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The Longhorned Beetles (Coleoptera: Cerambycidae) of Idaho

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Abstract

Ecological and distributional data are presented for the 134 species, plus six subspecies, of longhorned beetles (Coleoptera: Cerambycidae) known to occur in Idaho. Species recorded or confirmed for the first time in Idaho are *Batyle ignicollis* (Say), *Brachysomida atra* (LeConte), *Brachysomida californica* (LeConte), *Callidium antennatum* Casey, *Callidium cicatricosum* Mannerheim, *Callidium hoppingi* Linsley, *Callimus cyanipennis* (LeConte), *Clytus canadensis* Hopping, *Haplidus testaceus* LeConte, *Hyperplatys aspersa* (Say), *Judolia gaurotoides* (Casey), *Leptalia macilenta* (Mannerheim), *Leptura plagifera* LeConte, *Megacyllene robiniae* (Forster), *Meriellum proteus* (Kirby), *Molorchus longicollis* LeConte, *Necydalis diversicollis diversicollis* Schaeffer, *Phymatodes dimidiatus* (Kirby), *Phymatodes hirtellus* (LeConte), *Phymatodes nigerrimus* Van Dyke, *Phymatodes nitidus* LeConte, *Phymatodes vilitatis* Linsley, *Poecilobrium chalybeum* (LeConte), *Saperda horni* Joutel, *Saperda tridentata* (Olivier), *Stenocorus nubifer* (LeConte), *Stenocorus vestitus* (Haldeman), and *Xylocrius agassizi* (LeConte). New adult, larval, or flower host records are given for *Cortodera subpilosa* (LeConte), *Gnathacmaeops pratensis* (Laicharting), *Grammoptera subargentata* (Kirby), *Judolia montivagans* (Couper), *Leptura propinqua* Bland, *Pseudogaurotina cressoni* (Bland), and *Trachysida aspersa* (LeConte).

Key Words: ecology, distribution, species list, rare species, Pacific Northwest

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The longhorned beetles (Fig. 1) of the family Cerambycidae comprise an ecologically diverse group with larvae of many species either phytophagous or xylophagous. Adults use numerous plant species as hosts, which may or may not be associated as a larval host. The longhorned beetle fauna of America north of Mexico was monographed in the classic publications by Linsley (1961, 1962a, b, 1963, 1964) and Linsley and Chemsak (1972, 1976, 1984, 1995). When Chemsak (1996) began the second iteration of the fauna, he noted that "many individuals have contributed new data on localities, host plants, and flight periods. Still, the knowledge is rather scattered and reflects a need of further field work." For the northwestern USA, there are two primary publications on longhorned beetles: an earlier compilation by Hatch (1971) that collectively noted the species from Idaho, Oregon, and Washington; and Hart *et al.* (2013), which summarized the species within Montana, a state that adjoins much of Idaho's eastern border. The objective of our study is to provide the first comprehensive survey of longhorned beetle species known to occur within Idaho. Seasonal adult phenology, regional or county distributions, and new host plant associations are presented.

Material and Methods

Specimens in the William F. Barr Museum Entomology Collection, University of Idaho, Moscow, Idaho [WFBC] provided a majority of the data for this survey. Additional data were gleaned from the first author's collection, which was made during 1988 and is deposited in the Department of

Fig. 1. *Crossidius hirtipes allgewahri* LeConte.

Entomology Collection, Texas A&M University, College Station, Texas. Species were identified by the authors using Linsley (1962a, b, 1963, 1964) and Linsley and Chemsak (1972, 1976, 1984, 1995), except when more recent revisions were available. Nomenclature follows Bezark (2015). All specimens are deposited in WFBC unless otherwise noted. Literature records were taken from Linsley (1962a, b, 1963, 1964), Barr and Penrose (1969), Horning and Barr (1970), Linsley and Chemsak (1972, 1976, 1984, 1995), Turnbow (1984), Chemsak (1996), Hammond and Williams (2013), and Santos-Silva *et al.* (2016).

New state records and adult, larval, or flower host records (*sensu* MacRae and Rice 2007) were compared against published literature and, to the best of our knowledge, represent previously unpublished accounts of the noted species found in Idaho. Data for new records are presented in a telegraphic style in the following order: county, location, collection date (day-month [in Roman numerals]-year), host data if available, collector's name, and number of specimens (in parentheses). Missing or unknown data, which are predominantly collection dates, are noted with a "?" in the text and list of Idaho species (Table 1).

A list of longhorned beetle species is provided for the state and presented by subfamily and alphabetical within the subfamily. For each species, the number of specimens with usable label data, adult occurrence, and known regional distribution within the state are given. The phenology of adults is stated as a range for the first and last adult collection dates. Specimens with collection data from November through March are excluded from the range of adult phenology dates, since cold ambient temperatures during these months preclude normal beetle activity, and it is not uncommon for many species to emerge from firewood stored indoors during these months. Therefore, we presumed that adults collected during these winter months most likely do not represent the normal phenology for the species.

The number of specimens for a particular species listed in this survey is not necessarily a function of commonality or rarity. Common species are generally represented by large numbers of specimens and often taken in several, or all, geographical regions of the state. Rare species may have a small geographical distribution within Idaho or be restricted to rare host plants; however, it may also be common in these situations, but exhibit habits or behavior that hinders their easy observation and collection. Larger sample sizes, as indicated by the

Table 1. The longhorned beetles (Cerambycidae) of Idaho.

Subfamily and Species	N[a]	Adult Occurrence[b]	Region[c]
Parandrinae			
Neandra brunnea (Fabricius, 1798)	28	July ? –Sep ?	SW (Boise)
Prioninae			
Prionus californicus Motschulsky, 1845	74	May 28–Sep 3	C, N, SC, SE, SW, WC
Prionus emarginatus Say, 1824	2	Sep 2–31	N (Latah)
Prionus integer LeConte, 1851	49	July 10–Sep 31	E, N, SC, SE, SW
Prionus geminus Santos-Silva, Nearns, and Swift, 2016	3[j]	June 20–July 20	SC, SE
Tragosoma depsarium (Linnaeus, 1767)	61	June 12–Sep 19	C, E, N, WC
Trichocnemis spiculatus spiculatus LeConte, 1851	45	May 7–Sept 7	N, SW, WC
Necydalinae			
Necydalis diversicollis diversicollis Schaeffer, 1932	2	June 16–July 8	SW, WC
Ulochaetes leoninus LeConte, 1854	6	July 25–Sep 8	N, WC
Spondylidinae			
Arhopalus asperatus (LeConte, 1859)	34	July 1–Oct 10	C, N, SW
Arhopalus productus (LeConte, 1850)	57	Mar 9–Oct 30	C, E, N, SC, SW, WC
Asemum caseyi Linsley, 1957	9	June 4–Sep 17	N, SW, WC
Asemum nitidum LeConte, 1873	5	July 15–Sep 4	N (Latah)
Asemum striatum (Linnaeus, 1758)	29	May 23–Aug 22	E, N, WC
Atimia confusa dorsalis LeConte, 1869	2	May ?–July 19	N, WC
Megasemum asperum (LeConte, 1854)	16	July 7–Sep 25	C, N, WC
Neospondylis upiformis (Mannerheim, 1843)	195	Apr 1–July 20	N, SW, WC
Tetropium velutinum LeConte, 1869	61	Apr 6–Sep 21	N, WC
Cerambycinae			
Amannus vittiger LeConte, 1858	2	June 15–June 20	SW (Canyon, Owyhee)
Batyle ignicollis ignicollis (Say, 1824)	3	Aug 11	SC (Cassia)
Callidium antennatum hesperum Casey, 1912	18	May 7–Nov 7	N (Latah)
Callidium cicatricosum Mannerheim, 1853	36	Apr 1–July 12	C, N
Callidium hoppingi Linsley, 1957	9	Apr 29	SC (Cassia)
Callidium pseudotsugae Fisher, 1920	–	–	Dodds and Ross (2002)
Callimus cyanipennis (LeConte, 1873)	2	May 21	N (Kootenai)
Clytus canadensis Hopping, 1928	1	July 17	N (Latah)
Clytus planifrons (LeConte, 1874)	3	June 6–July 24	N, WC
Crossidius ater LeConte, 1861	144	Aug 7–Sep 22	C, SC, SE, N
Crossidius coralinus (LeConte, 1862)[e]	186	Aug 3–Sep 14	E, SC, SE, SW
Crossidius discoideus (Say, 1824)[f]	23	Aug 14–Sep 12	SC, SE
Crossidius hirtipes LeConte, 1854[g]	82	May 10–Sep 30	N, WC
Crossidius pulchellus LeConte, 1861	4	Sep 8–Sep 13	SE, SW
Crossidius punctatus LeConte, 1873	117	July 5–Sep 13	C, E, N, SC, SE, SW, WC
Elatotrypes hoferi Fisher, 1919	3	July ?	C (Butte)
Enaphalodes hispicornis (Linnaeus, 1767)	1	?	N (Latah)
Haplidus testaceus LeConte, 1873	1	May ?	WC (Boise)
Holopleura marginata LeConte, 1873	6	May 6–June 23	N (Kootenai, Latah)
Megacheuma brevipennis brevipennis (LeConte, 1873)	149	July12–Sep 16	E, SC, SW
Megacyllene robiniae (Forster, 1771)	12	June 19–Sep 16	N, SE, SC
Meriellum proteus (Kirby, in Richardson, 1837)	1	Aug 1	N (Latah)
Molorchus longicollis LeConte, 1873	35	May 16–July 21	N, WC
Neoclytus acuminatus acuminatus (Fabricius, 1775)	30	May 10–July 16	SW, WC
Neoclytus balteatus LeConte, 1873	2	July 25–Aug 15	E, SW
Neoclytus caprea (Say, 1824)	4	Apr ? –May 22	SC, SE
Neoclytus muricatulus muricatulus (Kirby, in Richardson, 1837)	1	June 25–Aug 8	C, N, WC
Neoclytus provoanus Casey, 1924	3	July 2–Sep 12	N, SC
Obrium californicum Van Dyke, 1920	1[k]	July ?	N (Latah)
Oeme costata costata LeConte, 1873	1	Sep 21	SC (Twin Falls)

Continued on next page

Table 1. Continued.

Subfamily and Species	N[a]	Adult Occurrence[b]	Region[c]
Phymatodes dimidiatus (Kirby, in Richardson, 1837)	37	June 7–July 25	C, E, N, WC
Phymatodes hirtellus (LeConte, 1873)	11	May 17–July 17	N, WC
Phymatodes maculicollis LeConte, 1878	2	Apr (reared)	N (Latah)
Phymatodes nigerrimus Van Dyke, 1920	1	June 29	N (Latah)
Phymatodes nitidus LeConte, 1874	1	July 9	N (Latah)
Phymatodes vilitatis Linsley, 1940	1	May 30	N (Latah)
Poecilobrium chalybeum (LeConte, 1873)	4	June 23–July 5	C, N, SC, SE
Pronocera collaris collaris (Kirby, in Richardson, 1837)	18	July 2–Aug 4	C, N
Rosalia funebris Motchulsky, 1845	26	May 5–Sep 7	N, SC, SE, SW, WC
Rusticoclytus annosus emotus (Brown, 1952)	38	Apr 18–July 10	C, N, SW
Semanotus amplus amplus (Casey, 1912)	14	Mar 1–May 25	N
Semanotus conformis (Casey, 1912)	21	Apr 18–(July 24–25[d])	SC, SE, N
Semanotus juniperi (Fisher, 1915)	14	May 20–June 10	SC (Cassia, Twin Falls)
Semanotus litigiosus (Casey, 1891)	2	May 18–May 30	N
Semanotus terminatus (Casey, 1912)	68	Mar 9–Sep 5	C, E, N, WC
Xylocrius agassizi (LeConte, 1861)	4	May 18–May 24	N (Latah)
Xylotrechus longitarsis Casey, 1912	73	May 17–Oct 10	N, SW, WC
Xylotrechus mormonus (LeConte, 1861)	10	June 14–July 18	C, SC, SW, WC
Lepturinae			
Acmaeops pratensis (Laicharting, 1784)	31	June 1–Aug 9	C, E, N, SC, WC
Acmaeops proteus proteus (Kirby, in Richardson, 1837)	11	May 16–Aug 20	C, E, N
Anastrangalia laetifica (LeConte, 1859)	53	May 21–July 22	N, SW, WC
Anastrangalia sanguinea (LeConte, 1859)	31	June 1–Aug 26	C, E, N, SE, WC
Brachysomida atra (LeConte, 1850)	19	June 18–July 17	C, SW, WC
Brachysomida californica (LeConte, 1851)	1	June 13	WC (Adams)
Brachysomida rugicollis Linsley and Chemsak, 1972	–	–	Heffern (1998)
Centrodera nevadica nevadica LeConte, 1873	39	July 1–Aug 14	C, SC
Centrodera spurca (LeConte, 1857)	41	May 15–Aug 3	C, N, WC
Cortodera barri Linsley and Chemsak, 1972	32	June 2–June 28	E, C, SC, SW
Cortodera longicornis (Kirby, in Richardson, 1837)	70	May 11–July 21	C, E, N, SC, SE, SW, WC
Cortodera spuria (LeConte, 1873)	–	July ?	Heffern (1998)
Cortodera subpilosa (LeConte, 1850)	225	Apr 22–July 12	C, E, N, SC, SE, SW, WC
Cosmosalia chrysocoma (Kirby, in Richardson, 1837)	224	May 2–Sep 18	C, E, N, SC, SE, SW, WC
Cosmosalia nigrolineata nigrolineata (Bland, 1865)	–	–	Heffern (1998)
Desmocerus aureipennis piperi Webb, 1905	112	June 3–Aug 6	C, N, WC
Evodinus monticola vancouveri Casey, 1913	22	May 22–June 24	N, WC
Grammoptera molybdica (LeConte, 1850)	4	July 5–7	C (Butte, Lemhi)
Grammoptera subargentata (Kirby, in Richardson, 1837)	64	Apr 4–Aug 14	C, E, N, SC, SE, SW
Judolia gaurotoides gaurotoides (Casey, 1893)	18	May 28–July 27	C, E, WC
Judolia instabilis (Haldeman, 1847)	111	May 14–Aug 10	C, E, N, SC, SE, SW, WC
Judolia montivagans montivagans (Couper, 1864)	38	June 20–Aug 28	C, E, N, WC
Leptalia macilenta (Mannerheim, 1853)	1	July 16	WC (Idaho)
Leptura obliterata obliterata (Haldeman, 1847)	48	June 16–Sep 20	C, N, SW, WC
Leptura plagifera LeConte, 1873	3	July 2–July 10	WC (Adams, Valley)
Leptura propinqua Bland, 1865	48	July 7–Aug 28	C, N, SC, WC
Neanthophylax mirificus (Bland, 1865)	8	May 14–June 24	N, WC
Neanthophylax pubicollis Linsley and Chemsak, 1972	4	June 8–July 15	N, WC
Neanthophylax tenebrosus orientalis Linsley and Chemsak, 1972	3	July 7–July 25	N, WC
Pachyta lamed liturata Kirby, in Richardson, 1837	37	July 3–Oct 1	C, N, WC
Pidonia scripta (LeConte, 1869)	5	June 20–July 16	N (Bonner, Kootenai, Latah)
Piodes coriacea LeConte, 1850	1	Apr 4	SW (Canyon)
Pseudogaurotina cressoni cressoni (Bland, 1864)	34	June 1–July 28	C, N, SC, WC
Pygoleptura carbonata (LeConte, 1861)	1	July 19	C (Blaine)
Pygoleptura nigrella nigrella (Say, 1826)	14	June 5–Sep 12	N, WC
Rhagium inquisitor inquisitor (Linnaeus, 1758)	30	Apr 14–Sep 25	N, WC

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Table 1. Continued.

Subfamily and Species	N[a]	Adult Occurrence[b]	Region[c]
Stenocorus nubifer (LeConte, 1859)	52	May 15–July 30	C, E, N, SC, SE, SW, WC
Stenocorus obtusus (LeConte, 1873)	31	May 19–July 23	E, N, SC
Stenocorus vestitus (Haldeman, 1847)	8	May 3–July 6	SW, WC
Stenostrophia tribalteata serpentina (Casey, 1891)	27	July 3–Aug 11	C, N, SW, WC
Stictoleptura canadensis cribripennis (LeConte, 1859)	66	July 4–Sep 21	N, WC
Trachysida aspera aspera (LeConte, 1873)	31	May 21–July 30	C, N, SE, SC, WC
Typocerus balteatus balteatus Horn, 1878	12	July 31–Sep 10	E, SC, SE
Typocerus serraticornis Linsley and Chemsak, 1976	2	May 25–May 29	SW (Owyhee)
Xestoleptura crassicornis (LeConte, 1873)	6	July 18–Sep 12	WC (Valley)
Xestoleptura crassipes (LeConte, 1857)	45	June 16–Sep 23	N, SW, WC
Xestoleptura tibialis (LeConte, 1850)	43	June 27–Sep 20	C, E, N, WC
Lamiinae			
Acanthocinus obliquus (LeConte, 1862)	2	July 8	N, SC
Hyperplatys aspersa (Say, 1824)	7	July 19–July 25	N, SC
Mecas bicallosa Martin, 1924	37	June 3–July 30	C, E, SC, SE, SW, WC
Moneilema semipunctatum LeConte, 1852	10	July 5–Sep 8	SC (Cassia)
Monochamus clamator (LeConte, 1852)[h]	88	June 29–Aug 12	E, N, SW, WC
Monochamus notatus (Drury, 1773)	2	Aug. 30–Sep 10	N (Clearwater)
Monochamus obtusus obtusus Casey, 1891	47	May 15–Sep 24	N, SW, WC
Monochamus scutellatus (Say, 1824)[i]	76	May 28–Oct 5	C, E. N, SW, WC
Oberea erythrocephala (Schrank, 1776)	4	July 23–Aug 4	C, WC
Oberea euphorbiae (Germar, 1813)	100+	May 14–July 31	C, E, N, SC, SE, SW, WC
Oberea quadricallosa LeConte, 1874	2	July 13–July 28	C, N
Pogonocherus mixtus Haldeman, 1847	4	July 10–July 20	N (Shoshone, Wallace)
Pogonocherus propinquus Fall, 1910	3	June 27–Sep 26	N (Shoshone)
Poliaenus oregonus (LeConte, 1861)	16	May 11–June 30	N, WC
Saperda calcarata Say, 1824	2	July 28–Aug 20	E (Bingham)
Saperda horni Joutel, 1902	1	July 1	N (Blaine)
Saperda inornata Say, 1824	–	March ?–July ?	Heffern (1998)
Saperda moesta tulari Felt and Joutel, 1904	19	March 23–July 6	N, SC, SW, WC
Saperda tridentata Olivier, 1795	1	June ?	N (Latah)
Tetraopes annulatus LeConte, 1847	–	–	Heffern (1998)
Tetraopes femoratus LeConte, 1847	369	June 12–Sep 12	C, E, N, SC, SE, SW, WC

[a] Number of adults examined by the authors.

[b] Period of adult occurrence, excluding "winter" reared specimens; missing dates noted with "?"

[c] Idaho regions and associated counties; some species noted as literature records only:

C (Central) = Blaine, Butte, Camas, Custer, Lemhi

E (East) = Bingham, Bonneville, Clark, Fremont, Jefferson, Madison, Teton

N (North) = Benewah, Bonner, Boundary, Clearwater, Kootenai, Latah, Lewis, Nez Perce, Shoshone

SC (South Central) = Cassia, Gooding, Jerome, Lincoln, Minidoka, Twin Falls

SE (South East) = Bannock, Bear Lake, Caribou, Franklin, Oneida, Power

SW (South West) = Ada, Canyon, Elmore, Owyhee

WC (West Central) = Adams, Boise, Gem, Idaho, Payette, Valley, Washington

[d] Dates reared from larval host.

[e] Two subspecies are found in Idaho: *C. coralinius coralinus* LeConte, 1862 and *C. coralinus obfuscipennis* Chemsak and Linsley, 1959.

[f] Two subspecies are found in Idaho: *C. discoideus discoideus* (Say, 1824) and *C. discoideus blandi* Casey, 1893.

[g] Three subspecies are found in Idaho: *C. hirtipes hirtipes* LeConte, 1854, *C. hirtipes allgewahri* LeConte, 1878 (Fig. 1), and *C. hirtipes nigripennis* Chemsak and Linsley, 1959.

[h] Two subspecies are found in Idaho: *M. clamator clamator* (LeConte, 1852) and *M. clamator nevadensis* Dillon and Dillon, 1941.

[i] Two subspecies are found in Idaho: *M. scutellatus scutellatus* (Say, 1824) and *M. scutellatus oregonensis* LeConte, 1873.

[j] Santos-Silva *et al*. (2016); no specimens observed by us.

[k] Turnbow (1984); no specimens observed by us.

number of specimens observed, can be expected to provide a more realistic representation of adult phenology and distribution.

The state was divided into seven geographical regions (Fig. 2), and specimen label data were used to assign individual beetles to a region. If a species was collected from only one region, then the county name(s) is (are) also provided for that species. Regions and their respective counties are as follows:

C (Central) = Blaine, Butte, Camas, Custer, Lemhi
E (East) = Bingham, Bonneville, Clark, Fremont, Jefferson, Madison, Teton
N (North) = Benewah, Bonner, Boundary, Clearwater, Kootenai, Latah, Lewis, Nez Perce, Shoshone
SC (South Central) = Cassia, Gooding, Jerome, Lincoln, Minidoka, Twin Falls
SE (South East) = Bannock, Bear Lake, Caribou, Franklin, Oneida, Power
SW (South West) = Ada, Canyon, Elmore, Owyhee
WC (West Central) = Adams, Boise, Gem, Idaho, Payette, Valley, Washington

Results and Discussion

Longhorned beetles in the Idaho WFBC collection were first collected by O. O. Huelleman in 1915, mostly in the northern counties. Collecting intensified during the latter half of the 20th century, primarily with the efforts of M. M. Furniss, K. E. Gibson, A. R. Gittens, D. S. Horning, Jr., H. C. Manis, R. L. Penrose, R. W. Portman, P. Rice, and R. L. Westcott. However, the bounty of longhorned beetle data—richness of species, abundance of specimens, and ecological information—came from W. F. Barr during the 1960s–1990s, and after whom the University of Idaho collection is named. His pursuit of Coleoptera in Idaho was both prodigious and exemplary (Westcott and Merickel 2012), and his collections of longhorned beetles contributed significantly to the knowledge of Idaho's fauna. From the efforts of these entomologists and others, there are 134 species and six subspecies of longhorned beetles now known from Idaho (Table 1). New and confirmed state records and new larval and flower host records are presented below.

Necydalinae

***Necydalis diversicollis diversicollis* Schaeffer, 1932**

The known range of this species is the Rocky Mountains to Utah and coastal British Columbia to Monterey, California (Linsley and Chemsak 1972). Two adults were collected in Elmore Co., 9 mi. N Mountain Home, 16-VI-1957, W. F. Barr, (1); and Washington Co., Weiser, 8-VII-1977, A. R. Gittens, (1). These represent a **NEW STATE RECORD** for Idaho.

Lepturinae

***Acmaeops pratensis* (Laicharting, 1784)**

Linsley and Chemsak (1972) record the species from flowers of plants in 14 genera. In northern Idaho near the Canadian border, adults were collected on two plants representing **NEW FLOWER HOST RECORDS**: Boundary Co., 4.5 mi. W Copeland, 27-VII-1977, flowers of *Melilotus alba*, A. R. Gittens, (1), and 13 mi. W Naples, 9-VII-1968, *Sambucus* blooms, W. F. Barr, (1).

***Brachysomida atra* (LeConte, 1850)**

Linsley and Chemsak (1972) record the distribution as the Pacific Northwest to Colorado. Heffern (1998) included Idaho in the distribution of the species, apparently based on examination of specimens but without further information. We are not aware of other literature records from Idaho. However, its presence in the state is confirmed by 13 specimens collected in Adams Co., 6 mi. S Tamarack, 29-VI-1967, R. L. Penrose, (1); Blaine Co., 15 mi. N Ketchum, 20-VI-1968, R. G. Jones, (1); Butte Co., Craters of the Moon Nat'l. Monument, 29-VI-1967, on *Symphoricarpos oreophilus*, D. S. Horning, Jr., (4); Camas Co., 16.5 mi. N Fairfield, 18-VI-1966, A. R. Gittens, (1); Lemhi Co., Bannock Pass, 5-VII-1953, on *Lupinus*, W. F. Barr, (3) and *Purshia tridentata* (1); Owyhee Co., Indian Hot Springs, 20-VI-1966, A. R. Gittens, (1); and Valley Co., No Business Lookout, 17-VII-1969, W. F. Barr, (1).

***Brachysomida californica* (LeConte, 1851)**

One specimen was collected in Adams Co., 2 mi. SW Mesa, 13-VI-1971, D. E. Foster. Linsley and Chemsak (1972) record the distribution as Washington and Oregon to central California. The single Idaho specimen was identified by the late Frank Hovore and represents a **NEW STATE RECORD** for Idaho.

***Cortodera subpilosa* (LeConte, 1850)**

Adults have been collected from flowers of *Achillea*, *Balsamorhiza*, *Lithospermum*, *Lomatium*, *Phacelia*, *Rosa*, and *Wyethia* (Linsley and Chemsak 1972). Additional specimens have been taken in Benewah Co., Plummer, 26-VI-1967, on flowers of *Ranunculus*, A. R. Gittens, (9); and Butte Co., Craters of the Moon Nat'l. Monument, 7-VII-1967, flowers of *Cirsium*, (1), and *Eriogonum heracleoides*, (1), D. S. and C. J. Horning. These two collections represent **NEW FLOWER HOST RECORDS**.

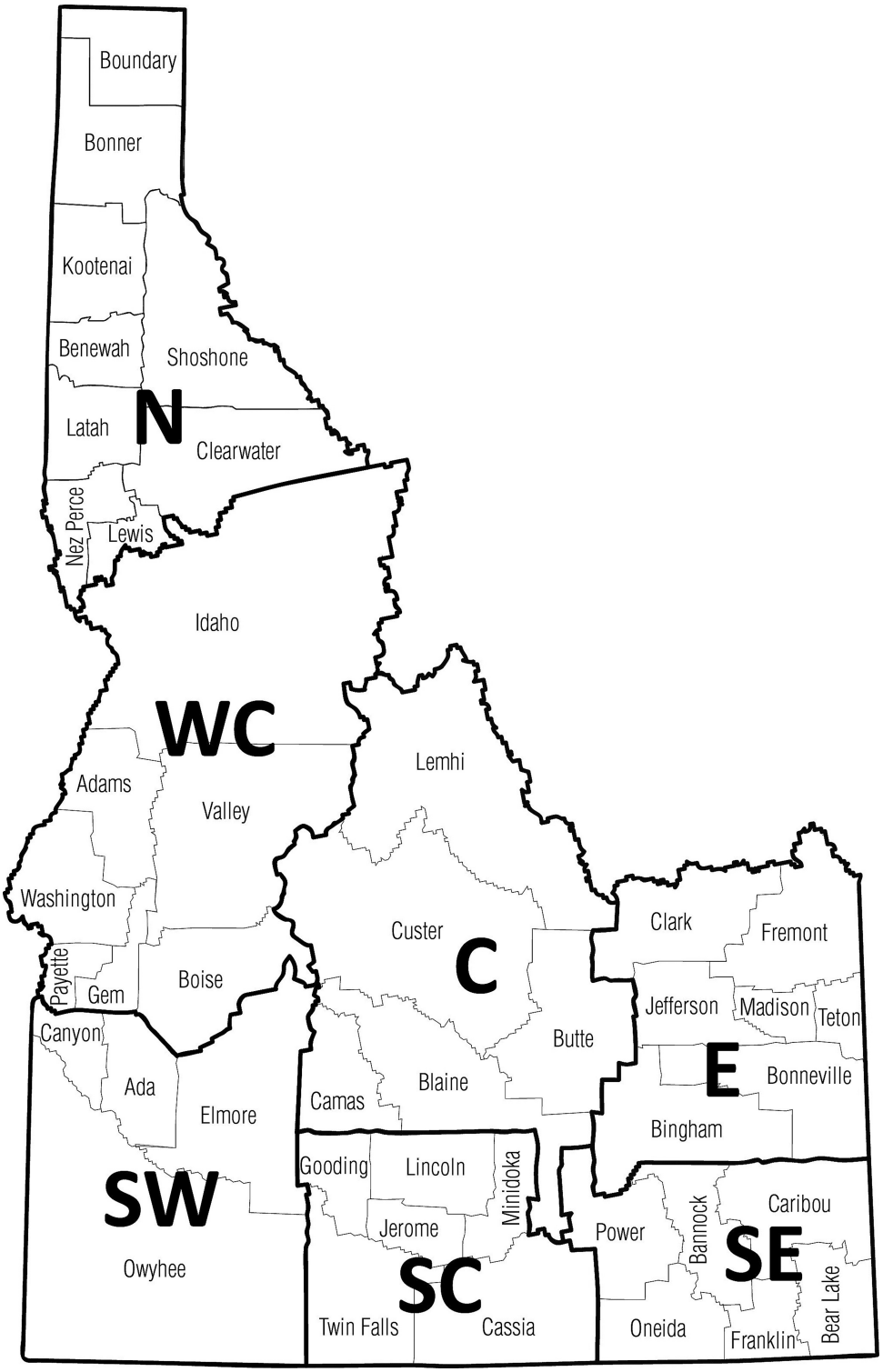

Fig. 2. Map of Idaho and designated regions.

***Grammoptera subargentata* (Kirby, 1837)**

This is an abundant species in Idaho and occurs statewide. Adults are polyphagous and have been recorded on flowers of plants in 13 genera (Linsley and Chemsak 1976). The following collections represent **NEW FLOWER HOST RECORDS**: Butte Co., Craters of the Moon Nat'l. Monument, 23-VI-1965, *Ericameria nauseosa*, D. S. Horning, Jr., (1); and Canyon Co., 0.5 mi. S Middleton, 30-VI-1961, *Heracleum*, A. R. Gittens, (1).

***Judolia gaurotoides gaurotoides* (Casey, 1893)**

This species is recorded from Montana to the Rocky Mountains of Oregon and south to southwestern Utah and the Sierra Nevada Mountains of California (Linsley and Chemsak 1976). These collections in Idaho fill in the gap between Montana and Oregon and represent a **NEW STATE RECORD**: Butte Co., 6 mi. S Howe, 28-V-1981, in pitfall traps, M. Stafford, (2); Clark Co., 3 mi. NE Argora, 12-VII-1965, *Eriogonum*, W. F. Barr, (8); Lemhi Co., Lemhi Pass, 12-VII-1956, 8000', W. F. Barr, (4), 6 mi. W Gilmore, 27-VII-1961, *Eriogonum,* W. F. Barr, (1); and Valley Co., No Business Lookout, 17-VII-1969, *Eriogonum*, W. F. Barr, (1).

***Judolia montivagans montivagans* (Couper, 1864)**

This species is widespread throughout boreal North America, and adults have been collected on flowers of plants in 13 genera (Linsley and Chemsak 1976). Adults were collected in northern Idaho, Boundary Co., 13 mi. W Naples, Ruby Pass, 9-VII-1968, on *Sambucus* blooms, W. F. Barr, (3), 4.5 mi. W Copeland, 27-VII-1977, on flowers of *Melilotus alba*, A. R. Gittens, (4); Latah Co., Giant White Pine Campground, 20-VI-1988, on *Ceanothus* blooms, M. E. Rice, (1). These collections represent **NEW FLOWER HOST RECORDS**.

***Leptalia macilenta* (Mannerheim, 1853)**

This species occurs along the Pacific coast from California, Oregon, Washington, and north to southwestern Alaska, and adults have been collected on flowers of *Ceanothus*, *Ribes*, *Rosa*, and *Rubus* (Linsley and Chemsak 1972). A single specimen was collected in Idaho Co., 15 mi. W Lolo Pass, 16-VII-1966, D. S. Horning, Jr. and represents a **NEW STATE RECORD** for Idaho.

***Leptura plagifera* LeConte, 1873**

The Rocky Mountains to British Columbia and the southern Sierra Nevada is the range given for this species by Linsley and Chemsak (1976). Heffern (1998) stated that Idaho was among the published records for this species. However, we are not aware of any specific literature records documenting this species from Idaho. Its presence in the state is confirmed by three adults collected in Adams Co., 8 mi. N New Meadows, 10-VII-1967, A. R. Gittens, (1); and Valley Co., Krassel, 2/3-VII-1957, on flower, M. M. Furniss, (2).

***Leptura propinqua* Bland, 1865**

Linsley and Chemsak (1976) list eight genera of flowering plants upon which this species has been collected. An additional specimen was collected in northern Idaho, Boundary Co., 13 mi. W Naples, Ruby Pass, 9-VII-1968, on *Sambucus* blooms, W. F. Barr, (1). This collection represents a **NEW FLOWER HOST RECORD**.

***Piodes coriacea* LeConte, 1850**

Linsley and Chemsak (1972) give the range for this species as the Pacific Northwest, including Idaho, and the flight period as May and June. It is a very rarely collected species as evidenced by the single specimen in the WFBM. This adult was collected in Canyon Co., Parma, 4-IV-1932, H. P. Lanchester. This April collection date expands the known flight period by nearly a full month and begins earlier in the spring than previously reported.

***Pseudogaurotina cressoni cressoni* (Bland, 1864)**

This species has been collected on flowers of *Heracleum*, *Lonicera*, *Ranunculus*, *Rosa*, and *Xerophyllum* (Linsley and Chemsak 1972). Seven adults were collected in Latah Co., Giant White Pine Campground, 23-VI-1988, on *Rubus parviflorus* blooms, M. E. Rice. These beetles represent a **NEW FLOWER HOST RECORD**.

***Stenocorus nubifer* (LeConte, 1859)**

The reported range for this species includes Montana and states along the Pacific coast, but it was not known from Idaho (Linsley and Chemsak 1972). A single specimen was collected in Fremont Co., Targhee National Forest, Swan Lake, 25-VI-1966, L. S. Hawkins, Jr. and represents a **NEW STATE RECORD** for Idaho.

***Stenocorus vestitus* (Haldeman, 1847)**

This species is known from British Columbia, Washington, Oregon, Utah, and California (Linsley and Chemsak 1972). Eight adults were collected in Adams Co., Council, 1-VI-1961, on flowers of *Eriogonum*, A. R. Gittens, (5); Owyhee Co., 6 mi SE Grasmere, 6-VII-1965, R. L. Westcott, (1); and Washington Co., Midvale, 3-V-1956, on flowers of *Eriogonum*, H. C. Manis, (2). These specimens represent a **NEW STATE RECORD** for Idaho.

***Trachysida aspera aspera* (LeConte, 1873)**

Linsley and Chemsak (1976) record the adults on flowers of *Heracleum* and *Achillea*. One adult was collected in Latah Co., Giant White Pine Campground, 20-VI-1988, on blooming *Ceanothus*,

M. E. Rice. This represents a **NEW FLOWER HOST RECORD**.

Cerambycinae

***Batyle ignicollis ignicollis* (Say, 1824)**

Three adults of this bright red and black species were collected in southern Idaho, Cassia Co., 6 mi. NE Malta, 11-VIII-1953, on *Atriplex confertifolia*, T. B. O'Connell. The reported range is Ohio, Missouri, and Texas westward to Colorado and Montana (Linsley 1962). The Idaho specimens represent a **NEW STATE RECORD**.

***Callidium antennatum hesperum* Casey, 1912**

This species occurs in Oregon, Washington, Utah, Wyoming and several other states but has not been documented from Idaho (Linsley 1964). Eighteen specimens were collected at several locations in Latah Co. including Paradise Ridge, 7-V-1932, J. Gillett, (8); Cedar Mtn., 9-VI-1935, K. E. Gibson, (1); and Moscow Mtn., 7-IX-1965, M. M. Furniss, (1). These adults represent a **NEW STATE RECORD** for Idaho.

***Callidium cicatricosum* Mannerheim, 1853**

Linsley (1964) records this species from Alaska to Oregon and the northern Rocky Mountains. Heffern (1998) included Idaho in the distribution of this species, apparently based on examination of specimens but without further information. We are not aware of other literature records from Idaho. However, its presence in the state is confirmed by 33 specimens collected in Boundary Co., Priest Lake, 6-VI-1986, *Pseudotsuga menziesii*, M. M. Furniss, (2); Latah Co., including 1.5 mi. N Kendrick, 3-III-1970, reared Douglas fir, R. L. Penrose, (10); Moscow, 2-IV-1972, R. W. Portman, (6); Moscow Mtn., 10-VI-1931, P. Rice, (1); and Robinson Lake, 6-V-1955, W. F. Barr, (1); plus Clearwater Co., Pierce, 23-V-1929, W. E. Shull, (1); Kootenai Co., Beauty Creek, 2-VII-1975, D. F. Veirs, (2); Lemhi Co., Pioneer Mts., Trail Creek Summit, 12-VII-1978, J. Littlefield, (1); and Nez Perce Co., Lewiston, 7-V-1932, C. C. Ball, (1).

***Callidium hoppingi* Linsley, 1957**

This species is known from British Columbia to Utah and Arizona (Linsley 1964). Nine adults were collected in Cassia Co., 5 mi. SW Malta, 29-IV-1968, on *Juniperus*, W. F. Barr. This represents a **NEW STATE RECORD** for Idaho.

***Callimus cyanipennis* (LeConte, 1873)**

Linsley (1963) records this species (until recently placed in the genus *Lampropterus* Mulsant) from flowers of *Ceanothus* and *Prunus*, with a distribution from Oregon to southern California. Two adults were collected in northern Idaho, Kootenai Co., 2 mi. W Lataldo, 21-V-1970, W. F. Barr, (2). These specimens represent a **NEW STATE RECORD** for Idaho and extend the range northward for the species.

***Clytus canadensis* Hopping, 1928**

This species is recorded from British Columbia and Alberta southward to southern Oregon and Colorado (Linsley 1964). Heffern (1998) included Idaho in the distribution of this species, apparently based on examination of specimens but without further information. We are not aware of other literature records from Idaho. However, its presence in the state is confirmed by four specimens from northern Idaho, all collected in Latah Co. as follows: Moscow, no date (probably early 1900s), J. M. Aldrich (1); Moscow Mtn., 17-VII-1981, on *Achillea*, W. F. Barr, (2), University of Idaho Experiment Forest, Flat Creek, 2-VI-2004, P. M. Callahan, ex. Japanese beetle trap in topped *Pinus ponderosae*, (1).

***Haplidus testaceus* LeConte, 1873**

Linsley (1962) notes that this species is a "typical Great Basin species." A single specimen was taken in southwestern Idaho, Boise Co., Horseshoe Bend, V-1955, W. Roe. This represents a **NEW STATE RECORD** for Idaho.

***Megacyllene robiniae* (Forster, 1771)**

This species is intimately associated with the larval host black locust, *Robinia pseudoacacia* L., and occurs throughout the eastern USA and Great Plains (Linsley 1964). More recently, it appears to have spread, either naturally or through introduction, into areas where black locust has been planted as an ornamental such as into south-central Montana (Hart *et al.* 2013) and Oregon (Westcott *et al.* 2006). Heffern (1998) included Idaho in the distribution of this species, apparently based on examination of specimens but without further information. We are not aware of other literature records from Idaho. However, its presence in the state is confirmed by adults collected in extreme northern and southern Idaho at Bannock Co., Pocatello, 19-VI-1968, R. L. Penrose, (3), Bonner Co., Priest Lake, 25-VII-1969, V. Maag, (1); Canyon Co., Nampa, IX-15-1980, C. R. Baird (9); Latah Co., 2 mi. S Moscow, IX-15-2008, F. W. Merickel, (2); and Twin Falls Co., Filer, 16-IX-1970, D. W. Sutherland, (8).

***Meriellum proteus* (Kirby, 1837)**

In western North America, this species has been collected in Alaska southward to British Columbia and Colorado (Linsley 1964). Heffern (1998) included Idaho in the distribution of this species, apparently based on examination of specimens but without further information. We are not aware of other literature records from Idaho; however, its

presence in the state is confirmed by a single adult collected in Latah Co., Moscow, Moscow Mtn., 1-VIII-1953, R. Abbott.

***Molorchus longicollis* LeConte, 1873**

This species occurs from British Columbia to southern California (Linsley 1963) and throughout western Montana (Hart *et al.* 2013) but has not been reported from Idaho. Twenty-four specimens, representing a **NEW STATE RECORD**, were collected from Clearwater Co., Elk River, 15-VI-1967, M. M. Furniss, (1); Latah Co., Moscow Mtn., 3-VII-1968, on *Ceanothus*, W. F. Barr, (13), 7 mi. NE Moscow, 16-V-1965, R. L. Westcott, (1), 4 mi. E Harvard, 21-VII-1969, W. F. Barr, (2), 6 mi. N Bovill, 25-VI-1962, W. F. Barr, (2); and Valley Co., Krassel, 2-VII-1959, M. M. Furniss, (5).

***Phymatodes dimidiatus* (Kirby, 1837)**

Linsley (1964) noted that this species has a wide distribution from Lake Superior to northern California and northward to Alaska. Heffern (1998) included Idaho in the distribution of the species, apparently based on examination of specimens but without further information. We are not aware of other literature records from Idaho. However, its presence in the state is confirmed by 16 adults collected in Adams Co., Bear, 8-VII-1951, W. F. Barr, (1); Benewah Co., Rocky Point, 25-VII-1964, R. W. Portman, (10); Bingham Co., Aberdeen, 26-VII-no year, A. R. Gittens, (1); Idaho Co., Ferdinand, 8-VII-1959, W. F. Barr, (1); Kootenai Co., Cour-de-Alene, 30-VII-1942, K. E. Gibson, (1); Latah Co., Moscow, 9-VI-1965, H. C. Manis, (1); and Shoshone Co., Wallace, 24-VII-1915, O. Huelleman, (1).

***Phymatodes hirtellus* (LeConte, 1873)**

The reported range of this species is the Rocky Mountains to the Pacific coast of North America (Linsley 1964). Eleven adults represent a **NEW STATE RECORD** and were collected in Idaho Co., Slate Lake Research Station, 9-VI-1951, W. F. Barr, (1); Latah Co., Deary, 27-V-1949, A. J. Walz, (1), and Potlatch, 17-V-1958, E. C. Clark, (1); Nez Perce Co., Lenor, 19-V-1937, R. W. Every, (1); and Valley Co., 6 mi. N No Business Lookout, 17-VII-1969, W. F. Barr, (1), and Cascade, 21-VI-1950, R. W. Portman, (6).

***Phymatodes maculicollis* LeConte, 1878**

The reported range of this species is from Lake Superior to British Columbia and the Pacific coast to central coastal California. Heffern (1998) included Idaho in the distribution of the species, apparently based on examination of specimens but without further information. We are not aware of other literature records from Idaho. However, its presence in the state is confirmed by two specimens collected in Latah Co., Moscow, IV-1995, reared *Picea abies*, M. M. Furniss, (2) and representing a **NEW LARVAL HOST RECORD**.

***Phymatodes nigerrimus* Van Dyke, 1920**

Linsley (1964) noted that this species was rare in collections. It has been recorded only from California. One specimen was taken in Latah Co., Moscow Mtn., 29-VI-1918, A. L. Melander. The specimen is in the entomology collection of Washington State University, Pullman. This singular specimen represents a **NEW STATE RECORD** for Idaho.

***Phymatodes nitidus* LeConte, 1874**

Linsley (1964) records this species from British Columbia south to California. A single specimen collected in Latah Co., Moscow Mtn., 9-VII-1961, W. F. Barr represents a **NEW STATE RECORD** for Idaho.

***Phymatodes vilitatis* Linsley, 1940**

Linsley (1964) records this species from Oregon to southern California. A single specimen collected in Latah Co., Moscow, 30-V-1931, P. Rice represents a **NEW STATE RECORD** for Idaho.

***Poecilobrium chalybeum* (LeConte, 1873)**

This is another species that occurs throughout western North America from British Columbia, south to California, and east to the Rocky Mountains to Colorado (Linsley 1963). Heffern (1998) included Idaho in the distribution of the species, apparently based on examination of specimens but without further information. We are not aware of other literature records from Idaho. However, its presence in the state is confirmed by five adults collected in Cassia Co., Elba-Basin Pass, 5-VII-1965, A. R. Gittens, (1), 8 mi. W. Elba, 5-VI-1969, *Artemisia tridentata*, S. M. Hogue, (1); Franklin Co., 20 mi. NE Preston, 4-VII-1966, R. L. Penrose, (1); Latah Co., Moscow, Paradise Ridge, 23-VI-1930, 3,000', P. Rice, (1); and Lemhi Co., 5 mi. NE Leadore, 5-VII-1953, W. F. Barr, (1).

***Xylocrius agassizi* (LeConte, 1861)**

The larval host of this rare species is gooseberry, *Ribes* spp., and its distribution is the Rocky Mountains to the Pacific coast (Linsley 1964). Heffern (1998) included Idaho in the distribution of the species, apparently based on examination of specimens but without further information. We are not aware of other literature records from Idaho. However, its presence in the state is confirmed by four specimens collected in Latah Co., Moscow, 19-V-1928, 2,750', no collector name, (1); Moscow Mtn. 18-V-1955, R. C. Carlstrom, (1); and Paradise

Ridge, N46°39′, W116°59′, pitfall trap 24-V-2003, T. D. Hatten and C. Looney, (2).

Lamiinae

***Hyperplatys aspersa* (Say, 1824)**

Linsley and Chemsak (1995) give the known range as eastern North America to Arizona, Utah, and Montana. A small series was collected in south-central Idaho, Cassia Co., City of Rocks, 25-VII-1985, *Prunus virginiana*, M. M. Furniss and J. B. Johnson, (5) and represents a **NEW STATE RECORD** for Idaho.

***Saperda horni* Joutel, 1902**

This species, which infests *Salix*, occurs along the Pacific coast from British Columbia south to California and inland to Utah (Linsley and Chemsak (1995). A single adult was taken in Blaine Co., Ketchum, 1-VII-1929, no collector, 6,500', and represents a **NEW STATE RECORD** for Idaho. The species has not been collected again in Idaho for nearly 85 years.

***Saperda tridentata* (Olivier, 1795).**

This species is common in the deciduous forests of eastern North America and has been found as far west as eastern Montana (Hart *et al.* 2013). A single specimen was collected in Latah Co., Vasser Meadows, VI-2000, D. Bullock, (1). This represents a **NEW STATE RECORD** for Idaho.

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References Cited

Barr, W. F., and R. L. Penrose. 1969. Notes on the distribution and bionomics of some Idaho Cerambycidae (Coleoptera). The Great Basin Naturalist 29: 88–95.

Bezark, L. G. 2015. Checklist of the Oxypeltidae, Vesperidae, Disteniidae and Cerambycidae, (Coleoptera) of the Western Hemisphere. 2015 Edition (updated through 31 December 2014). apps2.cdfa.ca.gov/publicApps/plant/bycidDB/checklists/WestHemiCerambycidae2015.pdf (accessed 17 January 2017).

Chemsak, J. A. 1996. Illustrated revision of the Cerambycidae of North America. Vol. 1. Parandrinae, Spondylidinae, Aseminae, Prioninae. Wolfsgarden Books, Burbank, CA.

Dodds, K. J., and D. W. Ross. 2002. Relative and seasonal abundance of wood borers (Buprestidae, Cerambycidae) and Cucujidae trapped in Douglas-fir beetle pheromone-baited traps in northern Idaho. The Pan-Pacific Entomologist 78: 120–131.

Furniss, R. L., and V. M. Carolin. 1977. Western forest insects. US Department of Agriculture, Forest Service, Miscellaneous Publication 1339.

Hammond, J. H. E., and D. J. Williams. 2013. Casey's conundrum, a review of the genus *Semanotus* Mulsant (Coleoptera: Cerambycidae: Cerambycinae: Callidiini) in North America. Zootaxa 3670: 101–136.

Hart, C. J., J. S. Cope, and M. A. Ivie. 2013. A checklist of the Cerambycidae (Coleoptera) of Montana, USA, with distribution maps. The Coleopterists Bulletin 67: 133–148.

Hatch, M. H. 1971. The Beetles of the Pacific Northwest. Part V: Rhipiceroidea, Sternoxi, Phytophaga, Rhynchophora, and Lamellicornia. University of Washington Press, Seattle, WA.

Heffern, D. J. 1998. Insects of Eastern North America 1. A Survey of the Cerambycidae (Coleoptera), or Longhorned Beetles of Colorado. Contributions of the C. P. Gillette Museum of Arthropod Diversity, Department of Bioagricultural Sciences and Pest Management, Colorado State University, Ft. Collins, CO.

Horning, D. S. Jr., and W. F. Barr. 1970. Insects of Craters of the Moon National Monument. University of Idaho, College of Agriculture, Misc. Series No. 8: 1–118.

Linsley, E. G. 1961. The Cerambycidae of North America. Part I. Introduction. University of California Publications in Entomology 18: 1–135.

Linsley, E. G. 1962a. The Cerambycidae of North America. Part II. Taxonomy and classification of the Parandrinae, Prioninae, Spondylinae, and Aseminae. University of California Publications in Entomology 19: 1–102.

Linsley, E. G. 1962b. The Cerambycidae of North America. Part III. Taxonomy and classification of the Cerambycinae, tribes Opsimini through Megaderini. University of California Publications in Entomology 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. University of California Publications in Entomology 21: 1–165.

Linsley, E. G. 1964. The Cerambycidae of North America. Part V. Taxonomy and classification of the subfamily Cerambycinae, tribes Callichromini through Ancylocerini. University of California Publications in Entomology 22: 1–197.

Linsley, E. G., and J. A. Chemsak. 1972. The Cerambycidae of North America. Part VI, No. 1. Taxonomy and classification of the subfamily Lepturinae. University of California Publications in Entomology 69: 1–138.

Linsley, E. G., and J. A. Chemsak. 1976. The Cerambycidae of North America, Part VI, No. 2: Taxonomy and classification of the subfamily

Lepturinae. University of California Publications in Entomology 80: 1–186.

Linsley, E. G., and J. A. Chemsak. 1984. The Cerambycidae of North America, Part VII, No. 1: Taxonomy and classification of the subfamily Lamiinae, tribes Parmenini through Acanthoderini. University of California Publications in Entomology 102: 1–258.

Linsley, E. G., and J. A. Chemsak. 1995. The Cerambycidae of North America, Part VII, No. 2: Taxonomy and classification of the subfamily Lamiinae, tribes Acanthocinini through Hemilophini. University of California Publications in Entomology 114: 1–292.

MacRae, T. C., and M. E. Rice. 2007. Biological and distributional observations on North American Cerambycidae (Coleoptera). The Coleopterists Bulletin 61(2): 227–263.

Penrose, R. L., and R. L. Westcott. 1974. Notes on the distribution, hosts and bionomics of some Pacific Northwest Cerambycidae (Coleoptera). The Coleopterists Bulletin 28: 233–236.

Santos-Silva, A., E. H. Nearns, and I. P. Swift. 2016. Revision of the American species of the genus *Prionus* Geoffroy, 1762 (Coleoptera, Cerambycidae, Prioninae, Prionini). Zootaxa 4134: 1–103.

Turnbow, R. H. Jr. 1984. New records of two cerambycids from the Pacific Northwest. The Pan-Pacific Entomologist 60: 67.

Westcott, R. L., J. R. LaBonte, G. L. Parsons, and P. J. Johnson. 2006. New records and other notes for Oregon Coleoptera. Zootaxa 1142: 1–33.

Westcott, R. L., and F. W. Merickel. 2012. *In Memoriam*: William Frederick Barr (1920–2011). The Coleopterists Bulletin 66: 100–104.

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