

**CONTENTS**  
**Journal of Arachnology**

**Volume 42**

**Number 3**

**Featured Articles**

Troglophobic pseudoscorpions (Arachnida: Pseudoscorpiones) of northern Arizona, with the description of two new short-range endemic species  
by **Mark S. Harvey & J. Judson Wynne** ..... 205

A new genus and a new species of scorpion (Scorpiones: Buthidae) from southeastern Mexico  
by **Oscar F. Francke, Rolando Teruel & Carlos Eduardo Santibáñez-López** ..... 220

Description of *Sarax buxtoni* (Gravely 1915) (Arachnida: Amblypygi: Charinidae) and a new case of parthenogenesis in Amblypygi from Singapore  
by **Michael Seiter & Jonas Wolff** ..... 233

The new spider genus *Arctenus*, an afrotropical representative of the Calocteninae (Araneae: Ctenidae)  
by **Daniele Polotow & Rudy Jocqué** ..... 240

Chemical defenses in the opilionid infraorder Insidiatores: divergence in chemical defenses between Triaenonychidae and Travunioidea and within travunioid harvestmen (Opiliones) from eastern and western North America  
by **W. A. Shear, T. H. Jones, H. M. Guidry, S. Derkarabetian, C. H. Richart, M. Minor & J. J. Lewis** ..... 248

Species differences and geographic variation in the communal roosting behavior of *Prionostemma* harvestmen in Central American rainforests  
by **Gregory F. Grether, Theresa L. Aller, Nicole K. Gruckey, Abrahm Levi, Carmen C. Antaky & Victor R. Townsend, Jr.** ..... 257

From spiderling to senescence: ontogeny of color in the jumping spider, *Habronattus pyrrithrix*  
by **Lisa A. Taylor, David L. Clark & Kevin J. McGraw** ..... 268

Scavenging throughout the life cycle of the jumping spider, *Phidippus audax* (Hentz) (Araneae: Salticidae)  
by **Michael E. Vickers, Marianne W. Robertson, Casey R. Watson & Travis E. Wilcoxon** ..... 277

Removal of genital plugs and insemination by males with normal and experimentally modified palps in *Leucauge mariana* (Araneae: Tetragnathidae)  
by **Vivian Méndez & William G. Eberhard** ..... 284

Burrow structure and microhabitat characteristics of *Nesiergus insulanus* (Araneae: Theraphosidae) from Frégate Island, Seychelles  
by **Gregory Canning, Brian K. Reilly & Ansie S. Dippenaar-Schoeman** ..... 293

Thermal preference of *Dysdera crocata* C. L. Koch 1838 (Araneae: Dysderidae)  
by **Rita Sepúlveda, Andres Taucare-Rios, Claudio Veloso & Mauricio Canals** ..... 299

Natural history of *Phoneutria boliviensis* (Araneae: Ctenidae): habitats, reproductive behavior, postembryonic development and prey-wrapping  
by **Nicolas A. Hazzi** ..... 303

**Short Communications**

The mechanism behind plasticity of web-building behavior in an orb spider facing spatial constraints  
by **Thomas Hesselberg** ..... 311

Development of novel microsatellite markers for the spider genus *Loxosceles* (Sicariidae) using next-generation sequencing  
by **Enric Planas, Laia Bernaus & Carles Ribera** ..... 315

Pre-ballooning in *Ummidia* Thorell 1875 (Araneae: Ctenizidae) from the Interior Highlands, USA: second account from the region and review of mygalomorph ballooning  
by **J. Ray Fisher, Danielle M. Fisher, Michael J. Skvarla & Ashley P. G. Dowling** ..... 318

*Instructions to Authors* ..... 322

# Journal of ARACHNOLOGY

PUBLISHED BY THE AMERICAN ARACHNOLOGICAL SOCIETY



JOURNAL OF ARACHNOLOGY

2014

VOLUME 42, NUMBER 3

VOLUME 42

2014

NUMBER 3

## THE JOURNAL OF ARACHNOLOGY

*EDITOR-IN-CHIEF:* **Robert B. Suter**, Vassar College

*MANAGING EDITOR:* **Richard S. Vetter**, University of California–Riverside

*SUBJECT EDITORS:* *Ecology*—**Stano Pekár**, Masaryk University, Czech Republic; *Systematics*—**Mark Harvey**, Western Australian Museum and **Jason Bond**, Auburn University; *Behavior*—**Elizabeth Jakob**, University of Massachusetts Amherst; *Morphology and Physiology*—**Peter Michalik**, Ernst Moritz Arndt University Greifswald, Germany

*EDITORIAL BOARD:* **Alan Cady**, Miami University (Ohio); **Jonathan Coddington**, Smithsonian Institution; **William Eberhard**, Universidad de Costa Rica; **Rosemary Gillespie**, University of California, Berkeley; **Charles Griswold**, California Academy of Sciences; **Marshal Hedin**, San Diego State University; **Marie Herberstein**, Macquarie University; **Yael Lubin**, Ben-Gurion University of the Negev; **Brent Opell**, Virginia Polytechnic Institute & State University; **Ann Rypstra**, Miami University (Ohio); **William Shear**, Hampden-Sydney College; **Jeffrey Shultz**, University of Maryland; **Petra Sierwald**, Field Museum; **Søren Toft**, Aarhus University; **I-Min Tso**, Tunghai University (Taiwan).

The *Journal of Arachnology* (ISSN 0161-8202), a publication devoted to the study of Arachnida, is published three times each year by *The American Arachnological Society*. **Memberships (yearly):** Membership is open to all those interested in Arachnida. Subscriptions to *The Journal of Arachnology* and *American Arachnology* (the newsletter), and annual meeting notices, are included with membership in the Society. Regular, \$55; Students, \$30; Institutional, \$125. Inquiries should be directed to the Membership Secretary (see below). **Back Issues:** James Carrel, 209 Tucker Hall, Missouri University, Columbia, Missouri 65211-7400 USA. Telephone: (573) 882-3037. **Undelivered Issues:** Allen Press, Inc., 810 E. 10th Street, P.O. Box 368, Lawrence, Kansas 66044 USA.

## THE AMERICAN ARACHNOLOGICAL SOCIETY

*PRESIDENT:* **Charles Griswold** (2013–2015), California Academy of Science, San Francisco, California, USA.

*PRESIDENT-ELECT:* **Marshal Hedin** (2013–2015), San Diego State University, San Diego, California, USA.

*MEMBERSHIP SECRETARY:* **Jeffrey W. Shultz** (appointed), Department of Entomology, University of Maryland, College Park, Maryland, USA.

*TREASURER:* **Karen Cangialosi**, Department of Biology, Keene State College, Keene, New Hampshire, USA.

*SECRETARY:* **Paula Cushing**, Denver Museum of Nature and Science, Denver, Colorado, USA.

*ARCHIVIST:* **Lenny Vincent**, Fullerton College, Fullerton, California, USA.

*DIRECTORS:* **Jonathan Coddington** (2013–2015), **Richard S. Vetter** (2013–2015), **Michael Draney** (2014–2016)

*PARLIAMENTARIAN:* **Brent Opell** (appointed)

*HONORARY MEMBERS:* **C.D. Dondale**, **H.W. Levi**.

---

*Cover photo:* An adult male jumping spider, *Habronattus pyrrithrix* (Salticidae), displaying characteristic green forelegs, white pedipalps and red face during courtship (see page 268). Photo by Colin Hutton.

---

Publication date: 26 November 2014

© This paper meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).