

American Arachnology

Newsletter of the American Arachnological Society

Number 92

April 2024

Table of Contents

2024 AAS Annual Meeting Chetumal, Quintana Roo, Mexico	. 1
2022 AAS Meeting Student Presentation Winners	. 2
Supporting the Society	. 2
Norman Platnick Award for Taxonomic Research	
Spiders and Opiliones of the Southern Appalachians Course	. 3
How Richard Bradley's Common Spiders of North America Came to Be	. 3
Arachnids Collected During the San Antonio de la Sierra Expedition, Baja California Sur,	
Mexico	. 6
Taxonomy: The Game of Naming Nature and Why it Matters	. 9
An Outreach Project in Serbia: A Spider is Not a Monster	
Society Remembered in Two Very Special Posthumous Gifts	15
Fun Links: Bea Vogel, Tarantulas, and Little Miss Muffet set to Music	
In Memoriam: Dr. Gerald Newlands	
In Memoriam: Pat Craig	17
In Memoriam: Charlie (Charles) Denton Dondale	19
In Memoriam: Stefan Foord	21

2024 AAS Annual Meeting Chetumal, Quintana Roo, Mexico



2024 Annual Meeting Chetumal

Join us for the 2024 AAS annual meeting being held in Chetumal, Quintana Roo, Mexico from 24 – 27 June 2024. Chetumal is located in the south of the state of Quintana Roo, Mexico, on the border with Belize. Chetumal is a quiet and safe place. It's a small town surrounded by mangrove swamps and tropical forests, home to numerous chelicerates in addition to Mayan remains, and lagoons such as Bacalar. It faces a gigantic bay that is a reserve for manatees and is located at the gateway to the Caribbean. Registration, housing and other information is posted on the AAS website at <u>https://www.americanarachnology.org/aas-meetings/aasmeeting-2024/</u>. Travel grant applications for student presenters is FAST approaching. Details can be found at: https://www.americanarachnology.org/society/grants/travel-grants/ If you would like to donate to the AAS in order for us to support student (or non-student) attendees, please visit the AAS donation page: https://www.americanarachnology.org/society/donations/

Thanks to Yann Henaut, Salima Machkour M'Rabet, and Raziel Lucio Palacio for hosting this meeting. Questions can be directed to <u>AASChetumal2024@gmail.com</u>.

2022 AAS Meeting Student Presentation Winners

The winners of the 2022 AAS meeting held in Davis, California were never reported in this newsletter. Apologies to student winners. The newsletter editor has had a hard time determining the 2022 winners but with the help of AAS Treasurer, Nina Sandlin, we congratulate the following winners (and apologize to any student who won but was not recorded as a winner):

Olivia Bauer-Nilson was the oral presentation winner for her presentation, "Infection detection and female aggression in a well-studied wolf spider." Pallabi Kundu was the oral runner-up for her presentation, "Disruption of air particle movement affects mating success in multimodal signaling wolf spider." Matthew Angelosanto was the poster winner for his presentation, "Group-living in the armored harvestman *Vonones sayi* and potential physiological benefits." Apologies to the poster presentation runner-up – please email the newsletter editor and your name will be included in a future edition.

Supporting the Society

Help support the mission of the American Arachnological Society through your donations. Your donations will support the future of the society and the next generation of arachnologists. https://www.americanarachnology.org/society/donations/. Want to support student research and student travel to AAS meetings? Give to the "Student Arachnology Research Fund" or "Student Roth Research Fund for Systematics." Or give to the "General Fund" with a note for student travel. Want to make it easier for Latin American students to attend the annual AAS meetings? Give to the "RAEL student travel grant." Want to keep AAS thriving? Have you considered a legacy donation from your estate or qualified charitable distribution (QCD) to AAS? Reduce your taxes while benefiting the future of arachnology. Or just give to support ongoing programs. Want to sponsor memberships of students or colleagues from developing countries? Donate to the "Sponsored memberships." Lifetime memberships are another fantastic way to support the society (https://www.americanarachnology.org/society/membership/). If you are committed to main-taining your association with the society for the remainder of your career, consider a lifetime membership.

The society, in recognition of its generous supporters has established Donor Recognition Categories: *Golden Hypochilid Donors* provide \$500 or more to the society; *Silver Salticid Donors* provide \$100 or more.

In this issue of the society newsletter, we'd like to recognize the 2023 and (thus far) 2024 donors to the society:

2023 Golden Hypochilid Donors: Nadia Ayoub, Richard Bradley, Paula Cushing, Peter E. Midford, Daniel Proud, and Sean Walker.

2023 Silver Salticid Donors: Nadia Ayoub, Robert Blackburn, Mercedes Burns, Douglas Gaffin, Yael Lubin, Facultas AG Maudrich Abonnements, Marc Milne, Kathryn Nagel, Linda Rayor, J. Andrew Roberts, Rebecca Robertson, Petra Sierwald, and Sarah Stellwagen.

Thanks to the (as of now) 2024 Golden Hypochild Donor: Jason Bond and the 2024 Silver Salticid Donors: Al Cady, Linda Rayor, J. Andy Roberts, and Gail Stratton.

New 2023 Lifetime Members (this is a list only of the recent lifetime members): Benjamin Apt, Mercedes Burns, Peter Jaeger, Christopher Malloy, David Nelsen, Zia Nisani, Linda Rayor, and Sean Walker

Norman Platnick Award for Taxonomic Research

The Norman Platnick Award for Taxonomic Research is given to outstanding early career researchers who are no more than six years post-PhD (PhD students who have not been awarded their degree will not be considered). The award criteria are based on the quantity and/or quality of taxonomic publications that have been published or accepted for publication. The applicant's publication record must demonstrate a strong commitment to morphological taxonomy. Applications must be emailed before 11:59 pm US Pacific Standard time on 30 April. More details can be found at:

https://www.americanarachnology.org/society/norman-platnick-award/

Spiders and Opiliones of the Southern Appalachians Course



AAS Sarah Stellwagen and Mercedes Burns will be teaching this course at Highlands Biological Station in Highlands, North Carolina from July 23 – August 4, 2024. This field biology course will present a comprehensive introduction to spider biology with additional review of the arachnid order Opiliones (daddy-long-legs). Lectures and discussions will cover systematics, morphology, behavior, physiology, and ecology. Afternoons are devoted to fieldwork and evenings will be spent identifying specimens, with the objective of assembling a significant collection of the extraordinarily rich local arachnid fauna while studying their ecology and behavior. This course can be taken for undergraduate or graduate university credit. Prerequisites: general biology, ecology, or permission of instructors.

Scholarships are available for attendees. The deadline for application submission is Friday, April 26, 2024. More information can be found at

https://burnslab.umbc.edu/spider-course/.

More information about the course and the course syllabus can be found at: <u>https://highlandsbiological.org/summer-2024-academic-courses/</u> or contact the instructors at Sarah Stellwagen (stellwagen@charlotte.edu) or Mercedes Burns (bursn@umbc.edu).

How Richard Bradley's Common Spiders of North America Came to Be



My arachnological training began rather suddenly in 1980 when I was forced to make a new choice of study organism for my Ph.D. dissertation work in New Mexico. I had been working for a few months on proposals and initial field work to study a predator-prey system with Rock Wrens and their insect prey. The birds were cooperative enough, but I found that they spent a large proportion of their time foraging under huge boulders. I tried a number of methods to obtain prey samples from under these huge rocks without success. It was clear that I was missing a critical portion of the prey biology. After a few other predator-prey systems also failed the practicality test, I was getting quite worried. Then Eric Toolson, a faculty member on my doctoral committee, suggested that I should study scorpions. They were abundant, easy to sample, the work wouldn't require elaborate permits, and they ate many of

the same prey items I'd been studying. This turned out to be a wonderful choice. My dissertation work went well, and I ended up publishing the results in seven papers on the vaejovid scorpion *Paruroctonus utahensis*.

Studying scorpions gave me an opportunity to investigate animals with a completely different sensory world. I found them fascinating. A friend I'd met years earlier in at Oregon State University, Gary Polis quickly became my go-to guy when I had questions about scorpion biology. I learned much about the ecology of desert invertebrates from Cliff Crawford at UNM. Of course, I'd had courses in invertebrates,

including general entomology, but I decided I needed a course in arachnology. Thankfully, Donald Lowrie was teaching one, he had retired to New Mexico and taught an occasional course at UNM in the autumn of 1981. It provided me with a solid background in spider biology.

My first job after receiving my doctorate was at the University of Sydney, in Australia. Between 1983 and 1987 I was immersed in a different world in many ways. Scorpions, spiders and amazing birds vied for my research attention. I couldn't decide, so I ended up doing some of each. With Peter Higgins I studied the melodious songs and territorial behavior of the Grey Shrike Thrush (*Colluricincla harmonica*). With John Clark, Greg Wallis, and Rebecca Bladon I worked on *Argiope aetheria*, *Misgolas rapax*, and *Atrax robustus* as well as a host of other fascinating arachnids found around the Crommelin Biological Research Station near Pearl Beach, New South Wales. Warrah, the station's primary building, became a second home. The station is surrounded by Brisbane Waters National Park.

In 1988 I took a job at The Ohio State University, Marion Campus. This was primarily a teaching position, with relatively little time for research. Nevertheless, I continued some research work on bird song and spider ecology. In 1994 I decided to focus on an outreach and engagement project entitled the Ohio Spider Survey. The purposes of this project were to provide an updated and expanded understanding of spider diversity and distribution in Ohio as well as to promote education about spiders in the general public. The project was generously supported by the Ohio Division of Wildlife: Wildlife Diversity Program. It was organizing and conducting this program that really sparked my interest in general spider diversity. We were observing, photographing, and collecting a large diversity of spiders throughout Ohio. As I presented the results of my work at American Arachnological Society meetings each year, I began to have a fruitful exchange of ideas about spider distribution, ecology, and taxonomy with numerous arachnologists. I learned much from colleagues who spent hours discussing spiders. Allen Brady, Joe Beatty, Don Cameron, Bruce Cutler, Robert Edwards, and GB Edwards stand out as particularly generous with their time. Gradually I came to realize that there was a clear gap in our natural history literature; a comprehensive guide to spiders of North America.

The genesis of the current book project was an inquiry in September of 2002 from Sarah Whittley of Wildlife Art Ltd (UK) indicating that she was seeking an author to revise and update Levi & Levi. Princeton University Press was our initial choice because of their reputation for producing color guides to a variety of organisms. We exchanged letters with PUP beginning in July of 2003. Michael Roberts (author and illustrator of *The Spiders of Britain and Northern Europe*) was our first choice for illustrator. He expressed interest in the project and put in a substantial amount of effort in producing a first sample plate in October of 2003 and we discussed a plan, an initial list of species, and cost estimate for the art. At that time, we were assuming that the press would provide funding for production of the art program. Princeton Univ. Press pulled out of the project in November of 2004. Between 2004 and 2008 we had ongoing discussions about the project and funding with Cornell University Press. We also sent book proposals to a number of other publishers without success. By early 2008 both Cornell University press and Michael Roberts had soured on the long-delayed project.

During the period between 2005 and 2008 I circulated a draft list of species to be included in the guide to arachnologists throughout North America. The goal was to prepare a list of approximately 500 species that would represent the most frequently encountered spiders in each region. Emphasis was placed on inclusion of species that would be encountered by interested naturalists, not necessarily spider specialists. Thus, larger and more conspicuous species were given preference. The list was also expanded to include examples of all families as well as all major genera. Each year during that period I discussed the book project and my list with participants at the annual meetings of the American Arachnological Society.

An appeal to the members of the American Arachnological Society for financial support was made to the executive committee of the AAS. Word of the proposed project was circulated to the society. The same generous anonymous donor who had supported the production of the very successful *Spiders of North America: an identification manual* in 2004, offered a large donation based on the contingency that the

society could raise partial matching funds from the membership. A proposal to provide society funds, and also solicit contributions from the membership was successful. Thanks in large part to the anonymous donor, as well as the ASS membership a total of \$55,000 was raised to fund the art program. At the AAS meeting in Berkeley, California in 2008 Paula Cushing and I discussed the field guide project with Chuck Crumly of the University of California Press. Having a pledge of support for the art program was the key. I signed a contract with the University of California Press on 3 March, 2009. Steve Buchanan joined the project later that month.

I applied for and was granted a sabbatical leave for the academic year 2009/2010. I began the outlines and initial work on the writing well before the project was actually in contract. I began writing in earnest late in the spring of 2009.

After Steve and I discussed the plan for the (82) color plates we began production in August of 2009. The process began with selection of the species, sex, and poses to be included. I arranged for the delivery of a set of specimens (loans from museum collections, the majority from the Museum of Comparative Zoology). Laura Liebensperger was extremely helpful in searching for and preparing a large number of loans of material from the MCZ collections. I researched and sent as many good color photographs and scanned published illustrations as I could locate for each species. For some species this was a real challenge because there were no color photographs available. In those cases, I recruited field workers familiar with the species to either catch and send a living specimen that I could photograph, or have them photograph the spider for us. For a few plates I sent my own rough sketches of particular features or poses.

After all the materials were collected, I sent an email message that included a brief description of the main features that were to be visible on the painting. Steve sent questions and often a first sketch of a pose to be used for all similar spiders on the plate. After we had decided on the pose, Steve provided a sketch of the layout of the illustrations to be included on the plate. I replied with suggested changes, if any. As soon as the details of pattern, eye position, leg, and body proportions had been ironed out, Steve proceeded to a second sketch. Assuming all went well we would then move to the first color illustration. At this stage the color illustration was shared with one or more experts on the particular group of spiders illustrated on the plate. Colleagues were very generous with their time and usually replied quickly with useful criticisms. At this point Steve produced a near final version. There were often small changes or color-shift revisions before the final color version was completed.

It took about two weeks to complete a plate, from the initial instructions to the final draft. Often, we were working on more than one plate at a time, each at a different stage as the next action due, shifting from Steve to me and back. The first plate was completed on 30 September 2009 and the last on 30 March 2012. In addition to the color plates, a total of 94 additional black-and-white line drawings were also completed during that period resulting in 25 figures. For these I provided Steve with a sample drawing and my initial view of a possible layout. He made suggestions, reflecting his extensive illustration experience about what art format conveys the important information. His work on these was remarkably efficient. In all Steve produced 688 individual colored paintings that are presented in the 82 plates.

The ability to exchange image files and messages using electronic mail was vital to the rapid progress on this project. I can only imagine how many years it would have taken to complete if we had been using regular mail.

I completed early drafts of most of the book during 2010 with the exception of the species accounts. I circulated these initial drafts of the introductory chapters and keys to a variety of reviewers. For each section I found a willing reviewer to tackle the English, as well as a technical reviewer from among my colleagues in the AAS. Thanks to these generous folks, the book went through a series of drafts and improvements. Major work on distribution maps and species accounts occupied my time during 2011. For each family, I used the most recent published generic revisions as my primary sources. The *Spiders of North America: an identification manual* was also vital to this effort. After completing drafts of the family and species accounts, I circulated them to particular experts. Herbert Levi read the texts for the orb-weaving

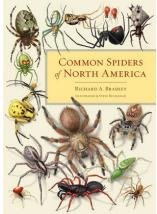
families. Gail Stratton read the wolf spiders accounts. Bruce Cutler read the jumping spider chapter. A variety of others read particular species accounts in their areas of interest. This book could not have been completed without the willing help of many arachnologists.

Late in 2011, anticipating the contract deadline of March 2012, I contacted Chuck Crumly at UC press about the status of the work. During those discussions I learned that my text was much too long, and that the maps were considered extra illustrations and thus could not be included in the book. After many hours of research and artwork, this was both a disappointment and a relief. It was disappointing because of all that work I had completed that would not be used. The relief was that I could shift my focus from the remaining unfinished maps to revision and reduction of the text to meet the suggested length limits set by UC press. I turned in the final manuscript on 18 January 2012, nearly two months early. The final plates were submitted on 30 March 2012.

My initial contact at the University of California press was Chuck Crumly (Executive Editor, Science Publishing Group, UCP). He was the person who handled the contract and initial submission of the manuscript. The next editor I worked with was Lynn Meinhardt (Editorial Coordinator, Science Publishing Group, UCP) who handled the review process and initial work with the art program. Most of the hands-on

editorial work was done by Kate Hoffman (Project Editor for Science, UCP). Copyediting was done by Amy Smith Bell. Lia Tjandra did the cover design using illustrations from Steve Buchanan. The book was printed by BookMatters, and my contact with that company was David Peattie.

With the art and text in hand, the UC press sent the work out to external reviewers. The reviewers' comments were quite positive and helpful. Final revisions were completed late in the spring of 2012. The press moved very quickly and provided the first page proofs by the end of June. My task then was to review the proofs. After relatively minor changes the press provided final page proofs. With these in hand, as a necessary prerequisite, I began work on the index. I completed the index by the end of the summer. In parallel with work on the text, the press provided proofs of the art. Steve and I reviewed these, and final art was approved at about the same time.



Arachnids Collected During the San Antonio de la Sierra Expedition, Baja California Sur, Mexico

By María-Luisa Jiménez, Carlos Palacios-Cardiel & David Chamé-Vázquez

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In the American Arachnology, issue 38 (November of 1988), an abstract of one study made in Sierra La Laguna, Baja California Sur, Mexico, was published. This study resulted in a hundred specimens collected, the discovery of several new species, and some papers published, some of which were used as baseline studies by Mexican decision-makers to propose a natural protection area in the region. Over the past year, we have been involved in several field trips; one expedition was carried out in the same region as the mentioned 1988 study. On this occasion, we visited San Antonio de la Sierra, Sierra La Laguna, Baja California Sur, from October 9 to 14, 2023, as collaboration in the project Rancho Encinalito: A Biodiversity & Conservation Evaluation, with support of Alumbra Foundation and the University of California, Alianza Mexico program.

During our expedition, we collected 322 arachnids belonging to orders Araneae, Scorpiones, Solifugae, Opiliones, and Amblypygi. Among spiders, we found 30 families and 61 species. The most abundant families were Araneidae, Salticidae, and Uloboridae. Some key species are endemic to Sierra La Laguna and Cape Region, such as *Rothilena sudcaliforniensis* Maya-Morales & Jiménez, 2013, *Lyssomanes pescadero* Jiménez & Tejas, 1993, *Tmarus ehecatltocatl* Jiménez, 1992, *Califorctenus cacachilensis*

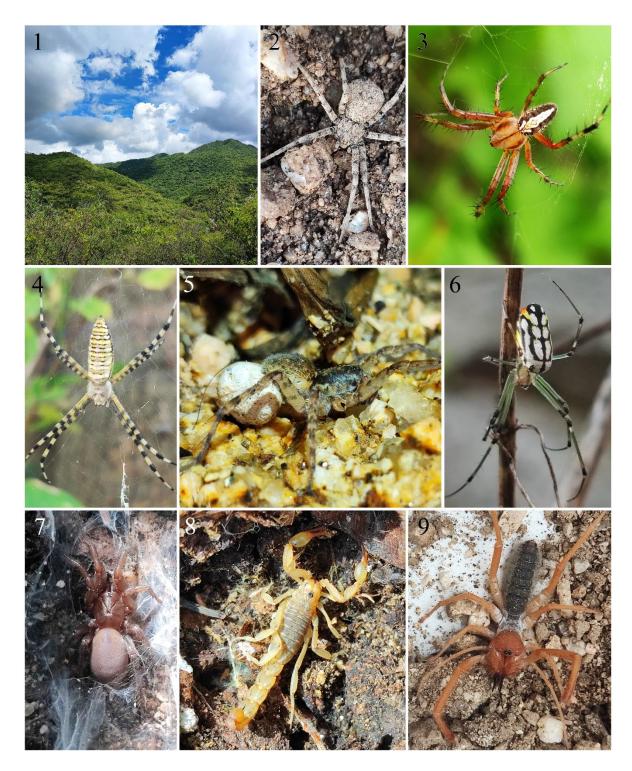
Jiménez, Berrian, Polotow & Palacios-Cardiel, 2017, and *Zorocrates badius* Simon, 1895. We observed that the richness and abundance of spiders were higher in sites with more complex and better-preserved vegetation.

We collected five scorpion species belonging to two families. The most abundant and diverse family was Vaejovidae, which comprises four species in the site. Buthidae was represented by one species. Interestingly, all scorpions collected are endemic to Mexico. We collected only seven specimens of Solifugae; three belong to Eremobatidae, and four belong to the Ammotrechidae family. The order Opiliones was represented by only two species, both belonging to the family Sclerosomatidae, with one species endemic to Baja California Sur. The order Amblypygi was represented by the single species of Baja California Peninsula: *Phrynus asperatipes* Wood, 1863.

There are still many specimens to identify or corroborate the species, but we hope to complete the curatorial and identification process soon. Furthermore, we hope to share a comprehensible list of species in an upcoming publication.

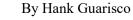
A few selected publications for Baja California Sur arachnids are:

- González-Santillán, E., & Prendini, L. (2013). Systematic revision of the scorpions of the genus *Hadrurus* Thorell, 1876 (Scorpiones: Caraboctonidae) from Baja California and Sonora, Mexico, with descriptions of two new species. *Boletín de la Sociedad Entomológica Aragonesa*, 52, 137–164.
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- Jiménez, M. L., & Llinas, J. L. (2005). Amblypygi (Arachnida) de Baja California Sur, México. *Revista Mexicana de Biodiversidad*, 76(2), 249–254.
- Williams, S. C. (1980). Scorpions of Baja California, Mexico. *Transactions of the San Diego Society* of Natural History, 19(1), 1–107.



1) San Antonio de la Sierra, Sierra La Laguna, Baja California Sur, Mexico, 2) *Homalonychus theologus* Chamberlin, 1924, 3) *Neoscona oaxacensis* (Keyserling, 1864), 4) *Argiope trifasciata* (Forsskål, 1775), 5) *Arctosa littoralis* (Hentz, 1844), 6) *Leucauge venusta* (Walckenaer, 1841),7) *Euagrus* sp., 8) *Maaykuyak vittatus* (Williams, 1970), 9) *Eremobates* sp. All photos were taken with a cellphone by DCV.

Taxonomy: The Game of Naming Nature and Why it Matters



Carl Linnaeus was a gifted individual who used his unique ability to recognize the important features of plants and animals to order life on earth into categories presented in his famous work, "Systema Naturae," first published in 1735. Each organism was given only two names, a genus name followed by a specific epithet, which together constitute the species name. In some ways, this is similar to our own names, only our "genus" name follows our "species" name instead. For example, the name Thomas Brown indicates that the unique person, Thomas, belongs to a family of other individuals with the surname, Brown. However, in the scientific name of a dog, *Canis familiaris*, the individual specific epithet, *familiaris*, resides within the genus, *Canis*, which has other members, such as the wolf, *Canis lupus*.

After this auspicious beginning, taxonomy has evolved over the years as new questions concerning the classification and naming of organisms have arisen. It was necessary to form an international commission on zoological

nomenclature (ICZN) that was tasked with developing the International Code of Zoological Nomenclature (ICZN). The code contains all the rules regarding the proper designation of animals' scientific names.

One important aspect of the code involves using the correct scientific name in a standard format. The genus and specific epithet are presented in that order, and both are in italics. The genus name is capitalized, while the specific epithet is not. The name of the person who initially described the species, followed by the year in which it was described follow the genus and specific epithet. For example, the scientific name of the bold jumping spider is *Phidippus audax* (Hentz 1845). Note that in this case, there is a pair of parentheses around the describer's name and year it was described. This indicates that this species was originally described by Hentz in a different genus than the one in which it now resides. Hentz originally described it as *Attus audax*. As more research was done through the years, this genus was split into several other genera, and the bold jumping spider was moved into the new genus *Phidippus*. Therefore, if a species name is followed by the describer and date, and there are no parentheses around them, we can be sure it is still in the original genus, and has not been moved.

Charles LINNE



Male Phidippus audax

Another important rule of the code is known as "priority." Sometimes,

taxonomists describe a new species but are not aware that it has already been described by someone else. In this case, if it can be clearly established that both names belong to the same organism, the name that was first published is given priority.

Scientific names that have been suppressed or have been given to the same species after it has already been described are "synonyms," and are often included under the proper scientific name in species accounts. In this way, one can easily check older literature for these names and know what species to which they refer. Looking at the account for the bold jumping spider in Edwards (2004), we find two pages of synonyms following the accepted scientific name. If we come across "*Phidippus variegatus* (Lucas 1833)," or any other name in the list, we know it refers to the bold jumping spider.

There can be a further wrinkle in the proper use of scientific names. Although it is common to use just the last name of the describer, this can cause problems in some instances. For example, two related individuals, L. Koch and C.L. Koch, both described new species of spiders. Another example involves the famous

9

arachnologist, Octavius Pickard-Cambridge, who described many new species in England and Central America, and his nephew, Frederic O. Pickard-Cambridge, who also discovered new species. Therefore, in these two cases it is important to use their initials within the complete scientific name. Although some of these rules may seem a bit esoteric and boring, it is all part of the game of taxonomy. "One should always keep in mind that an important function of classifications is information retrieval" (ICZN 1999).

Naming nature is not just a simple matter of following the rules, although it is one important aspect. A scientific name is given to each unique species of life on earth. In the days of Linnaeus (1707-1778), every living organism was believed to have been created by God and was unique and unchanging. This belief spurred early naturalists, who were often ministers and preachers, to give glory to God by exploring and studying His creation. Early explorations of tropical jungles in both hemispheres led to the discovery of a dazzling array of new plants and animals.

Detailed anatomical studies are required to determine if specimens are new to science. If a number of individuals of the new species are available, one typical example is chosen and the taxonomist provides a detailed description of pertinent characters that distinguish it from close relatives. This individual is designated as the "type specimen," or "holotype," and is stored in a museum collection. Other specimens of the new species collected at the same location and same time are called "paratypes."

Although detailed descriptions, often accompanied by illustrations, of new species published in peer reviewed, scientific publications are very helpful in identifying specimens, it is often necessary to actually examine the type material to be certain if one has discovered a new, undescribed species. Therefore, these invaluable, museum collections are literally the great libraries of life on earth.

Some libraries and museums have been destroyed during wars or natural catastrophes, resulting in the loss of priceless collections. If the holotype specimen has been destroyed, one of the paratypes can be designated as a new holotype to replace it. What happens if all of the type material is gone? A biologist may go to the type locality, where the original types were collected, and find new specimens of the species. One of them is selected as the new type specimen. It is called a "topotype."

Most members of the public, as well as many scientists, believe that almost all of the species on earth have been described hundreds of years ago, and therefore that learning taxonomy is no longer necessary. The discovery of thousands of new species across the globe every year proves this assumption is wrong. Unfortunately, the prevailing attitude has led to vastly reduced funding for basic taxonomic work. Because of this situation, few students are inclined to become taxonomists, and many of the experts are old or have gone to their graves. This leaves great gaps in our ability to identify many forms of life, especially invertebrates. It takes years or even decades to become proficient in identifying arachnids and most insect orders.

Those organisms that are medically or agriculturally important have received the most attention, while others have been neglected. As a result, many ecological field studies don't even attempt to identify what they have collected, but instead, use terms like: ecospecies 1, 2, 3 and 4. This practice may speed up the process, but greatly reduces the value of the study, and often leads to errors due to the presence of unrecognized cryptic species.

We are currently living in an era called the Anthropocene, an age of another great species die-off. Unlike past extinctions, this one is caused, directly or indirectly, by human activities that have resulted in habitat loss, poisons and other pollutants in the air and water, and disruption of normal biogeographic cycles. As a result, entire groups of species are dying at such an accelerated rate that many have not even been formally described, much less understood in terms of their ecological roles (Wilson1992).

The alarming loss of biodiversity, especially among pollinators, has become more apparent in recent years, and has spurred efforts to limit harmful insecticides and to plant pollinator gardens. Countries in the tropics and elsewhere are choosing to protect natural areas by designating new national parks. How are such areas selected? Some are chosen to protect one or two threatened, charismatic animals, such as jaguars or

elephants, for example. By protecting habitat for these wide-ranging species that have gained public affection, entire ecosystems composed of numerous forms of life, many unknown to science, are also saved from destruction.

Another way of choosing the most desirable area to protect is to pick the one with the highest biodiversity. Since it is virtually impossible to inventory all of the plant and animal life within the several areas under consideration, one or more key groups that are speciose and occupy a wide variety of habitats and niches can be intensively surveyed and used as a proxy for assessing overall biodiversity. Birds and spiders are two such target organisms (Coddington et al. 1990). Therefore, it is important to have biologists with sufficient expertise in identifying them.

Conclusions

What we don't know *can* hurt us. Two great extinction events are currently happening at the same time: the increasing rate of species extinction and of the taxonomists who can identify them.

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An Outreach Project in Serbia: A Spider is Not a Monster

By Gordana Grbić

Background story: In case you didn't know, Serbia has "The Spider Day," a special one-day event, held in Novi Sad, developed to increase spider popularity and to improve an interest in arachnology. The first was organized in 2017 and it was supported by the Rufford Foundation (United Kingdom). It brought together local and foreign experts who presented interesting facts about spiders to the general public. Furthermore, visitors had a chance to enjoy photo and art exhibitions, and observe live specimens, children's workshops and a lot of interesting accompanying content, such as teamed balloon decoration and a cocktail party with spider patterned food. A second Spider Day event was supported by AAS and organized in 2019, according to the same model, with also interesting lectures and accompanying programs. If you are interested to see photos of those previous events, please feel free to visit the "Spider Day" was organized only as an art exhibition, due to restrictions related to the Covid 19 pandemic. The next real (in person) event was planned for 2023.

Step by step towards the project – A Spider is not a Monster (in Serbian: Pauk nije Bauk): According to feedback collected over the years, it became obvious that holding the event in just one city (Novi Sad) was not enough to spread interesting information about spiders throughout the whole country. Furthermore, we learned that lots of people missed the event in Novi Sad, since it was too far or too expensive for them to travel. So, the president of NGO Spiders of Serbia, decided to change the situation around, and to design a

project that would cover several cities, from the south to the north part of Serbia. That way more people would get an opportunity to come to the places closest to them, and to enjoy the spider event.

Team members, Gordana Grbic, Igor Gajic (arachnologist) and Boris Ilic (naturalist, TikToker), chose 6 cities, and adapted the current event model for traveling. Igor and Gordana decided to give oral lectures,



reling. Igor and Gordana decided to give oral lectures, while Boris created an original video. Topics were popular subjects, with emphasis on species living in Serbia. Balloon decoration and gingerbread treats were in the traditional "The Spider Day" style, while socializing with the audience during artwork shows and live tarantula exhibits, was planned only in locations where it was possible to effectively manage these activities.

Fundraising started in October 2023, through a crowd funding campaign and with technical support of Catalyst Balkans, a regional philanthropy foundation. After just 30 days, this kind of campaign in Serbia exceeded everyone's expectations. It raised more than enough, approximately \$2,247.62 USD in total, so the team decided to invest that extra money in one more city and to organized a Bonus event. Everything was ready for realization.

Map of Serbia with all cities that were visited during the project.

An overview of project activities: All seven mini "Spider Days" were held with great success. Five lectures were organized during November and December of 2023, in the cities of Niš, Kragujevac, Novi Sad, Vršac and Subotica. The lecture in Belgrade and the Bonus city Bačka Palanka was organized in January 2024.

The number of visitors at the lectures was over 230. The lowest attendance was in Niš (15), while the highest was in Novi Sad (60), then Kragujevac (50) and Bačka Palanka (50). Usually, visitors were youth and adults,



Project team: (From left to right): Boris Ilic, Gordana Grbic, Igor Gajic.

although in some cities, there was also a younger audience, even some children of kindergarten age. For them we organized additional special lectures adjusted for their age.

The accompanying program in the form of an exhibition of live tarantulas was organized in two cities. In Novi Sad, one volunteer presented his pet collection of 4 tarantulas (*Grammostola pulchra, Chilobrachys fimbriatus, Chromatipelma cyaneopubescens, Monocentropus balfouri*). However, in Subotica (Palić Zoo),

our host presented confiscated tarantulas held in their wild animal sanctuary (*Brachypelma smithi, B. emilia* and *B. vagans*), so after the lecture, we got an opportunity to discuss the problems of illegal spider trafficking in general and in Serbia.

The art exhibition entitled "The Spider and the Girl" as a part of the accompanying program, was first staged in Novi Sad, and was available for 5 days after the main event, so everyone who missed the lectures, got an opportunity to take a look at the art. According to our host, around 10 people additionally came.

Then, this art exhibition was set up in the information center of the National Park "Fruška Gora Mt." and lasted for 30 days. In that period, management reported approximately 50 visitors. including the Chinese delegation that visited the National Park. After an official meeting with management of the park they also saw the exhibition, and according to our source, they were astonished by the presented creative work.

A new life was given to the exhibition, in the City Museum in Bačka Palanka, the Bonus city of the project. In January 2024, after the lecture, the art exhibition was staged till the end of February. In that period, the museum recorded over 200 visitors. Most of them were children of different ages, from the school nearby, but there were also adults with their families that missed the lectures.

A virtual version of this exhibition "The Spider and the Girl" was organized in other cities in order to give the audience a chance to enjoy the atmosphere from Novi Sad. The drawings were presented with the sounds of a lively tarantella melody. Balloon decoration and gingerbread with spider and web motifs accompanied every event.



Example of the art work from the exhibition "The Spider and the Girl".

A short note about project visibility and Facebook outreach: Apart from the very noticeable project brand visibility through the prominent roll up, uniforms for lecturers and volunteers, the general public was informed about the lectures mostly through Facebook pages Spiders of Serbia (in Serbian: Paukovi Srbije), Insects of Serbia (Insekti Srbije), and the team member's or spider enthusiast's personal social media accounts. Additional support came through organizations that were our hosts, donors, or general supporters. Several radio interviews were done, but only one TV presentation. That is not an unusual situation for Serbia, where political stories usually upstage biodiversity subjects. In our case that included new about road blocks due to farmers' protests in November, and announcements of parliamentary election schedule for middle December 2023. However, at the end of the project, it was clear that the number of followers of the Facebook page "Spiders of Serbia" increased significantly, from 1641 to 2002, which we consider a success.

Audience feedback and visitors' response: According to the positive response of the audience during and after the lecture, it looks like everyone had a great time. The biggest complaint was that seven is too low a number of cities that should be visited. There was also an invitation to expand the event regionally, e.g., in Bosnia. That will be taken under consideration for the future events. Some visitors that were not comfortable asking in public, wrote emails or messages later. Surprisingly, they didn't lose interest after the event. Additional questions by email also came after every radio interview that was aired. One letter was particularly nice, where a man wrote "I made my first step to conquer my fear," so it looks like our general goal was achieved. Furthermore, at the University of Niš and Kragujevac, biology students were not alone in the audience, there were future economists, philosophers, and language experts. Some of the financial supporters were also present in every city. In Vršac, one visitor surprised everyone by enriching the event with roasted grasshoppers from Mexico. It was not roasted tarantulas, but it was still exotic. The short film (video material) that was made for the project by Boris, was included in the Natural Photography Film festival in Smederevo (not a city on our traveling list). It was particularly noted and received the longest applause. Our NGO was officially named "a friend of the festival."



Preparation of lecture in Kragujevac city with all visual effects and balloon decoration (A), gingerbread with spider pattern that were prepared for all events (B).

For more photos from the events, please visit our Facebook photo gallery albums, available here: <u>https://www.facebook.com/paukovisrbije/photos_albums</u>. Every city has its own album.

If you would like to support our work in the future, please follow our Facebook page or write to us via email to <u>paukovisrbije@gmail.com</u>, or <u>gordana.grbic.ns@gmail.com</u>. The next traveling "The Spider Days" will be organized in 2025.



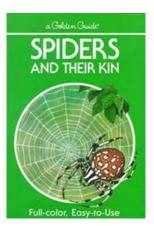
The Serbian team would like to thank everyone who contributed for their warm support. This was a unique journey that would have not been possible to organize without the donors. With this project, you didn't just support the idea of the "The Spider Day," you supported the development of the arachnological community in Serbia, and increased the visibility of the NGO "Spiders of Serbia." You made a huge impact that will be remembered. Gordana, Igor, and Boris thank you for that!

Society Remembered in Two Very Special Posthumous Gifts

The late arachnologist Herb Levi was the author of more than 200 scientific papers and described 1,254 spider species. But to the larger public, he is known primarily from a little book called *Spiders and Their Kin*, in the Golden Guides series from St. Martin's Press.

The slim 4 x 6-inch guide, co-authored with his wife Lorna, was first published in 1968, with a bright green cover. It has never been out of print, and many of us probably remember wearing out one or more copies as kids. A revised and updated version was released in 2001.

In 2022 Herb and Lorna's daughter Frances reached out to inform us that she had directed St. Martin's Press to transfer the royalties from the book to AAS. "I have a small amount of income that dribbles in as royalties," she wrote, "that I am sure Herb would want to go to spider research."



Direct payment has been set up from St. Martin's, and the proceeds are going toward the <u>Herb Levi</u> <u>Memorial Fund for Arachnological Research</u>. The fund was set up in 2015, the year after Herb died, to provide funding to AAS members to supplement the minimal institutional support available for research programs to early career scientists.

Also, in 2022, the Society received word that it had been remembered in the will of H. Don Cameron, who passed away in 2021 (see <u>American Arachnology</u> #87 to see the tribute to Don Cameron). The erudite classics scholar and arachnid enthusiast from Ann Arbor was a longtime AAS parliamentarian. He is remembered for – among many other things – his remarkable Etymological Dictionary of North American Spider Genus Names, which is published as an appendix to the *Spiders of North America: an Identification Manual*. Don left the AAS \$5,000. His bequest was directed to the Vincent Roth Fund for Systematic research, which supports student members whose work focuses on taxonomy or systematics.

We are deeply honored and grateful to Frances Levi and Dr. Cameron, and wanted to acknowledge their generosity to the society.

Fun Links: Bea Vogel, Tarantulas, and Little Miss Muffet set to Music



Bea Vogel forging her own pitons at the Stanford Engineering Lab in 1952

An extraordinary article about the first President of the American Arachnological Society, Dr. Bea Vogel, was published in *Alpinist* magazine in 2022 – "Bea and Me." It is well worth reading and can be found online at https://alpinist.com/features/bea-and-me/. Bea died 7 December 2018.

Not only did Bea make a name for herself in our society of arachnologists, she also was a trailblazer in the alpine climbing community! Bea was one of the first female climbers who ascended El Capitan using pitons she had forged herself.

In the article, the author mentions that when Bea attended Stanford University, she planned to try out for the track team, "but the woman in charge of the physical education department told Bea that there was no track program for women [in 1951] and that running might affect her childbearing abilities." Bea decided to join the Stanford Alpine Club instead, which admitted anyone interested in climbing regardless of their gender.

The article details many of the challenges related to sexism Bea faced throughout her life and career, including the fact that "her professors [at Yale University] didn't support her work during graduate school, forcing her to self-publish her thesis." (The professor was Alexander Petrunkevitch.)

For anyone in AAS who was fortunate to know Bea, the article in the *Alpinist* magazine sheds light on her sometimes prickly and always obstinate personality. Bea was an extraordinary scientist and adventurer who forged, not only her own pitons, but a trail for those of us female arachnologists who followed in her footsteps.

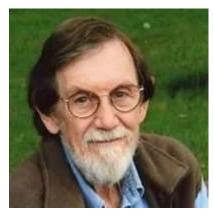
What do we know about the biology and natural history of the common southwestern tarantula, *Aphonopelma hentzi*? More and more thanks to the work coming out of Cara Shillington's lab. She and her students, for the past several years, have been exploring all aspects of the biology of this species. A nice article can be found at: <u>https://www.secondwavemedia.com/concentrate/features/emutarantulas0706.aspx</u>.

Her lab (and Paula Cushing's lab at the DMNS) have been highlighting the value of tarantulas and spiders at the annual La Junta Tarantula Fest. This spider-themed festival is being held September 27-28, 2024 and is well worth a visit (<u>https://visitlajunta.net/la-junta-tarantula-fest/</u>).

In March 2024, Dr. Jerry Rovner, the AAS's own answerer for all arachnid questions, received an email from Stephen Barchan. Mr. Barchan said, "I'm a freelance composer based in the UK and a piece of mine called *Two Songs about Spiders* was recorded recently in London. The piece sets two traditional rhymes about spiders to my own music and was written for the distinguished British soprano Jane Manning (1938-2021), who gave several performances of the piece and wrote about it in her book *Vocal Repertoire for the Twenty-First Century*, published by OUP. The recent recording, available on YouTube, was made last month by the British-Pakistani soprano Mimi Doulton - a former student of Jane's. I was wondering if the recording might be of interest to the American Arachnological Society membership, perhaps via the email newsletter or online social media." Here are links to these unique songs focused on our own favorite animals. Mr. Barchan has put the story of Little Miss Muffet and the poem Incey Wincey Spider to music: <u>https://www.youtube.com/watch?v=hs_L08G5cDo</u>

Score:

https://britishmusiccollection.org.uk/sites/default/files/TWO%20SONGS%20ABOUT%20SPIDERS.pdf British Music Collection: <u>https://britishmusiccollection.org.uk/score/two-songs-about-spiders-0</u>



In Memoriam: Dr. Gerald Newlands

Dr. Gerald Newlands of High River, Alberta passed away at the High River Hospital on May 26, 2022 at the age of 80. He is survived by his wife, Santa-Susanna, and his sister, Edith Wolff of South Africa.

Gerald was born in Pretoria, South Africa to parents George and Sheila Newlands. He began his scientific career working in the Department of Biochemistry at the University of Pretoria. Following that, he worked at the Transvaal Museum studying the evolution of man. Gerald then became more interested in the study of arachnids, which sparked him to take a position as a Medical Arachnologist and Entomologist at the South African Institute for Medical Research in Johannesburg. In 1983, Gerald returned to the University of Pretoria to teach medical students Clinical Entomology and science students Insect Physiology.

Gerald came to Canada in 1992 and devoted most of his time and energy into his photography (e.g., "Kirlian" method). His work was showcased at the University of Calgary Art Gallery in May 1994. He also worked as an Adjunct Associate Professor in the Archaeology Department at the University of Calgary. Throughout his life, Gerald wrote five books, over 50 scientific papers, and presented papers at 23 professional congresses worldwide; in addition, three of his inventions had been patented.

In Memoriam: Pat Craig



(Submitted by Darrell and Suzanne Ubick; photo by Warren Savary).

It is with deep sadness that I report on the passing of my dear friend, colleague, and mentor, Patrick R. Craig (1935 - 2023).

Pat was born on 27 February 1935 in Santa Maria, California, to a family of Irish, Spanish, and Mexican ancestry. His parents owned a restaurant/ inn, where the constant engagement with customers, family, and friends developed his natural gregariousness, love of discourse, and exchange of ideas. He early revealed an interest in natural history and collecting, compiling collections of insects, coins, and stamps. After completing high school in Santa Maria, he attended Allan Hancock College to study science and received an AA in Zoology.

Pat moved to Berkeley to continue his education at the University of California, attending classes from 1955-1957 but entered the US Army in 1958

before completing his Baccalaureate degree. In the Army, Pat was trained in communications and cryptography, receiving Top Secret Q clearance. During this period, he was also trained as a photographer and provided official military photo documentation. Upon returning to Berkeley, Pat was employed at the UC Lawrence Radiation Laboratory, as a Scientific Data Analyst in Physics and Photographic Specialist, where he worked from 1961 to 1976.

Pat married Donna Dailey during this time. They had two children, Kathleen and Michael.

Pat had an impressive eclectic employment record. Besides his fulltime employment at the Rad Lab, he took on positions as a Biological Collector in US and Mexico (1960), a Laboratory Assistant at the UC Richmond Field Station (1961), and a teacher of High School Biology and Physics at the Colegio Nueva Grande, in Bogota, Colombia (1964-1965). He lectured on Biology and Photography at Laney College (1968-1970), Oakland College of Arts and Crafts (1972-1973), Antioch College West (1974-1975), and John Muir Institute (1978-1979). From 1980-1992, Pat worked for the Berkeley Unified School District. His wide field of interests and expertise enabled him to manage the Special Education Resource Library, the Educational Materials, serve as an AV Computer Specialist, and repair electronics.

Pat, despite his love for igniting verbal fireworks, was a very gentle soul who was naturally drawn to the Unitarian Universalist Church. After his divorce from Donna, Pat met and married Rose Saint John at a church retreat in the Mendocino Redwoods, where they married. The two combined households in Rose's home at Guerneville, fittingly located among towering redwoods. It was necessary to build a whole new wing to house Pat's collections, not least his books, which he estimated between 40,000 to 50,000 volumes, on a very wide array of topics. He retained his early absorption in natural history, especially entomology, arachnology, and paleontology. His engagement with his books was evidenced by the voluminous notes written in tiny script on 3x5 cards that were inserted into books as placeholders. His shirt pockets always bulged with tiny notebooks, cards, and an abundance of fine-point pens.

Pat's greatest love was for amber, in which he soon became an expert. Both his love of beauty and his hunger for scientific knowledge were encapsulated in the golden resin. He began working with amber in 1980, when he visited the Canadian National Museum, Ottawa, to study their arachnid fossils in Cretaceous Amber. This triggered an interest in the inclusions in the more-readily-available recent ambers from the Dominican Republic, Chiapas, Mexico, and the Baltic region. After over four decades of study, Pat accumulated, processed, and identified the inclusions of many tens of thousands of pieces of amber and copal. In the process, he discovered numerous new species, co-authored three papers, and received a patronym for his discovery of a new and very unusual fly, *Syringogaster craigi* Grimaldi, 1996 (Syringogastridae, Diptera). In 1998, he attended the World Congress on Amber Inclusions at the Museo de Ciencias Naturales de Alava Vitoria-Gasteiz, Spain, where he presented a slide show on his amber

discoveries. As with all his collections, Pat was very generous in loaning material to colleagues, but was not so good in maintaining his loan records, so that many pieces have yet to be returned.

Pat's main source of amber was from the annual Gem and Mineral Show (GMS) in Tucson, AZ. From 1991-1998, he worked there as a consultant to various amber dealers, identifying and photographing spider and insect inclusions, and quickly converting his earnings into more amber, as well as other rocks, minerals, fossils, and artifacts. The show was a source of boundless wonder to Pat, who called the exhibitions "the magic of Tucson." Over the years he visited the GMS about 40 times and tried to purchase one of everything; with time his home resembled a small-scale version of the GMS.

Pat also had a passion for arachnids and compiled a modest collection of specimens to accompany his extensive arachnid literature. He collected locally in central California, in Mexico, and from 1964-1965 in Colombia, where he took voluminous leaf-litter samples and collected lots of undescribed species, one of which earned him a patronym: *Dysderina craigi* Platnick, Berniker & Bonaldo, 2013 (Oonopidae, Araneae). In 1963 he became Associate in Entomology at the California Academy of Sciences, San Francisco, and worked on the spider collection. He collaborated with Vince D. Roth and in 1970 co-authored an annotated species list of Arachnida of the Galapagos Islands. He attended some meetings of the American Arachnological Society: Tucson, AZ (1996); Riverside, CA (2002); Denver, CO (2003); and Berkeley, CA (2008). Pat also became interested in the revision and update of Roth's "Spider Genera of North America" and, once he learned that I was tinkering with Roth's keys, made a premature announcement on ArachnoL that the revision was already underway and so catalyzed the project into reality. Pat was proud of his nickname, The Patalyst. He also contributed to the book by co-authoring two of the chapters.

Pat never lost his passion for photography. He characteristically sported at least one camera, sometimes three, and spent much time looking at the world through a camera lens. In 1975 he received a grant from UC Berkeley (under Dr. John Doyen) to photograph orchids and their pollinators in Chiapas, Mexico. He produced a three-screen, multi-media slide show on insect-flower co-evolution, and the following year attended the meeting of the Entomological Society of America in Hawaii where he presented a slide show on Insect-Plant Co-Evolution. He contributed his photographs to many books, magazines, and papers on Arachnology, Entomology, Amber, Natural History, Gems and Minerals, and on ancient and modern beads.

Pat's love for humanity led him to study history and cultural artifacts, ranging from the Upper Paleolithic to the modern day. Naturally, he accumulated a library to deepen his understanding. He also accumulated a large collection of ancient and medieval coins, which he used as mnemonic devices to help recall important historic events. His attention to time was also reflected in his fossil collection, where he was always seeking the oldest fossiliferous rocks, as well as the oldest ambers.

Pat's last words were "It's been a good day!" He died peacefully in his sleep that night, 18 December 2023.

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In Memoriam: Charlie (Charles) Denton Dondale

Submitted by Robb Bennett



Charlie Dondale at 87 in June 2015, relaxing at home and discussing spider genitalia in Beckwith Township, Ontario. A life well-lived, a man well-loved. Charles D. Dondale (1927 – 2024), known to many simply as "Charlie," spent his early years on the family farm in rural Nova Scotia, Canada, near the small fishing village of Digby. Born on 27 November 1927, Charlie was the product of a blended family, one of the youngest of 10 siblings. Clearly undaunted by such a household ambience, later he and his life partner Joan (née Martin) augmented the Dondale clan with two daughters and four sons. Charlie and Joan met at MacDonald College (McGill University) in the early 1950s and spent close to 70 years in a treasured marriage, living for nearly half of that time in rural Ontario southwest of Ottawa. True to his country roots Charlie was still felling, bucking, and splitting the annual household firewood supply until Joan's sudden passing in 2020.

Charlie spent his entire professional career as a researcher within Agriculture Canada (now Agriculture and Agri-Food Canada, or AAFC), a part of Canada's federal government. He started in the late 1940s as a student research technician in pest management at the Kentville Nova Scotia agricultural research station. His work with spiders began during his Kentville years. An initial interest in spider ecology within agricultural ecosystems soon morphed into spider taxonomy and comparative morphology when he realized there were few literature resources, and fewer spider taxonomy experts, available to aid with spider species identification. During this period, he started life-long relationships with Herb Levi at the Museum of Comparative Zoology and Willis Gertsch at the American Museum of Natural History, initially as his mentors and subsequently as friends and colleagues. Also, while associated with the Kentville lab Charlie completed an MSc at Ohio State University in the mid-1950s and his PhD at McGill in 1959 (with Willis as external examiner on his dissertation).

Charlie's AAFC career evolved through moves to the Belleville Ontario Research Centre in 1961 and then in 1972, when the Belleville lab was closed down, to the Biosystematics Research Institute (now the Canadian National Collection of Insects and Arachnids, or CNC) in Ottawa, Canada's capital. At the Belleville lab Charlie focused on spider ecology and taxonomy while in Ottawa he led the national effort in spider taxonomy and systematics research and formally curated the CNC's arachnid collections. In Belleville Charlie began building up the CNC's spider collection in collaboration with two technicians: A.L. (Bert) Turnbull and J.H. (Jim) Redner. After Charlie's mentorship Bert went on to become a wellknown spider ecologist and professor at Simon Fraser University. And Jim, of course, became renowned as Charlie's primary co-author and taxonomic illustrator, working closely with Charlie on spider taxonomy until their retirements in the 1990s.

The Kentville era saw the beginning of Charlie's spider taxonomy and systematics research output with the publication of his PhD dissertation: a comparative morphology-based revision of part of the Holarctic

philodromid genus *Philodromus* Walckenaer. This was followed, during the Belleville years, by about 20 further publications focused primarily on spider taxonomy, faunistics, and systematics (the start of the three-decades-long "Dondale & Redner" period) but also included behavior and ecology papers. His taxonomic research while in Belleville concentrated on revisions of various genera and species groups of Nearctic and Neotropical philodromids as well as branching into Nearctic thomisids (revision of *Xysticus* C.L. Koch) and lycosids (species of *Schizocosa* Chamberlin).

Charlie's career and research output blossomed during his and Jim's Ottawa CNC years and continued well after Charlie's formal retirement in 1990. Around 50 publications resulted from the CNC period with an increasing focus on taxonomy, faunistics, and systematics including, between 1978 and 2003, the famed five spider volumes in "The Insects and Arachnids of Canada and Alaska" series covering the taxonomy of the northern Nearctic anyphaenid, araneid, clubionid, corinnid, gnaphosid, liocranid, lycosid, oxyopid, philodromid, phrurolithid, pisaurid, tetragnathid, theridiosomatid, thomisid, trachelid, and uloborid spider fauna – all five volumes are still famously useful decades later for Nearctic spider identification (in spite of nomenclatural changes). Where necessary, these volumes were supported by a foundation of formal taxonomic revisions of relevant Nearctic spider taxa led by Charlie up until his retirement: *e.g., Allocosa* Banks, *Alopecosa* Simon, *Apollophanes* O. Pickard-Cambridge, *Arctosa* C.L. Koch, *Clubiona* Simon, *Mecaphesa* Simon, *Ozyptila* Simon, *Philodromus, Pardosa* C.L. Koch, *Pirata* Sundevall, *Piratula* Roewer, and *Schizocosa*. During his CNC years Charlie developed a close relationship with Norm Platnick, who was following Willis's footsteps at the American Museum of Natural History. Although their relationship began as colleagues and evolved into friendship, Charlie viewed Norm as one of his primary mentors, along with Herb and Willis, even though Charlie was more than old enough to be Norm's father.

As well as the final two of the five spider volumes in the "Insects and Arachnids" series, from 1990 to 2020 in retirement Charlie continued to lead or contribute significantly to a substantial amount of spider research; including authoring the lycosid, philodromid, and thomisid chapters in the first edition of the American Arachnological Society's benchmark publication *Spiders of North America: an identification manual* and the revised versions of those chapters in the second edition. In 2020, his final research publication (of well over 100) resolved taxonomic problems associated with the four species of *Trochosa* C.L. Koch found in the Nearctic region and is a classic example of a well-executed study in comparative morphology. He continued to write, however, and over Christmas 2023 he completed a delightfully readable account, "My Life – A Memoir," for his family's benefit.

Throughout his adult life Charlie was a dedicated arachnological socialist, committed to the unconditional sharing of relevant knowledge and data. He mentored many past and present arachnologists, always maintaining an open-door policy for anyone seriously interested in arachnology especially spider taxonomy, faunistics, and systematics. During his Belleville and CNC years and for many years after his formal retirement almost everyone involved in Canadian arachnology as well as many folks from the United States of America and other parts of the world were hosted at some point by Charlie in his spider labs.

Charlie was a great supporter of the American Arachnological Society (AAS) and was instrumental in its establishment. In 1968, building upon his pronounced enjoyment of an arachnology symposium held in 1967 at the annual meeting of the Entomological Society of America Charlie wrote and circulated the first issue of "American Arachnology." Subsequently this became the focal newsletter for information on North American arachnological current events and, in Bea Vogel's hands, led to the creation and first meeting of the AAS near Portal Arizona in August 1972 (with 37 attendees) and finally, in 1973, formal inauguration of the AAS with 116 charter members (including Charlie, of course). Charlie went on to become President of the AAS in 1978 and, in 1990, he hosted the first (and only!) AAS meeting to be held in Canada. Also, in 1990 Charlie was made an Honorary Member of the AAS in commemoration of his lifetime contributions to arachnology and the AAS. Charlie was further feted in 2007 at the annual meeting of the Entomological Society of Canada through a symposium organized by Nadine Dupérré and Pierre Paquin with contributions from many other of Charlie's mentees and colleagues on the occasion of his 80th birthday.

Charlie died in the wee small hours of Sunday, 24 March 2024 after a few months of declining health. So passed an exceptional man and scientist; an inspiration to many as a devoted family man and empathetic humanist; a generous mentor, friend, and colleague; and an ardent and quietly competent comparative morphologist. He was 96.



Charlie with mentees at the "Pioneer of Canadian Araneology" symposium marking his 80th birthday at the 2007 meeting of the Entomological Society of Canada in Montreal, Quebec. From left to right – Joey Bowden, Matthias Foellmer, Nadine Dupérré, Charlie (in his famous seal skin vest), Jim Redner, Gail Stratton, Robb Bennett, Pierre Paquin, and Chris Buddle.



Stefan Foord at the 12th Colloquium of the African Arachnological Society in 2017, where he was appointed as chairperson of the society (photo: Norman Larsen).

In Memoriam: Stefan Foord

It is with great sadness that we have to announce the sudden passing of South African arachnologist Stefan Foord on Thursday 21 December 2023, aged 52. At the time of his passing, he was the NRF-SARChI Chair in Biodiversity Value and Change at the University of Venda in South Africa, and was the sitting Chairperson of the African Arachnological Society (AFRAS). He was a prolific ecologist and did a lot of pioneering work on the biodiversity and ecology of spiders in South Africa, particularly. During his career, he published more than 100 journal articles, one book chapter, and two books. He was instrumental in the preparation of the First Atlas of South African Spiders, the Red List of South African spiders, and the recently published national spider checklist. He also made a significant contribution to the systematics of Afrotropical spiders, revising the Hersiliidae as his Ph.D study, and described or co-authored the description of 29 spider species during his career. Stefan was an excellent networker, philosopher,

collaborator and mentor, and was always willing to listen to creative ideas and contribute to innovative studies. He was supervisor to a broad array of postgraduate students and, more recently, postdoctoral fellows, and made a massive contribution to the development of arachnology in Africa. His outgoing personality, approachability, drive, friendship and leadership will be sorely missed by all that had the pleasure of meeting and knowing him.

A legend of African arachnology, gone too soon.