

A CATALOGUE OF THE PRIMARY TYPES OF CARABIDAE  
(INCL. CICINDELINAE) IN THE COLLECTIONS OF THE  
UNITED STATES NATIONAL MUSEUM  
OF NATURAL HISTORY (USNM) (COLEOPTERA)

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ABSTRACT

USNM Carabid types are listed together with their type-localities and status. Correct and original generic placements are indicated alphabetically. Thirty-one lectotypes are selected from syntype pairs or series. All data are computer accessible and organized for immediate update when new types are acquired by the Museum. This limited study serves as a feasibility model for computerization of the USNM insect type collections.

In anticipation of computerizing primary type data for the insect collections at the National Museum of Natural History in Washington, D.C., we have undertaken a logistics study using the ground beetles as source material. Expedient methods must be developed for data capture, specimen handling, and data organization in the overall project because the USNM houses over 74,000 primary types of insects. Our study covers only primary types of Carabidae, excluding those of T. L. Casey which have been discussed elsewhere (Lindroth 1975; Erwin 1974; Allen 1977). The present paper provides data on all 287 primary types on hand through completion of this manuscript. Newly acquired specimens are easily listed in the data file together with their data, and up-to-date printouts of holdings are available at cost to curators and the public at large upon request.

METHODS

This paper is the result of a division of labor as follows: the junior author was responsible for recording all type label data on cards, gathering and checking literature citations, preparing initial typed draft and bibliographic cards; the senior author was responsible for the text, taxonomic decisions, problem solving, and general supervision of the project.

Taxa are listed alphabetically; where name changes have occurred taxa are cross indexed and full data given under the currently accepted name. We list the following categories of data for each type: status, sex, USNM type number, type-locality, and citation of original description. Occasionally notes are given to explain details. Where sex determination was impossible due to specimen condition or a need for dissection, we state "sex undetermined." Elevations are given in meters regardless of what is used on the specimen label; if altitudinal measurements are given in feet on labels we also recorded it.

The data given in the paper were encoded onto magnetic tape using the system developed by L. Erwin (1976). All newly acquired carabid types at the USNM are added to the data file upon arrival in order to keep the files up-to-date. The file can be assessed in various ways and listings made to suit the need of the user.

The system developed by L. Erwin (1976) was expanded in order to accommodate additional fields of data needed for type cataloguing (Figure 1). Other fields as already established (L. Erwin 1976) are also used when appropriate; however, Figure 1 gives the core data set for nearly all types in this paper.

KIND OF TYPE .....	210
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Fig. 1. Core data set for USNM Carabid type catalogue as expanded from L. Erwin (1976).

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## LECTOTYPE DESIGNATIONS

In 31 instances during this compilation it was discovered that only cotype or syntype series existed and that no lectotype had been selected. We have done so here after analysis of the literature and survey of the syntype series. Lectotypes were designated only when it was determined that they appropriately reside in the USNM. Although many Walther Horn "cotypes" are in the USNM it is best if lectotypes are chosen from the material at Eberswalde\*, DDR, that is, Horn's original collection, unless Horn's published papers lead us to other action (e.g., genus *Collyris*, see below).

*Acupalpus convexulus* Darlington, 1934:112.

HOLOTYPE: female, USNM #75657.

TYPE-LOCALITY: Cuba; Camagüey, Baragua.

*A. straneoi* Müller, 1942:70.

HOLOTYPE: sex undetermined, USNM #73973.

TYPE-LOCALITY: Southern Rhodesia; Melssetter-District.

*Adelotopus niger* Notman, 1925:8.

HOLOTYPE: sex undetermined, USNM #26168.

TYPE-LOCALITY: Australia.

*Agonum babcocki* Barr, 1960:52.

[See *Platynus babcocki* (Barr)]

*A. gratiosum* Mannerheim, 1853:142.

[See *Europhilus antiquus* Notman]

*A. rubrum* Barr, 1960:49.

[See *Platynus rubrum* (Barr)]

*Amara decora* (Notman)

(*Celia decora* Notman, 1922:101)

HOLOTYPE: male, USNM #26592.

TYPE-LOCALITY: USA; Arizona, Sabino Canyon.

*Anchonoderus unicolor* Schaeffer, 1910:395.

HOLOTYPE: male, USNM #56139.

TYPE-LOCALITY: USA; Texas, New Braunfels.

*Ancystroglossus ovalipennis* Reichardt, 1967:19.

HOLOTYPE: male, USNM #69206.

TYPE-LOCALITY: Mexico; Sinaloa, Los Mochis.

*Anillinus affabilis* (Brues)

(*Anillus affabilis* Brues, 1902:366)

LECTOTYPE: male, USNM #75691, here selected.

TYPE-LOCALITY: USA; Texas, Austin.

NOTE: Described from 3 specimens, only one of which was located in USNM.

*A. barberi* Jeannel, 1963:150.

HOLOTYPE: female, USNM #69545.

TYPE-LOCALITY: USA; Maryland, Plummers Island.

*A. dunavani* Jeannel, 1963:76.

HOLOTYPE: male, USNM #69542.

TYPE-LOCALITY: USA; South Carolina, Pickens County, Sassafras Mountains, Rocky Bottom, 4921' (1500 M).

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- A. elongatus* Jeannel, 1963:151.  
HOLOTYPE: female, USNM #69544.  
TYPE-LOCALITY: USA; North Carolina, Chapel Hill.  
NOTE: Specimen in very poor condition.
- A. indianae* Jeannel, 1963:152.  
HOLOTYPE: sex undetermined, USNM #69548.  
TYPE-LOCALITY: USA; Indiana, Lawrence County.
- A. longiceps* Jeannel, 1963:149.  
HOLOTYPE: female, USNM #69547.  
TYPE-LOCALITY: USA; Tennessee, Monteagle, Crystal Cave.
- A. sinuaticollis* Jeannel, 1963:152.  
HOLOTYPE: female, USNM #69541.  
TYPE-LOCALITY: USA; Tennessee, Roane County.
- A. turneri* Jeannel, 1963:77.  
HOLOTYPE: female, USNM #69543.  
TYPE-LOCALITY: USA; Georgia, Peach County.
- A. virginiae* Jeannel, 1963:76.  
HOLOTYPE: female, USNM #69546.  
TYPE-LOCALITY: USA; Virginia, Skyland.
- Anillodes sinuatus* Jeannel, 1963:57.  
HOLOTYPE: female, USNM #69549.  
TYPE-LOCALITY: USA; Texas, Bexar County.
- Anillus affabilis* Brues, 1902:366.  
[See *Anillinus affabilis* (Brues)]
- Anisodactylus loedingi* Schaeffer, 1911:114.  
LECTOTYPE: male, USNM #42494, here selected.  
TYPE-LOCALITY: USA; Alabama, Mobile.  
NOTE: Noonan (1973) did not select a lectotype from Schaeffer's material, therefore we do so now.
- A. texanus* Schaeffer, 1910:404.  
LECTOTYPE: male, USNM #75703.  
TYPE-LOCALITY: USA; Texas, New Braunfels.  
NOTE: Lectotype designated by Noonan, 1973:361.
- Anisotarsus depressus* Notman, 1919:236.  
[See *Notiobia depressus* (Notman)]
- Anophthalmus engelhardti* Barber, 1928:195.  
[See *Pseudanophthalmus engelhardti* (Barber)]
- A. hubbardi* Barber, 1928:196.  
[See *Pseudanophthalmus hubbardi* (Barber)]
- A. interstitialis* Hubbard, 1880:52.  
[See *Pseudanophthalmus interstitialis* (Hubbard)]
- Apenes angustata* Schwarz, 1878:354.  
LECTOTYPE: male, USNM #4495, here selected.  
TYPE-LOCALITY: USA; Florida, Enterprise.  
NOTE: Described from 3 specimens "apparently female," but we found one to be a male and selected it as lectotype.
- Apristus boldorii* Straneo, 1943:84.  
HOLOTYPE: female, USNM #73974.  
TYPE-LOCALITY: Africa; Ethiopia (Eritrea), Dorfu.
- Asaphidion alaskanum* Wickham, 1919:178.  
HOLOTYPE: female, USNM #22562.  
TYPE-LOCALITY: USA; Alaska, Porcupine River, 15 Miles below New Rampart House.
- A. yukonense* Wickham, 1919:180.  
HOLOTYPE: female, USNM #22563.  
TYPE-LOCALITY: Canada; Yukon Territory, Yukon Crossing.

*Aztecarpalus hemingi* Ball, 1976:63.

HOLOTYPE: male, USNM # 73500.

TYPE-LOCALITY: Mexico; Oaxaca, Microondas Sta., 0.5 Miles East Junction Routes 190 &amp; 125, 2529 M.

*A. whiteheadi* Ball, 1976:66.

HOLOTYPE: male, USNM # 73499.

TYPE-LOCALITY: Mexico; Oaxaca, 16.9 Miles South of Valle Nacional, 3600' (1097 M).

*Bembidion danniae* Perrault (in press)

HOLOTYPE: male, USNM # 73901.

TYPE-LOCALITY: Mexico; Oaxaca, Microondas Sta., 0.5 Miles East Junction Routes 190 &amp; 125, 8300' (2529 M).

*B. georgettae* Perrault (in press)

HOLOTYPE: male, USNM # 73902.

TYPE-LOCALITY: Mexico; Veracruz, 13.2 Miles West Ciudad Mendoza, 6600' (2011 M).

*B. jamaicense* Darlington, 1934:76.

HOLOTYPE: male, USNM # 75334.

TYPE-LOCALITY: Greater Antilles; Jamaica.

*B. kincaidi* Hatch, 1950:100.

HOLOTYPE: male, USNM # 75671.

TYPE-LOCALITY: USA; Washington, Mt. Baker.

*B. parvulum* Notman, 1922:99.

HOLOTYPE: female, USNM # 26594.

TYPE-LOCALITY: USA; Washington, Mt. Rainier, Paradise Park, 6000' (1828 M).

*Brachinus oaxacensis* Erwin, 1970:117.

HOLOTYPE: male, USNM # 74163.

TYPE-LOCALITY: Mexico; Oaxaca, 25 Miles South of Mitla.

*Brachyonychus sublævis medius* Darlington, 1952:128.

HOLOTYPE: male, USNM # 75706.

TYPE-LOCALITY: Lower Siam; Trang ("Trong").

*Bradycellus cubanus* Darlington, 1934:110.

HOLOTYPE: male, USNM # 75660.

TYPE-LOCALITY: Greater Antilles; Cuba, Santa Clara, Cayamas.

*Calleida tinctula* Darlington, 1934:117.

HOLOTYPE: female, USNM # 75439.

TYPE-LOCALITY: Greater Antilles; Cuba, Santa Clara, Cayamas.

*Calophaena costaricensis* Liebke, 1930:715.

LECTOTYPE: male, USNM # 54406.

TYPE-LOCALITY: Costa Rica; Limon Province, Rio Reventazón, Hamburg Farm.

NOTE: Lectotype designated by Erwin, 1975:268.

*C. nevermanni* Liebke, 1930:714.

LECTOTYPE: male, USNM # 54405.

TYPE-LOCALITY: Costa Rica; Limon Province, Las Mercedes.

NOTE: Lectotype designated by Erwin, 1975:268.

*C. sexmaculata* Liebke, 1930:719.

LECTOTYPE: female, USNM # 54407.

TYPE-LOCALITY: Costa Rica; Limon Province, Rio Reventazón, Hamburg Farm.

NOTE: Lectotype designated by Erwin, 1975:268.

*Calosoma howardi* Linell, 1898:251.

HOLOTYPE: male, USNM # 1311.

TYPE-LOCALITY: Galapagos Island; Duncan Island.

*C. irregulare* Schaeffer, 1915:235.

HOLOTYPE: male, USNM # 42495.

TYPE-LOCALITY: USA; California, Siskiyou County, Castella.

*C. linelli* Mutchler, 1925:222.

HOLOTYPE: male, USNM # 28205.

TYPE-LOCALITY: Galapagos Island; Chatham Island.

*Carabus erwini* Mandl, 1975:285.

HOLOTYPE: male, USNM # 73019.

TYPE-LOCALITY: China; Szechuen, road to Songpan, half way between Uen Chuan Chien and Meng Tseo, 3000' (914 M).

*C. kweitschauensis* Mandl, 1975:279.

HOLOTYPE: female, USNM # 73018.

TYPE-LOCALITY: China; Kweitschow, Shi Mon Kan.

*C. quadraticollis* Mandl, 1973:80.

HOLOTYPE: female, USNM # 73017.

TYPE-LOCALITY: China-Tibet-Border; near Jalala Pass, 14,000-17,000' (4267-5185 M).

*C. sinotibeticola* Mandl, 1975:281.

HOLOTYPE: male, USNM # 73016.

TYPE-LOCALITY: Tibet; Shien, near Jinfong, 13,000-14,000' (3962-4267 M).

*C. wittmeri* Mandl, 1975:280.

HOLOTYPE: female, USNM # 73015.

TYPE-LOCALITY: China-Tibet-Border; near Jalala Pass, 14,000-17,000' (4267-5181 M).

*Casnonia lengi* Schaeffer 1910:395.

[See *Colliuris lengi* (Schaeffer)]

*Celia decora* Notman, 1922:101.

[See *Amara decora* (Notman)]

*Cicindela abdominalis floridana* Cartwright, 1939:364.

HOLOTYPE: male, USNM # 53417.

TYPE-LOCALITY: USA; Florida, Miami.

*C. angulihumerosa* W. Horn, 1927:8.

HOLOTYPE: female, USNM # 41842.

TYPE-LOCALITY: Philippines; Island Samar.

*C. arida* Davis, 1928:65.

HOLOTYPE: male, USNM # 56263.

TYPE-LOCALITY: USA; California, Death Valley Junction.

NOTE: Although regarded as synonymous with *C. tranquebarica* informally by tiger beetle workers, we could not find this so stated in literature.

*C. cardini* Leng and Mutchler, 1916:690.

LECTOTYPE: female, USNM # 20439, here selected.

TYPE-LOCALITY: Greater Antilles; Cuba, Province of Havana, Contorro.

NOTE: Described from two specimens, both of which are in the USNM. The female is in better condition than the male.

*C. cazieri* Vogt, 1949:6.

HOLOTYPE: male, USNM # 59057.

TYPE-LOCALITY: USA; Texas, Starr County, 10 Miles North of Rio Grande City.

*C. formosa pigmentosignata* W. Horn, 1930:76.

LECTOTYPE: female, USNM # 41843, here selected.

TYPE-LOCALITY: USA; Texas, Rosser.

NOTE: Although several syntypes exist in DEI we chose the female as lectotype in USNM because the species is American and will be studied most frequently by Americans.

*C. latesignata tenuicincta* Schaupp, 1884:122.

HOLOTYPE: female, USNM # 1204.

TYPE-LOCALITY: USA; Colorado.

*C. nanula* W. Horn, 1937:57.

LECTOTYPE: male, USNM # 52044, here selected.

TYPE-LOCALITY: Philippines; "Lucon" Luzon, (Laguna:Paete).

NOTE: The material upon which Horn based his species was borrowed from the USNM; we therefore selected the lectotype from material he returned. Horn labelled one specimen as "type" and we invariably choose the same.

*C. nigrocoerulea subtropica* Vogt, 1949:2.

HOLOTYPE: female, USNM # 59055.

TYPE-LOCALITY: USA; Texas, Southwest Hidalgo County.

*C. obsoleta neojjuvenilis* Vogt, 1949:4.

HOLOTYPE: male, USNM # 59056.

TYPE-LOCALITY: USA; Texas, Southwest Hidalgo County, 5 Miles Southwest of Mission.

*C. parowana* Wickham, 1905:165.

HOLOTYPE: male, USNM #56136.

TYPE-LOCALITY: USA; Utah, Little Salt Lake near Parowan.

*C. rufiventris arizonae* Wickham, 1899:226.

HOLOTYPE: male, USNM #56137.

TYPE-LOCALITY: USA; Cañon of Colorado River.

NOTE: Now regarded as *Cicindela haemorrhagica arizonae*.

*Clarencia papua* Darlington, 1968:210.

HOLOTYPE: male, USNM #72366.

TYPE-LOCALITY: West New Guinea; Hollandia.

*Clinidium allegheniense georgicum* Bell and Bell, 1975:66.

HOLOTYPE: male, USNM #73195.

TYPE-LOCALITY: USA; Georgia, Cartersville.

*Colliuris lengi* (Schaeffer)

(*Casnonia lengi* Schaeffer, 1910:395)

HOLOTYPE: female, USNM #56140.

TYPE-LOCALITY: USA; Arizona, Nogales.

*Collyris aptera pseudocontracta* W. Horn, 1937:55.

LECTOTYPE: female, USNM #52042, here selected.

TYPE-LOCALITY: Peoples Republic of Vietnam; Prov. Haut Donai, Annam (Agr. Stat. of Biao), 800 M.

NOTE: See *Cicindela nanula* note.

*C. bimprensa* W. Horn, 1937:56.

LECTOTYPE: female, USNM #52043, here selected.

TYPE-LOCALITY: Peoples Republic of Vietnam; Prov. Haut Donai, Annam (Agr. Stat. of Biao), 800 M.

NOTE: See *Cicindela nanula* note.

*C. chaudoiri rariusculpta* W. Horn, 1929:4.

LECTOTYPE: female, USNM #41845, here selected.

TYPE-LOCALITY: Philippines; Island Samar.

NOTE: See *Cicindela nanula* note.

*C. pseudospeciosa* W. Horn, 1932:208.

LECTOTYPE: female, USNM #44156, here selected.

TYPE-LOCALITY: Philippines; Island Sibuyan.

NOTE: See *Cicindela nanula* note.

*Colpodes fractilinea* Darlington, 1934:96.

HOLOTYPE: male, USNM #75658.

TYPE-LOCALITY: Greater Antilles; Haiti, Diquini.

*C. vagepunctatus* Darlington, 1934:95.

HOLOTYPE: female, USNM #75659.

TYPE-LOCALITY: Greater Antilles; Jamaica.

*Cychrus andrewsii* Harris, 1839:195.

[See *Scaphinotus andrewsii* (Harris)]

*C. attenuatus liguricus* Straneo, 1933:113.

LECTOTYPE: male, USNM #73972, here selected.

TYPE-LOCALITY: Italy; Val Pesio, Maritime Alpi.

NOTE: Labelled as "Holotype" by Straneo but not so indicated in print.

*Cyrtolaus brevispina* Whitehead and Ball, 1975:608.

HOLOTYPE: male, USNM #73346.

TYPE-LOCALITY: Mexico; Chiapas, 1.5 Miles North Pueblo Nuevo, Yerba Buena Hospital, 7200' (2194 M).

*C. grumifer* Whitehead and Ball, 1975:612.

HOLOTYPE: male, USNM #73348.

TYPE-LOCALITY: Mexico; Chiapas, 1.5 Miles North Pueblo Nuevo, Yerba Buena Hospital, 5100-6000' (1554-1828 M).

*C. ricardo* Whitehead and Ball, 1975:609.

HOLOTYPE: male, USNM #73347.

TYPE-LOCALITY: Mexico; Chiapas, Volcan Tacaná, Southeast slope, 7800' (2377 M).

*C. subiridescens* Whitehead and Ball, 1975:607.

HOLOTYPE: male, USNM # 73349.

TYPE-LOCALITY: Mexico; Chiapas, 6.6 Miles North Pueblo Nuevo, 5600' (1706 M).

*Demetrida genicula* Darlington, 1968:158.

HOLOTYPE: male, USNM # 72368.

TYPE-LOCALITY: West New Guinea; Hollandia.

*Distichus smithi* Linell, 1898:254.

[See *Scarites smithi* (Linell)]

*Dromius alfieri* Peyerimhoff, 1926:220.

HOLOTYPE: male, USNM # 75654.

TYPE-LOCALITY: Egypt; Sinai méridional: Wadi Rayig.

*Duvalius bensai lombardii* Straneo, 1939:106.

HOLOTYPE: male, USNM # 73977.

TYPE-LOCALITY: Italy; Cave of Frasassi, near Genga.

*D. jurececki lanzai* Straneo, 1943:10.

HOLOTYPE: male, USNM # 73978.

TYPE-LOCALITY: Italy; Coreglia Antelminelli, Cave of Fate.

*Dyschirius cerberus* Larson, 1968:1108.

HOLOTYPE: female, USNM # 69973.

TYPE-LOCALITY: USA; Kansas, Atchison.

*D. colossus* Larson, 1968:1110.

HOLOTYPE: male, USNM # 69974.

TYPE-LOCALITY: USA; Texas, Goose Island State Park, 9 Miles North of Rockport.

*Epikastea limonae* Liebke, 1936:125.

LECTOTYPE: female, USNM # 54416.

TYPE-LOCALITY: Costa Rica; Limon Province, Waldeck Farm.

NOTE: Lectotype designated by Erwin, 1975:268.

*Euophilus antiquus* Notman, 1922:102.

HOLOTYPE: male, USNM # 26591.

TYPE-LOCALITY: USA; Connecticut, Lyme.

NOTE: This species is now referred to as *Agonum gratiosum* Mann.

*Evarthrus iowensis* Freitag, 1969:154.

HOLOTYPE: male, USNM # 69820.

TYPE-LOCALITY: USA; Iowa, Iowa City.

*Galerita boliviana* Reichardt, 1967:79.

HOLOTYPE: male, USNM # 69203.

TYPE-LOCALITY: Bolivia; La Paz, Huachi, Rio Beni.

*Harpalus alaskensis* Lindroth, 1968:801.

HOLOTYPE: male, USNM # 75705.

TYPE-LOCALITY: USA; Alaska, 7-15 Miles North of New Rampart House.

*H. carolinae* Schaeffer, 1910:402.

LECTOTYPE: male, USNM # 42509, here selected.

TYPE-LOCALITY: USA; North Carolina, Black Mountains.

NOTE: Described from several specimens, most of which are in USNM.

*H. huachuca* Ball, 1972:193.

HOLOTYPE: male, USNM # 72116.

TYPE-LOCALITY: USA; Arizona, Huachuca Mountains.

*H. iripennis* Schaeffer, 1910:402.

LECTOTYPE: male, USNM # 42510, here selected.

TYPE-LOCALITY: USA; Texas, Brownsville.

NOTE: Schaeffer's description does not indicate the number of specimens studied; since he gave a size range it must have been more than one.

*H. stephani* Ball, 1972:194.

HOLOTYPE: male, USNM # 72117.

TYPE-LOCALITY: USA; Arizona, Pima County, Arivaca.



*Helluomorphoides praeustus floridanus* Ball, 1956:80.

HOLOTYPE: male, USNM #75438.

TYPE-LOCALITY: USA; Florida, Volusia County, Ormond.

*Heraldinium nevermanni* Liebke, 1927:102.

[See *Otoglossa nevermanni* (Liebke)]

*Horologion speokoites* Valentine, 1932:3.

HOLOTYPE: male, USNM #44255.

TYPE-LOCALITY: USA; West Virginia, Maxwelton, Arbuckle's Cave.

*Inna texana* Schaeffer, 1910:400.

LECTOTYPE: male, USNM #42508, here selected.

TYPE-LOCALITY: USA; Texas, Brownsville, Esperanza Ranch.

NOTE: Schaeffer's description does not indicate the number of specimens studied.

*Lebia arizonica* Schaeffer, 1910:398.

LECTOTYPE: male, USNM #42506, here selected.

TYPE-LOCALITY: USA; Arizona, Huachuca Mountains.

NOTE: Schaeffer's description does not indicate the number of specimens studied.

*L. azteca* Reichardt, 1972:16.

HOLOTYPE: male, USNM #73428.

TYPE-LOCALITY: Mexico; Chiapas, 11.6 Miles South Ocozocuatlan, 3200' (975 M).

*L. bumeliae* Schaeffer, 1910:399.

LECTOTYPE: female, USNM #42507, here selected.

TYPE-LOCALITY: USA; Texas, Brownsville.

NOTE: Schaeffer indicates he saw "a few specimens," most of which are in the USNM.

*L. hexasticta* Liebke, 1936:127.

LECTOTYPE: male, USNM #54418.

TYPE-LOCALITY: Costa Rica; Limon Province, Rio Reventazón, Hamburg Farm.

NOTE: Lectotype designated by Erwin, 1975:267.

*L. reventazonica* Liebke, 1936:127.

LECTOTYPE: male, USNM #54419.

TYPE-LOCALITY: Costa Rica; Limon Province, Rio Reventazón, Hamburg Farm.

NOTE: Lectotype designated by Erwin, 1975:267.

*L. rhodopus* Schwarz, 1878:354.

LECTOTYPE: male, USNM #4494, here selected.

TYPE-LOCALITY: USA; Florida, Tampa.

NOTE: Schwarz mentions two specimens in his description.

*L. rufopleura* Schaeffer, 1910:398.

LECTOTYPE: female, USNM #42505, here selected.

TYPE-LOCALITY: USA; Texas, Brownsville.

NOTE: Schaeffer's description does not indicate the number of specimens studied.

*L. somalica* Straneo, 1942:66.

HOLOTYPE: male, USNM #73970.

TYPE-LOCALITY: Somali Republic; Mogadiscio.

*L. viridis subopaca* Schaeffer, 1910:397.

LECTOTYPE: female, USNM #42504, here selected.

TYPE-LOCALITY: USA; Arizona, Huachuca Mountains.

NOTE: Described from a "small number of specimens."

*Megacephala virginica melaena* (Cartwright)

(*Tetracha virginica melaena* Cartwright, 1935:70)

HOLOTYPE: male, USNM #50765.

TYPE-LOCALITY: USA; South Carolina, Clemson College.

*Micranillodes depressus* Jeannel, 1963:58.

HOLOTYPE: female, USNM #69551.

TYPE-LOCALITY: USA; Texas, Travis County.

*Micratopus insularis* Darlington, 1934:86.

HOLOTYPE: sex undetermined, USNM #75335.

TYPE-LOCALITY: Greater Antilles; Puerto Rico, San Juan.

*M. parviceps* Darlington, 1934:85.

HOLOTYPE: sex undetermined, USNM #75336.

TYPE-LOCALITY: Greater Antilles; Cuba, Jatibonico.

*Microlestes balli* Mateu, 1974:270.

HOLOTYPE: male, USNM #72829.

TYPE-LOCALITY: Mexico; Jalisco, de Tecalitlai.

*M. sinaiticus* Alfieri, 1976:26.

LECTOTYPE: sex undetermined, USNM #73501, here selected.

TYPE-LOCALITY: Egypt; Sinai, Wadi El Ghedeirat.

NOTE: Described tersely from an unknown number of specimens. The specimen in USNM was labelled "type" by Alfieri.

*Microtrechus barberi* Jeannel, 1931:444.

[See *Trechus barberi* (Jeannel)]

*Minuthodes irregularis* Darlington, 1968:100.

HOLOTYPE: male, USNM #72367.

TYPE-LOCALITY: West New Guinea; Hollandia.

*Neaphaenops intermedius* Valentine, 1931:249.

[See *Pseudanophthalmus intermedius* (Valentine)]

*Nebria kincaidi* Schwarz, 1900:525.

HOLOTYPE: male, USNM #5258.

TYPE-LOCALITY: USA; Alaska, Farragut Bay.

*N. schwarzi* Van Dyke, 1925:116.

HOLOTYPE: male, USNM #28174.

TYPE-LOCALITY: Canada; Alberta, Banff.

NOTE: Van Dyke (1925:116) incorrectly used type number 1057; the correct type number is 28174.

*N. trifaria piute* Erwin and Ball, 1972:95.

HOLOTYPE: male, USNM #71976.

TYPE-LOCALITY: USA; Utah, Beaver County, 15.9 Miles West of Junction, Circleville Mountain, La Baron Lake, 9700' (2956 M).

*N. trifaria tetonensis* Erwin and Ball, 1972:95.

HOLOTYPE: male, USNM #71975.

TYPE-LOCALITY: USA; Wyoming, Teton National Park, South Fork of Cascade Canyon, 10,000' (3048 M).

*Nomaretus hubbardi* Schwarz, 1895:272.

[See *Scaphinotus hubbardi* (Schwarz)]

*N. incompletus* Schwarz, 1895:271.

[See *Scaphinotus incompletus* (Schwarz)]

*Notiobia depressus* (Notman)

(*Anisotarsus depressus* Notman, 1919:236)

LECTOTYPE: male, USNM #75704.

TYPE-LOCALITY: USA; Texas, Austin.

NOTE: Lectotype designated by Noonan, 1973:307.

*Ochropisus concolor* Ball, 1975:165.

HOLOTYPE: male, USNM #73429.

TYPE-LOCALITY: Mexico; Morelos, 9.1 Miles East Cuernavaca, Cañon de Lobos, 4300' (1310 M).

*Odontochila divergentehamulata* W. Horn, 1929:154.

LECTOTYPE: male, USNM #41844, here selected.

TYPE-LOCALITY: Bolivia; Rurrenabaque, Río Beni.

NOTE: See *Cicindela nanula* note.

*Omus cupreonitens* Blaisdell and Reynolds, 1917:49.

HOLOTYPE: male, USNM #21355.

TYPE-LOCALITY: USA; California, Humboldt County, shore of Humboldt Bay near Arcata.

*Otoglossa nevermanni* (Liebke)

(*Heraldinium nevermanni* Liebke, 1927:102)

LECTOTYPE: male, USNM #54408.

TYPE-LOCALITY: Costa Rica; Limon Province, Rio Reventazón, Hamburg Farm.

NOTE: Lectotype designated by Erwin, 1975:268.

*Oxychila similis schmalzi* W. Horn, 1896:337.

LECTOTYPE: female, USNM #6929, here selected.

TYPE-LOCALITY: Brasil; St. Catharina.

NOTE: This specimen, labelled "type," was sent to the USNM by Horn years ago, however the description indicates that Horn saw two specimens.

*Paratachys filax* (Darlington)

(*Tachys filax* Darlington, 1934:83)

HOLOTYPE: female, USNM #75338.

TYPE-LOCALITY: Cuba; Santa Clara, Cayamas.

*P. paulax* (Darlington)

(*Tachys paulax* Darlington, 1934:80)

HOLOTYPE: male, USNM #75337.

TYPE-LOCALITY: Cuba; Santa Clara, Cayamas.

*Paussus occlusus* Darlington, 1950:70.

HOLOTYPE: male, USNM #59426.

TYPE-LOCALITY: Philippine Islands; Biliran Island, North of Leyte.

*Pelmatellus balli* Goulet, 1974:85.

HOLOTYPE: male, USNM #73535.

TYPE-LOCALITY: Mexico; Chiapas, Volcan Tacaná, Southeast slope, 7800' (2377 M).

*P. brachypterus* Goulet, 1974:94.

HOLOTYPE: male, USNM #73534.

TYPE-LOCALITY: Mexico; Chiapas, Mt. Zontehuitz, near San Cristobal de las Casas, 9200' (2804 M).

*P. infuscatus* Goulet, 1974:90.

HOLOTYPE: male, USNM #73536.

TYPE-LOCALITY: Mexico; Oaxaca, 21.8 Miles North Juchatengo, 7100' (2164 M).

*P. nubicola* Goulet, 1974:93.

HOLOTYPE: male, USNM #73533.

TYPE-LOCALITY: Mexico; Chiapas, Yerba Buena Hospital, 1.5 Miles North of Pueblo Nuevo, 7200' (2194 M).

*P. rotundicollis* Goulet, 1974:91.

HOLOTYPE: male, USNM #73532.

TYPE-LOCALITY: Mexico; Nuevo Leon, 12.2 Miles Northwest of Galeana, Cerro de Potosi, 7200' (2194 M).

*Pericompsus acon* Erwin, 1974:77.

HOLOTYPE: male, USNM #75357.

TYPE-LOCALITY: Bolivia; Rio Beni, San Miguel de Huachi.

*P. amygdali* Erwin, 1974:66.

HOLOTYPE: female, USNM #75344.

TYPE-LOCALITY: Venezuela; Guarico State, 12.0 Kilometers South of Calabozo, Estacion Biologica de Los Llanos.

*P. commotes* Erwin, 1974:31.

HOLOTYPE: male, USNM #75351.

TYPE-LOCALITY: Venezuela; Guarico State, 12.0 Kilometers South of Calabozo, Estacion Biologica de Los Llanos.

*P. crossodmos* Erwin, 1974:35.

HOLOTYPE: male, USNM #75356.

TYPE-LOCALITY: Argentina; San Fernando.

*P. dynastes* Erwin, 1974:28.

HOLOTYPE: male, USNM #75348.

TYPE-LOCALITY: Venezuela; Guarico State, 12.0 Kilometers South of Calabozo, Estacion Biologica de Los Llanos.

*P. gongylus* Erwin, 1974:37.

HOLOTYPE: female, USNM #75345.

TYPE-LOCALITY: Mexico; Campeche, Edzna.

*P. leucocareus* Erwin, 1974:34.

HOLOTYPE: male, USNM #75349.

TYPE-LOCALITY: Mexico; Veracruz, Fortin de las Flores.

*P. micropegasus* Erwin, 1974:75.

HOLOTYPE: female, USNM #75350.

TYPE-LOCALITY: Bolivia; Beni Province, Cosincho Region.

*P. morantensis* Erwin, 1974:61.

HOLOTYPE: male, USNM #75355.

TYPE-LOCALITY: Greater Antilles; Jamaica, Morant Bay.

*P. pauli* Erwin, 1974:47.

HOLOTYPE: male, USNM #75347.

TYPE-LOCALITY: Mexico; Chiapas, near Pijijiapan.

*P. pegasus* Erwin, 1974:75.

HOLOTYPE: male, USNM #75343.

TYPE-LOCALITY: Bolivia; Río Beni, Huachi.

*P. polychaetus* Erwin, 1974:88.

HOLOTYPE: female, USNM #75358.

TYPE-LOCALITY: Bolivia; Río Beni, Huachi.

*P. prionomus* Erwin, 1974:63.

HOLOTYPE: female, USNM #75346.

TYPE-LOCALITY: Panama; Canal Zone, Barro Colorado Island.

*P. saga* Erwin, 1974:45.

HOLOTYPE: male, USNM #75354.

TYPE-LOCALITY: Mexico; Guerrero, Coyuca de Benitez, 100' (30 M).

*P. silicis* Erwin, 1974:51.

HOLOTYPE: female, USNM #75352.

TYPE-LOCALITY: Honduras; Northwest Comayagua, Rio Humuya.

*P. talloc* Erwin, 1974:54.

HOLOTYPE: male, USNM #75353.

TYPE-LOCALITY: Mexico; Sinaloa, Rio San Lorenzo, 30.6 Miles South of Culiacan on Route 15.

*Perigona microps* Darlington, 1934:99.

HOLOTYPE: male, USNM #75685.

TYPE-LOCALITY: Greater Antilles; Puerto Rico, Bayamon.

*Phloeoxena herculeano* Ball, 1975:182.

HOLOTYPE: male, USNM #73426.

TYPE-LOCALITY: Mexico; Chiapas, Volcan Tacaná, Southeast slope, 7800' (2377 M).

*P. imitatrix* Darlington, 1934:114.

HOLOTYPE: male, USNM #75686.

TYPE-LOCALITY: Greater Antilles; Cuba, Santa Clara, Cayamas.

*P. nigricollis* Ball, 1975:195.

HOLOTYPE: male, USNM #73423.

TYPE-LOCALITY: Mexico; Chiapas, San Quentin, 700' (213 M).

*P. picta apicalis* Ball, 1975:202.

HOLOTYPE: female, USNM #73427.

TYPE-LOCALITY: Mexico; Oaxaca, 16.9 Miles South Valle Nacional, 3600' (1097 M).

*P. schwarzi* Darlington, 1934:115.

HOLOTYPE: male, USNM #75440.

TYPE-LOCALITY: Greater Antilles; Cuba, Santa Clara, Cayamas.

*Platynus babcocki* (Barr)*(Agonum babcocki* Barr, 1960:52)

HOLOTYPE: male, USNM #75388.

TYPE-LOCALITY: USA; Texas, Sutton County, Mayfield's Cave.

*P. longiceps* Schaeffer, 1910:394.

LECTOTYPE: female, USNM #42502, here selected.

TYPE-LOCALITY: USA; Arizona, Huachuca Mountains.

NOTE: Described from more than one specimen as indicated by Schaeffer's note on size variation.

*P. rubrum* (Barr)*(Agonum rubrum* Barr, 1960:49)

HOLOTYPE: male, USNM #75389.

TYPE-LOCALITY: USA; Texas. Wheeler County, Big Mouth Cave, 3 Miles North of Shamrock on left bank Red River.

*Polyhirma chanleri* Linell, 1895(1896):687.

HOLOTYPE: male, USNM #16.

TYPE-LOCALITY: East Africa; Tana River.

*Prothyma discretepunctata* W. Horn, 1924:88.

LECTOTYPE: male, USNM #75688, here selected.

TYPE-LOCALITY: Philippines Island; Sibuyan.

NOTE: See *Cicindela nanula* note.*Psammotromus noctivagus* Peyerimhoff, 1926:222.

LECTOTYPE: female, USNM #75707, here selected.

TYPE-LOCALITY: Africa; Egypt, Amrieh (Mariout).

NOTE: Described from an unknown number of specimens in the Alfieri Collection which was sent in part to the USNM recently. The specimen #75707 was labelled "type."

*Pseudanophthalmus alabamiae* Valentine, 1932:273.

HOLOTYPE: male, USNM #44279.

TYPE-LOCALITY: USA; Alabama, Ft. Payne, Manitou Cave (1.5 Miles Southwest of Ft. Payne, at the foot of Lookout Mountain in Coosa River drainage).

*P. ciliaris* Valentine, 1937:95.

HOLOTYPE: male, USNM #56125.

TYPE-LOCALITY: USA; Tennessee, Clarksville, Dunbar's Cave.

*P. cumberlandus* Valentine, 1937:96.

HOLOTYPE: male, USNM #56124.

TYPE-LOCALITY: USA; Tennessee, Monoville, Piper Cave.

*P. digitus* Valentine, 1932:270.

HOLOTYPE: female, USNM #44275.

TYPE-LOCALITY: USA; Tennessee, Chattanooga, Tennessee River, Raccoon Mountain (on the South side of the Tennessee River about 5 Miles West of Chattanooga).

*P. egberti* Barr, 1965:49.

HOLOTYPE: male, USNM #75268.

TYPE-LOCALITY: USA; Virginia, Giles County, Starnes Cave.

*P. engelhardti* (Barber)

(Anophthalmus engelhardti Barber, 1928:195)

HOLOTYPE: male, USNM #40824.

TYPE-LOCALITY: USA; Tennessee, 6 Miles South of Cumberland Gap, Powell River, English Cave.

*P. eremita barberi* Jeannel, 1931:466.

HOLOTYPE: female, USNM #75689.

TYPE-LOCALITY: USA; Kentucky, Meade County, near Brandenburg, Rockhaven Cave.

*P. fullcri* Valentine, 1948:10.

HOLOTYPE: female, USNM #44277.

TYPE-LOCALITY: USA; Tennessee, Chattanooga, Raccoon Mountain, Tennessee Caverns.

*P. fuscus* Valentine, 1931:254.

HOLOTYPE: female, USNM #44266.

TYPE-LOCALITY: USA; West Virginia, Frankford, Kaufman's Cave.

*P. fuscus constrictus* Valentine, 1932:267.

HOLOTYPE: male, USNM #44272.

TYPE-LOCALITY: USA; West Virginia, Ronceverte, Organ Cave (2 Miles Southeast of Ronceverte, East of the Greenbrier River).

*P. gracilis* Valentine, 1931:253.

HOLOTYPE: female, USNM #44263.

TYPE-LOCALITY: USA; Virginia, Newport, Tommie's Cave.

*P. grandis* Valentine, 1931:254.

HOLOTYPE: male, USNM #44264.

TYPE-LOCALITY: USA; West Virginia, Frankford, Higginbotham's large Cave.

*P. grandis elevatus* Valentine, 1932:265.

HOLOTYPE: male, USNM #44269.

TYPE-LOCALITY: USA; West Virginia, Ronceverte, Organ Cave (2 Miles Southeast of Ronceverte, East of the Greenbrier River).

*P. grandis orthosulcatus* Valentine, 1932:265.

HOLOTYPE: female, USNM #44270.

TYPE-LOCALITY: USA; West Virginia, Greenville (East of the Greenbrier River, cave opening about 800 feet (243 M) North of the village).

- P. hadenoecus* Barr, 1965:53.  
HOLOTYPE: male, USNM #75266.  
TYPE-LOCALITY: USA; West Virginia, Pendleton County, Mystic Cave.
- P. higinbothami* Valentine, 1931:251.  
HOLOTYPE: male, USNM #44259.  
TYPE-LOCALITY: USA; West Virginia, Frankford, Higinbotham's large Cave.
- P. hirsutus* Valentine, 1931:252.  
HOLOTYPE: male, USNM #44260.  
TYPE-LOCALITY: USA; Tennessee, Cumberland Gap, King Solomon's Cave.
- P. hirsutus delicatus* Valentine, 1932:270.  
HOLOTYPE: male, USNM #44274.  
TYPE-LOCALITY: USA; Virginia, Pennington Gap, Gilly's Cave (1 Mile South of Pennington Gap, well on the side of small mountain in the watershed of Cane Creek which enters the Powell River).
- P. hoffmani* Barr, 1965:58.  
HOLOTYPE: male, USNM #75260.  
TYPE-LOCALITY: USA; Virginia, Smyth County, 6 Miles Northeast of Saltville, Buchanan Saltpeter Cave, at Ellendale.
- P. holsingeri* Barr, 1965:63.  
HOLOTYPE: male, USNM #75261.  
TYPE-LOCALITY: USA; Virginia, Lee County, Fugates Cave, at Gibson Station.
- P. hortulanus* Barr, 1965:59.  
HOLOTYPE: male, USNM #75263.  
TYPE-LOCALITY: USA; Virginia, Tazewell County, Cassells Cave, at the Northwest end of Burkes Garden.
- P. hubbardi* (Barber)  
(*Anopthalmus hubbardi* Barber, 1928:196)  
HOLOTYPE: female, USNM #40823.  
TYPE-LOCALITY: USA; Virginia, Page County, Luray Cave.
- P. hubbardi avernus* Valentine, 1945:648.  
HOLOTYPE: male, USNM #57053.  
TYPE-LOCALITY: USA; Virginia, Rockingham County, Endless Caverns.
- P. hubbardi parvicollis* Jeannel, 1931:452.  
HOLOTYPE: female, USNM #43665.  
TYPE-LOCALITY: USA; Virginia, 1 Mile North of Strasburg, Battlefield Crystal Cave.
- P. humeralis* Valentine, 1931:253.  
HOLOTYPE: male, USNM #44262.  
TYPE-LOCALITY: USA; Tennessee, Monteagle, Crystal Cave.
- P. humeralis brevis* Valentine, 1932:273.  
HOLOTYPE: male, USNM #44278.  
TYPE-LOCALITY: USA; Tennessee, Monteagle, Wonder Cave (the larger of two Monteagle caves, separated by about one-fourth of a mile).
- P. hypertrichosis* Valentine, 1932:266.  
HOLOTYPE: male, USNM #44271.  
TYPE-LOCALITY: USA; West Virginia, Hillsboro, Martha Clarke Cave (2 Miles Southwest of Hillsboro).
- P. illinoisensis* Barr and Peck, 1966:519.  
HOLOTYPE: male, USNM #75259.  
TYPE-LOCALITY: USA; Illinois, Hardin County, Cave Spring Cave.
- P. intermedius* (Valentine)  
(*Neophaenops intermedius* Valentine, 1931:249)  
LECTOTYPE: male, USNM #44256, here selected.  
TYPE-LOCALITY: USA; Tennessee, Monteagle, Wonder Cave.  
NOTE: Described from 4 specimens. Valentine had material from two caves "thought to be connected." He noted two males from Wonder Cave and declared it type locality but failed to select a Holotype.
- P. interstitialis* (Hubbard)  
(*Anopthalmus interstitialis* Hubbard, 1880:52)  
HOLOTYPE: female, USNM #23860.  
TYPE-LOCALITY: USA; Kentucky, "Washington's Hall," Mammoth Cave.
- P. jonesi* Valentine, 1945:645.  
HOLOTYPE: male, USNM #57052.  
TYPE-LOCALITY: USA; Tennessee, Cumberland County, Saltpeter or Brady Cave, Southeast slope of Walden Ridge, Grassy Cove.

*P. krekeleeri* Barr, 1965:52.

HOLOTYPE: male, USNM #75264.

TYPE-LOCALITY: USA; West Virginia, Randolph County, Rich Mountain Cave.

*P. loedingi* Valentine, 1931:252.

HOLOTYPE: male, USNM #44261.

TYPE-LOCALITY: USA; Alabama, Huntsville, Shelta Cave.

*P. loedingi aladdini* Valentine, 1945:637.

HOLOTYPE: male, USNM #57049.

TYPE-LOCALITY: USA; Alabama, Madison County, Aladdin Cave, upper end of Sharp Cove.

*P. loedingi aquaticus* Valentine, 1945:638.

HOLOTYPE: male, USNM #57050.

TYPE-LOCALITY: USA; Alabama, Madison County, Cave Spring Cave, between Troy and Keels Mountains, near Berkley.

*P. loedingi meridionalis* Valentine, 1945:639.

HOLOTYPE: male, USNM #57051.

TYPE-LOCALITY: USA; Alabama, Marshall County, "Saltpeter or Nyman Cave," 10 Miles Southwest of Gunterville.

*P. loedingi profundus* Valentine, 1945:637.

HOLOTYPE: male, USNM #57048.

TYPE-LOCALITY: USA; Alabama, Madison County, Natural Well, Monte Sano.

*P. montanus* Barr, 1965:52.

HOLOTYPE: male, USNM #75265.

TYPE-LOCALITY: USA; West Virginia, Tucker County, Bennett Cave.

*P. nelsoni* Barr, 1965:44.

HOLOTYPE: male, USNM #75270.

TYPE-LOCALITY: USA; Virginia, Alleghany County, Old Tunnel Cave.

*P. petrunkevitchi* Valentine, 1945:652.

HOLOTYPE: male, USNM #57054.

TYPE-LOCALITY: USA; Virginia, Warren County, Skyline Cavern, 2 Miles Southwest of Front Royal.

*P. pontis* Barr, 1965:45.

HOLOTYPE: male, USNM #75269.

TYPE-LOCALITY: USA; Virginia, Rockbridge County, Buck Hill Cave at Natural Bridge.

*P. potomaca* Valentine, 1932:262.

HOLOTYPE: male, USNM #44267.

TYPE-LOCALITY: USA; West Virginia, Cave, Simmons' Cave (on South branch Potomac River, 10 Miles South of Franklin, West Virginia).

*P. potomaca senecae* Valentine, 1932:263.

HOLOTYPE: male, USNM #44268.

TYPE-LOCALITY: USA; West Virginia, Seneca Caves (along the North Fork Potomac River, 4 Miles Northeast of Riverton, West Virginia).

*P. pusio bathycola* Valentine, 1932:268.

HOLOTYPE: male, USNM #44273.

TYPE-LOCALITY: USA; Virginia, Blacksburg, Aunt Nellie's Cave (on tributary of the North Fork Roanoke River, 3 Miles Southeast of Blacksburg).

*P. pusio punctatus* Valentine, 1931:250.

HOLOTYPE: male, USNM #44258.

TYPE-LOCALITY: USA; Virginia, Newport, Tommie's Cave.

*P. quadratus* Barr, 1965:60.

HOLOTYPE: male, USNM #75262.

TYPE-LOCALITY: USA; Virginia, Giles County, Strakeys Cave.

*P. robustus* Valentine, 1931:250.

HOLOTYPE: male, USNM #44257.

TYPE-LOCALITY: USA; Tennessee, Monterey, Johnson's Cave.

*P. robustus beaklei* Valentine, 1937:97.

HOLOTYPE: male, USNM #56123.

TYPE-LOCALITY: USA; Tennessee, Byrdstown, Bunkum Cave.

*P. rotundatus* Valentine, 1932:271.

HOLOTYPE: male, USNM #44276.

TYPE-LOCALITY: USA; Tennessee, English Cave.

*P. subaequalis* Valentine, 1931:255.

HOLOTYPE: male, USNM #44265.

TYPE-LOCALITY: USA; West Virginia, Frankford, Kaufman's Cave.

*P. sylvaticus* Barr, 1967:167.

HOLOTYPE: male, USNM #75271.

TYPE-LOCALITY: USA; West Virginia, Pocahontas County, East base of Kennison Mountain near the Cranberry Glades, 1000 M.

*P. tenesensis* Valentine, 1937:98.

HOLOTYPE: male, USNM #56126.

TYPE-LOCALITY: USA; Tennessee, Byington, "Grand Caverns."

*P. tenuis blatchleyi* Barr, 1960:316.

HOLOTYPE: male, USNM #75258.

TYPE-LOCALITY: USA; Indiana, Monroe County, Truitt's Cave.

*P. vicarius* Barr, 1965:48.

HOLOTYPE: male, USNM #75267.

TYPE-LOCALITY: USA; Virginia, Tazewell County, Hugh Young Cave, near Maiden Spring.

*Pseudaptinus nevermanni* Liebke, 1936:126.

LECTOTYPE: female, USNM #54412.

TYPE-LOCALITY: Costa Rica; Limon Province, Rio Reventazón, Hamburg Farm.

NOTE: Lectotype designated by Erwin, 1975:268.

*P. schmidti* Liebke, 1936:126.

LECTOTYPE: male, USNM #54413.

TYPE-LOCALITY: Costa Rica; La Caja, near San Jose.

NOTE: Lectotype designated by Erwin, 1975:268.

*Pseudomorpha alutacea* Notman, 1925:17.

HOLOTYPE: female, USNM #26171.

TYPE-LOCALITY: USA; New Mexico, Mesilla.

*P. champlaini* Notman, 1925:20.

HOLOTYPE: male, USNM #26173.

TYPE-LOCALITY: USA; Arizona, Paradise.

*P. schwarzi* Notman, 1925:21.

HOLOTYPE: male, USNM #26174.

TYPE-LOCALITY: USA; Arizona, Santa Rita Mountains.

*P. tenebroides* Notman, 1925:16.

HOLOTYPE: male, USNM #26170.

TYPE-LOCALITY: USA; Arizona, Tucson.

*Pterostichus arizonicus* Schaeffer, 1910:393.

HOLOTYPE: female, USNM #42500.

TYPE-LOCALITY: USA; Arizona, Tucson.

*P. cochlearis* Hacker, 1968:19.

HOLOTYPE: male, USNM #69601.

TYPE-LOCALITY: USA; California, Humboldt County, Weitchpec-Orick Road, 1400' (426 M).

*P. elongatus* Schaeffer, 1910:391.

HOLOTYPE: female, USNM #42496.

TYPE-LOCALITY: USA; Idaho, Moscou Mountains.

*P. fenyesi fenderi* Hacker, 1968:18.

HOLOTYPE: male, USNM #69600.

TYPE-LOCALITY: USA; California, Humboldt County, 2 Miles Northwest of Petrolia, 200' (60 M).

*P. fuchsii* Schaeffer, 1910:392.

HOLOTYPE: female, USNM #42501.

TYPE-LOCALITY: USA; California.

*P. hatchi* Hacker, 1968:31.

HOLOTYPE: male, USNM #69606.

TYPE-LOCALITY: USA; California, Calaveras County, 2 Miles Southwest of Ganns, 6500' (1981 M).

*P. laevilatus* Notman, 1919:231.

HOLOTYPE: female, USNM #75390.

TYPE-LOCALITY: Canada; British Columbia, Golden.

NOTE: This species is now referred to as *Pterostichus riparius* Dejean.

*P. lobatus* Hacker, 1968:23.

HOLOTYPE: male, USNM #69603.

TYPE-LOCALITY: USA; California, Mendocino County, 3 Miles South of Rockport, 800' (243 M).



- P. marinensis* Hacker, 1968:22.  
HOLOTYPE: male, USNM #69602.  
TYPE-LOCALITY: USA; California, Marin County, 2 Miles Northwest of Pan Toll Camp, West slope of Mount Tamalpais, 1700' (518 M).
- P. mattolenis* Hacker, 1968:24.  
HOLOTYPE: male, USNM #69604.  
TYPE-LOCALITY: USA; California, Humboldt County, 4 Miles South of Honeydew, 1500' (457 M).
- P. ovicollis* Schaeffer, 1910:393.  
HOLOTYPE: female, USNM # 42498.  
TYPE-LOCALITY: USA; California.
- P. palmi* Schaeffer, 1910:393.  
HOLOTYPE: male, USNM # 42499.  
TYPE-LOCALITY: USA; North Carolina.
- P. pumilus willamettensis* Hacker, 1968:13.  
HOLOTYPE: male, USNM #69599.  
TYPE-LOCALITY: USA; Oregon, Linn County, 5 Miles North of Mabel, 700' (213 M).
- P. riparius* Dejean, 1829:332.  
[See *Pterostichus laevilatus* Notman]
- P. stapedius* Hacker, 1968:32.  
HOLOTYPE: male, USNM # 69607.  
TYPE-LOCALITY: USA; California, Madera County, Beashore Meadows, 6700' (2042 M).
- P. stapedius yosemitensis* Hacker, 1968:34.  
HOLOTYPE: male, USNM #69608.  
TYPE-LOCALITY: USA; California, Tuolumne County, ½ Mile North of Crane Flat Ranger Station, 6100' (1859 M).
- P. trinitensis* Hacker, 1968:26.  
HOLOTYPE: male, USNM # 69605.  
TYPE-LOCALITY: USA; California, Trinity County, 8 Miles Northwest of Zenia, 3500' (1066 M).
- P. vandykei* Schaeffer, 1910:392.  
LECTOTYPE: female, USNM # 42497, here selected.  
TYPE-LOCALITY: USA; Idaho, Moscou Mountains.  
NOTE: Probably described from a single specimen (cf. note on size by Schaeffer) but not so stated.

- Scaphinotus andrewsii* (Harris)  
(*Cychnus andrewsii* Harris, 1839:195)  
NEOTYPE: female, USNM # 56127.  
TYPE-LOCALITY: USA; North Carolina, Orange County, Chapel Hill.  
NOTE: Neotype designated by Valentine, 1935:349.
- Scaphinotus andrewsi barksdalei* (Valentine)  
(*Steniridia andrewsi barksdalei* Valentine, 1936:230)  
HOLOTYPE: male, USNM # 56131.  
TYPE-LOCALITY: USA; North Carolina, Swain and Haywood Counties, Mt. Guyot, 3500' (1066 M).
- S. andrewsi montana* Valentine, 1935:350.  
HOLOTYPE: male, USNM # 56128.  
TYPE-LOCALITY: USA; North Carolina, Avery County, Beech Mountain, 4500-5500' (1371-1676 M).
- S. andrewsi nantahalae* (Valentine)  
(*Steniridia andrewsi nantahalae* Valentine, 1936:228)  
HOLOTYPE: male, USNM # 56130.  
TYPE-LOCALITY: USA; North Carolina, Jackson County, Cashier's, 3500' (1066 M).
- S. andrewsi parvitorsalis* Valentine, 1935:354.  
HOLOTYPE: male, USNM # 56129.  
TYPE-LOCALITY: USA; Georgia, Rabun County, Clayton, 2000-3700' (609-1127 M).
- S. andrewsi saludae* (Valentine)  
(*Steniridia andrewsi saludae* Valentine, 1936:229)  
HOLOTYPE: female, USNM # 56132.  
TYPE-LOCALITY: USA; North Carolina, Polk County, Melrose.

- S. hubbardi* (Schwarz)  
 (*Nomaretus hubbardi* Schwarz, 1895:272)  
 HOLOTYPE: male, USNM #4572.  
 TYPE-LOCALITY: USA; North Carolina, Haywood County, near Retreat, 3000' (914 M).
- S. incompletus* (Schwarz)  
 (*Nomaretus incompletus* Schwarz, 1895:271)  
 HOLOTYPE: female, USNM #4571.  
 TYPE-LOCALITY: USA; Virginia, Lee County (Cumberland Mountains), Stone Creek.
- S. laedingi* Valentine, 1935:364.  
 HOLOTYPE: male, USNM #56134.  
 TYPE-LOCALITY: USA; Alabama, Madison County, Monte Sano.
- S. laedingi obscura* Valentine, 1935:366.  
 HOLOTYPE: male, USNM #56135.  
 TYPE-LOCALITY: USA; Alabama, Randolph County, Wadley.
- S. manni* Wickham, 1919:170.  
 HOLOTYPE: male, USNM #22545.  
 TYPE-LOCALITY: USA; Washington, Whitman County, Wawawai.
- S. violacea carolinae* Valentine, 1935:358.  
 HOLOTYPE: male, USNM #56133.  
 TYPE-LOCALITY: USA; North Carolina, "Blue Ridge Mts."
- S. webbi* Bell, 1959:11.  
 HOLOTYPE: male, USNM #73630.  
 TYPE-LOCALITY: USA; Virginia, Campbell County, 10 Miles Southwest Lynchburg.  
 NOTE: The holotype is labelled differently, but the locality is identical to that given here; "16 mi n. Altaviste, VA."
- Scarites galapagoensis* Linell, 1898:253.  
 HOLOTYPE: sex undetermined, USNM #1312.  
 TYPE-LOCALITY: Galapagos Islands; Chatham Island.
- S. smithi* (Linell)  
 (*Distichus smithi* Linell, 1898:254)  
 HOLOTYPE: sex undetermined, USNM #1313.  
 TYPE-LOCALITY: Brazil; Santarem.
- Schizogenius grossus* Whitehead, 1966:3.  
 HOLOTYPE: male, USNM #68012.  
 TYPE-LOCALITY: Brazil; Rio Madeira.  
 NOTE: This species is now referred to as *Schizogenius xanthopus* Brulle.
- S. planulooides* Whitehead, 1972:241.  
 HOLOTYPE: male, USNM #74164.  
 TYPE-LOCALITY: USA; Texas, Blanco County, Cypress Mills.
- S. xanthopus* Brulle, 1837:39.  
 [See *Schizogenius grossus* Whitehead]
- Selenophorus concinnus* Schaeffer, 1910:403.  
 LECTOTYPE: female, USNM #42511, here selected.  
 TYPE-LOCALITY: USA; Arizona, Huachuca Mountains.  
 NOTE: Probably described from a single specimen (cf. note on size by Schaeffer) but not so stated.
- S. discoderaoides* Schaeffer, 1910:404.  
 LECTOTYPE: male, USNM #42512, here selected.  
 TYPE-AREA: USA; Texas, Esperanza Ranch and Yucca Ridges, near Brownsville.  
 NOTE: Described from several specimens from two localities in Southern Texas. The Lectotype is labelled Esperanza Ranch, which is herewith designated Type-locality.
- S. nonseriotus* Darlington, 1934:109.  
 HOLOTYPE: male, USNM #75656.  
 TYPE-LOCALITY: Greater Antilles; Santo Domingo, San Francisco Mountains.
- S. sinuaticollis* Notman, 1922:102.  
 HOLOTYPE: female, USNM #26590.  
 TYPE-LOCALITY: USA; Arizona, Tucson.
- Steniridia andrewsi barksdalei* Valentine, 1936:230  
 [See *Scaphinotus andrewsi barksdalei* (Valentine)]
- S. andrewsi nantahalae* Valentine, 1936:228.  
 [See *Scaphinotus andrewsi nantahalae* (Valentine)]

*S. andrewsi saludae* Valentine, 1936:229.  
[See *Scaphinotus andrewsi saludae* (Valentine)]

*Stenomorphus convexior* Notman, 1922:103.  
HOLOTYPE: female, USNM #26593.  
TYPE-LOCALITY: USA; Arizona, Tucson.

*S. sinaloae* Darlington, 1936:37.  
HOLOTYPE: male, USNM #75661.  
TYPE-LOCALITY: Mexico; Sinaloa.

*Tachys filax* Darlington, 1934:83.  
[See *Paratachys filax* (Darlington)]  
*T. paulax* Darlington, 1934:80.  
[See *Paratachys paulax* (Darlington)]

*Tachyta gilloglyi* Erwin, 1975:19.  
HOLOTYPE: male, USNM #73589.  
TYPE-LOCALITY: Republic of South Viet Nam; Cam Rahn Bay, Tiger Lake area.

*Tetracha virginica melaena* Cartwright, 1935:70.  
[See *Megacephala virginica melaena* (Cartwright)]

*Trechicomimus suturalis* Ueno (in press)  
HOLOTYPE: male, USNM #75670.  
TYPE-LOCALITY: Chile; Arauco, San Alfonso, above Caramavida.

*Trechus aduncus* Barr, 1962:82.  
HOLOTYPE: male, USNM #65978.  
TYPE-LOCALITY: USA; North Carolina, Haywood County, Mt. Pisgah, 4800-6400' (1463-1950 M).

*T. balsamensis* Barr, 1962:87.  
HOLOTYPE: male, USNM #65979.  
TYPE-LOCALITY: USA; North Carolina, Haywood-Jackson Counties, Water Rock Knob, 6200' (1889 M).

*T. barberi* (Jeannel)  
(*Microtrechus barberi* Jeannel, 1931:444)  
HOLOTYPE: male, USNM #43664.  
TYPE-LOCALITY: USA; North Carolina, Retreat, Black Mountains.

*T. beutenmulleri avus* Barr, 1962:72.  
HOLOTYPE: male, USNM #65973.  
TYPE-LOCALITY: USA; North Carolina, Avery County, Grandfather Mountain.

*T. beutenmulleri canus* Barr, 1962:73.  
HOLOTYPE: male, USNM #65974.  
TYPE-LOCALITY: USA; Virginia, Grayson County, White Top Mountain.

*T. bowlingi* Barr, 1962:78.  
HOLOTYPE: male, USNM #65980.  
TYPE-LOCALITY: USA; North Carolina, Tennessee-Swain County, Sevier County, Mt. Kephart, 4900-6600' (1493-2011 M).

*T. chalybaeus brachyderus* Jeannel, 1931:422.  
HOLOTYPE: male, USNM #43660.  
TYPE-LOCALITY: USA; Montana, Bear Paw Mountain.

*T. chalybaeus coloradensis* Schaeffer, 1915:48.  
HOLOTYPE: male, USNM #42515.  
TYPE-LOCALITY: USA; Colorado.

*T. chalybaeus utahensis* Schaeffer, 1915:48.  
LECTOTYPE: male, USNM #75690, here selected.  
TYPE-LOCALITY: USA; Southwest Utah.

NOTE: Probably described from a single specimen (cf. note on size by Schaeffer) but not so stated. The size given by Schaeffer is 15.5 mm; this must be considered a typographical error. The type is ca. 5.5 mm, but the apices of the elytra are missing.

*T. coloradensis arcticollis* Jeannel, 1931:428.  
HOLOTYPE: male, USNM #43662.  
TYPE-LOCALITY: USA; Idaho, Cedar Mountain.

*T. coloradensis gravidulus* Jeannel, 1931:429.  
HOLOTYPE: male, USNM #43661.  
TYPE-LOCALITY: USA; New Mexico.

*T. cumberlandus* Barr, 1962:76.

HOLOTYPE: male, USNM #65975.

TYPE-LOCALITY: USA; Kentucky, Wayne County, 3 Miles East of Monticello, Elisha Steele Cave.

*T. luculentus* Barr, 1962:88.

HOLOTYPE: male, USNM #65981.

TYPE-LOCALITY: USA; North Carolina, Swain County, Clingmans Dome, 6300' (1920 M).

*T. mitchellensis* Barr, 1962:75.

HOLOTYPE: male, USNM #65976.

TYPE-LOCALITY: USA; North Carolina, Yancey County, Celo Mountain.

*T. nebulosus* Barr, 1962:86.

HOLOTYPE: male, USNM #65982.

TYPE-LOCALITY: USA; Tennessee, Sevier County, Mt. Kephart, 5000-6300' (1524-1920 M).

*T. novaculosus* Barr, 1962:89.

HOLOTYPE: male, USNM #65983.

TYPE-LOCALITY: USA; North Carolina, Swain County, Clingmans Dome, 6300' (1920 M).

*T. roanicus* Barr, 1962:73.

HOLOTYPE: male, USNM #65977.

TYPE-LOCALITY: USA; Tennessee, Carter County, Roan Mountain, 6313' (1924 M).

*T. rosenbergi* Barr, 1962:89.

HOLOTYPE: male, USNM #65984.

TYPE-LOCALITY: USA; North Carolina, Haywood-Jackson Counties, Water Rock Knob, 6000' (1800 M).

*T. satanicus* Barr, 1962:81.

HOLOTYPE: male, USNM #65985.

TYPE-LOCALITY: USA; North Carolina, Haywood County, West end of Graveyard Fields near Devils Courthouse.

*T. schwarzi* Jeannel, 1931:437.

HOLOTYPE: female, USNM #43663.

TYPE-LOCALITY: USA; North Carolina, Roan High Knob, 6305' (1922 M).

*T. straneoi* Jeannel, 1931:52.

HOLOTYPE: male, USNM #73971.

TYPE-LOCALITY: Italy; Provincia di Roma, Lazio: Filettino.

*T. subtilis* Barr, 1962:80.

HOLOTYPE: male, USNM #65986.

TYPE-LOCALITY: USA; North Carolina, Haywood County, Mt. Sterling.

*T. talequah* Barr, 1962:82.

HOLOTYPE: male, USNM #65987.

TYPE-LOCALITY: USA; Tennessee, Monroe County, Haw Knob, 4800-5000' (1463-1524 M).

*T. tennesseensis tauricus* Barr, 1962:87.

HOLOTYPE: male, USNM #65988.

TYPE-LOCALITY: USA; Tennessee, Blount County, Bull Cave Sinkhole, 1800' (548 M).

*T. tennesseensis tennesseensis* Barr, 1962:87.

HOLOTYPE: male, USNM #65989.

TYPE-LOCALITY: USA; Tennessee, Roane County, Berry Cave, 840' (256 M).

*T. tonitru* Barr, 1962:79.

HOLOTYPE: male, USNM #65990.

TYPE-LOCALITY: USA; Tennessee, Blount County, Great Smoky Mountains National Park, Thunderhead, 5530' (1685 M).

*T. tuckaleechee* Barr, 1962:86.

HOLOTYPE: male, USNM #65991.

TYPE-LOCALITY: USA; Tennessee, Blount County, Tuckaleechee Caverns.

*T. uncifer* Barr, 1962:80.

HOLOTYPE: male, USNM #65992.

TYPE-LOCALITY: USA; North Carolina, Tennessee-Swain County, Sevier County, Clingmans Dome.

*T. verus* Barr, 1962:81.

HOLOTYPE: male, USNM #65993.

TYPE-LOCALITY: USA; North Carolina, Haywood County, Mt. Sterling.

*Troglanillus valentinei* Jeannel, 1963:148.

HOLOTYPE: male, USNM #69550.

TYPE-LOCALITY: USA; Alabama, Fort Payne, Fort-Payne Cave.

*Xystosomus anterocostis* Erwin, 1973:14.

HOLOTYPE: male, USNM #75331.

TYPE-LOCALITY: Costa Rica; Hamburg Farm at Reventazón.

*X. microtretus* Erwin, 1973:24.

HOLOTYPE: male, USNM #75332.

TYPE-LOCALITY: Costa Rica; Reventazón, Hamburg Farm.

*X. nigripalpis* Erwin, 1973:9.

HOLOTYPE: male, USNM #75333.

TYPE-LOCALITY: Panama; Canal Zone, Barro Colorado Island.

*X. spangleri* Erwin, 1973:23.

HOLOTYPE: male, USNM #75330.

TYPE-LOCALITY: Panama; 9 Miles West of Los Algarrobos (near Río San Pedro).

*Zuphium magnum* Schaeffer, 1910:396.

LECTOTYPE: female, USNM #42503, here selected.

TYPE-LOCALITY: USA; Texas, Brownsville.

NOTE: Probably described from a single specimen (cf. note on size by Schaeffer) but not so stated.

#### LIST OF REFERENCES

- ALFIERI, A. 1976. The Coleoptera of Egypt. *Mém. Soc. Ent. Egypte* 5:1-361.
- ALLEN, R. T. 1977. Designation of Holotypes and Lectotypes for Species Described by Thomas L. Casey in the Subtribe Pterostichini (Coleoptera: Carabidae: Pterostichini). *Col. Bull.* 31(3):283-286.
- BALL, G. E. 1956. A revision of the North American species of the genus *Helluomorphoides* Ball, 1951 (Coleoptera, Carabidae, Helluonini). *Proc. Ent. Soc. Washington* 58(2):67-91.
- \_\_\_\_\_. 1972. Classification of the species of the *Harpalus* subgenus *Glanodes* Casey (Carabidae: Coleoptera). *Col. Bull.* 26(4):179-204.
- \_\_\_\_\_. 1975. Pericaline Lebiini: Notes on classification, a synopsis of the New World genera, and a revision of the genus *Phloeoxena* Chaudoir (Coleoptera: Carabidae). *Quaest. Ent.* 11:143-242.
- \_\_\_\_\_. 1976. *Aztecarpalus* Ball: New species from Oaxaca, Mexico, reclassification, and a reconstructed phylogeny of the *Hebescens* group. *Col. Bull.* 30(1):61-72.
- BARBER, H. S. 1928. Two new cave beetles related to *Anophthalmus pusio* Horn. *Journ. Washington Acad. Sci.* 18(7):194-196.
- BARR, T. C., JR. 1960a. A synopsis of the cave beetles of the genus *Pseudanophthalmus* of the Mitchell Plain in Southern Indiana (Coleoptera, Carabidae). *American Midl. Nat.* 63(2):307-320.
- \_\_\_\_\_. 1960b. The cavernicolous beetles of the subgenus *Rhadine*, genus *Agonum* (Coleoptera: Carabidae). *American Midl. Nat.* 64(1):45-65.
- \_\_\_\_\_. 1962. The genus *Trechus* (Coleoptera: Carabidae: Trechini) in the Southern Appalachians. *Col. Bull.* 16(3):65-92.
- \_\_\_\_\_. 1965. The *Pseudanophthalmus* of the Appalachian Valley (Coleoptera: Carabidae). *American Midl. Nat.* 73(1):41-72.
- \_\_\_\_\_. 1967. A new *Pseudanophthalmus* from an egeian environment in West Virginia (Coleoptera: Carabidae). *Psyche* 74(2):166-172.
- BARR, T. C., JR., AND S. B. PECK. 1966. Discovery of *Pseudanophthalmus* (Coleoptera: Carabidae) in Southern Illinois. *American Midl. Nat.* 76(2):519-522.

- BELL, R. T. 1959. A new species of *Scaphinotus* Dej. intermediate between *Scaphinotus* s. str. and *Irichroa* Newman. Proc. Ent. Soc. Washington 61(1):11-13.
- BELL, R. T. AND J. R. 1975. Two new taxa of *Clinidium* (Coleoptera: Rhysodidae or Carabidae) from the eastern U.S. with a revised key to U.S. *Clinidium*. Col. Bull. 29(2):65-68.
- BLAISDELL, F. E., SR., AND L. R. REYNOLDS. 1917. A new *Omus* (Coleop.). Ent. News 28(2):49-55.
- BRUES, C. T. 1902. New and little-known guests of the Texan legionary ants. The American Nat. 36(425):365-378.
- CARTWRIGHT, O. L. 1935. The tiger beetles of South Carolina with the description of a new variety of *Tetracha virginica* (L.) (Coleoptera: Cicindelidae). Bull. Brooklyn Ent. Soc. 30(2):69-77.
- \_\_\_\_\_. 1939. Eleven new American Coleoptera (Scarabaeidae, Cicindelidae). Ann. Ent. Soc. America 32(2):53-364.
- DARLINGTON, P. J., JR. 1934. New West Indian Carabidae, with a list of the Cuban species. Psyche 41(2):66-131.
- \_\_\_\_\_. 1936. The species of *Stenomorphus* (Coleoptera: Carabidae), with data on heterogony in *S. californicus* (Men.). Pan-Pacific Ent. 12(1):33-44.
- \_\_\_\_\_. 1950. Two new Paussid beetles from the Panama Canal Zone and the Philippines. Psyche 57(2):68-71.
- \_\_\_\_\_. 1952. Notes on *Brachyonychus* Chd. (Coleoptera, Carabidae, Panagaeini). Psyche 59(3):126-128.
- \_\_\_\_\_. 1968. The Carabid Beetles of New Guinea Part III. Harpalinae (continued): Perigonini to Pseudomorphini. Bull. Mus. Comp. Zool. 137(1):1-253.
- DAVIS, A. C. 1928. A new *Cicindela* (Coleoptera, Cicindelidae). Pan-Pacific Ent. 5(2):65-66.
- ERWIN, L. J. M. 1976. Application of a Computerized General Purpose Information Management System (SELGEM) to a Natural History Research Data Bank (Coleoptera: Carabidae). Col. Bull. 30(1):1-32.
- ERWIN, T. L. 1970. A Reclassification of Bombardier Beetles and a Taxonomic Revision of the North and Middle American Species (Carabidae: Brachinida). Quaest. Ent. 6:4-215.
- \_\_\_\_\_. 1973. Studies of the Subtribe Tachyina (Coleoptera: Carabidae: Bembidiini) Part I: A Revision of the Neotropical Genus *Xystosomus* Schaum. Smithson. Contr. Zool. No. 140:1-39.
- \_\_\_\_\_. 1974a. Studies of the Subtribe Tachyina (Coleoptera: Carabidae: Bembidiini) Supplement A: Lectotype Designations for New World Species, Two New Genera, and Notes on Generic Concepts. Proc. Ent. Soc. Washington 76(2):123-155.
- \_\_\_\_\_. 1974b. Studies of the Subtribe Tachyina (Coleoptera: Carabidae: Bembidiini) Part II: A Revision of the New World-Australian Genus *Pericompsus* LeConte. Smithson. Contr. Zool. No. 162:1-96.
- \_\_\_\_\_. 1975a. The ground beetle types of Max Liebke in the Smithsonian Institution, Washington, D.C. (Coleoptera: Carabidae). Col. Bull. 29(4):267-268.
- \_\_\_\_\_. 1975b. Studies of the Subtribe Tachyina (Coleoptera: Carabidae: Bembidiini) Part III: Systematics, Phylogeny, and Zoogeography of the Genus *Tachyta* Kirby. Smithson. Contr. Zool. No. 208:1-68.
- ERWIN, T. L., AND G. E. BALL. 1972. Classification of the Ovipennis and Trifaria groups of *Nebria* Latreille (Coleoptera: Carabidae: Nebrüni). Proc. Biol. Soc. Washington 85(7):77-108.
- FREITAG, R. 1969. A revision of the species of the genus *Evarthrus* LeConte. Quaest. Ent. 5:89-212.

- GOULET, H. 1974. Classification of the North and Middle American species of the genus *Pelmatellus* Bates (Coleoptera: Carabidae: Harpalini). Quaest. Ent. 10:80-102.
- HACKER, H. A. 1968. The species of the subgenus *Leptoferonia* Casey (Coleoptera: Carabidae: *Pterostichus*). Proc. United States Nat. Mus. 124:1-61.
- HARRIS, T. W. 1839. Art. VIII. Remarks upon the North American insects belonging to the genus *Cychnus* of Fabricius; with descriptions of some newly detected species. Boston Journ. Nat. Hist. 2:189-204.
- HATCH, M. H. 1950. Studies on the Coleoptera of the Pacific Northwest. II: Carabidae: Bembidiini. Pan-Pacific Ent. 26(3):97-106.
- HORN, W. 1896. Zehn neue Cicindeliden species nebst einigen neuen varietäten. Ent. Nachrichten 22(22):337-343.
- \_\_\_\_\_. 1924. Three new Cicindelidae from the Philippines. Philippine Journ. Sci. 24(1):87-89.
- \_\_\_\_\_. 1929a. Ueber einige orientalische und aethiopische Cicindelinae-Genera. Entomol. Nachrichtenblatt 3(1):3-8.
- \_\_\_\_\_. 1929b. Sur deux espèces nouvelles d'*Odontochila* néotropiques et quelques autres espèces rapprochées. Rev. Chilena Hist. Nat. 33:154-158.
- \_\_\_\_\_. 1930. Notes on the races of *Omus californicus* and a list of the Cicindelidae of America north of Mexico (Coleoptera). Trans. American Ent. Soc. 56(1):73-86.
- \_\_\_\_\_. 1932. Ueber die Gattung *Collyris* [Coleoptera Cicindelidae]. Soc. Ent. Fr., Livre du Centenaire, pp. 195-211.
- \_\_\_\_\_. 1937. Drei neue orientalische Cicindelinen aus dem Nat.-Mus. in Washington. Ent. Blätt. 33(1):55-57.
- HUBBARD, H. G. 1880. Description of a new *Anophthalmus* from Mammoth Cave. American Ent. 3:52.
- JEANNEL, R. 1931. Trechinae et Bathysciinae nouveaux de l'Italie. Boll. Soc. Ent. Italiana 63(4):49-54.
- \_\_\_\_\_. 1931. Campagne spéologique de C. Bolivar et R. Jeannel dans l'Amérique du Nord (1928): 9. Insectes Coléoptères et révision des Trechinae de l'Amérique du Nord. Archs. Zool. exp. gén. 71:403-499.
- \_\_\_\_\_. 1963. Monographie des "Anillini" Bembidiides endogés. [Coleoptera Trechidae]. Mem. Mus. Natn. Hist. Nat. Paris 28(2):33-204.
- \_\_\_\_\_. 1963. Supplément à la Monographie des Anillini (1). Sur quelques espèces nouvelles de l'Amérique Nord. Rev. Franc. Ent. 30(3):145-152.
- LARSON, D. J. 1968. Two new species of *Dyschirius* from the United States (Coleoptera: Carabidae: Scaritini). Canadian Ent. 100(10):108-113.
- LENG, C. W., AND A. J. MUTCHLER. 1916. Descriptive catalogue of West Indian Cicindelinae. Bull. American Mus. Nat. Hist. 35:681-698, illus.
- LIEBKE, M. 1927. 1. Beitrag zur Kenntnis der Laufkäfer *Colliuris bella* nov. sp. m. Ent. Blätt. 23(3):100-104.
- \_\_\_\_\_. 1930. Revision der amerikanischen Arten der Unterfamilie Colliurinae (Col. Carab.). Mitt. Zool. Mus. Berlin 15:647-726.
- \_\_\_\_\_. 1936. Neue Carabiden aus Costa Rica (Col.). Revista Ent. 6(1):125-128.
- LINDROTH, C. H. 1968. The ground-beetles (Carabidae excl. Cicindelinae) of Canada and Alaska Part 5. Opusc. Ent. Supplementum 33:649-944.
- \_\_\_\_\_. 1975. Designation of Holotypes and Lectotypes Among Ground Beetles (Coleoptera, Carabidae) Described by Thomas L. Casey. Col. Bull. 29(2):109-147.
- LINELL, M. L. 1895(1896). List of Coleoptera collected on the Tana River, and on the Jombene Range, East Africa, by Mr. William Astor Chan-

- ler and Lieutenant Ludwig Von Höhnell, with descriptions of new genera and species. Proc. United States Nat. Mus. 18:687-716.
- \_\_\_\_\_. 1898. On the coleopterous insects of Galapagos Islands. Proc. United States Nat. Mus. 21:249-268.
- MANDL, K. 1973. Beschreibung einer Carabus (*Pagocarabus*) art aus China. Z. ArbGem. öst. Ent. 24(1/2):80.
- \_\_\_\_\_. 1975. Neue Carabus-Arten aus China (Col. Carabidae). Ent. Arb. Mus. Frey 26:278-291.
- MATEU, J. 1974. Sur les *Microlestes* Schmidt-Goebel du Mexique (Col. Carabidae Lebiinae). Ent. Arb. Mus. Frey 25:261-275.
- MÜLLER, G. 1942. Nuovi Coleotteri Dell'Africa Orientale. Atti Mus. Civ. Stor. Nat. Trieste 15(3):63-86.
- MUTCHLER, A. J. 1925. Coleoptera from the Williams Galapagos Expedition. Zoologica 5:219-240.
- NOONAN, G. R. 1973. The Anisodactylines (Insecta: Coleoptera: Carabidae: Harpalini): Classification, Evolution, and Zoogeography. Quaest. Ent. 9(4):266-480.
- NOTMAN, H. 1919. Records and new species of Carabidae. Journ. New York Ent. Soc. 27:225-237.
- \_\_\_\_\_. 1922. New species of Carabidae, Staphylinidae, and Elateridae. Bull. Brooklyn Ent. Soc. 17(4):99-108.
- \_\_\_\_\_. 1925. A review of the beetle family Pseudomorphidae and a suggestion for a rearrangement of the Adephaga, with descriptions of a new genus and new species. Proc. United States Nat. Mus. 67:1-34.
- PEYERIMHOFF, P. 1926. Carabids Egyptiens (Coleop.). Bull. Soc. Ent. Egypte 10:218-223.
- REICHARDT, H. 1967. A monographic revision of the American Galeritini (Coleoptera, Carabidae). Arq. Zool. S. Paulo 15(Fasc. 1-2):1-176.
- \_\_\_\_\_. 1972. Monograph of *Lebia* (Chelonodema) (Coleoptera, Carabidae). Arq. Zool., S. Paulo 23(1):1-72.
- SCHAEFFER, C. 1910. Additions to the Carabidae of North America with notes on species already known. Sci. Bull. Mus. Brooklyn Inst. Arts Sci. 1(17):391-405.
- \_\_\_\_\_. 1911. New Coleoptera and miscellaneous notes. Journ. New York Ent. Soc. 19:113-126.
- \_\_\_\_\_. 1915. New Coleoptera and miscellaneous notes. Journ. New York Ent. Soc. 23:47-55.
- \_\_\_\_\_. 1915b. New Coleoptera and miscellaneous notes. III. Journ. New York Ent. Soc. 23:235-238.
- SCHAUPP, F. G. 1884. Remarks and Descriptions of new species. Bull. Brooklyn Ent. Soc. 6:121-124, illus.
- SCHWARZ, E. A. 1878. The Coleoptera of Florida. Proc. American Philos. Soc. 17(101):353-372.
- \_\_\_\_\_. 1895. Notes on *Nomarectus*, with descriptions of two new species. Proc. Ent. Soc. Washington 3(4):269-273.
- \_\_\_\_\_. 1900. Papers from the Harriman Alaska Expedition. XVIII. Entomological Results (12): Coleoptera. Proc. Wash. Acad. Sci. 2:523-537.
- STRANEO, S. L. 1933. Appunti su alcuni Carabidi Italiani. Boll. Soc. Ent. Ital. 65(5):113-115.
- \_\_\_\_\_. 1939. Sulla distribuzione geografica del *Duvalius bensai* Gestro (Coleopt. Carab.). Boll. Soc. Ent. Ital. 71(5):105-107.
- \_\_\_\_\_. 1942. Su alcuni Carabidi dello collezioni del Museo di Milano. Att. Soc. Italiana Sci. Nat. 81:62-67.
- \_\_\_\_\_. 1943. Un nuovo *Duvalius* Italiano. Atti Soc. Ital. Sci. Nat. 82:10-11.



- \_\_\_\_\_. 1943. Su Alcuni Carabidi Africani. *Annali Mus. Civ. Stor. Nat. Giacomo Doria LXII*:76-84.
- VALENTINE, J. M. 1931. New cavernicole Carabidae of the subfamily Trechinae Jeannel. *J. Elisha Mitchell Scient. Soc.* 46(2):247-258.
- \_\_\_\_\_. 1932. A classification of the genus *Pseudanopthalmus* Jeannel (Fam. Carabidae) with descriptions of new species and notes on distribution. *J. Elisha Mitchell Scient. Soc.* 47(2):261-280.
- \_\_\_\_\_. 1932. *Horologion*, a new genus of cave beetles. *Ann. Ent. Soc. America* 25(1):1-8.
- VALENTINE, J. M. 1935. Speciation in *Steniridia*, a group of Cychrine beetles (Carabidae, *Scaphinotus*). *J. Elisha Mitchell Scient. Soc.* 51(2):341-375.
- \_\_\_\_\_. 1936. Raciation in *Steniridia andrewsi* Harris, a supplement to speciation in *Steniridia*. *J. Elisha Mitchell Scient. Soc.* 52(2):223-234.
- \_\_\_\_\_. 1937. Anophthalmid beetles (Fam. Carabidae) from Tennessee caves. *J. Elisha Mitchell Scient. Soc.* 53(1):93-100.
- \_\_\_\_\_. 1945. Speciation and raciation in *Pseudanopthalmus* (Cavernicolous Carabidae). *Trans. Connecticut Acad. Arts Sci.* 36:631-659.
- \_\_\_\_\_. 1948. New Anophthalmid beetles (Fam. Carabidae) from the Appalachian region. *Mus. Pap. Alabama Mus. Nat. Hist.* No. 27, 19 pp.
- VAN DYKE, E. C. 1925. Studies of Western North American Carabinae (Coleoptera) with descriptions of new species. *Pan-Pacific Ent.* 1(3):111-125.
- VOGT, G. B. 1949. Three new Cicindelidae from South Texas with collecting notes on other Cicindelidae (Coleoptera). *Bull. Brooklyn Ent. Soc.* 44(1):1-9.
- WHITEHEAD, D. R. 1966. Two remarkable new South American species *Schizogenius* Putzeys (Coleoptera: Carabidae). *Col. Bull.* 20(1):1-7.
- \_\_\_\_\_. 1972. Classification, phylogeny, and zoogeography of *Schizogenius* Putzeys (Coleoptera: Carabidae: Scaritini). *Quaest. Ent.* 8:131-348.
- WHITEHEAD, D. R., AND G. E. BALL. 1975. Classification of the Middle American genus *Cyrtolaus* Bates (Coleoptera: Carabidae: Pterostichini). *Quaest. Ent.* 11(4):591-619.
- WICKHAM, H. F. 1899. The habits of American Cicindelidae. *Proc. Davenport Acad. Sci.* 7:206-228.
- \_\_\_\_\_. 1905. New species of Coleoptera from the Western United States. *Canadian Ent.* 37(5):165-171.
- \_\_\_\_\_. 1919. Two New Species of *Asaphidion* from North America (Coleoptera, Carabidae). *Proc. Ent. Soc. Washington* 21(8):178-181.
- WICKHAM, H. F. 1919. *Scaphinotus (Pseudonomaretus) manni* n. sp. (Coleoptera Carabidae). *Proc. Ent. Soc. Washington* 21(7):170-173.