Missouri. *Coleopt. Bull.* (1981), 35(4):459-462.
- Rice, M. E.** 1989. Natural history observations on *Tetraopes* and other Cerambycidae (Coleoptera) from the Great Plains ecosystem. *J. Kans. Entomol. Soc.* (1989), 61(4):412-419.
- Rice, M. E. & W. R. Enns.** 1981. The longhorn beetle subfamily Lamiinae (Coleoptera: Cerambycidae) in Missouri. *Trans. Missouri Acad. Sci.*, 15:89-109.
- Riley, C. V.** 1880. Food habits of the longicorn beetles or wood borers. *Am. Entomol.*, 3(10-11):237-239, 270-271.
- Riley, E. G. & W. R. Enns.** 1979. An annotated checklist of Missouri leaf beetles (Coleoptera: Chrysomelidae). *Trans. Missouri Acad. Sci.*, 13:53-83.

- Say, T.** 1823. Descriptions of coleopterous insects collected in the late expedition to the Rocky Mountains, performed by order of Mr. Calhoun, Secretary of War, under command of Major Long [pt. 1]. *J. Acad. Nat. Sci. Philadelphia*, 3:139-216.
- Say, T.** 1824. Descriptions of coleopterous insects collected in the late expedition to the Rocky Mountains, performed by order of Mr. Calhoun, Secretary of War, under command of Major Long [pt. 2]. *J. Acad. Nat. Sci. Philadelphia*, 3:238-282, 298-331, 403-462.
- Say, T.** 1826. Descriptions of new species of coleopterous insects inhabiting the United States [pt. 2]. *J. Acad. Nat. Sci. Philadelphia*, 5:237-284, 292-304.
- Skiles, D. D.** 1985. New genera and species of elaphidionine Cerambycidae (Coleoptera) from North America and the West Indies. *Coleopt. Bull.*, 39(4):305-320.
- Stein, J. D. & A. D. Tagestad.** 1976. The longhorned wood-boring beetles of North Dakota (Coleoptera: Cerambycidae). *U. S. Dep. Agric. For. Serv. Res. Pap. RM-171*:1-58.
- Thom, R. H. & J. H. Wilson.** 1980. The natural divisions of Missouri. *Trans. Missouri Acad. Sci.*, 14:9-23.
- Turnbow, R. H., Jr. & R. T. Franklin.** 1980. An annotated checklist of the Cerambycidae of Georgia (Coleoptera). *J. Georgia Entomol. Soc.*, 15(3):337-349.
- Turnbow, R.H., Jr. & F.T. Hovore.** 1979. Notes on Cerambycidae from the southeastern U.S. (Coleoptera). *Entomol. News*, 90(5):219-229.
- Tyson, W. H.** 1970. The Cerambycidae of the Panamint Mountains, California (Coleoptera). *Pan-Pac. Entomol.*, 46(4):296-299.
- Walsh, B. D. & C. V. Riley.** 1868. A new grape root borer. *Am. Entomol.*, 1(1):19.
- Walsh, B. D. & C. V. Riley.** 1869. The gigantic root borer (*Prionus laticollis*, Drury). *Am. Entomol.*, 1(12):231-234.
- Yatskievych, G. & J. Turner.** 1990. Catalogue of the flora of Missouri. *Monogr. Syst. Bot. Mo. Botanical Garden*, 37:1-345.