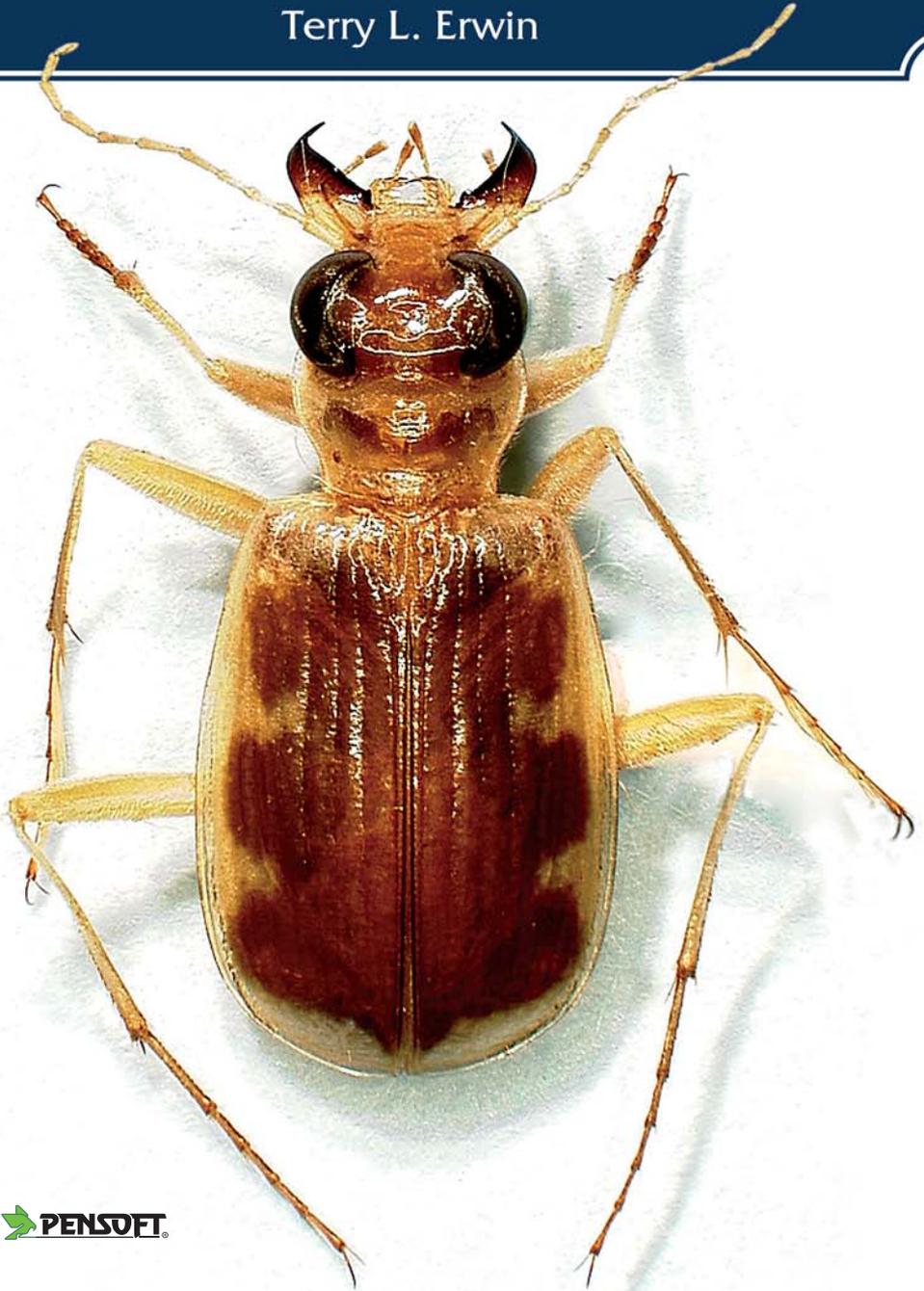


A Treatise on the  
Western Hemisphere Caraboidea (Coleoptera)  
Their classification, distributions, and ways of life  
Volume I. *Trachypachidae, Carabidae – Nebriiformes 1*

Terry L. Erwin



A TREATISE ON THE WESTERN  
HEMISPHERE CARABOIDEA (COLEOPTERA)  
THEIR CLASSIFICATION, DISTRIBUTIONS, AND WAYS OF LIFE

VOLUME I (TRACHYPACHIDAE, CARABIDAE – NEBRIIFORMES 1)

*Terry L. Erwin*

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TERRY L. ERWIN



SOFIA–MOSCOW

2007

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*Terry L. Erwin*

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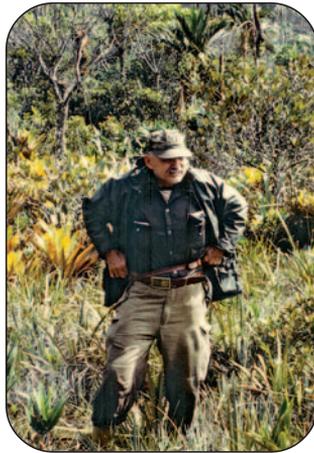
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*Dedicated To*

*Professor George Eugene Ball  
University of Alberta  
Edmonton, Canada*

*George likes books and little brooks  
those hard-to-reach places in which  
carabid beetles dwell; landscapes  
that make the muscles twitch n' swell  
that's when George Ball  
hears yon the Beckon Call  
taking the student – he mentors! shapes!  
the next generation's itch  
to add yet another species to the Tell*



GEORGE E. BALL  
PICO DE NEBLINA, VENEZUELA, 1984  
SMITHSONIAN EXPEDITION

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## Foreward

Going on nearly 4 decades of admiration for my dear friend and still mentor, to Professor George E. Ball, I dedicate these volumes, hard bound with carabid images and carabid-dwelling landscapes, on the occasion of his 80<sup>th</sup> birthday (September 28, 2006); to him and to his devoted decades of gathering carabid beetles and data about them, mentoring, apprenticing, training, and teaching young carabid workers and dozens of other-taxa students, building important reference collections, and sharing his time with anyone needing a carabid identification, their distributions, or general life philosophy. Without him, and all those Carabidologists and generalist beetle collectors he trained or influenced, much of what is included in these volumes would not be available to the world of beetle enthusiasts and natural historians, indeed, to the world in general.

TERRY L. ERWIN  
*National Museum of Natural History*  
*Smithsonian Institution*  
*Washington, DC*

## Introduction

Inspired by the book, *A Natural History of the Ground Beetles (Coleoptera: Carabidae) of America North of Mexico* (Larochelle, A. & Larivière, M.C. 2003), its utility and elegance on the shelf, and knowing that Prof. George E. Ball prefers books to electronic media, and at the urging of my dear wife Grace who recognized the importance of the Larochelle & Larivière contribution, I decided to migrate the information in my electronic database of Western Hemisphere Caraboidea to the printed page. There are at present 9,242 species and subspecies currently recorded from the Western Hemisphere, therefore this Treatise will necessarily appear in six or seven volumes, with subsequent supplemental updates. The electronic version is updated on a six month basis. These volumes will add to and update the species of North America documented by Larochelle & Larivière (2003) with new information garnered from data in the large collections at NMNH, CAS, CMNH, UASM, and others, as well as my personal field notes from 39 years of neotropical field work, thus extending Larochelle & Larivière's important contribution south of the U.S. - México border by treating species of northern México, the Neotropics and Neaustral Regions. Together, my volumes and that of Larochelle & Larivière can be considered as a set of handbooks on the 'ways of life' of Western Hemisphere carabid beetles. Larochelle & Larivière included information that I don't cover, for example laboratory feeding and trapping methods of the North American species, while I include information they didn't include, for example, historical nomenclature, distributions, altitudinal information, and data from specimens in major collections not heretofore published, as well as color images of adults and landscapes/habitats. We both also contribute complementary bibliographies. Nearly all carabid species need much more study before we can truly know their role in the complexity of earth's environment. The species' "way of life snapshots" provided by our combined contributions should be regarded as a starting point for further discoveries, many of which will be exciting and worth telling again and again sometime, somewhere, over a camp fire. The "Tell" (Film: *Mad Max: Beyond Thunderdome*, 1985) began with us in the early evolution of humankind as oral history. Oral history has now evolved into e-sharing of data, e-stories, e-ideas, e-images and a multitude of other types of modern communication. This is the mode by which future generations will 'tell,' however, the written page stored amongst dispersed libraries remains, at least today, as the only reliably *permanent* continuum of human knowledge.

## Methods

For over three decades, data on Caraboidea of the Western Hemisphere have been stored in various data management systems in my Tropical Forest Canopy Laboratory at the National Museum of Natural History, Smithsonian Institution. In the early 1990's, these data were migrated to FileMakerPro and launched on the Department of Entomology website. Updates were made to the website, as reprints were received from colleagues, and at each new issue of the Zoological Record (Coleoptera). Plans are now being made to move this carabid database into SEQUEL, another database management system that is more secure on today's internet, in anticipation of the Smithsonian's planned Encyclopedia of Life Project. In addition, a version of the information from each of the six-seven volumes in this series, as they are finished, will be placed on the Tree of Life website in cooperation with D.R. Maddison, (Maddison D.R. (2001) <http://tolweb.org>).

The format for the following species accounts have been standardized, as much as possible. Organization of higher taxa follows that of Erwin (1985) with some modifications based on recent publications. Within each Tribe, genera are arranged alphabetically, and within them, species and subspecies are also arranged alphabetically. General information is presented for the categories Tribe and Genus, including:

**Number of worldwide genera:**

**Number of Western Hemisphere genera:**

**Taxonomy:** Notes on its stability, or lack thereof, and lineages needing revisionary studies.

**Adelphotaxon:**

**Geographic status:** Biogeographic realms. I use standard terminology with the addition of Neaustral (*sensu* Kavanaugh, pers. comm.) to delineate the Patagonian region. Derivatives of this are Panaustral and Afroaustral.

**References:** Only ones that I used are listed, it is not exhaustive.

In addition to the above, I also provide for the Genus:

**Type species:**

**Distribution:** Countries, or realms if widespread, with number of species in each.

**Habitat:** An overview for the genus.

Common name (see below)

Plates references (these plates are found at the back of the book)

Synonym list

**Table 1.** Abbreviations of states and provinces use in the species accounts.

<b>AB</b>	Alberta	<b>NE</b>	Nebraska
<b>AG</b>	Aguascalientes	<b>NC</b>	North Carolina
<b>AI</b>	Aleutian Islands	<b>NB</b>	New Brunswick
<b>AK</b>	Alaska	<b>NF</b>	Newfoundland
<b>AL</b>	Alabama	<b>NH</b>	New Hampshire
<b>AR</b>	Arkansas	<b>NJ</b>	New Jersey
<b>AZ</b>	Arizona	<b>NK</b>	North Dakota
<b>BC</b>	British Columbia	<b>NL</b>	Neuvo Leon
<b>BJ</b>	Baja California	<b>NM</b>	New Mexico
<b>CA</b>	California	<b>NS</b>	Nova Scotia
<b>CH</b>	Chihuahua	<b>NT</b>	Northwest Territories
<b>CL</b>	Coahuila	<b>NV</b>	Nevada
<b>CM</b>	Colima	<b>NY</b>	New York
<b>CO</b>	Colorado	<b>OA</b>	Oaxaca
<b>CP</b>	Campeche	<b>OH</b>	Ohio
<b>CS</b>	Chiapas	<b>OK</b>	Oklahoma
<b>CT</b>	Connecticut	<b>ON</b>	Ontario
<b>DC</b>	District of Columbia	<b>OR</b>	Oregon
<b>DE</b>	Delaware	<b>PA</b>	Pennsylvania
<b>DF</b>	Distrito Federal	<b>PE</b>	Prince Edward Island
<b>DU</b>	Durango	<b>PM</b>	St. Pierre and Miquelon
<b>FL</b>	Florida	<b>PQ</b>	Quebec
<b>GA</b>	Georgia	<b>PU</b>	Puebla
<b>GJ</b>	Guanajuato	<b>QR</b>	Quintana Roo
<b>GO</b>	Guerrero	<b>QT</b>	Queretaro
<b>HD</b>	Hidalgo	<b>RI</b>	Rhode Island
<b>IA</b>	Iowa	<b>SK</b>	Saskatchewan
<b>ID</b>	Idaho	<b>SC</b>	South Carolina
<b>IL</b>	Illinois	<b>SD</b>	South Dakota
<b>IN</b>	Indiana	<b>SI</b>	Sinaloa
<b>JA</b>	Jalisco	<b>SL</b>	San Luis Potosi
<b>KS</b>	Kansas	<b>SO</b>	Sonora
<b>KY</b>	Kentucky	<b>TA</b>	Tabasco
<b>LA</b>	Louisiana	<b>TL</b>	Tlaxcala
<b>LB</b>	Labrador	<b>TM</b>	Tamaulipas
<b>MA</b>	Massachusetts	<b>TN</b>	Tennessee
<b>MB</b>	Manitoba	<b>TX</b>	Texas
<b>MD</b>	Maryland	<b>UT</b>	Utah
<b>ME</b>	Maine	<b>VA</b>	Virginia
<b>MH</b>	Michoacan	<b>VC</b>	Veracruz
<b>MI</b>	Michigan	<b>VT</b>	Vermont
<b>ML</b>	Morelos	<b>WA</b>	Washington
<b>MN</b>	Minnesota	<b>WS</b>	Wisconsin
<b>MO</b>	Missouri	<b>WV</b>	West Virginia
<b>MS</b>	Mississippi	<b>WY</b>	Wyoming
<b>MT</b>	Montana	<b>YT</b>	Yukon Territory
<b>MX</b>	México -	<b>YC</b>	Yucatan
<b>NA</b>	Nayarit	<b>ZA</b>	Zacatecas

An extended focus image or digital image of an exemplar adult of some species in each genus is included and where possible, an exemplar image is provided for each genus of a living beetle and an image of the typical landscape/habitat inhabited by members of the genus.

Within each species account, information is presented in the following format:

**Genus (Subgenus) species name/ author/ date**

**Common name:** These names are derived for the most part from the Latin epithet, patronyms, or geographic references. In some cases, I have used the author of the species name in place of the foregoing. Common names are essential for public access to information and particularly in the realm of conservation practices. This is not a new practice; Brullé (1836,1837), for example, provided a common name in French preceding each of his new species and provided common names for those already described by his contemporaries and predecessors.

**Synonym list:** Here I give the original synonymical names arranged in chronological order following the currently accepted name as it was originally proposed. The name is followed by author and date:page citation.

**Distribution:** Here, information about Realms, introductions, countries, and in some cases, States (USA and México) or Provinces (Canada and Argentina) is provided. See Table 1.

**Way of Life:**

**MACROHABITAT:** Here I give a general statement about altitudinal zones, actual meters in altitude, followed by notes on vegetation cover. My protocol is as follows: Lowlands, 0 to 500 meters; midlands, 501 to 1500 meters; uplands, 1501 to 2200 meters; mountains, 2201 to >> *n* meters. The altitudinal data come directly from specimen labels, or from Google look-ups of specimen localities, if data were not found in publications. Label data given in “feet” were converted to metric.

**MICROHABITAT:** Under this heading is provided as much detailed information as is known from the literature, field notes, or specimen labels regarding strata (ground dwelling, canopy dwelling, etc.), soil types and general moisture content, near or far from water, snow, or other physical feature of the environment wherein members of the species are found.

**DISPERSAL ABILITIES:** Wing length reference; flying, running, burrowing, and climbing abilities.

**SEASONAL OCCURRENCE:** Months in which specimens have been captured.

**BEHAVIOR:** All recorded observations on activities of adults and larvae that I was able to find in the literature and on specimen labels.

**References:** Here I have included pertinent published articles, field notes, specimen label information (i.e. which museum has specimen data referred to), and personal communications from other Carabidologists.

In the following species accounts, a hyphen (-) is used for its normal purpose; a dash (–) is used to indicate a continuum between entries (e.g. between measures, altitudinal ranges, or across months), and for separation between Country and its States/Provinces in the distribution lists.

The following codens are used in the species accounts in this volume:

**CAS**, California Academy of Sciences, San Francisco, CA; David H. Kavanaugh,  
Curator

**CMNH**, Carnegie Museum of Natural History, Pittsburg, PA, Robert Davidson,  
Curator

**IADIZA**, Instituto Argentino de Investigaciones de las Zonas Áridas, Mendoza,  
Argentina, Sergio Roig-Juñent, Director and Curator

**NMNH**, National Museum of Natural History, Smithsonian Institution, Terry L.  
Erwin, Curator

**UASM**, University of Alberta, Strickland Museum, Edmonton, Alberta, Canada,  
George E. Ball and Danny Shpeley, Curators

## Volume supplements and Database

Upon using this volume and those to follow, readers are encouraged to send notice of any errors, omissions, bibliographic additions, or supply new data and/or images, so that these may be included both in the volume supplementals and on the website database. Full credit will be given to contributors. Please send such to the author at: [erwint@si.edu](mailto:erwint@si.edu).

## Bibliography

The bibliography attending this first volume is more or less complete for the taxonomy of all carabid species described for the Western Hemisphere plus many articles on way of life. With each ensuing volume, a supplemental bibliography will be added to fill in the gaps and to add newly published papers, as well as more natural history articles.

## Images

Dorsal aspect mounted beetle images used herein were either made with a Leica M420 microscope with a JVC Digital Camera KY-F70B attached and processed with GT Vision™ software (referred to in the captions as “extended focus image,” or for larger

adults, imaged with a Microptics™ Digital Lab XLT (referred to in the captions as “digital image”.) Leg and antennae orientation differs among habitus images because all were reoriented after removal from pins or points and pin holes rendered in Photoshop™. Background color varies depending on the colors of the specimen being imaged. Figure captions of montage and Microptics imaged specimens include an ADP or other number which is a unique label identification number for the specimen that was illustrated. This number links the specimen and associated illustration and/or images to additional information in electronic databases at the NMNH. Images provided by credited photographers were taken with a variety of different methods; “live” notes in the captions can refer to a specimen actually alive, or to a very freshly dead specimen posed for the image. Plate captions include a measure indicating the ABL (apparent body length, from Ball, 1982) of the specimen montaged or digitally imaged with the Microptics setup. Images of live beetles do not have a scale. These captions also include locality information for individuals imaged, as well as a referenced exemplar landscape/habitat typical for members of the genus. Image credits are provided in each caption. All extended focus images and Microptics images were produced and rendered as necessary in Photoshop by Warren E. Steiner Jr., with the exception of *Notiokasis* (see caption).

## Acknowledgements

First and foremost, heartfelt and gracious thanks go to George E. Ball for my apprenticeship into the world of carabid beetles and his continuing role as my mentor and amigo; and, to his colleague and fellow Carabidologist, Danny Shpeley, whose dedicated work on the Méxican collection (UASM) contributed significantly to this Treatise; and, to Andre L. Larochelle and Marie Claude Larivière for stimulating this effort and allowing their data to be incorporated into the website behind this Treatise, as well as the liberal use of their prose on North American carabids in this book. To Grace P. Servat (Erwin) who saw the book, *A natural history of the ground-beetles (Coleoptera: Carabidae) of America north of Mexico* by Larochelle and Larivière, and showed me the way toward getting my electronic data base out of “e” and into this published Treatise; a gigantic hug for her. Carl H. Lindroth led the way first, grandly and systematically, for all of us with his treatment of the ground beetles of Newfoundland, and later in his *Magnum Opus* of Canada and Alaska in which he presented a snapshot of the ‘way of life’ for many of his included one-thousand plus species. Larochelle and Larivière captured and enhanced much of this for their book and dedicated it to Carl; I captured their enhancement and built on it. Our debt to Carl is *enormous*. Special thanks also go to George Venable who got me into using FileMakerPro and the resulting data base on which this Treatise is built; to Warren E. Steiner who provided the extended focus images and Microptics images for this volume plus many trips to the library, and to Stephen McJonathan of GT Vision for the loan of equipment and software necessary to make the extended focus images; to Roy Anderson, Allan Ashworth, Christopher J. Earle, Henri Goulet, David Kavanaugh, David Maddison, and Grace Servat who provided other images which are credited appropriately in the figure captions; to many colleagues who sent their publications to the Smithsonian Carabid Library; and to David H. Kavanaugh, Roberta Brett, and Allen Ashworth for their valuable contributions to the Nebrini, Omophronini, and Trachypachidae sections, respectively. And, a hearty thanks to Sergio Roig-Juñent who personally checked the identifications of *Ceroglossus* species in the NMNH and to Soledad Sallenave who did some library work for the Patagonian references.

# Arrangement of Western Hemisphere taxa<sup>1</sup> Caraboidea

## Volume 1

### Family TRACHYPACHIDAE

Tribe Systolosomatini, *Systolosoma*

Tribe Trachypachini, *Trachypachus*

### Family CARABIDAE

Division NEBRIIFORMES

Subfamily CARABINAE

Supertribe NEBRIITAE

Tribe Pelophilini, *Pelophila*

Tribe Nebriini, *Leistus*, *Nebria*, *Nippononebria*

Tribe Notiokasiini, *Notiokasis*

Tribe Opisthiini, *Opisthius*

Tribe Notiophilini, *Notiophilus*

Supertribe CICINDITAE

Tribe Cicindini, *Cicindis*

Supertribe OMOPHRONTAE

Tribe Omophronini, *Omophron*

Supertribe LORICERITAE

Tribe Loricerini, *Loricera*

Supertribe CARABITAE

Tribe Carabini, *Carabus*, *Calosoma*, *Callisthenes*, *Calopachys*, *Ceroglossus*

[Tribe Pamborini]

Tribe Cychrini, *Cychnus*, *Scaphinotus*, *Sphaeroderus*

Supertribe CICINDELITAE

Tribe Collyridini, *Ctenostoma*

<sup>1</sup> Name in brackets is strictly an Australian taxon included here only for completeness of Tribal list.

## SPECIES ACCOUNTS

### TRACHYPACHIDAE

#### FALSE GROUND BEETLES

#### Systolosomatini Erwin 1985

#### NEAUSTRAL FALSE GROUND BEETLES

Systolosomatini Erwin, 1985:467

**Number of worldwide genera:** One.

**Number of Western Hemisphere genera:** One.

**Taxonomy:** Stable. Adelphotaxon: Trachypachini Thomson 1857.

**Geographic status:** Neaustral.

**References:** Erwin (1985, 2001)

#### *Systolosoma* Solier 1849

#### NEAUSTRAL FALSE GROUND BEETLES

(Plate 1)

*Systolosoma* Solier, 1849:241

*Notioxenus* Motschulsky, 1857:111

**Number of species:** Two.

**Taxonomy:** Stable. Adelphotaxon: *Trachypachus* Motschulsky 1844.

**Type species:** *Systolosoma breve* Solier, 1849.

**Distribution:** Native, New World: ARGENTINA, Chile. (Two species)

**Habitat:** Neaustral Beech and conifer forests, thickets, and coppice.

**References:** Ashworth (pers. comm.), Erwin (2001), Nègre (1973)

#### *Systolosoma breve* Solier 1849

#### SHORT NEAUSTRAL FALSE GROUND BEETLE

*Systolosoma breve* Solier, 1849:242

*Notioxenus bilunulatus* Motschulsky, 1857:111

**Distribution:** Native, New World. ARGENTINA – NEUQUÉN, RÍO NEGRO; CHILE.

**Way of Life: MACROHABITAT:** Lowlands to midlands, 40 – 1350 meters altitude, in Valdivian rainforest with *Nothofagus dombeyi* (Mirb.) Blume and *Araucaria araucana* (Molina) K. Koch, Coigue-Maniu Forest, and Nire/Steppe. **MICROHABITAT:** On sandy alluvium and open sand, as well as in forest leaf and wood litter. **DISPERSAL ABILITIES:** Macropterous, probably capable of flight.

**SEASONAL OCCURRENCE:** Adults have been found in January – March, and October – December.

**BEHAVIOR:** Adults take cover in leaf litter and are attracted to dung-baited and squid-baited pitfall traps. They fly low to the ground and are often caught in window traps.

**References:** Ashworth (pers. comm.), Erwin (2001), Data from CAS, NMNH collections

*Systolosoma lateritium* Nègre 1973  
TILED NEAUSTRAL FALSE GROUND BEETLE

*Systolosoma lateritius* Nègre, 1973:291

**Distribution:** Native, New World. ARGENTINA – RÍO NEGRO: CHILE.

**Way of Life: MACROHABITAT:** Midlands, 530 – 1350 meters altitude, Valdivian temperate rain forests, and in Coigue-Maniu forest, Coigue-Lenga forest, Lenga Beech forest, (*Notofagus dombeyi* (Mirb.) Blume-*N. pumilio* (Poep & Endl.) Krasser forests, *N. pumilio* forests (w/ *Chusquea*), and at tree line. **MICROHABITAT:** On open ground, as well as in forest leaf and wood litter. **DISPERSAL ABILITIES:** Macropterous, probably capable of flight. **SEASONAL OCCURRENCE:** Adults have been found in January, March, and October – December. **BEHAVIOR:** Adults take cover in leaf litter and are attracted to dung-baited pitfall traps.

**References:** Ashworth (pers. comm.), Erwin (2001), Nègre (1973), Data from CAS, NMNH collections

*Trachypachini* Thomson 1857  
TEMPORAL FALSE GROUND BEETLES

*Trachypachini* Thomson, 1857:5

**Number of worldwide genera:** One.

**Number of Western Hemisphere genera:** One.

**Taxonomy:** Stable. Adelphotaxon: Systolosomatini Erwin 1985.

**Geographic status:** Holarctic.

**Distribution:** Canada, northwestern USA, northern Europe.

**References:** Erwin (2001), Lindroth (1961)

*Trachypachus* Motschulsky 1844  
ROUGH TEMPORAL FALSE GROUND BEETLES  
(Plate 2)

*Trachypachus* Motschulsky, 1844:86

*Trachypachus* Gemminger & Harold, 1868:46

**Number of species:** Four.

**Taxonomy:** Stable. Adelphotaxon: *Systolosoma* Solier 1849.

**Type species:** *Blethisa Zetterstedtii* Gyllenhal, 1827.

**Distribution:** Native, New World (three species), northern Europe (one species).

**Habitat:** Sandy or dusty ground beneath deciduous or conifer forests, or on open faced embankments of exfoliating clay.

**References:** Erwin (2001), Lindroth (1961), Maddison (2001)

*Trachypachus gibbsii* LeConte 1861  
GIBBS' TEMPORAL FALSE GROUND BEETLE

*Trachypachus Gibbsii* LeConte 1861:339

*Trachypachus californicus* Motschulsky, 1864:194

*Trachypachus alticola* Casey, 1920:144

**Distribution:** Native, New World. CANADA – BC; USA – CA, ID, MT, OR, WA.

**Way of Life: MACROHABITAT:** Midlands to mountains, 762 – 3505 meters altitude.

**MICROHABITAT:** Adults of this species are stenotopic, restricted to a special habitat where it often is abundant: on the banks of large rivers and small forested creeks, often some distance from the water. Also, they occur under poplars (*Populus balsamifera* L.) where the ground, half shaded, consists of fine dusty dry sand covered with dry leaves, no herb layer present, and in pine/fir forests in similar soil conditions. **DISPERSAL ABILITIES:** Macropterous, and recorded in flight. **SEASONAL OCCURRENCE:** Adults have been found in March, May – September, and November. **BEHAVIOR:** Adults run in the sunshine on open bare spots; they have been extracted from Noble Fir (*Abies procera* Rehd.) duff using Berlese funnels.

**References:** Erwin (2001), Lindroth (1961), Data from CAS, NMNH collections

*Trachypachus holmbergi* von Mannerheim 1853  
HOLMBERG'S TEMPORAL FALSE GROUND BEETLE

*Trachypachus Holmbergi* von Mannerheim, 1853:119

*Trachypachus inermis* Motschulsky, 1864:194

*Trachypachus oregonus* Casey, 1920:145

*Trachypachus specularis* Casey, 1920:146

**Distribution:** Native, New World. CANADA – AB, BC, NT, SK, YT; USA – AK, CA, CO, ID, MT, NV, OR, WA.

**Way of Life: MACROHABITAT:** Lowlands to mountains, 5 – 2652 meters altitude. **MICROHABITAT:** Often among dead leaves. According to Maddison (2001), adults of *Trachypachus holmbergi* are “found on loose loam or conifer duff. For example, specimens were common in one regularly-tilled garden at the University of Alberta. They were found in a similar, but more natural habitat, at the base of a slope on Cape Perpetua, Oregon”. Adults of this species are xerophilous, occurring independent of water and are found on open or slightly shaded ground, usually moraine, with sparse vegetation. **DISPERSAL ABILITIES:** Macropterous, and these no doubt functional. **SEASONAL OCCURRENCE:** Adults have been found in April – August, October, and December. **BEHAVIOR:** Adults run in the sunshine, and dive into the substrate to escape capture. Adults hibernate.

**References:** Erwin (2001), Lindroth (1961), Maddison (2001), Data from CAS, NMNH collections

*Trachypachus slevini* Van Dyke 1925  
SLEVIN'S TEMPORAL FALSE GROUND BEETLE

*Trachypachus slevini* Van Dyke, 1925:111

**Distribution:** Native, New World. USA – OR, WA.

**Way of Life: MACROHABITAT:** Lowlands to midlands, sea level–1045 meters altitude.

**MICROHABITAT:** “At Moolack Beach along the coast of Oregon, *Trachypachus slevini* can be found