

**STUDIES OF THE SUBTRIBE TACHYINA (COLEOPTERA:
CARABIDAE: BEMBIDIINI) SUPPLEMENT A: LECTOTYPE
DESIGNATIONS FOR NEW WORLD SPECIES, TWO NEW
GENERA, AND NOTES ON GENERIC CONCEPTS¹**

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ABSTRACT—The New World species-group names of the carabid subtribe Tachyina are arranged alphabetically by genus. Lectotype designation are made where necessary and species are assigned accordingly to their proper genus. Two new genera, **Costitachys** and **Meotachys** are described. Three species described in the genus *Polyderis*, *testaceolimbata* Motschulsky, *glabrella* Mots., and *breviscula* Mots., are reassigned to the genus *Perigona* of the Perigonini. A key is provided to Tachyina genera and notes on generic concepts are given.

INTRODUCTION

The purposes of this paper are to clarify generic concepts in New World Tachyina, designate lectotypes, list synonymies, provide a key to genera, and describe two new genera. All of this became possible after studying the World fauna to determine how New World groups relate to Old World groups. Much of this work has now been done and my series of revisions for the World Tachyina has begun to be issued (Erwin, 1973a, 1974).

The work here has been strictly limited without giving reasons for many of the actions taken. Reasons will be provided in forthcoming revisions where space will allow full development of ideas from facts, and analyses of these facts.

METHODS

During 1971, I was able to study almost all primary type material for New World Tachyina as well as to study numerous Old World forms in the British Museum in London and in the Muséum d'Histoire Naturelle in Paris. I labelled all lectotypes designated below with my own labels, hence these specimens can easily be found.

For the most part, I have been able to synonymize names where appropriate; however, in some genera below further synonymization may be made in my revisionary works now in preparation.

The following abbreviations indicate the various museums and private collections from which specimens were borrowed and in which listed specimens can be found:

¹ This study was supported in part by the American Philosophical Society (Penrose Fund #5795) through funds provided for type studies at the British Museum (Natural History), Muséum National d'Histoire Naturelle, Paris, and the Moscow University Museum.

AMNH	American Museum of Natural History, New York, New York 10024; L. Herman, Jr.
BMNH	British Museum (Natural History), London, England; P. Hammond.
CAS	California Academy of Sciences, San Francisco, California 94118; H. B. Leech.
CNC	Canadian National Collection of Insects, Biosystematic Research Institute, Ottawa, Ontario; E. C. Becker.
FDAG	Florida State Collection of Arthropods, Gainesville, Florida 32601; R. E. Woodruff.
HUB	Institut für Spezielle Zoologie und Zoologisches Museum der Humboldt-Universität zu Berlin, East Berlin, DDR; F. Hieke.
IRSN	Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium; G. Demoulin.
MCZ	Museum of Comparative Zoology, Cambridge, Massachusetts 02138; P. J. Darlington, Jr.
MHNP	Muséum National d'Histoire Naturelle, Paris; A. Bons.
MMM	Moscow Museum, Moscow, U.S.S.R.; S. I. Kelejnikova.
SRM	Swedish Riksmuseum, Stockholm, Sweden; T. Nyholm.
UCBP	Paleontological Museum, University of California, Berkeley, California; J. H. Peck.
UMU	Zoological Institute, University, Uppsala, Sweden.
USNM	Smithsonian Institution, Washington, D. C. 20560.
ZMC	Universitetets Zoologiske Museum, Copenhagen; S. L. Tuxen.
ZMHF	Universitetets Zoologiske Museum, Helsinki; H. Silfverberg.

In the key and descriptions of new genera I refer to elytral setae by code numbers. Refer to Erwin (1974) for the "map" of elytral chaetotaxy. In the list of species the type locality is cited as given in the original description, or I have added the country if none was given. In some cases, I cite the actual locality label on the type. The genera and species are listed alphabetically and cross referenced by the older generic name. I cite several cases where the sex of the type specimen was undetermined due to specimen condition. This means that I feared the specimen would disarticulate if relaxed and separated from the card on which it was glued.

DISCUSSION OF GENERA

Revisions of all genera of Tachyina are now in preparation. Two have been published (Erwin, 1973a, 1974) and one is in press. These studies provide the background for new combinations and different rankings listed below, many of which are not fully explained herein. It is the purpose of this section to acquaint the reader with the generic concepts below and relate these concepts to the world fauna. I discuss only the New World groups in detail here, mentioning the Old World forms where appropriate.

The genus *Xystosomus* is the most primitive of the New World Tachyina. *Tachys trunci* Darlington, of Queensland, Australia, has

similar character states and may be related. *Xystosomus* contains at least 32 species and has been revised (Erwin, 1973a). Further details may be sought in that paper.

Tachymenis is the only other New World genus with members having a truncate anterior tibial apex. Its members live under bark, in rotten logs or stumps, or in deep leaf litter in cloud forests. I know over 100 species, although only 13 have been described. These beetles are a very common component of the tropical forest ecosystems (dry or wet) and are apparently restricted to hardwoods. Members of one small group of species have reduced eyes and are apterous. There is no Old World counterpart of this group.

The following genera, through *Costitachys*, have members with the anterior tibia notched, but have no mental foveae. The genus *Tachyta* has six New World species with a combined range extended from Alaska to Belize. The group is much more diverse in the Old World with at least 5 African species and 9 Oriental-Australian species. These beetles live under bark of conifers and hardwoods, and at least one Oriental species is arboreal, occurring on leaves in the understory. *Tachyta* is composed of two subgenera, one of which is as yet unnamed (Erwin, 1975, in press).

Elaphropus is extremely large with many diverse groups which I will recognize formally as subgenera. In general, these beetles are convex to subdepressed and have a short, arcuate recurrent groove on the apex of the elytron. The group's greatest diversity is in the Oriental Region and in Africa. Many North and Middle American species are obligatory or facultative myrmecophiles; many others are riparian. The New World species are many in the north, decreasing in number southward toward northern South America where the group is replaced by members of *Pericompsus* in the riparian habitat. Members of some species are found in caves, but are not troglobitic.

The sister groups *Lynnastis* and *Micratopus* are Old and New World counterparts (vicariants), respectively. Their highly modified mouthparts and the single supra-orbital seta caused T. L. Casey (1914) to place them in a tribe of their own. I have studied the single known specimen of the monotypic *Straneoites* of Africa. This bizarre species is intermediate in many respects between *Lynnastis* and *Paratachys*. Further study must be made to elucidate the relationship, however. These deep soil forms are extremely common in some situations, especially at light during dispersal flights. Males were once thought to be rare in *Micratopus* species, but this is due to the lack of secondary sexual characteristics. I know about 40 species of *Micratopus* although only 5 have been described. Two *Lynnastis* occur in the New World, one in Cuba, and one in Hawaii. At least the Hawaiian species was introduced as it occurs in soil around imported nursery stock. The Cuban species is wing dimorphic, however, and should be closely

studied; its possible relationship to the Old World fauna will only be known after further study.

The last genus of this group is *Costitachys*, described herein as new. All other New World genera have members with a bifoveate mentum and an apically notched anterior tibia. *Paratachys* is by far the largest Tachyina genus in the World; the New World species known to me now number over 300, most of them undescribed. These species are very similar externally, but the form of the internal sac of the male genitalia is exceptionally diverse from species to species. There are numerous species groups which are easily recognized, although not as easily as in *Elaphropus*. If subgenera were to be used in this group they would necessarily be based on male genitalia, therefore, I will use the species group concept in the revision of this genus. The diversity of species is almost matched by the diversity of habitats in which the species are found. Unlike the more ecologically restricted genera discussed above and below, *Paratachys* members are riparian, in forest floor litter, bogs, swamps, bromeliads, grass roots, and so on.

Members of the genus *Tachys* are halophilous in nature, all species occurring on the sea coast or near inland alkali deposits. Many species are estuarine and some are intertidal. These beetles easily cross salt-water gaps and are established on many islands. The Galapagos and Hawaiian Islands each have one endemic species and the former also have a more widespread species. The majority of species are in North America, but a few occur in the Oriental and Palaearctic Regions.

Pericompsus contains 68 species and has been revised (Erwin, 1974). Further details may be sought in that paper.

Members of *Polyderis* are found in all zoogeographic regions and on oceanic islands. These beetles are very small, one species with members being only 0.7 mm in length. It is quite probable that individuals are transported by man in soil and only a worldwide revision will uncover true identities in this genus. I know well over 50 species at this writing, among them many apterous and small-eyed forms.

The remaining New World genera contain small numbers of species. *Liotachys* is monotypic, its single species occurring in the Amazon Basin. *Meotachys* contains about 19 species, 11 of them undescribed. This group has a combined range extended from Mexico to Brazil and is closely related to *Paratachys*. *Porotachys* is presently known from two species, one in Europe (recently introduced into eastern North America) and one in the Oriental Region.

SPECIES HEREIN REMOVED FROM TACHYINA

Bembidium nigriceps Dejean, 1831:44. Lectotype, sex undetermined, here designated, in MHNP. Type-locality.—Georgia, as designated by Lindroth (1968:651). Recognized by LeConte (1848:474) as probably genus *Perigona*; confirmed by Lindroth (1955:22). I agree.

Polyderis testaceolimbata Motschulsky, 1862:33. Lectotype, sex undetermined, here designated, in MMM. Type-locality.—Mobile, Alabama. This is *Perigona nigriceps* (Dejean). New synonymy.

Polyderis glabrella Motschulsky, 1862:34. Lectotype, sex undetermined, here designated, in MMM. Type-locality.—Mobile, Alabama. This is *Perigona nigriceps* (Dejean). New synonymy.

Polyderis breviuscula Motschulsky, 1862:34. Lectotype, sex undetermined, here designated, in MMM. Type locality.—Panama. This is genus *Perigona*, hence *Perigona breviuscula* Motschulsky, new combination. This is one of the several species of Central American *Perigona* which is apterous, small-eyed, rufo-testaceous, and small (about 3.0 mm).

PROVISIONAL KEY TO THE GENERA OF TACHYINA
OCCURRING IN THE NEW WORLD²

1.	Elytra impunctate, each with 8 longitudinal carinae extended from near base to apex; pronotum with 5 carinae; head with 3 carinae	Costitachys, new genus
—	Elytra, pronotum, and head without carinae or if elytra are carinate they are also punctate	2
2.	Mentum with 2 deep foveae, each circular or horseshoe shaped	8
—	Mentum without deep foveae, but with or without shallow bilateral depressions	3
3(2).	Anterior tibia nearly or perfectly truncate apically	4
—	Anterior tibia strongly notched apicolaterally	5
4(3).	Elytral disc without setae Ed 2 through 6; convex beetles	Xystosomus Schaum
—	Elytral disc with setae at Ed 3 and 5; convex or depressed beetles with strongly reflexed pronotal margins	Tachymenis Motschulsky
5(3).	Elytra and abdominal sterna sparsely pubescent, usually rest of surface also; color testaceous to flavotestaceous; head slightly or strongly retracted into pronotum; recurrent groove of elytron absent or barely engraved	6
—	Elytra and abdominal sterna not pubescent; color testaceous to black; head not retracted into pronotum; recurrent groove well marked	7
6(5).	Apical abdominal sternum of both sexes with 4 long setae along posterior margin, lateral setae sickle-shaped	Micratopus Casey
—	Apical abdominal sternum of male with 2 long setae, female with 4 setae, setae straight	Lynnastis Motschulsky
7(5).	Recurrent groove of elytron short, arcuate, and closer to suture than side margin; form convex or subdepressed	Elaphropus Motschulsky
—	Recurrent groove of elytron elongate, straight, and very close to side margin; form depressed	Tachyta Kirby
8(2).	Recurrent groove of elytron elongate, prolonged anteriorly beyond setae Ed 6 then curved posteriorly in the form of a hook	9
—	Recurrent groove of elytron short, arcuate, and not prolonged beyond seta Ed 6, or elongate and close to side margin	10

² See Erwin (1974) for discussion of the term interneur.

- 9(8). Elytral interneur 8 subsulcate posterior to middle with apical portion of sulcus bent medially just posterior of Eo 5 and 6; recurrent groove hooked around Ed 6 *Paratachys* Casey
- Elytral interneur 8 subsulcate but not bent medially near Eo 5 and 6; recurrent groove hooked into Ed 6 or effaced laterad of Ed 6 *Tachys* Stephens
- 10(8). Pronotum without hind angles, form pedunculate; interneur 8 absent externally *Liotachys* Bates
- Pronotum with hind angles, or at least form not at all pedunculate; interneur 8 entire, or present at least anteriorly and/or posteriorly 11
- 11(10). Recurrent groove elongate and very close and parallel to side margin *Porotachys* Netolitzky
- Recurrent groove absent, almost effaced, or short, arcuate, and well-engraved and nearer the suture than to side margin or at least not parallel to side margin 12
- 12(11). Elytral interneurs punctate or sulcate-striate 13
- Elytral interneurs effaced or very shallowly striate, form small and depressed or subdepressed; color testaceous to flavous .. *Polyderis* Motschulsky
- 13(12). Elytral interneur 8 with posthumeral foveae or fovea, usually at basal fourth or middle OR elytron with 8 entirely punctate interneurs *Pericompsus* Leconte
- Elytral interneur 8 without foveae nor elytron with more than 5 interneurs externally visible *Meotachys*, new genus

Genus *Costitachys* Erwin, new genus

Type-species: *Costitachys inusitatus*, new species, here designated.

Description: Form (Fig. 1): Broad and subdepressed. Easily recognized from other Tachyina by the carinae of the head, pronotum, and elytra.

Color: Flavotestaceous throughout, antennae slightly paler.

Head: Clypeus and dorsum of head with 3 longitudinally oriented carinae; 1 supra-orbital seta per eye; eyes micro-setiferous; mentum without foveae, with minute tooth along anterior margin; antennae short, extended to base of prothorax, and articles pubescent from 2-11.

Prothorax: With 5 longitudinally oriented carinae; without setae at base or along lateral margin; tibia obliquely notched apically.

Mesothorax: Elytron with 8 longitudinally oriented carinae, sixth continuous with rounded humeral margin; marginal explanation nonsetulose and nonserrate; recurrent groove absent; chaetotaxy formula Eo 1a, 2a, 3a, 4a, 5c, 6b, 7, 8a; Ed 1, 7b.

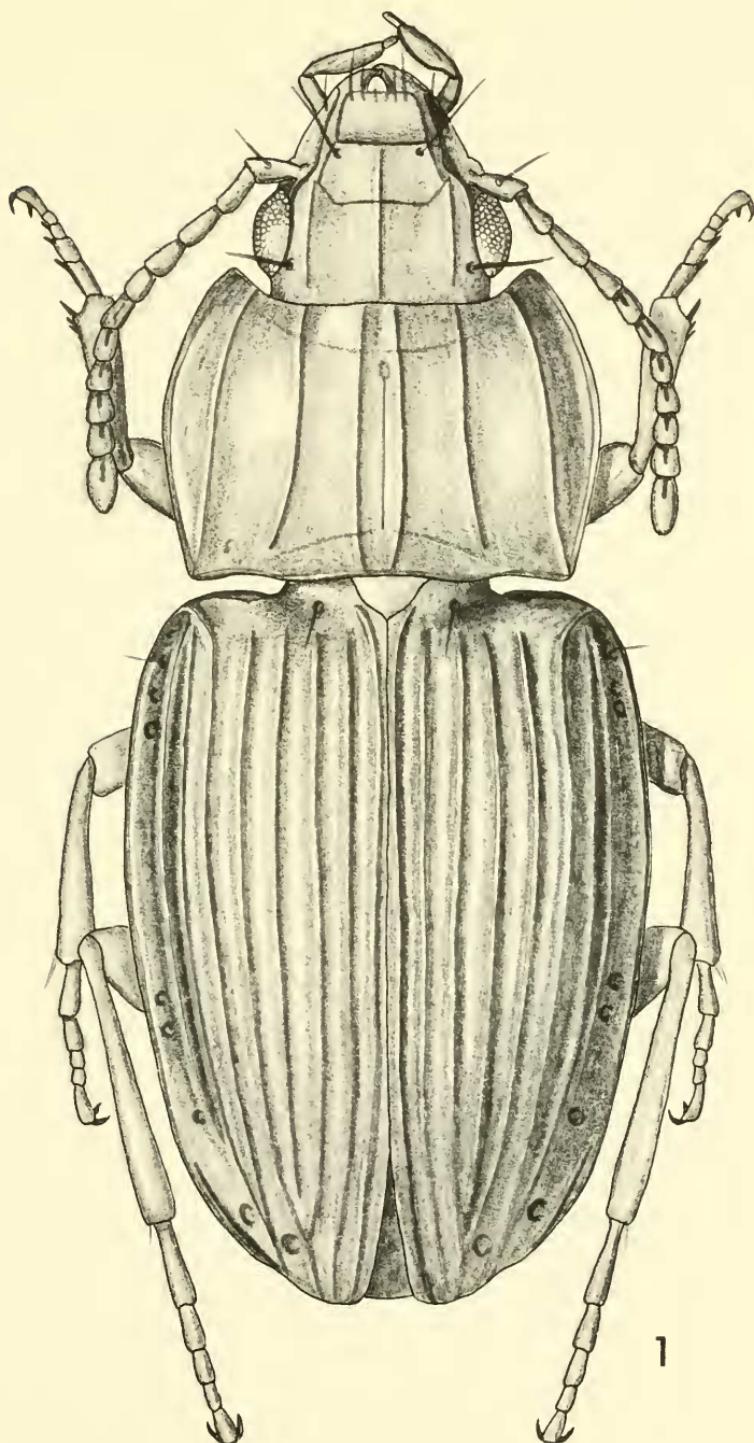
Abdomen: Last visible sternum of female with 2 setigerous pores; male unknown.

Size: Length, 2.60 mm; width, 1.12 mm.

Distribution: Known only from the type locality of Santarem, Pará, Brazil.

Discussion: Though I have seen only one female specimen, the characteristics are so remarkable in comparison with the world Tachyina

Fig. 1. Habitus of *Costitachys inusitatus*, female, Santarem, Brazil.



that I feel fully justified in describing the new species and erecting the new genus.

Etymology: Latin, *costa*, meaning rib and referring to the longitudinal carinae of the head, pronotum, and elytra; plus *Tachys*, the nominate genus of the subtribe, hence the *Tachys* with ribs.

Costitachys inusitatus Erwin, new species

Fig. 1

Type-specimen: The holotype female is in MCZ; it was collected by F. G. Werner in April, 1963.

Type-locality: Santarem, Pará, Brazil.

Description: Form (Fig. 1): Broad and subdepressed.

Color, head, prothorax, mesothorax, abdomen, and size as described under generic description.

Distribution: Known only from the type locality of Santarem, Pará, Brazil.

Etymology: Latin, *inusitatus*, meaning unusual and referring to the bizarre structure of the dorsal surface of these beetles in relation to other Tachyina.

Genus *Meotachys* Erwin, new genus

Fig. 2

Type-species: *Tachys amplicollis* Bates, 1882:142, here designated.

Description: Form (Fig. 2): Broad and convex or subdepressed. Easily recognized from other Tachyina by the foveate mentum, short arcuate recurrent groove on the elytral apex, and the medially deflected anterior apex of the posterior section of interneur 8 between Eo setae 5 and 6. In addition the females have 4 setigerous pores arranged in a straight row across abdominal sternum V.

Color: Testaceous, rufotestaceous, or flavous with paler appendages than body. I have specimens of 1 undescribed species with piceous elytra and rufous head and pronotum.

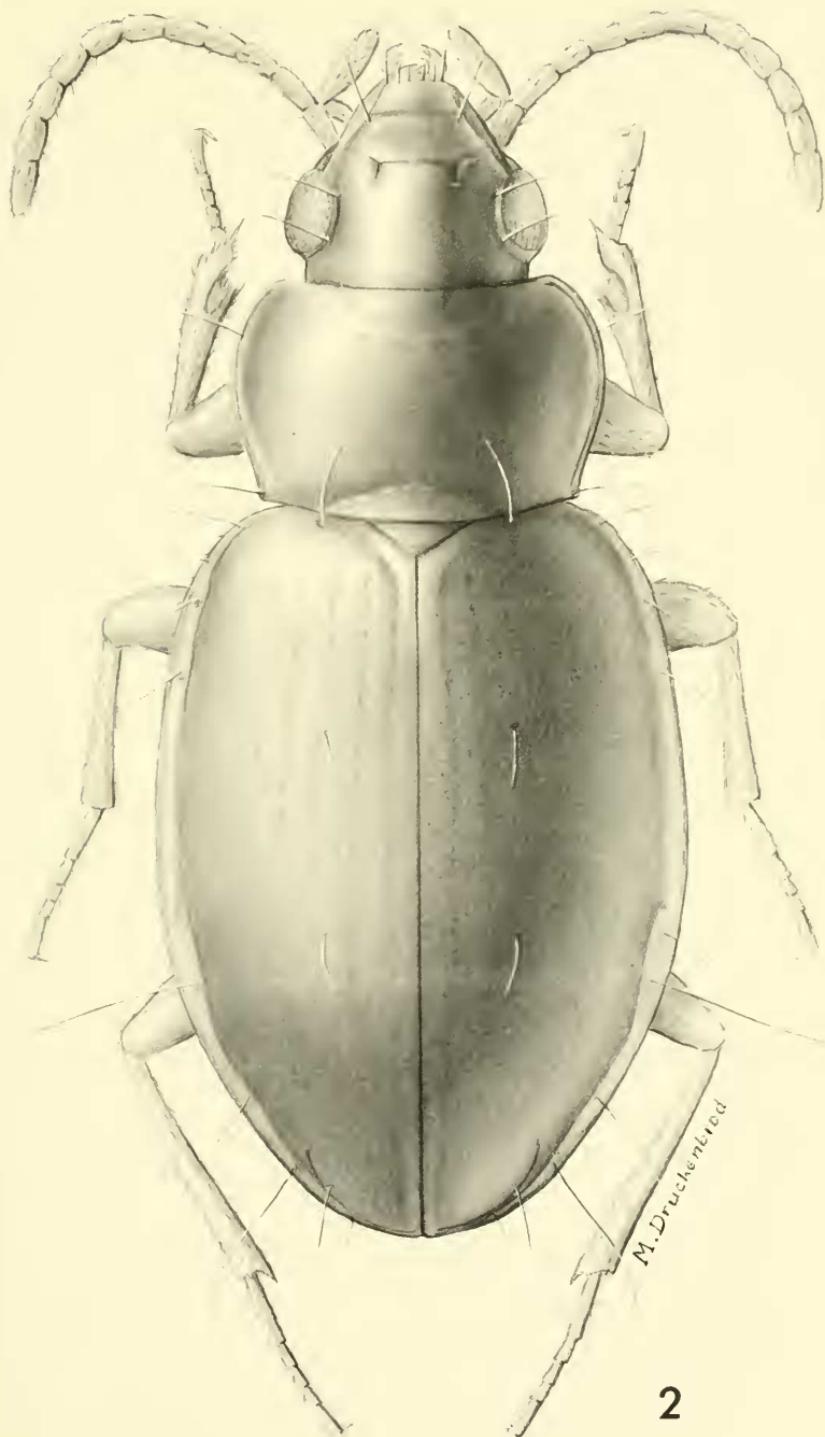
Head: Frontal furrows short and foveate or elongate and extended behind eyes; antennae elongate, extended beyond humerus; mentum bifoveate, anterior edge entire; antennal pubescence on apical half of article 2 and on all of articles 3-11.

Prothorax: Prosternum glabrous; tibia with obliquely notched apex; pronotum with punctate or smooth basal transverse impression.

Mesothorax: Elytra with punctate-striate or striate interneurs; recurrent groove short, arcuate, and extended anteriorly just past Ed seta 7a; chaetotaxy formula Eo 1a, 2b, 3a, 4c, 5b, 6a, 7, 8a, Ed. 1, 3, 5b, 7a, 8; plica present.

Abdomen: Sterna III and IV with or without accessory setae in addition to the regular ambulatory setae; sternum V with short scattered setae, male also with 2 long setae, female with 4 long setae arranged in a transverse row.

Fig. 2. Habitus of *Meotachys amplicollis*, female, El Palmar, Veracruz, Mexico.



Secondary sexual characteristics: Besides the setae of sternum V mentioned above, the males have the probasitarsus dilated medially and the dilation is spini-form, beneath which is a small pad of squamate setae.

Size: Length, 1.5 to 4.6 mm; width, 0.7 to 1.6 mm.

Distribution: The combined ranges of the species known to me at this time extend from Nayarit and San Luis Potosi States in Mexico south to Matto Grosso State in Brazil.

Discussion: Besides the eight species listed herein, I have studied 11 undescribed species. The genus is poorly represented in collections and it is possible that special collecting techniques are necessary to find these beetles. The largest nonriparian series I have seen came from litter (W. L. Brown, collector) or Berlese samples (J. M. Campbell, collector).

Etymology: Latin, *meatus*, meaning way, path, passage, referring to the foveae of the mentum as passages into the head, plus *Tachys*, the nominate genus of the subtribe.

LIST OF GENERIC AND SPECIES-GROUP NAMES OF NEW WORLD TACHIYINA

[*BARYTACHYS* Chaudoir, see *Elaphorpus*.]

[*BLEMUS* LeConte, see *Micratopus*.]

Costitachys Erwin

Costitachys Erwin (see above). Type-species: *Costitachys inusitatus* Erwin (see above); by original designation and monotypy.

COSTITACHYS INUSITATUS Erwin

Costitachys inusitatus Erwin (see above). Holotype, a female, in MCZ. Type-locality: Santarem, Pará, Brazil.

Elaphropus Motschulsky

Elaphropus Motschulsky, 1839:73. Type-species: *Elaphropus caraboides* Motschulsky, 1862:74; by monotypy.

Tachylopha Motschulsky, 1862:27. Type-species: *Lopha ovata* Motschulsky, 1851:509; by monotypy.

Tachyura Motschulsky, 1862:27. Type-species: *Elaphrus quadrisignatus* Duftschmidt, 1812:205; subsequent designation by Jeannel, 1941:434.

Barytachys Chaudoir, 1868:213. Type-species: *Bembidium incurvum* Say, 1834:440; subsequent designation by Jeannel, 1941:434.

Sphaerotachys G. Müller, 1926:95. Type-species: *Bembidium haemorrhoidale* Dejean, 1831:58; by monotypy. The subsequent designation by Jeannel (1941:434) was unnecessary.

Trepanotachys Alluaud, 1933:17. Type-species: *Bembidium haemorrhoidalis* Dejean, 1831:58; original designation. Objective junior synonym of *Sphaerotachys* G. Müller.

Tachyphanes Jeannel, 1946:362. Type-species: *Bembidium amabile* Dejean, 1831:45; original designation.

[*ELAPHROPUS APACHEANA* (Casey), see *Elaphropus dolosus*.]

ELAPHROPS ANCEPS (LeConte), new combination

Tachys anceps LeConte, 1848:470. Lectotype, a female, here designated, in MCZ, No. 5583. Type-locality: Nebraska.

[*ELAPHROPS ANCILLA* (Casey), see *Elaphropus xanthopus*.]

ELAPHROPS ANTHRAX (LeConte), new combination

Tachys anthrax LeConte, 1851:192. Lectotype, a male, here designated, in MCZ, No. 5580. Type-locality: San Diego, California.

[*ELAPHROPS BARNESI* (Stehr), see *Elaphropus tripunctatum*.]

ELAPHROPS BREVIS (Casey), new combination

Tachyura brevis Casey, 1918:182. Lectotype, a female, here designated, in USNM, No. 46918. Type-locality: Fort Monroe, Virginia. This is not the same species as *E. granarius* (Dejean) as supposed by Lindroth, 1966:414.

ELAPIROPS BRUNNICOLLIS (Motschulsky), new combination

Tachyura brunnicollis Motschulsky, 1862:28. Lectotype, sex undetermined, here designated, in MMM. Type-locality: Mobile, Alabama.

Barytachys gemellus Casey, 1884:71. Lectotype, a female, here designated, in USNM, No. 46916. Type-locality: Cape May, New Jersey. New synonymy.

Tachys subpunctatus Blatchley, 1924:164. Holotype probably at Purdue University, not seen. Type-locality: Dunedin, Florida. From the description and material in the USNM I believe *T. subpunctatus* to be the same as *E. brunnicollis*. New synonymy.

ELAPIROPS CEYLANICUS (Nietner), new combination

Bembidium ceylanicus Nietner, 1858:423. Types in Berlin Zoological Museum according to Darlington (1962:446). Type-locality: Ceylon.

Tachys mucescens Blackburn, 1878:158. Lectotype, a female, here designated, in BMNH. Type-locality: Honolulu, Hawaii. Britton, 1948:239.

ELAPHROPS COCKERELLI (Fall), new combination

Tachys cockerelli Fall, 1907:218. Lectotype, a female, here designated, in MCZ, No. 23871. Type-locality: Romeroville, New Mexico.

ELAPHROPS CONGENER (Casey), new combination

Tachyura congener Casey, 1918:181. Lectotype, a female, here designated, in USNM, No. 46914. Type-locality: Austin, Texas. Lindroth (1966:417) synonymized this with *E. anceps* LeConte, but the species are clearly different.

ELAPROPS CONJUGENS (Notman), new combination

Tachys conjugens Notman, 1919:229. Types probably in Staten Island Museum, New York, not seen. Type-locality: Rincon Mountains, Arizona. This is the first available name for Hayward's unavailable junior primary homonym, *Tachys trechiformis*.

Tachys trechiformis Hayward, 1900:216. Lectotype, a male, here designated, in MCZ, No. 7051. Type-locality: Verde River, Arizona. This name is a junior primary homonym of *Tachys trechiformis* Jordan.

Tachys trechooides Csiki, 1928:201. New name for *T. trechiformis* Hayward not Jordan, however Jordan's species belongs to genus *Paratachys* Casey.

ELAPHROPS CRUCIATUS (Chaudoir), new combination

Tachys cruciatus Chaudoir, 1868:214. Lectotype, a male, here designated, in MHNP. Type-locality: Panama, from the type label and listed second by Chaudoir.

ELAPHROPS DOLOSUS (LeConte), new combination

Tachys dolosus LeConte, 1848:470. Lectotype, a female, here designated, in MCZ, No. 5584. Type-locality: Rocky Mountains.

Tachys rapax LeConte, 1851:192. Lectotype, a male, here designated, in MCZ, No. 5586. Type-locality: Gila River, Arizona. New synonymy.

Tachys audax LeConte, 1851:193. Lectotype, a female, here designated, in MCZ, No. 5585. Type-locality: Colorado River, Arizona. New synonymy.

Tachyura apacheana Casey, 1918:184. Lectotype, a male in USNM, No. 46922. Type-locality: Riverside, Arizona. New synonymy.

ELAPHROPIUS FATUUS (Casey), new combination

Tachyura fatua Casey, 1918:187. Lectotype, a male, here designated, in USNM, No. 46930. Type-locality: Lake Worth, Florida.

ELAPHROPIUS FERRUGINEUS (Dejean), new combination

Bembidium ferrugineum Dejean, 1831:59. Holotype apparently lost; specimen labelled as type in MHNP does not fit Dejean's description (see also Lindroth, 1955:14, 1966:423, 424). Type-locality: Iowa City, Iowa, designated by Lindroth, 1966:423.

Tachys ovipennis Chaudoir, 1868:215. Lectotype, sex undetermined, here designated, in MHNP. Type-locality: Amerique septentrionale. Lindroth, 1966:423.

[**ELAPHROPIUS FRACTA** (Casey), see *Elaphropus rubicauda*.]

ELAPHROPIUS FUSCICORNIS (Chaudoir), new combination

Tachys fuscicornis Chaudoir, 1868:214. Lectotype, a female, here designated, in MHNP. Type-locality: Louisiana.

[**ELAPHROPIUS GAUDENS** (Casey), see *Elaphropus rubicauda*.]

[**ELAPHROPIUS GEMELLUS** (Casey), see *Elaphropus brunnicollis*.]

[**ELAPHROPIUS GLOSSEMA** (Casey), see *Elaphropus granarium*.]

ELAPHROPIUS GRANARIUS (Dejean), new combination

Bembidium granarium Dejean, 1831:61. Holotype, a male, in MHNP. Type-locality: Mt. Washington, New Hampshire, designated by Lindroth, 1966:414.

Barytachys glossema Casey, 1884:70. Lectotype, a male, here designated, in USNM, No. 46917. Two-locality: Philadelphia, Pennsylvania. Casey (1918:182) recognized the synonymy, and it was confirmed by Hayward (1900:233) and Lindroth (1966:414). I fully agree.

ELAPHROPIUS INCURVUS (Say), new combination

Bembidium incurvum Say, 1834:440. Neotype, designated by Lindroth and Freitag (1969:338) in MCZ. Type-locality: Indiana.

Tachyura parallela Casey, 1918:182. Lectotype, a female, here designated, in USNM, No. 46915. Type-locality: Boston Neck, Rhode Island. Lindroth, 1966: 416.

Tachys rhodensis Csiki, 1928:195. New name for *T. parallela* Casey not Mot-schulsky.

[**ELAPHROPIUS LAETIFICA** (Casey), see *Elaphropus vernicata*.]

[**ELAPHROPIUS LAREDOANA** (Casey), see *Elaphropus tripunctatum*.]

ELAPHROPIUS LEVIPES (Casey), new combination

Tachyura levipes Casey, 1918:186. Lectotype, a male, here designated, in USNM, No. 46927. Type-locality: Long Island, New York. Lindroth (1966:420) wrongly synonymized this with *T. xanthopus* Dejean.

ELAPHROPIUS LIEBECKI (Hayward), new combination

Tachys liebecki Hayward, 1900:207. Lectotype, a male, here designated, in MCZ, No. 7049. Type-locality: Texas.

ELAPHROPS MELLITUS (Casey), new combination

Tachyura mellita Casey, 1918:176. Lectotype, a female, here designated, in USNM, No. 46907. Type-locality: Tepehuanes, Durango, Mexico.

ELAPHROPS MICROSPILUS (Bates), new combination

Tachys microspilus Bates, 1882: 142. Lectotype, a male, here designated, in BMNH. Type-locality: San Geronimo, Guatemala.

ELAPIROPS MONTICOLA (Casey), new combination

Tachyura monticola Casey, 1918:179. Lectotype, a male, here designated, in USNM, No. 46910. Type-locality: Jemez Springs, New Mexico.

ELAPIROPS MUNDULUS (Bates), new combination

Tachys mundulus Bates, 1882:141. Lectotype, a male, here designated, in BMNH. Type-locality: Cordoba, Mexico.

ELAPHROPS NEBULOSUS (Chaudoir), new combination

Tachys nebulosus Chaudoir, 1868:214. Lectotype, a female, here designated, in MHNP. Type-locality: Louisiana. Lindroth (1966:417) wrongly synonymized this with *T. anceps* LeConte.

Tachyura solita Casey, 1918:178. Lectotype, a female, here designated, in USNM, No. 46908. Type-locality: Galveston, Texas. New synonymy.

Tachyura soror Casey, 1918:179. Lectotype, a female here designated, in USNM, No. 46909. Type-locality: Austin, Texas. New synonymy.

ELAPIROPS OBESULUS (LeConte), new combination

Tachys obesulus LeConte, 1851:192. Lectotype, a female, here designated, in MCZ, No. 5581. Type-locality: Valley of the Gila River, Arizona.

ELAPIROPS OBTUSELLUS (Bates), new combination

Tachys obtusellus Bates, 1882:141. Lectotype, a female, here designated, in BMNH. Type-locality: Vera Cruz, Mexico.

ELAPHROPS OCCULTUS (LeConte), new combination

Tachys occultus LeConte, 1848:470. Lectotype, a male, here designated, in MCZ, No. 5582. Type-locality: Georgia. Hayward (1900:233) and Lindroth (1966:414) wrongly synonymized this with *T. granarius* Dejean.

[**ELAPHROPS PARALLELA (Casey), see *Elaphropus incurvus*.**]

ELAPHROPS PARVULUS (Dejean), new combination

Bembidium parvulum Dejean, 1831:57. Lectotype, a male, here designated, in MHNP. Type-locality: Spain. This European species has been introduced into western Washington.

ELAPIROPS PERICALLIS (Bates), new combination.

Tachys pericallis Bates, 1882:141. Lectotype, a male, here designated, in BMNH. Type-locality: Rio Naranjo, Guatemala.

[**ELAPHROPS PROFUGA (Casey), see *Elaphropus sedula*.**]

ELAPHROPS PURGATUS (Bates), new combination

Tachys purgatus Bates, 1882:142. Lectotype, a male, here designated, in BMNH. Type-locality: Puebla, Mexico.

ELAPIROPS RENOICUS (Casey), new combination

Tachyura renoica Casey, 1918:183. Lectotype, a female, here designated, in USNM, No. 46920. Type-locality: Reno, Nevada.

ELAPIROPS RUBICAUDA (Casey), new combination

Tachyura rubricauda Casey, 1918:186. Lectotype, a female, here designated, in USNM, No. 46928. Type-locality: Galveston, Texas, named in the first place.

Tachyura fracta Casey, 1918:188. Lectotype, a male, here designated, in USNM, No. 46932. Type-locality: Waco, Texas, named in the first place. New synonymy.

Tachyura gaudens Casey, 1918:188. Lectotype, a male, here designated, in USNM, No. 46933. Type-locality: Valley of the Rio Grande between Brownsville and El Paso. New synonymy.

ELAPHROPIUS SATURATUS (Casey), new combination

Tachyura saturata Casey, 1918:187. Lectotype, a female, here designated, in USNM, No. 46931. Type-locality: Asheville, North Carolina.

ELAPHROPIUS SECTOR (Casey), new combination

Tachyura sectator Casey, 1918:180. Lectotype, a male, here designated, in USNM, No. 46911. Type-locality: Provo, Utah.

Tachyura sectator sospes Casey, 1918:180. Lectotype, a female, here designated, in USNM, No. 46912. Type-locality: Arizona. New synonymy.

ELAPHROPIUS SEDULUS (Casey), new combination

Tachyura sedula Casey, 1918:184. Lectotype, a female, here designated, in USNM, No. 46923. Type-locality: Santa Cruz, California, named in the first place.

Tachyura profuga Casey, 1918:185. Lectotype, a female, here designated, in USNM No. 46924. Type-locality: Reno, Nevada. New synonymy.

[**ELAPHROPIUS SOLITA** (Casey), see *Elaphropus nebulosus*.]

[**ELAPHROPIUS SOROR** (Casey), see *Elaphropus nebulosus*.]

ELAPHROPIUS TAHOENSIS Casey, new combination

Tachyura tahoensis Casey, 1918:183. Holotype, a female, in USNM, No. 46921. Type-locality: Lake Tahoe, California. Casey (1918:183) mentions he saw only one specimen.

[**ELAPHROPIUS SERVA** (Casey), see *Elaphropus tripunctatum*.]

ELAPHROPIUS TRIPUNCTATUS (Say), new combination

Bembidium tripunctatum Say, 1834:439. Neotype, designated by Lindroth and Freitag (1969:338), in MCZ. Type-locality: Indiana.

Tachyura serva Casey, 1918:189. Holotype, a female, in USNM, No. 46935. Type-locality: Bluff Point, Lake Champlain, New York. New synonymy.

Tachyura laredoana Casey, 1918:189. Holotype, a female, in USNM, No. 46934. Type-locality: Laredo, Texas. New synonymy.

Tachyura barnesi Stehr, 1946:284. Type not seen, probably in Ohio State University Collection; the description is good and there can be no doubt this is *E. tripunctatum* (Say). Type-locality: Muskingum River, Muskingum township, Washington County, Ohio. New synonymy.

ELAPHROPIUS TRITAX (Darlington), new combination

Tachys tritax Darlington, 1935:175. Holotype, a male, in MCZ, No. 22015. Type-locality: Camp Perrin, Haiti.

[**ELAPHROPIUS UNIONIS** (Csiki), see *Elaphropus vernicata*.]

ELAPHROPIUS UNISTRATIATUS (Bilimek), new combination

Bembidiou unistriatum Bilimek, 1867:902. Location of type unknown. Type-locality: Cueva Cacahuamilpa, Mexico. Bolívar y Pieltain and Hendrichs (1965) recognized this as a Tachyina and placed it in *Tachyura*.

ELAPHROPIUS VERNICATUS (Casey), new combination

Tachyura vernicata Casey, 1918:181. Lectotype, a female, here designated, in USNM, No. 46913. Type-locality: Probably Indiana. Lindroth (1966:417) wrongly synonymized this with *T. aueeps* LeConte.

Tachyura laetifica Casey, 1918:183. Lectotype, a female, here designated, in

USNM, No. 46919. Type-locality: St. Louis, Missouri. Lindroth (1966:419) regarded this as a separate species from *E. anceps* and with him I agree. However, since *E. vernicata* is not a synonym of *E. anceps*, but rather is a synonym of *E. laetifica*, *E. vernicata* has seniority.

Tachyura unionis Csiki, 1928:202. New name for *T. laetifica* Casey not Bates.

ELAPHROPIUS VIVAX (LeConte), new combination

Tachys vivax LeConte, 1848:468. Lectotype, a male, here designated, in MCZ, No. 5578. Type-locality: Rocky Mountains.

Tachys mendax LeConte, 1848:469. Lectotype, a female, here designated, in MCZ, No. 5589. Type-locality: New England, named in the first place. Casey (1918:185) and Hayward (1900:233) regarded this taxon wrongly as conspecific with *E. xanthopus* (Dejean) while Chaudoir (1868:215) regarded it wrongly as conspecific with *E. ferrugineus* (Dejean). New synonymy.

Tachys capax LeConte, 1863:20. Lectotype, a female, here designated, in MCZ, No. 5579. Type-locality: Washington, D. C. New synonymy.

ELAPHROPIUS XANTHOPUS (Dejean), new combination

Bembidium xanthopus Dejean, 1831:60. Lectotype, a male, here designated, in MHNP. Type-locality: Long Island, New York designated by Lindroth (1966: 420).

Tachyura xanthopus laxipennis Casey, 1918:185. Holotype, a female, in USNM, No. 46925. Type-locality: Boston Neck, Rhode Island. New synonymy.

Tachyura xanthopus famelica Casey, 1918:185. Holotype, a male, in USNM, No. 46926. Type-locality: Boston Neck, Rhode Island. New synonymy.

Tachyura ancilla Casey, 1918:186. Lectotype, a female, here designated, in USNM, No. 46929. Type locality: Southern Pines, North Carolina.

ELAPHROPIUS YUNAX (Darlington), new combination

Tachys yunax Darlington, 1939:87. Holotype, a male in MCZ, No. 23509. Type-locality: Sanchez, Dominican Republic.

[*EOTACHYS* Jeannel, see *Paratachys*.]

[*ISOTACHYS* Casey, see *Tachys*.]

Liotachys Bates

Liotachys Bates, 1871b:267. Type-species: *Liotachys antennatus* Bates, 1871b: 268, by monotypy.

LIOTACHYS ANTENNATUS Bates

Liotachys antennatus Bates, 1871b:268. Lectotype, a female, here designated, in MHNP. Type-locality: Santarem, Brazil (on the Amazon).

Lymnastis Motschulsky

Lymnastis Motschulsky, 1862:27. Type-species: *Lymnaeum nidicus* Motschulsky, 1851:507; subsequent designation by Jeannel (1932:170).

Paralimnastis Jeannel, 1932:176. Type-species: *Limnastis swaluwenbergi* Jeannel, 1932:176; by monotypy and original designation. New synonymy.

Limnastis, auct.

LYMNASTIS AMERICANA Darlington

Limnastis americanus Darlington, 1934:83. Holotype, a male, in MCZ, No. 19504. Type-locality: Soledad, Cuba.

[*LYMNASTIS CAPITO* Bates, see *Polyderis capito*.]

LYMNASTIS SWALUWENBERGI Jeannel

Limnastis swaluwenbergi Jeannel, 1932:176. Holotype, sex undetermined because of specimen condition, in MHNP. Type-locality: Honolulu, Oahu, Hawaii.

Meotachys Erwin

Meotachys Erwin (see above). Type species: *Tachys amplicollis* Bates, 1882: 142; by original designation.

MEOTACHYS AMPLICOLLIS (Bates), new combination

Tachys amplicollis Bates, 1882:142. Lectotype, a female, here designated, in BMNH. Type-locality: Teapa, Mexico.

MEOTACHYS INSULARUM (Bates), new combination

Tachys insularum Bates, 1884:288. Lectotype, a male, here designated, in BMNH. Type-locality: San Miguel, Pearl Islands, Panama.

MEOTACHYS FRATERCULUS (Bates), new combination

Tachys fraterculus Bates, 1871b:268. Holotype, a female, in MHNP. Type-locality: Santarem, Brazil.

MEOTACHYS JANSONI (Bates), new combination

Tachys jansoni Bates, 1882:143. Lectotype, a female, here designated, in BMNH. Type-locality: Chontales, Nicaragua.

MEOTACHYS PLATYDERUS (Bates), new combination

Tachys platyderus Bates, 1871b:268. Lectotype, a female, here designated, in MHNP. Type-locality: Santarem, Brazil, according to the label of the type.

MEOTACHYS RUFULUS (Motschulsky), new combination

Tachyura rufula Motschulsky, 1862:28. Lectotype, sex undetermined, here designated, in MMM. Type-locality: Obispo, Panama.

MEOTACHYS SQUIRESI (Bates), new combination

Tachys squiresi Bates, 1871b:269. Holotype, a female, in MHNP. Type-locality: Rio Janeiro, Brazil.

MEOTACHYS SULCIPENNIS (Bates), new combination

Tachys sulcipennis Bates, 1871b:269. Holotype, a female, in MHNP. Type-locality: Ega (Tefé), Brazil.

Micratopus Casey

Micratopus Casey, 1914:42. Type-species: *Micratopus fusciceps* Casey, 1914: 43; by monotypy.

Blemus LeConte, 1848:473. Type-species: *Blemus aenescens* LeConte, 1848: 473; by monotypy. *Blemus* was preoccupied by *Blemus* Stephens at the time of LeConte's citation of *Blemus* Dejean, a *nomen nudum*. LeConte, in effect, became the author of Dejean's concept, but by that time Stephens had used the name for something else.

MICRATOPUS AENESCENS (LeConte)

Blemus aenescens LeConte, 1848:473. Lectotype, a female, here designated, in MCZ, No. 5577. Type-locality: Georgia.

Micratopus fusciceps Casey, 1914:43. Lectotype, sex undetermined, here designated, in USNM, No. 46973. Type-locality: Vicksburg, Mississippi. Barr, 1971: 34.

[*MICRATOPUS FUSCICEPS* Casey, see *Micratopus aenescens*.]

MICRATOPUS INSULARIS Darlington

Micratopus insularis Darlington, 1934:86. Holotype, sex undetermined, in USNM. Type-locality: San Juan, Puerto Rico.

MICRATOPUS PARVICEPS Darlington

Micratopus parviceps Darlington, 1934:85. Holotype, sex undetermined, in USNM. Type-locality: Jatibonico, Cuba.

MICRATOPUS WITHYCOMBEI Jeannel

Micratopus withycombei Jeannel, 1932:168. Lectotype, a female, here designated, in BMNH. Type-locality: Sainte-Augustine, Trinidad.

MICRATOPUS EXIGUUS (R. F. Sahlberg), new combination

Bembidium exiguum R. F. Sahlberg, 1844a:54. Lectotype, probably female, here designated, in ZMHF. Type-locality: Petropolis, Brazil, from the label. This species was listed in Coleopterorum Catalogus as occurring in Ochotsk, Siberia. Sahlberg did not give a locality in his original description, although the carabid species described were supposed to have come from Ochotsk, Siberia (Sahlberg, 1844:3). The specimen labelled "*B. exiguum*" in ZMHF fits the Sahlberg description quite well and I have no doubt that this specimen is what Sahlberg described. How then can we explain the labels "Petropolis, Brazil" and the fact that the species represented is South America, not Siberian? During 1844, Sahlberg also wrote an article describing Brazilian Carabidae (Sahlberg, 1844b). I believe he placed the *B. exiguum* description in his Siberian work, when it should have been in the Brazilian paper.

[*MICROTACHYS* Casey, see *Polyderis*.]

[*MOOPTACHYS* Bates, see *Tachymenis*.]

[*NEOTACHYS* Kult, see *Polyderis*.]

[*PARALIMNASTIS* Jeannel, see *Lynnastis*.]

Paratachys Casey

Paratachys Casey, 1918:174. Type-species: *Paratachys austiniicus* Casey, 1918: 174; by original designation.

Eotachys Jeannel, 1941:426. Type-species: *Elaphrus bistrigatus* Duftschmidt, 1812:205; by original designation. Erwin, 1971:236.

PARATACHYS ABRUPTUS (Darlington), new combination

Tachys abruptus Darlington, 1934:80. Holotype, a male, in AMNH. Type-locality: Gourbeyre, Guadeloupe. I have seen the two paratypes in MCZ, No. 19496, but not the holotype.

PARATACHYS AENEIPENNIS (Motschulsky), new combination

Tachys aeneipennis Motschulsky, 1862:29. Lectotype, a male, here designated, in MMM. Type-locality: Mobile, Alabama.

PARATACHYS AEQUINOCTIALIS (Motschulsky), new combination

Polyderis aequinoctialis Motschulsky, 1862:33. Lectotype, sex undetermined because of specimen condition, here designated, in MMM. Type-locality: Panama.

PARATACHYS ALBIPES (LeConte), new combination

Tachys albipes LeConte, 1863:20. Lectotype, a male, here designated, in MCZ, No. 5575. Type-locality: Louisiana.

Tachys putzeyi Fleutiaux and Sallé, 1889:368. Lectotype, a female, here designated, in MHNP. Type-locality: Camp Jacob, Guadeloupe. New synonymy.

PARATACHYS ARCANICOLA (Blackburn), new combination

Tachys arcanicola Blackburn, 1878:158. Lectotype, a male, here designated, in BMNH. Type-locality: Oahu, Hawaii.

PARATACHYS AUSTINICUS Casey

Paratachys austiniicus Casey, 1918:174. Lectotype, a female, here designated, in USNM, No. 46905. Type-locality: Austin, Texas.

PARATACHYS BEAUMONTI (Casey), new combination

Tachys beaumonti Casey, 1918:196. Lectotype, a male, here designated, in USNM, No. 46941. Type-locality: Colón, Panama.

PARATACHYS BONARIENSIS (Steinheil), new combination

Tachys bonariensis Steinheil, 1869:247. Lectotype, a badly damaged male, here designated, in MHNP. Type-locality: Buenos Aires, Argentina.

PARATACHYS CARIB (Darlington), new combination

Tachys carib Darlington, 1935:176. Holotype, a male, in MCZ, No. 22017. Type-locality: Ennery, Haiti.

PARATACHYS CASTANEICOLOR (Bates), new combination

Tachys castaneicolor Bates, 1882:139. Lectotype, a male, here designated, in BMNH. Type-locality: Guatemala (near the city), Guatemala.

PARATACHYS CHIRIQUINUS (Bates), new combination

Tachys chiriquinus Bates, 1882:130. Lectotype, a male, here designated, in BMNH. Type-locality: Volcan de Chiriquí, Panama.

PARATACHYS COLONICUS Casey

Paratachys colonicus Casey, 1918:175. Lectotype, a female, here designated, in USNM, No. 46906. Type-locality: Colón, Panama.

PARATACHIYS COLUMBIENSIS (Hayward), new combination

Tachys columbiensis Hayward, 1900:231. Lectotype, a female, here designated, in MCZ, No. 7054. Type-locality: "Ch-rlotet I. Fla" from the type label.

PARATYCHYS CUBAX (Darlington), new combination

Tachys cubax Darlington, 1934:78. Holotype, a male, in MCZ, No. 19500. Type-locality: Soledad, Cuba.

PARATACHYS CYCLODERUS (Bates), new combination

Tachys cycloderus Bates, 1871c:11. Lectotype, a male, here designated, in MHNP. Type-locality: Rio Janeiro, Brazil.

PARATACHYS DELAMAREI (Jeannel), new combination

Etachys delamarei Jeannel, 1962:613. Holotype, a female, in MHNP. Type-locality: "Sierra de San Javier, Parque Aconquija, Argentina, 700m."

PARATACHIYS DIMINUTUS (Bates), new combination

Tachys diminutus Bates, 1871c:11. Lectotype, sex undetermined because of specimen condition, here designated, in MHNP. Type-locality: Santarem, Brazil.

PARATACHIYS DIPLOHARPINUS (Bates), new combination

Tachys diploharpinus Bates, 1878:602. Lectotype, a female, here designated, in BMNH. Type-locality: Chontales, Nicaragua.

PARATACHYS DOMINICANUS (Darlington), new combination

Tachys dominicanus Darlington, 1934:81. Holotype, a male, in AMNH. Type-locality: Long Ditton, Dominica. I have seen the 3 paratypes in MCZ, No. 19497, but not the holotype.

PARATACHYS DROMIOIDES (Bates), new combination

Tachys dromiooides Bates, 1871b:269. Lectotype, a male, here designated, in MHNP. Type-locality: Ega (Tefé), Brazil, from the type label.

PARATACHIYS EDAX (LeConte), new combination

Tachys edax LeConte, 1851:194. Lectotype, a male, here designated, in MCZ, No. 5573. Type-locality: Not given on the label; Gilroy Hot Springs, Santa Clara County, California herewith designated.

PARATACHIYS FILAX (Darlington), new combination

Tachys filax Darlington, 1934:83. Holotype, a female, in USNM. Type-locality: Cayamas, Santa Clara, Cuba.

PARATACHYS FLAVICOLLIS (Motschulsky), new combination

Tachys flavigollis Motschulsky, 1862:28. Lectotype, a female, here designated, in MMM. Type-locality: Obispo, Panama.

Tachys multistriata Motschulsky, 1862:29. Lectotype, a female, here designated, in MMM. Type-locality: ? Panama. Motschulsky (1862:29) noted this was probably a variety of *P. flavigollis*.

PARATACHYS HYALINUS (Casey), new combination

Tachys hyalinus Casey, 1918:200. Lectotype, a female, here designated, in USNM, No. 46946. Type-locality: Austin, Texas.

Tachys temporalis Casey, 1918:200. Lectotype, a female, here designated, in USNM, No. 46947. Type-locality: New York, near the city. New synonymy.

PARATACHYS HYDROPHILUS (Germain), new combination

Bembidium hydrophilus Germain, 1906:616. Jeannel (1962:613) states the "type" is in Museum of Santiago (? University). Type-locality: "Chili central." I have seen specimens in MHNP that Jeannel compared with Germain specimens, but I have not seen type material.

PARATACHYS LAEVIGATUS (Bohemian), new combination

Trechus laevigatus Boheman, 1858:17. Lectotype, a female, here designated, in RMS. Type-locality: Buenos Aires, Argentina.

PARATACHYS LATALATUS (Csiki), new combination

Tachys latalatus Csiki, 1928:185. New name for *T. latipennis* Hayward, not Sharp.

Tachys latipennis Hayward, 1900:277. Lectotype, a male, here designated, in MCZ. Type-locality: San Estaban, Baja California, Mexico. Hayward's *T. latipennis* is a junior primary homonym of *T. latipennis* Sharp (1886:374).

PARATACHYS LIMBATELLUS (Bates), new combination

Tachys limbatellus Bates, 1884:288. Lectotype, a male, here designated, in BMNH. Type-locality: Bugaba, Panama.

PARATACHYS LUGUBRIS (Motschulsky), new combination

Tachys lugubris Motschulsky, 1862:30. Lectotype, sex undetermined because of specimen condition, here designated, in MMM. Type-locality: Obispo, Panama from the type label.

PARATACHYS MINUTISSIMUS (Sahlberg), new combination

Trechus minutissimus Sahlberg, 1844b:514. Lectotype, a female, here designated, in ZMHF. Type-locality: Rio Janeiro, Brazil according to the label on type.

PARATACHYS MONSTICTUS (Bates), new combination

Tachys monstictus Bates, 1871c:11. Lectotype, a female, here designated, in MHNP. Type-locality: Rio Tapajos, Brazil.

PARATACHYS OBLITUS (Casey), new combination

Tachys oblitus Casey, 1918:195. Lectotype, a female, here designated, in USNM, No. 46937. Type-locality: New Jersey.

Tachys cuneatus Casey, 1918:195. Lectotype, a male, here designated, in USNM, No. 46938. Type-locality: New York, near the city. New synonymy.

Tachys cuneatus appalachius Casey, 1918:195. Lectotype, a female, here designated, in USNM, No. 46939. Type-locality: Asheville, North Carolina. New synonymy.

Tachys iowensis Casey, 1918:195. Lectotype, a male here designated, in USNM, No. 46940. Type-locality: Cedar Rapids, Iowa. New synonymy.

Tachys gentilis Casey, 1918:197. Lectotype, a male, here designated, in USNM, No. 46943. Type-locality: ? Indiana. New synonymy.

Tachys obliquus Casey, 1918:201. Lectotype, a female, here designated, in USNM, No. 46949. Type-locality: Willets Point, Long Island, New York. New synonymy.

PARATACHYS PANAMENSIS (Casey), new combination

Tachys panamensis Casey, 1918:194. Lectotype, a female, here designated, in USNM, No. 46936. Type-locality: Colon, Panama.

PARATACHYS PAULAX (Darlington), new combination

Tachys paulax Darlington, 1934:80. Holotype, a male, in USNM. Type-locality: Cayamas, Santa Clara, Cuba.

PARATACHYS PICEOLUS (Laferte), new combination

Tachys piceolus Laferte, 1841:48. Lectotype, a male, here designated, in MHNP. Type-locality: Puerto Rico.

PARATACHYS PROXIMUS (Say), new combination

Bembidium proximum Say, 1823:88. Neotype, designated by Lindroth and Freitag (1969:338), in MCZ. Type-locality: Brookline, Massachusetts, designated by Lindroth (1966:432).

Tachys nubifer Casey, 1918:200. Lectotype, a female, here designated, in USNM, No. 46948. Type-locality: Vicksburg, Mississippi. New synonymy.

PARATACHYS PUMILUS (Dejean), new combination

Bembidium pumilum Dejean, 1831:43. Lectotype, a female, here designated, in MHNP. Type-locality: Amerique septentrionale, as originally given, herewith restricted to New York.

Tachys cornuscus LeConte, 1848:472. Lectotype, a female, here designated, in MCZ, No. 5571. Type-locality: New York, as restricted by Lindroth (1966:435). New synonymy.

PARATACHYS RECTANGULUS (Notman), new combination

Tachys rectangulus Notman, 1919:229. Holotype, a male, in Leng collection, probably in CAS. Type-locality: North America. I have not yet seen the type, however the description clearly indicates the species belongs to *Paratachys*.

PARATACHYS RHODEANUS (Casey), new combination

Tachys rhodeanus Casey, 1918:198. Lectotype, a female, here designated, in USNM, No. 46944. Type-locality: Boston Neck, Rhode Island.

PARATACHYS SAGAX (Casey), new combination

Tachys sagax Casey, 1918:197. Lectotype, a male, here designated, in USNM, No. 46942. Type-locality: Highland Park, Illinois.

PARATACHYS SCITULUS (LeConte), new combination

Tachys scitulus LeConte, 1848:471. Lectotype, a female, here designated, in MCZ, No. 5568. Type-locality: Columbia, Pennsylvania.

Tachys pallescens Casey, 1918:199. Lectotype, a male, here designated, in USNM, No. 46945. Type-locality: Keokuk, Iowa. New synonymy.

PARATACHYS SEQUAX (LeConte), new combination

Tachys sequax LeConte, 1848:472. Lectotype, a female, here designated, in MCZ, No. 5570. Type-locality: Rocky Mountains.

PARATACHYS SPADIX (Casey), new combination

Tachys spadix Casey, 1918:202. Holotype, a male, in USNM, No. 46950. Type-locality: El Paso, Texas.

Tachys laticollis Casey, 1918:202. Holotype, a female, in USNM, No. 46951. Type-locality: Houston, Texas. New synonymy.

PARATACHYS STRIAX (Darlington), new combination

Tachys striax Darlington, 1934:82. Holotype, a male, in MCZ, No. 19502. Type-locality: Soledad, Cuba.

PARATACHYS SUBANGULATUS (Bates), new combination

Tachys subangulatus Bates, 1871c:11. Lectotype, a male, here designated, in MHNP. Type-locality: Rio Janeiro, Brazil.

PARATACHYS TRECHULUS (Darlington), new combination

Tachys trechulus Darlington, 1935:177. Holotype, a male, in MCZ, No. 22018. Type-locality: Blue Mountain Forest Reserve, Jamaica.

PARATACHYS UMBRIPENNIS (Chaudoir), new combination

Tachys umbripennis Chaudoir, 1868:213. Lectotype, a female, here designated, in MHNP. Type-locality: Louisiana, according to label of type. Hayward (1900: 235) wrongly synonymized this with *P. pumilum* Dejean.

PARATACHYS VENTRICOSUS (LeConte), new combination

Tachys ventricosus LeConte, 1863:20. Lectotype, a male, here designated, in MCZ, No. 5574. Type-locality: Louisiana.

Tachys oopterus Chaudoir, 1868:212. Lectotype, a male, here designated, in MHNP. Type-locality: Louisiana. Hayward (1900:227).

PARATACHYS VERNILIS (Casey), new combination

Tachys vernilis Casey, 1918:202. Lectotype, a male, here designated, in USNM, No. 46952. Type-locality: Brownsville, Texas.

PARATACHYS VORAX (LeConte), new combination

Tachys vorax LeConte, 1851:194. Lectotype, a female, here designated, in MCZ, No. 5569. Type-locality: Gila River, Arizona.

[*PERICOMPSUS* LeConte, see Erwin (1974).]

[*POLYDERIDIUS* Jeannel, see *Polyderis*.]

Polyderis Motschulsky

Polyderis Motschulsky, 1862:27. Type-species: *Tachys brevicornis* Chaudoir, 1846:193; subsequent designation by Jeannel, 1941:424.

Microtachys Casey, 1918:210. Type-species: *Bembidium laevum* Say, 1823:88; subsequent designation by Jeannel, 1941:424, Lindroth, 1966:424. Jeannel, 1941: 424.

Neotachys Kult, 1961:2. Type-species: *Tachys algiricus* Lucas, 1846:79; by monotypy and original designation. Lindroth, 1966:424.

Polyderidius Jeannel, 1962:611. Type-species: *Polyderidius rapoporti* Jeannel, 1962:612; original designation. New synonymy.

[*POLYDERIS AEQUINOCTIALIS* Motschulsky, see *Paratachys aequinoctialis*.]

POLYDERIS ANTIGUA Erwin

Polyderis antigua Erwin, 1971:234. Holotype, a female, in Chiapas Amber (Late Oligocene or early Miocene), No. 12974/B-7456, in UCBP. Type-locality: Chiapas, Mexico.

POLYDERIS ATOMA (Blackburn), new combination

Tachys atomus Blackburn, 1878:158. Lectotype, a female, here designated, in BMNH. Type-locality: Oahu, Hawaii.

POLYDERIS CAPITO (Bates)

Lynnastis capito Bates, 1884:287. Lectotype, sex undetermined because of specimen condition, here designated, in BMNH. Type-locality: San Gerónimo, Guatemala. Britton (1948:238) wrongly synonymized this name with *P. atomus*; the two species represented are quite distinct. Erwin, 1971:234.

POLYDERIS CURVANS (Bates), new combination

Tachys curvans Bates, 1882:143. Lectotype, a male, here designated, in BMNH. Type-locality: San Geronimo, Guatemala.

POLYDERIS DIAPHANA (Casey), new combination

Tachys diaphanus Casey, 1918:214. Lectotype, a male, here designated, in USNM, No. 46965. Type-locality: Austin, Texas.

POLYDERIS LAEVIS (Say)

Bembidium laevum Say, 1823:88. Neotype, designated by Lindroth and Freitag (1969:339) in MCZ. Type-locality: Arlington, Massachusetts designated by Lindroth, 1966:426.

Bembidium troglodytes Dejean, 1831:44. Holotype, probably female, in MHNP. Type-locality: Amerique Septentrionale. Dejean mentions a single individual (1831:44). This name was recognized as a synonym early, LeConte, 1848:472.

Tachys congestus Casey, 1918:212. Lectotype, a female, here designated, in USNM, No. 46962. Type-locality: Norfolk, Virginia. New synonymy.

Tachys unistriatus Casey, 1918:212. Lectotype, a male, here designated, in USNM, No. 46963. Type-locality: Pennsylvania. New synonymy.

Tachys flumenalis Casey, 1918:213. Lectotype, a female, here designated, in USNM, No. 46964. Type-locality: Vicksburg, Mississippi. New synonymy.

Tachys rectus Casey, 1918:213. Lectotype, a female, here designated in USNM, No. 46961. Type-locality: Alexandria, Louisiana. New synonymy.

Tachys unistriolatus Csiki, 1928:202. New name for *T. unistriatus* Casey, not Putzeys.

POLYDERIS MINUSCULA Motschulsky

Polyderis minuscula Motschulsky, 1862:36. Lectotype, sex undetermined, here selected in MMM. Type-locality: Obispo, Panama.

POLYDERIS RUFOTESTACEA (Hayward)

Tachys rufotestaceus Hayward, 1900: 217. Lectotype, a male, here designated, in MCZ, No. 7052. Type-locality: Pomona, California, from type labels. Lindroth, 1966:426.

POLYDERIS RAPOPORTI (Jeannel), new combination

Polyderidius rapoporti Jeannel, 1962:612. Holotype missing from MHNP; other authentic specimens present. Type-locality: Serra de San Javier, Parque Aconquija, Argentina (700m).

POLYDERIS TANTILLA (Motschulsky), new combination

Tachys tantilla Motschulsky, 1862:30. Lectotype, sex undetermined, here selected, in MMM. Type-locality: Obispo, Panama.

Porotachys Netolitzky

Porotachys Netolitzky, 1914:174. Type-species: *Trechus bisulcatus* Nicolai, 1822:26; by monotypy.

POROTACHYS BISULCATUS (Nicolai)

Trechus bisulcatus Nicolay, 1822:26. Lindroth (1966) thought the type lost. Type-locality: Halle, Germany.

Tachys frontalis Hayward, 1900:212. Lectotype, a male, here designated, in MCZ, No. 7050. Type-locality: Peekskill, New York. Lindroth, 1966:424.

[SPHAEROTACHYS G. Müller, see *Elaphropus*.]

[TACHYLOPHIA Motschulsky, see *Elaphropus*.]

Tachymenis Motschulsky

Tachymenis Motschulsky, 1862:27. Type-species: *Bembidium flavicaudus* Say, 1823:87; designated by Casey, 1918:220. Jeannel (1941:440) missed Casey's paper and designated *Bembidion nanum* Gyllenhal.

Mioptachys Bates, 1882:144. Type-species: *Mioptachys trechooides*, here designated as this is the first named species Bates mentioned. New synonymy.

TACHYMEMIS AUTUMNALIS (Bates), new combination

Tachyta autumnalis Bates, 1882:137. Lectotype, a male, here designated in BMNH. Type-locality: Cordoba, Vera Cruz, Mexico.

TACHYMEMIS CRUCIGERA (Bates), new combination

Tachyta crucigera Bates, 1871c:12. Lectotype, a male, here designated, in MHNP. Type-locality: Rio Janeiro, Brazil.

TACHYMEMIS CUCUJOIDES (Bates), new combination

Tachyta cucujoides Bates, 1882:138. Lectotype, a male, here designated in BMNH. Type-locality: Belize, Belize.

TACHYMEMIS FLAVICAUDA (Say)

Bembidium flavicaudus Say, 1823:87. Neotype designated by Lindroth and Freitag (1969:339) in MCZ. Type-locality: White Sulphur Springs, West Virginia, as designated by Lindroth (1966:441).

Tachymenis marginicollis Motschulsky, 1862:32. Lectotype, sex undetermined because of specimen condition, here designated, in MMM. Type-locality: New Orleans, Louisiana. Bates (1882) recognized this name as a possible synonym of *T. flavicauda*. Casey (1918) and Lindroth (1966) declared it such, and I agree.

TACHYMEMIS INSULARIS (Darlington)

Xystosomus insularis Darlington, 1939:86. Holotype, a male, in MCZ, No. 23508. Type-locality: Loma Vieja, Dominican Republic. Erwin, 1973a:1.

[**TACHYMEMIS MARGINICOLLIS** Motschulsky, see *Tachymenis flavicauda*.]

TACHYMEMIS MELANIA (Bates), new combination

Tachyta melania Bates, 1871c:12. Lectotype, a male, here designated, in MHNP. Type-locality: Rio Janeiro, Brazil.

TACHYMEMIS NEOTROPICA (Csiki), new combination

Tachys neotropicus Csiki, 1928:189. New name for *Tachys marginicollis* Schaum (1863:89) not Motschulsky.

Tachys marginicollis Schaum, 1863:89. Type series presumed lost. Dr. Hieke of HUB sent me 21 specimens under this name from Schaum collection, however all were pale, not "Niger, subaenens" as Schaum stated, and they were labelled Panama, not Venezuela. The description leaves little doubt that *Tachymenis* is the correct genus however.

TACHYMEMIS NOCTIS (Darlington), new combination

Tachys noctis Darlington, 1935:174. Holotype, a male, MCZ No. 22014. Type-locality: Rocke Croix, Massif de la Hotte, Haiti.

TACHYMEMIS OCULARIS Casey

Tachymenis oocularis Casey, 1918:222. Lectotype, a female, here designated, in USNM, No. 46972. Type-locality: Quiriqua, Guatemala.

TACHYMEMIS OOPTEROIDES (Bates), new combination

Mioptachys oopterooides Bates, 1882:144. Lectotype, sex undetermined because of specimen condition, in BMNH. Type-locality: Totonicapam, Guatemala.

TACHYMEMIS PARALLELA (Bates), new combination

Tachyta parallela Bates, 1871c:12. Lectotype, a male, here designated, in MHNP. Type-locality: Ega (Tefé), Brazil.

Tachys batesi Csiki, 1928:169. New name for *T. parallela* Bates, not Motschulsky.

[**TACHYMEMIS REFLEXICOLLIS** Motschulsky, see *Tachymenis flavicauda*.]

TACHYMEMIS TRECHOIDES (Bates), new combination

Mioptachys trechoides Bates, 1882:144. Lectotype, sex undetermined because of specimen condition, here designated, in BMNH. Type-locality: Totonicapan, Guatemala.

TACHYMEMIS XANTHURA (Bates), new combination

Tachyta xanthura Bates, 1871c:12. Holotype, a female, labelled as such by me, in MHNP. Bates mentioned specifically that he saw only one specimen. Type-locality: Rio Janeiro.

[**TACHYPHANES** Jeannel, see *Elaphropus*.]

Tachys Stephens

Tachys Stephens, 1829:4. Type-species: *Tachys scutellaris* Stephens, 1829:5; subsequent designation by Hope (1838:61).

Isotachys Casey, 1918:204. Type-species: *Tachys vittiger* LeConte, 1851:193; subsequent designation by Lindroth (1966:427). *Isotachys* was treated as a subgenus by Casey (1918) and Lindroth (1966). In my analysis of the world fauna, I do not think the included species deserve more than "species group" status.

[**TACHYS ABRUPTUS** Darlington, see *Paratachys abruptus*.]

[**TACHYS AENEIPENNIS** Motschulsky, see *Paratachys acenipennis*.]

[**TACHYS ALBIPES** LeConte, see *Paratachys albipes*.]

[**TACHYS AMPERICOLLIS** Bates, see *Meotachys amplicollis*.]

[**TACHYS ANCEPS** LeConte, see *Elaphropus anceps*.]

[**TACHYS ANTHRAX** LeConte, see *Elaphropus anthrax*.]

[**TACHYS ARCANICOLA** Blackburn, see *Paratachys arcanicola*.]

TACHYS ARGENTINICUS Csiki

Tachys argentinicicus Csiki, 1928:168. New name for *T. dromiooides* Jensen-Haarup not Bates. Bates' species belongs to *Paratachys*.

Tachys dromiooides Jensen-Haarup, 1910:554. Lectotype, a male, here designated, in ZMC. Type-locality: "Prov. Mendoza," Argentina. This name is a junior primary homonym of *T. dromiooides* Bates, 1871b:269.

[**TACHYS ATOMUS** Blackburn, see *Polyderis atomus*.]

[**TACHYS AUDAX** LeConte, see *Elaphropus dolosus*.]

[**TACHYS BATESI** Csiki, see *Tachymenis parallela*.]

[**TACHYS BEAUMONTI** Casey, see *Paratachys beaumonti*.]

[**TACHYS BEEBEI** Mutchler, see *Tachys vittiger*.]

[**TACHYS BONARIENSIS** Steinheil, see *Paratachys bonariensis*.]

TACHYS BRADYCELLINUS Hayward

Tachys bradycellinus Hayward, 1900:224. Holotype, a male, in MCZ, No. 7053. This specimen was noted as a unique by Hayward (1900:224). Type-locality: Louisiana.

TACHYS BRYANTI Lindroth

Tachys bryanti Lindroth, 1966:430. Holotype, a male, in CAS, No. 10007. Type-locality: Edmonton, Alberta, Canada.

[**TACHYS CAPAX** LeConte, see *Elaphropus vivax*.]

- [*TACHYS CARIB* Darlington, see *Paratachys carib.*.]
 [*TACHYS CASTANEICOLOR* Bates, see *Paratachys castaneicolor.*.]
 [*TACHYS CHIRIQUINUS* Bates, see *Paratachys chiriquinus.*.]
 [*TACHYS COCKERELLI* Fall, see *Elaphropus cockerelli.*.]
 [*TACHYS CONJUGENS* Notman, see *Elaphropus conjugens.*.]

TACHYS CORAX LeConte

Tachys corax LeConte, 1851:194. Lectotype, a female, here designated, in MCZ, No. 5572. Type-locality: "Colorado desert (New River)."

Tachys funebris Casey, 1918:205. Lectotype, a female, here designated, in USNM, No. 46954. Type-locality: Provo, Utah. New synonymy.

Tachys esurialis Casey, 1918:209. Lectotype, a female, here designated, in USNM, No. 46953. Type-locality: San Diego, California. New synonymy.

- [*TACHYS COLUMBIENSIS* Hayward, see *Paratachys columbiensis.*.]

[*TACHYS CONGESTUS* Casey, see *Polyderis laevis.*.]

[*TACHYS CORRUSCUS* LeConte, see *Paratachys pumilum.*.]

[*TACHYS CRUCIATUS* Chaudoir, see *Elaphropus cruciatus.*.]

[*TACHYS CUBAX* Darlington, see *Paratachys cubax.*.]

[*TACHYS CUNEATUS* Casey, see *Paratachys oblitus.*.]

[*TACHYS CURVANS* Bates, see *Polyderis curvans.*.]

[*TACHYS CYCLODERUS* Bates, see *Paratachys cycloderus.*.]

[*TACHYS DIAPHANUS* Casey, see *Polyderis diaphanus.*.]

[*TACHYS DIMINUTUS* Bates, see *Paratachys diminutus.*.]

[*TACHYS DIPLOHARPINUS* Bates, see *Paratachys diploharpinus.*.]

[*TACHYS DOLOSUS* LeConte, see *Elaphropus dolosus.*.]

[*TACHYS DOMINICANUS* Darlington, see *Paratachys dominicanus.*.]

[*TACHYS DROMIOIDES* Bates, see *Paratachys dromioides.*.]

[*TACHYS EDAX* LeConte, see *Paratachys edax.*.]

[*TACHYS ENSENADE* Mutchler, see *Tachys vittigar.*.]

[*TACHYS ESURIALIS* Casey, see *Tachys corax.*.]

[*TACHYS FALLI* Hayward, see *Tachya falli.*.]

[*TACHYS FASCIATUS* (Bohemian), see *Tachys oahuensis.*.]

[*TACHYS FILAX* Darlington, see *Paratachys filax.*.]

[*TACHYS FLAVICOLLIS* Motschulsky, see *Paratachys flavicollis.*.]

[*TACHYS FLUMENALIS* Casey, see *Polyderis laevis.*.]

[*TACHYS FRATERCULUS* Bates, see *Meotachys fraterculus.*.]

[*TACHYS FRONTALIS* Hayward, see *Porotachys bisulcatus.*.]

[*TACHYS FUSCICORNIS* Chaudoir, see *Elaphropus fuscicornis.*.]

[*TACHYS FUNEBRIS* Casey, see *Tachys corax.*.]

[*TACHYS GENTILIS* Casey, see *Paratachys oblitus.*.]

TACHYS HALOPIJILUS Lindroth

Tachys halophilus Lindroth, 1966:428. Holotype, a male, in CNC. Type-locality: Woodside, N.W. Portage-la-Prairie, Manitoba, Canada.

[*TACHYS HISPANIOLAE* Darlington, see *Tachya hispaniolae.*.]

[*TACHYS HYALINAS* Casey, see *Paratachys hyalinas.*.]

[*TACHYS INSULARUM* Bates, see *Meotachys insularum.*.]

[*TACHYS IOWENSIS* Casey, see *Paratachys oblitus.*.]

[*TACHYS JANSONI* Bates, see *Meotachys jansonii.*.]

[*TACHYS LATALATUS* Csiki, see *Paratachys latalatus.*.]

[*TACHYS LATIPENNIS* Hayward, see *Paratachys latalatus*.]

[*TACHYS LAXICOLLIS* Casey, see *Paratachys spadix*.]

[*TACHYS LIEBECKI* Hayward, see *Elaphropus liebecki*.]

[*TACHYS LINBATELLUS* Bates, see *Paratachys limbatellus*.]

TACHYS LITORALIS Casey

Tachys litoralis Casey, 1884:15. Holotype, a female, in USNM, No. 46955. Type-locality: Atlantic City, New Jersey. Casey (1884:16) specifically mentions "one specimen." Hayward (1900:234) wrongly synonymized *T. litoralis* with *T. pallidus*.

Tachys occultator Casey, 1884:69. Holotype, a female, in MCZ, No. 5576. Type-locality: Cape May, New Jersey. Casey (1884:70) again specifically mentions "1" specimen. New synonymy.

Tachys omissus Casey, 1918:206. Lectotype, a female, here designated, in USNM, No. 46956. Type-locality: Fort Monroe, Virginia. New synonymy.

Tachys luridicollis Casey, 1918:207. Lectotype, a male, here designated, in USNM, No. 46957. Type-locality: Galveston, Texas. New synonymy.

Tachys torrescans Casey, 1918:207. Lectotype, a female, here designated, in USNM, No. 46958. Type-locality: Pass Christian, Mississippi. New synonymy.

[*TACHYS LYNNAEOIDES* Bates, see *Tachys misellus*.]

[*TACHYS LUGUBRIS* Motschulsky, see *Paratachys lugubris*.]

[*TACHYS LURIDICOLLIS* Casey, see *Tachys litoralis*.]

[*TACHYS MARGINICOLLIS* Schauf, see *Tachymenis flavicauda*.]

[*TACHYS MARGINELLUS* LeConte, see *Tachys vittiger*.]

[*TACHYS MENDAX* LeConte, see *Elaphropus vivax*.]

[*TACHYS MICROSPILUS* Bates, see *Elaphropus microspilus*.]

TACHYS MISELLUS Laferte

Tachys misellus Laferte, 1841:48. Lectotype, a male, here designated, in MHNP. Type-locality: Texas.

Tachys lynnaeoides Bates, 1882:139. Lectotype, a male, here designated, in BMNH. Type-locality: Champerico, Guatemala. New synonymy.

[*TACHYS MONSTICTUS* Bates, see *Paratachys monstictus*.]

TACHYS MORDAX LeConte

Tachys mordax LeConte, 1851:193. Lectotype, a female, here designated, in MCZ, No. 5564. Type-locality: Colorado.

[*TACHYS MUCESCENS* Blackburn, see *Elaphropus ceylanicus*.]

[*TACHYS MULTISTRIATA* Motschulsky, see *Paratachys flavicollis*.]

[*TACHYS MUNDULUS* Bates, see *Elaphropus mundulus*.]

[*TACHYS NEBULOSUS* Chaudoir, see *Elaphropus nebulosus*.]

[*TACHYS NEOTROPICUS* Csiki, see *Tachymenis neotropicus*.]

[*TACHYS NOCTIS* Darlington, see *Tachymenis noctis*.]

[*TACHYS NUBIFER* Casey, see *Paratachys proximus*.]

TACHYS OAHUENSIS Blackburn

Tachys oahuensis Blackburn, 1878:158. Lectotype, a female, here designated, in BMNH. Type-locality: Oahu, Hawaii.

Trechus fasciatus Boheman, 1858:17. Lectotype, a female, here designated, in SRM. Type-locality: "Insula Oahu (Honolulu)" Hawaii. This name is a junior primary homonym of *T. fasciatus* Motschulsky, 1851:506. Motschulsky's *T. fasciatus* is now considered a *Paratachys*.

[*TACHYS OBESULUS* LeConte, see *Elaphropus obesulus*.]

[TACHYS OBLIQUUS Casey, see *Paratachys oblitus.*]

[TACHYS OBLITUS Casey, see *Paratachys oblitus.*]

[TACHYS OBTUSELLUS Bates, see *Elaphropus obtusellus.*]

[TACHYS OCCULTATOR Casey, see *Tachys litoralis.*]

[TACHYS OCCULTUS LeConte, see *Elaphropus occultus.*]

[TACHYS OMISSUS Casey, see *Tachys litoralis.*]

[TACHYS OOPTERUS Chaudoir, see *Paratachys ventricosus.*]

[TACHYS OVIPENNIS Chaudoir, see *Elaphropus ferrugineum.*]

[TACHYS PALLESCENS Casey, see *Paratachys scitulus.*]

TACHYS PALLIDUS Chaudoir

Tachys pallidus Chaudoir, 1868:212. Lectotype, a male, here designated, in MHNP. Type-locality: Texas.

[TACHYS PANAMENSIS Casey, see *Paratachys panameensis.*]

[TACHYS PAULAX Darlington, see *Paratachys paulax.*]

[TACHYS PERICALLIS Bates, see *Elaphropus pericallis.*]

[TACHYS PICEOLUS Laferte, see *Paratachys piceolus.*]

[TACHYS PICTURATUS Putzeys, see *Tachys vittiger.*]

[TACHYS PLATYDERUS Bates, see *Meotachys platyderus.*]

TACHYS PULCHELLUS Laferté

Tachys pulchellus Laferté, 1811:45. Lectotype, sex not determined because of specimens condition, here designated, in MHNP. Type-locality: Texas.

Tachys pugnax Casey, 1918:207. Lectotype, a female, here designated, in USNM, No. 46959. Type-locality: Galveston, Texas. New synonymy.

Tachys subtropicus Casey, 1918:208. Lectotype, a female, here designated, in USNM, No. 46960. Type-locality: Brownsville, Texas. New synonymy.

[TACHYS PUGNAX Casey, see *Tachys pulchellus.*]

[TACHYS PURGATUS Bates, see *Elaphropus purgatus.*]

[TACHYS PUTZEYI Fleutiaux and Sallé, see *Paratachys albipes.*]

[TACHYS RAPAX LeConte, see *Elaphropus dolosus.*]

[TACHYS RECTANGULUS Notman, see *Paratachys rectangulus.*]

[TACHYS RECTUS Casey, see *Polyderis laevus.*]

[TACHYS RHODEANUS Casey, see *Paratachys rhodeanus.*]

[TACHYS RHODENSIS Csiki, see *Elaphropus iucervus.*]

[TACHYS RUFOTESTACEUS Hayward, see *Polyderis rufotestaceus.*]

[TACHYS RUFULA Motschulsky, see *Meotachys rufula.*]

[TACHYS SAGAX Casey, see *Paratachys sagax.*]

[TACHYS SCITULUS LeConte, see *Paratachys scitulus.*]

[TACHYS SEQUAX LeConte, see *Paratachys sequax.*]

[TACHYS SPADIX Casey, see *Paratachys spadix.*]

[TACHYS SQUIRESI Bates, see *Meotachys squiresi.*]

[TACHYS STRITAX Darlington, see *Paratachys stritax.*]

[TACHYS SUBANGULATUS Bates, see *Paratachys subangulatus.*]

[TACHYS SUBPUNCTATUS Blatchley, see *Elaphropus brunnicollis.*]

[TACHYS SUBTROPICUS Casey, see *Tachys pulchellus.*]

[TACHYS SULCIPENNIS Bates, see *Meotachys sulcipeuuis.*]

[TACHYS TANTILLA Motschulsky, see *Polyderis tantilla.*]

[TACHYS TEMPORALIS Casey, see *Paratachys hyalinus.*]

TACHYS TRANSLUCENS Darlington

Tachys translucens Darlington, 1934:123. Holotype, a male, in MCZ, No. 22484.
Type-locality: Boqueron, Cuba.

[*TACHYS TRECHIFORMIS* Hayward, see *Elaphropus conjugens*.]

[*TACHYS TRECHOIDES* Csiki, see *Elaphropus conjugens*.]

[*TACHYS TRECHULUS* Darlington, see *Paratachys trechulus*.]

[*TACHYS TRITAX* Darlington, see *Elaphropus tritax*.]

[*TACHYS UMBRIPENNIS* Chaudoir, see *Paratachys umbripennis*.]

[*TACHYS UNISTRATIUS* Casey, see *Polyderis laevns*.]

[*TACHYS UNISTRIOLATUS* Csiki, see *Polyderis laevns*.]

[*TACHYS VENTRICOSUS* LeConte, see *Paratachys ventricosus*.]

[*TACHYS VERNILIS* Casey, see *Paratachys vernilis*.]

TACHYS VIRGO LeConte

Tachys virgo LeConte, 1851:194. Lectotype, a female, here designated, in MCZ, No. 5567. Type-locality: San Diego, California.

TACHYS VITTIGER LeConte

Tachys vittiger LeConte, 1851:193. Lectotype, a female, here designated, in MCZ, No. 5565. Type-locality: San Diego, California.

Tachys marginellus LeConte, 1851:193. Lectotype, a female, here designated, in MCZ, No. 5566. Type-locality: "Circa millia xxx a mare, flumen Colorado." Hayward (1900:222).

Tachys picturatus Putzeys, 1874:119. Lectotype, a male, here designated, in IRSN. Type-locality: Antigua, West Indies. New synonymy.

Tachys beebei Mutchler, 1924:223. Holotype, a male, in AMNH. Type-locality: South Seymour, Galapagos Islands. Erwin (1973:125).

Tachys ensenada Mutchler, 1934:3. Holotype, a male, in AMNH. Type-locality: Ensenada, Puerto Rico. Erwin (1973:125).

[*TACHYS VIVAX* LeConte, see *Elaphropus vivax*.]

[*TACHYS VORAX* LeConte, see *Paratachys vorax*.]

[*TACHYS YUNAX* Darlington, see *Elaphropus yunax*.]

Tachyta Kirby

Tachyta Kirby, 1837:56. Type-species: *Tachyta picipes* Kirby, 1837:56; by monotypy. *T. picipes* Kirby is a junior synonym of *T. nana* (Gyllenhal).

TACHYTA ANGULATA Casey

Tachyta angulata Casey, 1918:216. Lectotype, a male, here designated, in USNM, No. 46966. Type-locality: Bayfield, Wisconsin.

[*TACHYTA ARIZONICA* Casey, see *Tachyta nana*.]

[*TACHYTA AUTUMNALIS* Bates, see *Tachymenis autumnalis*.]

[*TACHYTA CALIFORNICA* Casey, see *Tachyta nana*.]

[*TACHYTA COLLARIS* Casey, see *Tachyta nana*.]

[*TACHYTA CRUCIGERA* Bates, see *Tachymenis crucigera*.]

[*TACHYTA CUCUJOIDES* Bates, see *Tachymenis cucujoides*.]

[*TACHYTA DIBILICOLLIS* Casey, see *Tachyta nana*.]

TACHYTA FALLI (Hayward), new combination

Tachys falli Hayward, 1900:199. Lectotype, here designated, a male, in MCZ, No. 7048. Type-locality: Siskiyou County, California.

TACHYTA HISPANOLAE (Darlington), new combination

Tachys hispaniolae Darlington, 1934:77. Holotype, a female, in MCZ, No. 19499. Type-locality: Grande Rivière, Haiti.

[*TACHYTA KIRBYI* Casey, see *Tachyta nana*.]

[*TACHYTA MELANIA* Bates, see *Tachymenis melania*.]

TACHYTA NANA (Gyllenhal)

Bembidium nanum Gyllenhal, 1810:30. Lectotype, a male, in UMU, designated by Lindroth (1966:436).

Tachyta nana (Gyllenhal). Bates, 1882:137.

Bembidium inornatum Say, 1823:87. Neotype designated by Lindroth and Freitag (1969:339) in MCZ. Type-locality: Asheville, North Carolina, designated by Lindroth (1966:436). Hayward (1900:233) treated *B. inornatum* as a junior synonym of *T. nana* as did Lindroth (1966:436).

Tachyta picipes Kirby, 1834:56. Lectotype, a female, here designated in BMNH. Type-locality: "British America, latitude 50°." Lindroth (1953:176) reported that two specimens, glued on a card of one pin, were in BMNH. He did not indicate which was lectotype. During my visit in 1971 to BMNH I found that one specimen had become unglued and was lost. I reglued the remaining specimen and selected it as lectotype. LeConte (1848:471) and Casey (1918:218) treated *T. picipes* as a junior synonym of *T. inornata*. Hayward (1900:233) and Lindroth (1966:436) treated *T. picipes* as a junior synonym of *T. nana*.

Tachys rivularis Motschulsky, 1846:8. Lectotype, a female, here designated, in MMM. Type-locality: "California" as indicated on label of type "C." One paralectotype is labelled "Sitka," and "California." Hayward (1900:233) and Lindroth (1966:436) treated *T. rivularis* as a junior synonym of *T. nana*.

Tachyta kirbyi Casey, 1918:216. Lectotype, a male, here selected, in USNM, No. 46967. Type-locality: Duluth, Minnesota. Lindroth (1966:436) treated *T. kirbyi* as a junior synonym of *T. nana*.

Tachyta californica Casey, 1918:219. Lectotype, a female, here designated, in USNM, No. 46970. Type-locality: Humboldt County, California. Lindroth (1966:437) treated *T. californica* as a junior synonym of *T. nana*.

Tachyta collaris Casey, 1918:218. Lectotype, a male, here designated, in USNM, No. 46968. Type-locality: Washington (State). Lindroth (1966:436) treated *T. collaris* as a junior synonym of *T. nana*.

Tachyta arizonica Casey, 1918:219. Lectotype, a male, here designated, in USNM, No. 46969. Type-locality: Arizona. New synonymy.

Tachyta debilicollis Casey, 1918:219. Lectotype, a male, here designated, in USNM, No. 46971. Type-locality: Catskill Mountains, New York. Lindroth (1966:437) treated *T. debilicollis* as a junior synonym of *T. nana*.

[*TACHYTA PARALLELA* Bates, see *Tachymenis parallela*.]

TACHYTA PARVICORNIS Notman

Tachyta parvicornis Notman, 1922:100. Holotype, a male, in FDAG. Type-locality: St. Petersburg, Florida.

[*TACHYTA PICIPES* Kirby, see *Tachyta nana*.]

[*TACHYTA RIVULARIS* Motschulsky, see *Tachyta nana*.]

[*TACHYTA XANTHURA* Bates, see *Tachymenis xanthura*.]

[*TACHYURA* Motschulsky, see *Elaphropus*.]

[*TREPANOTACHYS* Alluaud, see *Elaphropus*.]

[*XYSTOSOMUS* Schaum, see Erwin (1973a).]

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REFERENCES

- Alluaud, C. 1933. Etude des *Tachys* du sous-genre *Trepanotachys* All. Afra. no. 7, p. 17-20.
- Barr, T. C., Jr. 1971. *Micratopus* Casey in the United States (Coleoptera: Carabidae: Bembidiinae). *Psyche*. 78(1-2):32-37.
- Bates, H. W. 1871a. Notes on Carabidae, and descriptions of new species (no. 2). *Entomol. Mon. Mag.* 7:244-248. [Contains descriptions of *Pericompsus*, thus is not cited directly herein.]
- . 1871b. Notes on Carabidae, and descriptions of new species (no. 3). *Entomol. Mon. Mag.* 7:266-269.
- . 1871c. Notes on Carabidae, and descriptions of new species (no. 4). *Entomol. Mon. Mag.* 8:11-14.
- . 1878. On new genera and species of geodephagous Coleoptera from Central America. *Proc. Zool. Soc. London*. 1878:587-609.
- . 1882. Insect Coleoptera Carabidae. In Godman and Salvin, *Biologia Centrali-Americanana*. 1(1):40-152.
- . 1884. Insecta, Coleoptera, Cicindelidae suppl., Carabidae suppl. In Godman and Salvin, *Biologia Centrali-Americanana*. 1(1):257-299.
- Bilimek, D. 1867. Farma der Gotte Cacahuamilpa in Mexiko. Verh. zool-bot. Gesellschaft in Wien. 17:901-908.
- Blackburn, T. 1878. Characters of new genera and descriptions of new species of geodephaga from the Hawaiian Islands. *Entomol. Mon. Mag.* 15:156-158.
- Blatchley, W. S. 1924. New Coleoptera from southern Florida with notes on other interesting species. *Can. Entomol.* 56:164-170.
- Bohemian, C. H. 1858. Coleoptera. Species novas description. In Kongliga Svenska Fregatten Eugenies resa omkring Jorden . . . zoologi, I, Insecta. Stockholm, p. 1-112.
- Bolivar y Pieltain, C. and J. Hendrichs. 1965. Los Carabidae de la Gruta de Cacahuamilpa (Mexico), con descripción de *Agonum (Platynus) bilimcki* n. sp. y do su larva. *Ciencia*. 23(6):225-232.
- Britton, E. B. 1948. The carabid Tribes Harpalini, Lebiini, and Bembidiini in Hawaii (Coleoptera). *Proc. Hawaiian Entomol. Soc.* 13(2):235-254.
- Casey, T. L. 1884. Contributions to the descriptive and systematic coleopterology of North America. I. II. Philadelphia, p. 1-198.
- . 1914. Some observations on the Carabidae including a new subfamily. *Memoirs on the Coleoptera*. Lancaster, Penn. 5:25-44.
- . 1918. A Review of the North American Bembidiinae. *Memoirs on the Coleoptera*. 8:1-223.
- Chaudoir, M. de. 1846. Enumération des Carabiques et Hydrocanthares recueillis pendant un voyage au Caucase. . . . Kiew, p. 1-268.
- . 1868. Observations synonymiques sur les Carabiques de l'Amérique septentrionale et descriptions d'espèces nouvelles de ce pays. *Rev. et Mag. Zool.* 20(2):211-217.
- Csiki, E. 1928. *Coleopterorum catalogus*, pars 97, Carabidae: Mormolycinae, Harpalinae I. W. Junk, Berlin. p. 1-226.

- Darlington, P. J., Jr. 1934. New West Indian Carabidae with a list of the Cuban species. *Psyche*. 41(2):66-131.
- _____. 1935. West Indian Carabidae II: Itinerary of 1934; Forests of Haiti; New species; and a new key to *Colpodes*. *Psyche*. 42(4):167-215.
- _____. 1939. West Indian Carabidae. V. New forms from the Dominican Republic and Puerto Rico. *Memo. Soc. Cubana Hist. Nat.* 13:79-101.
- _____. 1962. The carabid beetles of New Guinea. Part I. Cicindelinae, Carabinae Harpalinae through Pterostichini. *Bull. Mus. Comp. Zool.* 126(3): 321-564, 4 plates.
- Dejean, P. F. M. A. 1831. Species général des Coléoptères. 5:I-VIII, 1-883.
- Duftshmid, C. E. 1812. Faunae Austriae. 2. Linz, p. 1-VIII, 1-311.
- Erwin, T. L. 1971. Fossil Tachyne beetles from Mexican and Baltic amber with notes on a new synonym of an extant group (Col. Carabidae). *Entomol. Scand.* 2:233-236.
- _____. 1973a. Studies of the Subtribe Tachyina (Coleoptera: Carabidae: Bembidiini), Part I. A revision of the neotropical genus *Xystosomus* Schaub. *Smiths. Contr. Zool.*, No. 140.
- _____. 1973b. Nomenclatorial notes on the Tachyini (Coleoptera: Carabidae). *Proc. Entomol. Soc. Wash.* 75(1):125.
- _____. 1974. Studies of the Subtribe Tachyina (Coleoptera: Carabidae: Bembidiini), Part II. A revision of the New World-Australian genus *Pericompsus* LeConte. *Smiths. Contr. Zool.*, in press.
- Fall, H. C. 1907. Descriptions of new species. In Fall and Cockerell, the Coleoptera of New Mexico. *Trans. American Entomol. Soc.* 33:218-272.
- Fleantoux, E. and A. Sallé. 1889. Liste des coléptères de la Guadeloupe et descriptions d'espèces nouvelles. *Ann. Soc. Entomol. France*. 9:351-484.
- Germain, P. 1906. Apuntes entomológicos. *Anal. Univ. Chile*. 117:589-653.
- Gyllenhal, L. 1810. *Insecta Suecia I*. Skara and Leipzig, p. 1-XX, 1-660.
- Hayward, R. 1900. A study of the species of *Tachys* of boreal America. *Trans. Amer. Entomol. Soc.* 26:191-239.
- Hope, F. W. 1838. The Coleopterist's Manual. II. London, p. 1-168.
- Jeannel, R. 1932. Revision du genre *Limnastis*. Société entomologique France, Paris Livre centenaire 1932:167-187.
- _____. 1941. Faune de France 39. Coléoptère Carabiques. Paris. 1, 571 p.
- _____. 1946. Faune de l'Empire Français VI. Coléoptères Carabiques de la Région Malgache. Paris, p. 1-372.
- _____. 1962. Les Trechides de la Paleantarctide Occidentale. Biologie de l'Amérique Australe Etudes sur la Faune du Sol. Paris. VII:529-655.
- Jensen-Haarup, A. C. 1910. New species of Coleoptera from west Argentina. *Deutsche Entomol. Zeit.* 1910:541-554.
- Kirby, W. 1837. The Insects. In J. Richardson, *Fauna Boreali-Americana* 4. Norwick, p. 1-325.
- Kult, K. 1961. Beitrag zur Kenntnis der Tachyiini aus Iran (Coleoptera, Carabidae). *Stutt. Beitr. Natur.* 57:1-4.
- LaFerté-Senectère, M. F. T. de. 1841. Description de dix Carabiques nouveaux du Texas et d'une espèce nouvelle de Buprestide de France. *Rev. Zool.* 1841: 37-51, 95-96.

- LeConte, J. L. 1848. A descriptive catalogue of the geodephagous Coleoptera inhabiting the United States east of the Rocky Mountains. *Ann. Lyceum Nat. Hist. New York.* 4:173-474.
- _____. 1851. Descriptions of new species of Coleoptera, from California. *Ann. Lyceum Nat. Hist. New York.* 5:125-184, (1852) 185-216.
- _____. 1863. New species of North American Coleoptera. I. *Smithsonian Misc. Coll.* no. 167, p. 1-86.
- Lindroth, C. H. 1953. Kirby's types of North American Carabidae. *Proc. Royal Entomol. Soc. London (Series B).* 22:167-177.
- _____. 1955. Dejean's types of North American Carabidae. *Opusc. Entomol.* 20:10-34.
- _____. 1966. The ground-beetles (Carabidae, excl. Cicindelinae) of Canada and Alaska. Part 4. *Opusc. Entomol. Suppl.* 29, p. 409-648.
- _____. 1968. The ground-beetles (Carabidae, excl. Cicindelinae) of Canada and Alaska. Part 5. *Opusc. Entomol. Suppl.* 33, p. 649-944.
- Lindroth, C. H. and R. Freitag. 1969. North American ground-beetles (Coleoptera, Carabidae, excluding Cicindelinae) described by Thomas Say: Designation of lectotypes and neotypes. *Psyche.* 76(3):326-361.
- Lucas, P. H. 1846. Exploration scientifique de l'Algérie. Zoologie. Historie naturelle des animaux articulés. 2:1-590.
- Motschulsky, T. V. de. 1839. Coléoptères du Caucase et des provinces Transcaucasienne décrits par T. Victor. *Bull. Soc. Imp. Nat. Moscow.* 12:68-93.
- _____. 1846. Die Coleopterologischen Verhaeltnisse und die Käfer Russlands. I. *Insecta Carabica.* Moskva, p. 1-VII, 1-91, Tüb. II-X.
- _____. 1851. Énumération des nouvelles espèces de Coléoptères. *Bull. Soc. Imp. Nat. Moscow.* 24(2):479-511.
- _____. 1862. Etudes entomologiques. 11. Dresden, p. 1-55.
- Müller, G. 1926. I Coleotteri della venezia giulia. Part I. Adephaga Studi entomologici. 1(2):1-306.
- Mutchler, A. J. 1924. Coleoptera from the Williams Galapagos Expedition. *Zoologica.* 5(20):219-224.
- _____. 1934. New species of Carabidae from Puerto Rico. *American Mus. Nov.* 686:1-5.
- Netolitzky, F. 1914. Die Bembidiini in Winklers Catalogus. I-II. *Entomol. Blät.* 10:50-55, 164-176.
- Nicolai, E. A. 1822. *Dissertatio inauguralis sistens Coleopterorum species Agri Halensis.* Halle, p. 1-44.
- Nietner, J. 1858. Descriptions of new Ceylon Coleoptera. *Ann. Mag. Nat. Hist.* 2:418-431.
- Notman, H. 1919. Records and new species of Carabidae. *Jour. New York Entomol. Soc.* 27:225-237.
- _____. 1922. New species of Carabidae, Staphylinidae, and Elateridae. *Bull. Brooklyn Entomol. Soc.* 17:99-108.
- Putzeys, J. A. A. H. 1874. Notice sur les cicindèles et carabiques recueillis dans l'Île Antigoa par M. Purves. *Ann. Soc. Entomol. Belg.* 17:117-119.
- Sahlberg, R. F. 1844a. In faunam insectorum rossicam symbola, novus ad Ochotsh lectos Carabicorum species. *Acta Soc. Fenn.* 1844:1-69.
- _____. 1844b. Coleoptera diebus 15-27. Decembris anni 1839 ad Rio Janeiro lecta. *Acta Soc. Scien. Fennicae.* 2(1):499-522.

- Say, T. 1823. Descriptions of insects of the families of Carabici and Hydrocanthari of Latreille, inhabiting North America. Trans. American Phil. Soc. (N.S.) 2 (1825). Philadelphia, p. 1-109.
- _____. 1834. Descriptions of new North American insects and observations on some already described. Trans. American Phil. Soc. 4:409-470.
- Schaum, H. R. 1863. Beiträge zur Kenntniss einiger Carabicinen-Gattungen. Berl. Entomol. Zeitschr. 7:67-92.
- Sharp, D. 1886. On New Zealand Coleoptera, with descriptions of new genera and species. Trans. Royal Dublin Soc. 3(2):374.
- Stehr, W. C. 1946. *Tachyura barnesi* n. sp. (Bembidiini, Carabidae, Coleoptera). Ohio Jour. Sci. 46(5):284.
- Stephens, J. F. 1829. Illustrations of British Entomology or a synopsis of indigenous insects. Mandibulata. II, p. 1-200.
- Steinbeil, E. W. 1869. Symbolae ad historiam coleopterorum Argentinae meridionalis, ossia elenco dei coleotteri raccolti dal professore Pelegreno Strobel, durante il suo soggiorno in Buenos Aires e nei viaggi de la intrapresi a Mendoza e nel Chili, indi a Bahia Blanca ed al Carmen de los Patagones; e descrizione delle specie nueve. Atti della Soc. Ital. Sci. Nat. 12:238-260.