

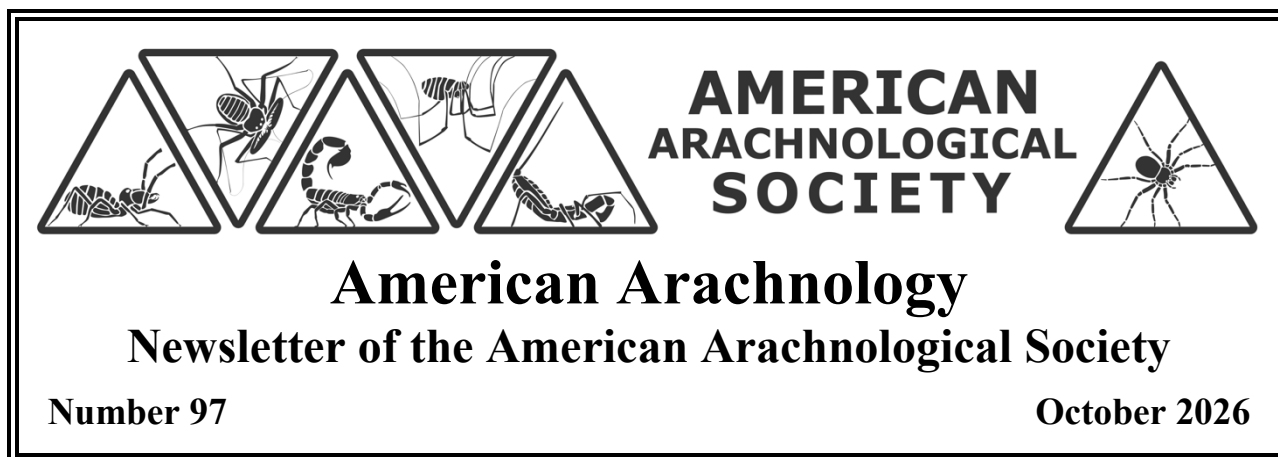


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Report of the 2026 AAS Annual Meeting

Eileen Hebets and her amazing team of students and volunteers hosted the 2026 American Arachnology Society annual meeting in Lincoln, Nebraska July 12-16. Over 155 participants attended. Many arrived before the meeting to participate in “Eight-Legged Encounters” – a fun public outreach event that introduces people to all orders of arachnids in a fun and engaging way. The meat of the meeting included 60 oral presentations and 43 poster presentations. The [abstracts](#) can be found on the AAS website.

Plenary speakers included Dr. Alfredo Peretti who presented “Rarity in reproductive biology: arachnids as insights” in which he encouraged us all to pay more attention to the story “outliers” can tell. The 2025 winner of the AAS Platnick Award, Dr. Muhammad Irfan, gave a plenary presentation on “Diversity, distribution, and evolutionary adaptations of Linyphiidae spiders: global patterns and recent advances from China.” Dr. Irfan stressed the critical importance of taxonomy in understanding the planet’s biodiversity and illustrated this by explaining how he went about describing hundreds of new species of some of the most taxonomically challenging spiders. The third Plenary speaker, Dr. Leticia Aviles, presented “Biology meets geometry: Web-building spiders’ solutions to the tyranny of geometry” in which she challenged us to understand how solitary spiders and social spiders address challenges inherent in the geometric scaling of their webs.

The meeting also included lots of fun events and networking opportunities including the first ever Araneomorph versus Mygalomorph [soccer game](#) fielded entirely from the ranks of meeting attendees. The event was a joyful nod to the 2026 World Cup competition going on concurrently to the AAS meeting. The final score was 4-3 for the Araneomorphs, with goals by Brandon Marrone, Gustavo Silva de Miranda, and

Jillian Kurovski. Erika Garcia and Patrick Casto scored for the Mygalomorphs. A rematch is planned for the 2027 meeting, to be hosted in Indianapolis by Marc Milne.

An evening social event at Spring Creek Prairie included delicious food, drinks, and even live music. During that social event, the newsletter editor even had the opportunity to interview senior scientists in the society (see later in this issue and the next issue to read extracts from these interviews).

All meeting long, attendees also submitted observation records of arachnids to iNaturalist during a virtual BioBlitz. Participants recorded 741 observations of 283 species (49 species of arachnids and 157 species of insects).

During the banquet, Rich Bradley gave a lovely memorial presentation in honor of two long-time AAS members who died in 2025: Dr. Petra Sierwald and Joe Warfel. And Paula Cushing (aforementioned *AA* editor) served as the live auctioneer for the very last time. In future meetings, meeting hosts will appoint a local MC to serve as the auctioneer and to serve as the auctioneer's de facto "Vanna White." The auctions (silent and live) raised \$4,769 for the society, which goes towards supporting student research.



Alfredo Peretti, giving his plenary.



Muhammad Irfan receiving his Platnick Award from Marc Milne.

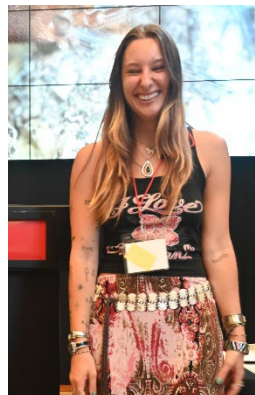


Mygalomorphs and Araneomorphs soccer teams.

2026 Student Presentation Winners



Yihang Park, 1st place oral presentation winner.



Sophie Neu, 2nd place oral presentation winner.



Calvin Runels, 1st place poster presentation winner.



Jaclyn Mowry, 2nd place poster presentation winner.

We congratulate this year's winners of the 2026 student presentation competition! Yihang Park received 1st place for his oral presentation, "Effects of cannibalism risk on the ontogeny of risk-averse behavior in

jumping spiders.” Sophie Neu received 2nd place for her oral presentation, “Disentangling the role of growth in sequential tarsomere formation in the harvestman *Phalangium opilio*.” Calvin Runnels received 1st place for his poster presentation, “Comparative transcriptomic analysis reveals signatures of selection for orb-weaving behavior in spiders.” Jaclyn Mowry received 2nd place for her poster presentation, “Utilizing the spider exposure pathway to estimate mercury contaminant risk to arachnivoracious birds in the Kalamazoo River area of concern.”

Judges find it more and more difficult each year to choose winners because of the outstanding quality of presentations by these early career scientists. The chair of the presentation committee, [Dr. Anne Danielson-Francois](#), welcomes any presenters to reach out for feedback after the annual meeting.

2026 Student Research Grant Recipients

The American Arachnological Society has [two funds to support](#) research by student members of the society (undergraduate or graduate): The Arachnological Research Fund (ARF) provides awards of up to \$1,000 to support projects related to any aspect of the behavior, ecology, physiology, or evolution of any of the arachnid groups. The Vincent Roth Fund for Systematics Research (VRF) provides awards of up to \$1,000 to support projects focused on the taxonomy or systematics of any arachnid group. Submissions are due February 15th every year. In 2026, the Grant committee received 23 submissions and funded 17 of the requests:

- Curtis James Abell, PhD student, University of Georgia, USA. \$1,000. Analysis of spider community structures and food webs in peanut landscapes.
- Annalyse Leach Brogan, MS student, Eastern Michigan University, USA. \$1,000. Co-occurrence of Tarantula Burrows with Soil Properties and Plant Community Composition.
- Brendan James Lan, PhD student, Duke University, USA. \$1,000. Small but keen: Investigating the exceptional vision and novel eyes of a tiny harvestman.
- Ava Marie Maliszewski, UG student, Penn State York, USA. \$376. Temperature-induced alternative splicing of circadian regulators in *Parasteatoda tepidariorum*.
- Sayith Padilla, UG student, University of Panama, Panama. \$624. Sensory Integration in Wolf Spiders: Vision and Ornamentation in the Courtship of *Schizocosa tristani*.
- Jeniann Rodriguez Rosa, UG student, Penn State York, USA. \$1,000. How Tracing the Developmental Onset of Spider Silk Gene Expression in *Parasteatoda tepidariorum*.
- Brian Tamos Sabanal, PhD student, Kaohsiung Medical University, Taiwan. \$1,000. Advancing Spider Genomics through Next-Generation Sequencing.
- Jenna Marie Sbeity, MS student, Eastern Michigan University, USA. \$1,000. Season, Environmental Conditions, and Physiology Drive Tarantula (*Aphonopelma hentzi*) Activity.
- Kayla M. Stalcup, MS student, University of Florida, USA. \$1,000. Is a diet containing ants more nutritionally beneficial to an ant-specialist jumping spider (*Anasaitis canosus*) than one that excludes ants?
- Maite Allegue, PhD student, Centro de Recursos Naturales Renovables de la Zona Semiárida (CERZOS), Argentina. \$1,000. On the genus *Chilehexops* Coyle, 1986 (Araneae, Mygalomorphae, Euagridae) from Argentina: discovery of a new lineage, taxonomy and phylogenetic placement.
- Fernando Pilo García, MS student, Centro de Investigaciones en Biodiversidad y Conservación, México. \$1,000. Taxonomic Review of *Mecaphesa* Simon, 1900 (Araneae, Thomisidae) in Mexico.
- Jadon Gonzales, MS student, San Diego State University, USA. \$1,000. Integrative Taxonomic Revision and Biogeographic History of the California Spider Genus *Yorima*.
- Athira Jose, PhD student, Christ College Irinjalakuda, Thrissur, Kerala, India \$330. A Taxonomic and Phylogenetic Study of *Pilia* Simon, 1902, a Little-Known Jumping Spider Lineage from the Western Ghats.

- Miguel Menendez-Acuna, PhD student, Universidad Nacional Autónoma de México (UNAM), México. \$1,000. The unexpected diversity of the genus *Mexigonus* Edwards, 2003 (Salticidae: Euophryini).
- Alexandre Stamato Michelotto, PhD student, Universidade Federal de Minas Gerais, Brazil. \$1,000. Phylogenomics of freyine jumping spiders from Brazilian Caatinga using Ultraconserved Elements.
- Harper Elizabeth Montgomery, PhD student, University of Maryland, USA. \$1,000. Identifying Genomic Fingerprints of Historical Introgression in the *Leiobunum vittatum* species group of Opiliones.
- Brendan Stewart O'Loughlin, PhD student, The Ohio State University, USA. \$1,000. Defining cryptic species boundaries in the *Hogna coloradensis* complex (Araneae: Lycosidae).

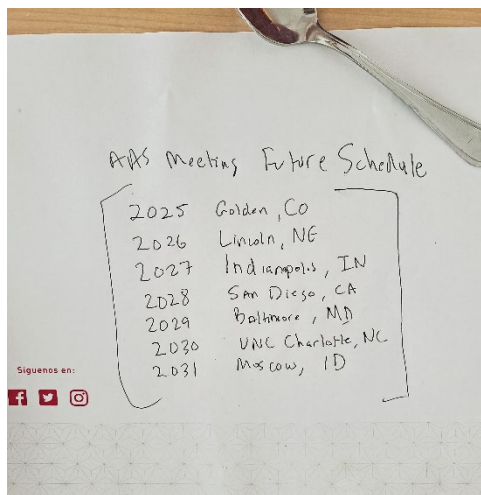
Ann Rypstra & Deb Smith Elected Honorary Members



Ann Rypstra and Deb Smith.

The AAS Constitution recognizes a special category of members: [Honorary Members](#). This category of membership was established to acknowledge arachnologists who have achieved a high level of eminence on the basis of significant research contributions. After being nominated, an individual may be elected by a two-thirds vote of the Executive Committee. A list of these Honorary Members is occasionally published in the Journal of Arachnology. The Executive Committee has not voted on Honorary Members for many years. This past year, two AAS members were approved for this prestigious membership: Drs. Ann Rypstra and Deborah Smith. Congratulations to both for this well-earned honor.

Day of the Napkin



The Napkin.

On a memorable day in 2024 during the AAS meeting in Chetumal, Mexico, a group of arachnologists were enjoying lunch at the Fiesta Inn Hotel basking in a glass-walled corner of the hotel lobby with sunlight streaming in from the corner of Avenidas Alvaro Obregón and Independencia. The long tables they had set up for us made for easy socializing and casual shouts from table to table. On June 26th while cheerfully eating and chatting, we gradually became aware of a central point of focus developing among the hubbub and noticed our colleagues starting to leave their seats and their food and cluster around Jason Bond who was industriously doing something on his cell phone. It turns out he was Zooming with several members of the society and, somehow, by the end of that Zoom meeting, Jason had finagled and convinced seven of our colleagues to host future meetings of the AAS. To document this historic event (and to serve as a binding contract), these six future meeting sites were carefully recorded for posterity on, what else, a napkin! One can

only hope that this memorable napkin gets saved and sent to the society archives. And that, gentle reader, is one way business gets done in a society.

An Inexpensive, Simple, Spider Vacuum

Marc A. Milne, Department of Biology, University of Indianapolis, Indianapolis, IN 46227

Nobody loves tiny spiders more than linyphiidologists. But getting at those tiny critters nestled down in the grass, amongst the moss, and in divots and footprints in wet mud can be pretty difficult if you don't have the right tools. Sweep nets pass right over their heads; beating limbs and bushes won't grab them; hand collecting may work but it will take a while! Pitfall traps have been quite useful for collecting these tiny ground-hugging spiders, but setting and then waiting and then collecting these traps takes days, if not weeks. If you're looking to actively catch them within a short period of time, the best method has been the vacuum. Indeed, the vacuum excels at collecting critters smaller than 5 cm (Doxon et al., 2011) and, by my observation, critters smaller than 5 mm. The vacuum has also been shown to be 12x more efficient than the sweep net when considering arthropod density collected (Callahan et al. 1966). Arthropods collected via vacuum suffer less damage than those collected from a sweep net (Callahan et al. 1966; personal observation). Finally, I have noticed that while rain-soaked vegetation ruins the opportunity to collect with a sweep net or a litter sifter, vacuum collecting is less affected by these wet conditions.

Hand-held insect vacuums have been used for sampling insects (largely in agricultural fields) for several decades, with one of the first, the D-Vac, being invented in the late 1950's (Dietrick et al. 1959; Dietrick 1961). However, this type of vacuum is loud, expensive, heavy, and clunky. It has had only limited use in sampling invertebrates in non-agricultural groups such as spiders. Improvements on the D-Vac have been made, but many of those require noisy, polluting, gas-powered devices, hardware such as pieces of metal with nuts and bolts, and permanent modifications that include drilling, sawing, and more advanced engineering-based changes (for example, see Wilson et al. 1993; Harper and Guynn 1998).

More-recently developed hand-held insect vacuums, termed "G-Vacs", include any number of leaf blowers flipped in reverse with a bag tied to the end in some manner. This design, such as that developed by Stewart and Wright (1995), is essentially no different than the one described below, except that mine is an electric leaf blower instead of a gas version and uses a different type of bag around the base. There are other advanced hand-held suction sampling devices out there, such as the Vortis™, manufactured by Bukard Manufacturing Co. Ltd., in the UK (Arnold 1994). However, it should be noted that the Vortis™ is much more expensive than a home-built G-Vac and has been found to be less effective at collecting spiders than G-Vacs (Zentane et al. 2016).

My G-Vac design requires three pieces: a leaf blower / vacuum, a bag, and duct tape. Any leaf blower / vacuum may be used to create a G-Vac, but I have found success by using an electric model manufactured by Black and Decker (40V MAX Cordless Battery Powered Handheld Leaf Blower & Vacuum Kit with 1.5Ah Battery and Charger; Model #LSWV36). Keep in mind that this model comes with a black side container that is designed to hold debris that is vacuumed up. However, this black side container will hang unused if modified for arthropod collection because all of the arthropods will instead get sucked up into a suction bag attached to the suction tube. This bag is manufactured by Watkins & Doncaster in the UK and is Product #E668 (Suction Bag). Duct tape is what I have used for securing the bag to the end of the vacuum tube, but any sturdy tape may be used (Fig. 1). As of the writing of this note, the total cost to purchase all of these supplies should not exceed \$200. Because the leaf blower / vacuum may be used as either, one must construct it as the latter per the instructions. Once completed, all one then has to do is duct tape the bag to the end of the vacuum tube.

One of the advantages of this model over previous G-Vacs is its ability to use batteries instead of gas. Because of this switch in power source, this model lacks an internal combustion engine and therefore is quieter than gas-powered G-Vacs. Moreover, one can purchase multiple batteries and then extend the duration of use for the vacuum in the



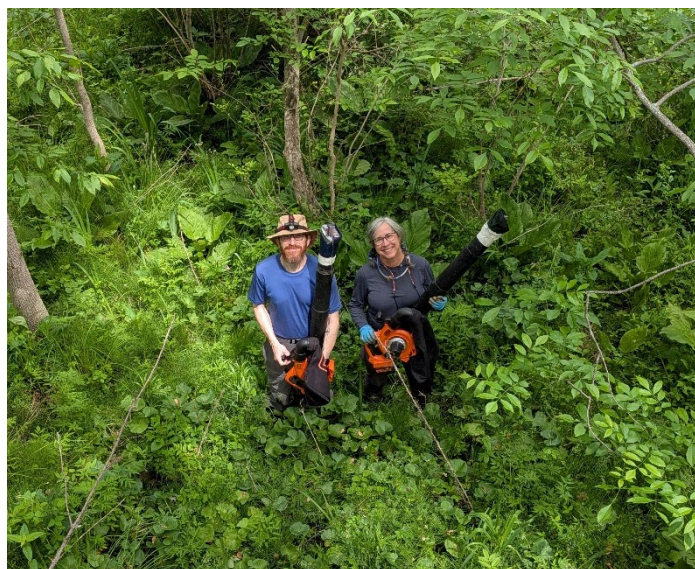
The author using the spider vacuum in moss at Okefenokee National Wildlife

field equal to the number of batteries one wishes to carry around (as opposed to carrying around jugs of gasoline, which is certainly less palatable). Batteries alone are approximately \$35 - \$40.

To collect using this device, site selection is key. As alluded to, the best sites for vacuum sampling are those that have ample amounts of moss and short grasses. Prairies and grasslands are ideal habitats to sample with a vacuum. Habitats which contain large amounts of debris on the ground (e.g., forests) are not easily sampled this way as the debris (e.g., leaves) clogs the bag quite easily. Additionally, while wetlands such as fens, marshes, and bogs have many microhabitats containing moss patches and short grasses, one must be careful of getting water into the vacuum. I constantly use my vacuum in wetland habitats, but oftentimes keep the suction tube lifted above the ground to prevent water intake. If water does get into the vacuum, it's easy to disconnect the vacuum tube from the motor and to clean out the inside with a dry cloth. I've done this multiple times and haven't had a vacuum die on me, so, luckily, I think it takes a good deal of water to really damage the device.

Once a suitable site has been selected, I find a nice flat spot and place a white beating sheet onto the ground. This serves as my "home base" and will also be the location where I dump out my vacuum bag once I've sampled. After this is placed, I simply turn on the vacuum, step into the habitat, point and press the suction tube against the ground, and walk around while pressing the vacuum down onto the ground to create suction against the flat surface and/or slowly sweep it side to side. I usually walk through the habitat like this for approximately 2-3 minutes before lifting the vacuum up, pointing it towards the sky, and turning it off (Fig. 2). At this point, I have a bunch of live arthropods crawling around in the bag attached to the vacuum suction tube. To prevent escape, I've recently started using a stretchy silicone cat food can cover (easily found at your local pet store) to cover the end of the suction tube while I walk back to my beating sheet. Once there, I put down the vacuum with the suction end on the beating sheet. The bag affixed to the end of the vacuum comes with a cord that may be pulled to invert the bag. I pull on this cord to invert the bag so that the contents spill onto the beating sheet, after which all of the spiders may then be aspirated.

I've found that the vacuum is excellent at collecting ground-dwelling spiders, including those in webs. Specifically, in Eastern USA, I most commonly collect spiders within the families Linyphiidae, Lycosidae,



The author (left) and Greta Binford (right) taking a break from vacuuming a wetland on the Binford farm in Crawfordsville, IN.

Phrurolithidae, and Salticidae using the vacuum. Other families that I usually find using a vacuum, but not as common, include Dictynidae, Oxyopidae, Tetragnathidae, Theridiidae, and Thomisidae. Of course, this could be a product of the sampling method as much as the habitats sampled and/or the natural abundance of each of these families in those habitats, but these are the general trends that I have found.

I now own three of these vacuums and whenever I'm in the appropriate habitat for sampling, I give two to colleagues or students and all three of us vacuum sample for as long as we feel necessary. Using this method, I've found several undescribed species, lost species, and new state distribution records. Hopefully using this method will be as fruitful for you as it has been for me.

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Spider Taxonomy Course in Oaxaca, Mexico

David Chamé-Vázquez (chamevazquez@gmail.com), and Miguel Angel García García

From June 18 to 20, 2026, fourteen arachnologists gathered in Oaxaca, Mexico, for a course in spider taxonomy. The course was led by David Chamé Vázquez (Universidad Estatal de Sonora, UES) and Miguel A. García García (Universidad de la Sierra Juárez, UNSIJ). Designed primarily for students, the group consisted of undergraduate students from the region, along with one graduate student who traveled nearly 1,000 km to attend. This shows a strong interest in the course. Although the organizers had originally hoped to offer the course free of charge, sponsorship could not be secured. A modest fee of about US\$50 per participant was therefore necessary to cover basic needs. Fortunately, through MAGG's role as a professor at UNSIJ, the university allowed the course to use its facilities and equipment, which was essential for the event.



Participants after the short field experience (from left to right): David Chamé Vázquez, Karen Mariel Ramirez Manzano, Violeta Sarai Jiménez Hernández, Luis Fernando Limón Pelayo, Juan Manuel Cortés Vásquez, Perla Ximena García Ramírez, Paola Scarlet Figueroa Mariscal, Araceli Elienai Lorenzo Méndez, Leonardo Pineda Arzola, Bibiana García García, Brisa Celeste Rodríguez Vásquez, Rigoberto Aragón Martínez, Aldo Eliezer Luján López, Alhely Bautista Gonzales, Miguel Ángel García García.

Participants explored key topics in spider taxonomy, including collecting spiders in the field, preserving specimens for scientific purposes, using the World Spider Catalog, and working with dichotomous keys such as those in *Spiders of North America: An Identification Manual*. The short field experience took place in the surroundings of UNSIJ, in pine-oak forest patches. The collections provided a sample of the spider fauna of Oaxaca. As with any spider inventory, most captured specimens were juveniles, but adult specimens representing 12 families were found: Sparassidae, Tetragnathidae, Theridiidae, Lycosidae, Filistatidae, Salticidae, Anyphaenidae, Araneidae, Corinnidae, Zodariidae, Gnaphosidae, and Linyphiidae.

Among the most abundant groups were Theridiidae, Zodariidae, Salticidae, and Tetragnathidae, each represented by multiple specimens. All students were enthusiastic about their findings, and their hard work led to interesting results. They identified specimens at the family level and multiple genera, including *Leucauge* (Tetragnathidae), *Dipoenoides* (Theridiidae), *Wulfilia* and *Anyphaena* (Anyphaenidae), *Mangora* (Araneidae), *Castianeira* (Corinnidae), *Corythalia* (Salticidae). Their efforts also allowed them to identify specimens at the species level. Identifications included *Curicaberis sanpedrito* Rheims, 2015 (Sparassidae), *Colonus sylvanus* (Hentz, 1846) (Salticidae), and *Ariamnes mexicanus* (Exline & Levi, 1962) (Theridiidae). These findings show the diversity of the region and the value of the course in generating scientific materials and developing taxonomic expertise. The success of this course shows the importance of hands-on training and continued exploration of Mexico's arachnid fauna.



David explaining sorting techniques.



Aldo Eliezer Luján López photographing a spider through the microscope eyepiece.

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A zodariid spider (*Ishania* sp.) photographed and identified by Rigoberto Aragón Martínez.



A theridiid (*Dipoenoides* sp.) photographed and identified by Luis Fernando Limón Pelayo.



A sparassid (*Curicaberis sanpedrito*) epigynum photographed and identified by Luis Fernando Limón Pelayo.



Jim Berry in the field.

Interview with Jim Berry

The editor of *American Arachnology* sent an email to Jim and Betsy Berry asking if Jim could provide an overview of his career in arachnology. Betsy interviewed Jim and the following is Jim's story:

After I finished my master's at Virginia Tech, I went to Duke and wanted to do a large study in field ecology. I was thinking about doing a field problem on various invertebrate groups, but everything seemed to have limiting problems that I couldn't resolve. Then I finally came to spiders, and thought, "well, the arachnids will work." They are available year-round, available in abundance, and the work will be on dry ground.

After reading a paper by Luckett Davis on the distribution of spiders on the North Carolina coastal plain, I decided it would be workable to study spider distribution of the oldfield succession in the North Carolina piedmont. When Duke was offering one-year teaching appointments, I recommended Joe Beatty come from Harvard for a year, and he was hired. When he saw the depth and breadth of the North Carolina spider collection he was an enthusiastic supporter of the project. Joe's taxonomic knowledge was invaluable.

When the North Carolina study was complete and I had my Duke University PhD in hand I was hired at Butler University in Indianapolis. Almost immediately after beginning at Butler, I saw an advertisement for a post-doc in marine biology field work at the Rosenstiel Marine Science Lab at the University of Miami. I resigned my post at Butler and moved to Miami.

The very next week after I arrived at the marine lab, there was a fire in the lab assigned to me. The space was unusable, so what was I to do? One day, someone told me about an advertisement from the Atomic Energy Commission (AEC) seeking researchers to survey fauna on the Pacific island of Eniwetok where atomic testing was done from 1948 – 1958. I decided to apply.

In the meantime, some botanists in the next lab over who had an airboat to do their work in the Everglades told me thousands of spiders fell into their airboat every time they went out into the Everglades. I had planned to work on zooxanthellae in corals, but the spiders provided a workplace for me in the Everglades, so I went with the botanists and collected spiders from their boat. I knew enough from the North Carolina work to apply spider collecting to a totally different, aquatic environment. This study turned out to be far more extensive than I had thought it might be.

Even after working on the Everglades project for a whole year, I didn't realize that it would take 40 years to complete it. With the one-year post-doc finished, I was fortunate enough to be re-hired by Butler University. Then a letter arrived from the AEC announcing that I had been appointed to survey spiders on Eniwetok. Fortunately, I was free to go to the Pacific in the summers. The first year I spent three months on Eniwetok. The second year, I convinced Joe Beatty to apply for the program. He was accepted, and we went together to Eniwetok and the Marshall Islands. Both Joe and I submitted reports to the AEC indicating that we found nothing unusual in the spider fauna where atomic testing had taken place. After spending that one summer on Eniwetok, I was intrigued with the idea of extending the study to a much wider geographic zone in the Pacific.

The next year I married Betsy Ramsey. From then on, I had a chief cook and bottle-washer and an excellent field assistant.



Jim collecting spiders from the seaside.

Both Joe and I were eligible for sabbatical the same year. We arranged a home base in Palau (Caroline Islands) where Betsy and I spent six months. Joe was with us for three months. After that sabbatical, either we went to Southern Illinois University at Carbondale to work on specimens with Joe, or Joe came to Indianapolis to work on specimens at practically every academic break. We were surprised at the number of undescribed species in many genera that we were finding.

I was fortunate that my 34-year tenure at Butler afforded me 3 sabbaticals to return to the Pacific. All told, Betsy, Joe and I collected in the Caroline Islands, Marshall Islands, Fiji, Cook Islands, French Polynesia, New Zealand, Australia and Hawaii.

While I was at Kwajalein in the Marshall Islands, I was taking an afternoon break on a beach, when I noticed spiders in the intertidal zone. The zone was a good 50 feet wide. As I was digging around in the beach coral, I thought, “spiders don’t belong in coral.” I collected some, and lo and behold, it was the creature Roth and Brown had described from the Sea of Cortez...or a close relative thereof. As we went through the various Pacific Islands, these intertidal spiders, *Paratheuma*, kept showing up. As far as we know, only one species has been found in the Atlantic basin.

Years later, I decided to search the Red Sea for intertidals, and Yael Lubin arranged Israeli collecting permits for us. We searched diligently, and we only brought in one immature.

The *Paratheuma* papers we have published are in *Journal of Arachnology*, *Proceedings of the Indiana Academy of Science*, *Bulletin of the B.P. Bishop Museum*, and *NZ Entomologist*. Specimens have been deposited in the Bishop Museum, the American Museum of Natural History, and the Florida State Collection of Arthropods (where the largest part of the collection remains).

I only know one young arachnologist who made the whole circuit. Brent Opell graduated from Butler, went to Southern Illinois U. for his master’s with Joe Beatty, Harvard for his PhD with Herb Levi, then to Virginia Tech to teach.

Along the way, I hosted the 1989 AAS meeting, edited the AAS newsletter for a decade, then took over after Jim Carico to edit the JOA for another ten years. It wasn’t work; it was a joy. The 1989 meeting very nearly turned into a tragedy when Butler double-booked the large, air-conditioned sorority house I had reserved for AAS. Butler hastily squeezed a few AAS participants into the several air-conditioned rooms remaining on campus and shoe-horned the bulk of AAS participants into the baking hot dorms with summer volleyball campers. I thought my days were numbered, but we had great (air-conditioned) meetings during the day and sweated it out overnight with no homicide.

Butler University gave me a grant to bring Jerzy Prószyński to Indianapolis to work on the Pacific salticids. For a whole semester, Joe Beatty, Prószyński, and I worked over Pacific salticids. After Joe Beatty died in 2009, we felt the bulk of the Pacific work was done and my attention returned to the Everglades collections. Toward the end of my career, Parkinson’s Disease progressively stole my eyesight. G.B. Edwards supplied high resolution images of specimens from my personal collection that now reside in the Florida State Collection of Arthropods, and Betsy continues to assist with fieldwork, microscope work and manuscript preparation.

As it turns out, I could not replicate the 1968-69 Everglades collection for qualitative and quantitative comparisons, because Everglades National Park regulations had changed markedly. Nevertheless, Betsy and I returned to the Everglades (2008-9) to re-collect as many of the earlier sites as possible. When we had all the material in hand, Mike Draney volunteered his graduate student (Mia Spaid) to help with the gargantuan identification task. All told 200 species were identifiable. The good news is that there was only one new one – which Mike published. The Everglades collection is housed in the South Florida Collection Management Center in the Everglades National Park.

The very last project is the DNA analysis of the *Paratheuma* we know about so far. Sarah Crews at the California Academy of Science has taken on the project. Stay tuned for Sarah’s analysis.

Interview with Ann Rypstra



Ann Rypstra, 2026.

During the 2026 meeting in Lincoln, Nebraska, the *American Arachnology* editor, Paula Cushing (PEC below) recorded an interview with Ann Rypstra (AR below). Below is a transcript of that interview (slightly edited for brevity and readability). The recordings of this and other interviews will be posted on the AAS website in the future.

PEC: July 14th at Lincoln, Nebraska, the AAS meeting. I'm here to interview Ann Rypstra. So Ann, can you tell me your background in biology?

AR: I went to Hope College, and I had summer research experiences with birds, studying moorhens. We called them gallinules at the time, in a marsh. I did that for three summers. I did take a field class.

Alan Brady was on sabbatical when I was looking for research projects, and so I did not work with Alan. I did gallinules, and I took a field course from Alan in northern Michigan. I just knew a tiny, little tiny bit about spiders, like I knew you could see them in the

dark. And then in the summer, I worked at Kellogg Biological Station with a guy named Harvey Blankenscore on parasites on birds.

PEC: Where is Kellogg?

AR: It's near Kalamazoo. It's associated with Michigan State. I had to feed chickens different things to try and see if they would get the parasites. And then I had to climb up into trees and do things you probably can't do now, take little pipe cleaners and put it around the baby bird's neck. And then you come back and see what the mom fed them.

PEC: So the pipe cleaner would prevent them from swallowing? You had climbing equipment or you just shunned up the tree?

AR: No, we used ladders. They weren't that high. They were grackles mostly that we were working on. So I did that one summer. And, fun fact, we worked with a high school student. And we were all dismayed because she was getting paid like five times as much as us. And then we found out that her father was the founder of Wendy's. And he had wanted her to have this experience. So he had given Dr. Blankenscore a bunch of money.

PEC: And then said, pay my daughter?

AR: Exactly.

PEC [laughing]: It's a little wrong!

AR: We thought so at the time. But in this day and age, it's not so, you know, unusual.

And so then I went to graduate school at Penn State. My major professor was very territorial about his work. He worked on birds and I thought I was going to work on birds. He was switching to tiger beetles [...] because it was a time manipulative experiments were becoming more [common]. Every bird idea [that I had] he didn't like. And I knew a little bit about spiders. So I did spiders in a class project.

And then there was an arachnology class taught by Bob Snetzinger at Penn State. And he took us to Carbondale, which was my first meeting [AAS]. And that was 1976, 50 years ago.

PEC: Wow. That was right after the society formed then. Or was that still at the time when they had the East and the West?

AR: It was like every three years or something, yeah. And we were all embarrassed because Bob would ask a question and then fall asleep during the answer to the question.

PEC: Did he do research or did he publish work?

AR: Yeah, he worked on mites. He was an agricultural mite person. Snetzinger. And he later on became Butterfly Bob and did a lot of outreach. Even up until maybe 10 years ago I saw him. I would see stuff about him. But anyway, I went to the meetings. That was the summer. And then in the fall I went to... You didn't know you were going to get this whole life history thing.

PEC: No, no, I do. That's what I wanted.

AR: So I went to Gabon, West Africa, to collect data from my major professor on bird community structure. And that was the site in Makuku where Bertrand Kraft did all this work on the social *Anelosimus*. And so there were a bunch of social spiders there that I saw, but I didn't do anything with them. I did, but the beautiful thing was there was a huge euphorb on the mission school grounds that had *Certophora citricola* – like a thousand of them. It was just spectacular. So I did a project there. That was my first publication. And the priest would come and give me a glass of wine.

PEC: Was it blessed?

AR: Probably. Leftover communion wine was what everybody said. So I went there and I published a little paper. That was my first paper when I got back. And then I started working on... My major professor was doing community structure, and so I just kind of collected on birds. When he came, then I had time to collect my own data, and I did surveys of spiders day and night, and saw some elephants and chimpanzees and things.

PEC: That's fantastic. Did you present at that first AAS meeting that you attended?

AR: No, it was a class. The whole class went. My first presentation was at the '78 meetings in Florida.

Then I went back to Penn State, and then my dissertation sort of became kind of on community structure: food availability, habitat structure, forest systems compared. Ended up comparing forests in Peru, subtropical forest in Peru, the equatorial forest of Gabon, and central Pennsylvania.

PEC: Of birds or of the spiders? Of social spiders?

AR: No, just a general community structure. The social spiders was always a sideline that I did.

PEC: Who hosted the meeting in Florida in '78? Was that H.K. Wallace or was that Will Whitcomb?

AR: No. Well, Whitcomb was there. John Anderson, [Jon] Reiskind.

PEC: So he [Reiskind] hosted two meetings, ultimately.

AR: Yeah, [and] I was very nervous, and my talk was early. But Brent Opell was there, and he was just finishing his PhD and getting ready to go to Virginia Tech. And Brent was shaking. He was that nervous. And so the good part of him being so nervous, it made me feel better. Here's this senior graduate student from Harvard. And he's more nervous than me.

PEC: I'm sure he did just fine.

AR: He did. Oh, yeah, his talk was fantastic. Oh, poor Brent. But it was that pre-talk nervousness. I can remember standing there and seeing him and Matt Greenstone and David Wise. We were all sort of standing around, and Brent was, oh, my God.

PEC: You were doing better than that.

AR: I did my Pennsylvania stuff, and then my major professor put this note on my desk saying free trip to Peru. Free trip? Yeah. So this place called Explorer's Inn was offering airfare and free room and board to be a resident naturalist in the jungle. And [I thought], okay, I can do that.

PEC: And was your major advisor going, or he was just saying this?

AR: He was eventually going, but he was connected with it because the owner of the place was doing kind of a survey. Jonathan Coddington went, Dave went for tiger beetles and birds. There [was] Louise Emmons with mammals and other people doing plants. Gary Hartshorn did the plants. There were a lot of famous people that were going. So I went down as a naturalist and was there for about eight months and collected data and showed tourists around.

PEC: Where in Peru?

AR: In southeastern Peru near the Bolivian border. Subtropical, three hours by motorized canoe from Puerto Maldonado, Rio. Now it's connected to the Manu, but it's a little further south.

PEC: And that's with your bird biologist advisor?

AR: Yeah. Well, he wasn't there except for maybe a couple of weeks to do tiger beetles and birds. I had to do some tiger beetles, trapping. So I got pretty good at catching tiger beetles. And then I came back and finished my dissertation. Now you can ask your next question.

PEC: And you did your dissertation where?

AR: Penn State. In Penn State with David Pearson.

PEC: But he was fine with you doing it as part of the community structure [research]?

AR: He would not have let me do anything that he did.

PEC: Oh, that's so funny.

AR: Yeah, he had, you know, it was like, this is my stuff. One of the grad students, there were five grad students, you know, sort of mixed. One of them co-authored a paper with him while they were graduate students. Steve Giuliano, who ended up doing a lot with mosquito biology, ended up collaborating with him later, but not during the PhD. I have no co-authored papers with him.

PEC: So then what happened after that? Did you get a postdoc or did you go right into a job?

AR: The job market was really bad. This was, you know, when Ronald Reagan was elected.

PEC: So early '80s?

AR: Yeah. And so I got a visiting assistant professor [position] at Miami.

PEC: Who were you replacing? Who was on sabbatical?

AR: It was complicated, but somebody had moved into administration and they thought he was going to move back. So I had a visiting position for three years. And then that person stayed in administration so then they hired [for] tenure track and I got that tenure track position. So I just stayed.

PEC: And you were there your whole career?

AR: Yeah. In Ohio. [There were] various times when I tried to leave, but the world wouldn't let me.

PEC: Were you generally happy there?

AR: It was up and down, you know, as all jobs can be. But at first it was not that great a job. I taught seven classes the first year.

PEC: Oh my gosh.

AR: And I was the only woman in the department. And so that was, you know, a little strange.

PEC: In what way? Tell women now what you had to face at that point.

AR: Well, you know, I was a visiting assistant professor and Rick Lee, super nice guy, most of the time, he was hired at the same time in the tenure track. You go to faculty meeting, you know, and we sit there and Rick is here and I'm here and the old guys are over here and they would lean over me and say, hey, Rick, you going to lunch?

PEC: Oh my God.

AR: So it's like, yeah, let's go. Let's go here. Where? Okay.

PEC: And nobody recognized you?

AR: Nobody. I was a visiting assistant professor and I served in those three years on four tenure track search committees because I was the only woman in the department.

PEC: So you were the token woman.

AR: Exactly. And then there was one year I served on two of them [search committees] and there was a third position, one was a geneticist, one was a physiologist, the third one was an ecologist. And the chair asked me to serve on the third search committee. I said, I can't do another search committee. And he says, but it's right in your area. And [I said] I'm sorry, Bob, I can't do it. So that's, you know....

PEC: Yeah. People have no idea. So how would you define for readers, what research you're best known for?

AR: I guess understanding predator-prey interactions in agricultural systems and applying basic ecological principles to understanding what the species are doing in human-dominated landscapes.

PEC: Who are some of the students that you mentored or that you feel like you influenced?

AR: Greta Binford, Sean Wilder, Jason Schmidt, other ones you wouldn't have heard of, but Alex Berry, Lacey Campbell, Karen Cangialosi, Carrie Wren, yeah.

PEC: That's a huge influence. Yeah, that's a great legacy! Did you have people within our field of Arachnology that you feel like were mentors to you or supported you? Or did you feel like you had to carve out your own niche?

AR: I think my first year of grad school when I was trying to figure out what I was going to work on, Susan Reichert and Ruth Buskirk had spectacular papers in ecology on spiders. And that was hugely important to me. And Ruthie, she was good friends with my major professor and she showed up a few times and gave me a lot of encouragement. George [Uetz] was there, I mean, he was on my committee and he was overall supportive and helpful and doing the kinds of things that I was doing and so that was important to me.

PEC: Do you feel like things changed as time went on at Miami in terms of getting more respect, in terms of being better recognized?

AR: Yeah.

PEC: And what do you think made the difference? Was it just you being productive? Did you have to prove yourself? I guess is what I'm getting at.

AR: Yes, yes. I mean, I just showed up and kept doing things. But yeah, it got better. And I would kid my colleagues and say, yeah, I'm on the committee, but you need a woman and they would say, oh, that's not true, you know. But they were all nice people, so it wasn't like they were mean or anything.

PEC: They were nice but oblivious?

AR: Yeah, exactly, exactly. They never had a woman [as a colleague] and they hadn't had...like Rick was pre-tenure Lee, who was hired when I was, and he was an insect physiologist. But nobody had gone through the tenure run for like seven years before we showed up, so they didn't even know what they were doing with him, much less me.

PEC: And you did yours after him?

AR: Yes, yeah. At least he got to... Pave the way and work out the case. We hired a woman and she didn't get tenure, and we hired another woman and she left before tenure, and we hired another woman and she left before tenure, and then a woman finally decided to be, I got tenure, Phyllis got tenure, two or three more people did not, women did not get tenure in that '80s-'90s period before we finally got our act together.

PEC: And do you feel like that was gender bias, or do you feel like it was just a hard environment at that time for anybody to get tenure?

AR: A little bit of both. Certainly the woman that was hired while I was still visiting and was denied tenure, she was screwed. They built a new building and they had to move [to] the building, and the guy that was hired, got an extra year on the tenure clock, and she didn't push for it. Not that she should have had to. The chair should have said to her, well, Jim's getting this extra year. And she had to switch organisms. But the most annoying thing to me is she... the NIH started the AREA [grant] program, [which] services places that don't have lots of PhDs, so Miami was eligible, so a lot of people got them, and she didn't get it the first time. And then she got it, and everybody said, well, so-and-so, and so-and-so, and so-and-so got it the first time, and she just got it the year before she went up for tenure. Yeah, so they discounted it.

PEC: Oh my God, simply because it was competitive?

AR: Yeah, and because these other guys that they didn't think did great research had gotten them before her. So I've always been pissed about that. She left and went to podiatry school or something like that.

PEC: What are some of your favorite field stories?

AR: I don't know. I mean, if you go out to an Ag field in Ohio and the little coyotes are there, they love playing with your pitfall traps, like puppy dogs, you know. They [play] tug of war, they pull them out. So that's always fun. Because I did night work, everybody was jealous of what I saw, so like the elephants in Africa and the chimpanzees and the jaguar... I saw a jaguar in Peru, and he just walked along the path and he had a peccary in his mouth.

PEC: Oh, my gosh, that's fabulous.

AR: Yeah, and he just walked along, and it was pouring down rain, and I couldn't get a picture or anything, but he just walked very slowly and looked at me, you know. Don't worry, I'm not taking your peccary. And then he just disappeared, and that was fun.

PEC: When you were in Africa, did you need guards with guns to protect you against elephants or lions or anything?

AR: We didn't have them, no. We were at the French field station. It was pretty safe. Okay, [but] in Pennsylvania, when I was working, the guard was having a practice war [for trainees], and that was kind of surprising. So they came with, you know, these guns. I was like, whoa. And then they told me I wasn't supposed to be there. We're having a war. [I asked] Who are you fighting in central Pennsylvania?

PEC: That's great! What do you feel like are your most influential discoveries, research that was most impactful?

AR: I don't know. Probably the *Tigrosa* and *Pardosa* [research]; you know, discovering the importance of those chemical cues to that anti-predator behavior certainly produced the most publications and little projects because it was so easy to manipulate, and everybody else was doing vibration and vision and the real importance of that, the richness of that chemical communication was probably the biggest [impact]. It certainly produced the most dissertations and theses and undergrad projects. There were so many ways you could manipulate the system.

PEC: What have I missed? Did I miss anything that you wanted to talk about, about arachnology or your career?

AR: No. I mean, the only other thing that I've done that I still do is I do a workshop every year in Oxford, England. I did a couple sabbaticals there. And now we do a workshop on bringing ecological principles to agricultural systems. That's influential in that country because that's [has huge] agricultural impact. Well, it has people from all over, you know. It brings people in. It used to bring lots of people in, in person. Now it brings in lots of people.

PEC: You're still doing it?

AR: Yeah.

PEC: You're doing it next year, this year, next year?

AR: This September. Yeah, during COVID, they made me do it online. And I got to 2023. And [knew] if I did it one more year online, then I would be permanently online. So now I go [in person]. I wouldn't do it anymore if I had to do it online.

PEC: Are you the only professor doing it, the only teacher, instructor?

AR: No, there's a whole group of us. There's five or six of us that collaborate.

PEC: All focused on agroecosystems?

AR: Yeah, different biomes, different kinds of agricultural systems, different kinds of questions. So I'm sort of the generalist predator, spidery person.

PEC: What else?

AR: That's probably all. I'm retired.

PEC: Are you happy to be a retired? You're still staying active and researching?

AR: Yeah. My last PhD student finished in December.

PEC: Oh, wow. Who was that?

AR: Jake Godfrey.

PEC: Okay. Where's he gone on to?

AR: He spent [time] teaching at a community college in northern Kentucky. So it pushed him through the line. So I had ten. I should have had two more. I had Karen and Carrie, Alex and Alex, Sean and Sean, Jason and Jake. But then I had Haley and Michael.

PEC: What's that about? You need another Haley and another Michael!

AR: [Or] Henry and Michelle or something. Broke the pattern.

PEC: Oh, that's great, Ann. Anything else?

AR: I don't think so. You've got more information about me than anybody deserves to have.

Interview with Gail Stratton & Pat Miller

During the 2026 meeting in Lincoln, Nebraska, the *American Arachnology* editor, Paula Cushing (PEC below) recorded an interview with Gail Stratton and Pat Miller (GS or PM below). Below is a transcript of that interview (slightly edited for brevity and readability). The recordings of this and other interviews will be posted on the AAS website in the future.

PEC also recorded an interview with Doug Gaffin at the 2026 meeting and with Kenny Prestwich in August of 2026. Additional email interviews were received from James Cokendolpher and Matt Greenstone. All these interviews will be included in later editions of the newsletter.



Gail Stratton and Pat Miller, 2026.

PEC: Okay, July 14th, an interview with Gail Stratton and Pat Miller at the AAS meeting in Lincoln, Nebraska. Alright ladies, so tell me something about your training in biology. How did you get started in the field of biology?

PM: This is Pat, I think for me it was when I was 12 years old and I had to make a leaf collection and I loved making a leaf collection and I kept it until about two years ago.

PEC: Oh my gosh [laughs].

PM: So, you know, 70 years and I think that I began being a collector. I collected leaves, I collected shells,

I collected acorns, I collected everything. So, a collector of biology and I love the diversity, I love a puzzle, I love figuring things out, you know, what is what and who is who. And that's how I got started.

PEC: That's great! How about you, Gail?

GS: So, I was horse crazy as a kid. Loved horses. And I wanted to be a vet and there was some point, I think it was college or getting into college, I thought, well, people aren't too bad, I could be a doctor.

PEC: [laughs] And then you learned that they were that bad!

GS: And then there was a point where I thought, you know, I really don't want to be dealing with sick people. I'd like to be outside learning about nature. And I got to do a field class and the field class was heaven for me. That was absolutely wonderful.

PEC: Do you remember where that was or who taught it?

GS: I got to do it at a field station near Ely, Minnesota. Carleton College was part of a consortium that had a field station. I was up there for something like eight weeks. First semester was an invertebrate zoology class. We used keys and we could figure out what things were. And the second term I got to do an independent study and I worked on spiders because they were beautiful. It seemed like nobody knew what they were. Somehow, I got ahold of the book, *How to Know the Spiders* [by B.J. Kaston]. And that was it.

PEC: So how old were you? Were you in high school or were you in college by that point?

GS: That was college. Maybe after my junior year. I'd been taking biology classes, but they were all theoretical classes. I mean, I needed the "ology" classes. I didn't know it, but that's what I needed. That's what I wanted.

PEC: So, that got you started?

GS: Yeah, that got me started. And my teacher there was a guy named Dean Dillery. Dean was from Albion College. He had a former student named George Uetz who had just gotten his Ph.D. And he [Dillery] said, you ought to write to him. He might send you his reprints. And I said, okay. So, I started corresponding with George Uetz.

PEC: So you were junior?

GS: I must have been a junior. Junior, maybe going into being a senior.

PEC: So, did you both get biology degrees in college?

Both: Yes, yes.

PEC: And how did that transform or transition into arachnology? For you [to Gail] it was a connection with George?

GS: It was a connection with George and doing that project. And I remember distinctly after undergraduate thinking, okay, what do I do now? And thinking, okay, I'd like to learn. I could maybe think about teaching. And that's something to know. So, I applied to entomology departments and I applied to George's department, University of Cincinnati. He didn't have any support for me at that point.

PEC: For graduate students?

GS: Yeah. And so I ended up going to the University of Maine for a year. Started in entomology, which turned out to be a good thing because I had no background in arthropods, except for my independent study on spiders.

PEC: When was that?

GS: I graduated in 76, so that was 77.

PEC: And what about you, Pat?

PM: Well, I was actually trained in ornithology, so I've never had an arachnology course. I went to graduate school at Mississippi State University and I was in ornithology. I worked with an endangered woodpecker, the red-cockaded woodpecker, and I did my master's degree on that. And after I finished my master's, I was hired by the USDA Boll Weevil Research Lab. I had taken some entomology classes and I had minored in entomology, but I had no arachnology. One of my jobs was to work in the cotton and soybean fields in Mississippi and North Carolina and identify everything that we collected out of them. We did pitfall trappings year-round, all kinds of trappings, light traps, sweep net traps, everything. And it was just a ton of material. And I started with the spiders. I knew nothing about spiders. I got the *Golden Guide to Spiders* [by Herb and Lorna Levi]. And I learned about the arrangement of eyes and worked my way up to *How to Know the Spiders* [by B.J. Kaston]. And then I realized the only other book I had was *Spiders of Connecticut* [also by B.J. Kaston]. And I thought, well, that's my next step. And then went from there to the primary literature. And I had a wonderful mentor, and he encouraged me in that way. He paid for my way to the first arachnology meeting in 1982 in Hampton, Sydney, Virginia.

PEC: Hosted by Bill Shear?

PM: That's right.

PEC: So who was your mentor?

PM: His name was Bill Cross, and he was an ecologist. He knew about everything. He worked with grasshoppers. He worked with dragonflies. He worked with the screwworm fly in Florida. You know, he knew plants. So I really just absorbed a lot from him. And he was the one that merged the USDA boll weevil research collection, which I curated, that was the other part of my job, with the university collection. And I went with it as curator, even though I was not trained as a curator. And I just had to learn on my own. The first arachnologist I met was G.B. Edwards. Dr. Cross would fly me to Florida with a stack of insect boxes and spiders. And G.B. would patiently sit there with me and help me identify spiders until I could get my feet under me and learn how to do it myself. I was curator there at the Mississippi Entomological Museum for eight years.

PEC: When was that that you were under Cross?

PM: That was '79. But he was murdered in Mexico.

PEC: He was what?

PM: Murdered. He was murdered in Mexico. He was on a trip tracing the route of the boll weevil up into the United States. And one of the routes was from Mexico. So he had gone off on a trip by himself. He had been warned not to go by himself. And he said, well, I'll check in every third day. And he never did check in with the lab. They called my phone because I had given him one of my business cards from the museum. Because he was my boss, he had a card. And that's what he had in his pocket when they found him. So they

called my number. Luckily, I wasn't at my desk. And it got transferred to the secretary. And she found somebody. I described what he would have had on. It was a real tragedy for me.

PEC: That's horrible.

PM: Yeah, yeah.

PEC: Did they ever find out who killed him? Was it the cartel?

PM: Bandidos.

PEC: Wow. PEC: And you would have been in your, what, first or second year of graduate school?

PM: I was out by then.

PEC: You were done with your Ph.D.?

PM: I never got a Ph.D.

PRV: But you were a graduate student with him, right? Or no, you were just, you were technically...

PM: He was my boss. He was my boss at the Boll Weevil Lab.

PEC: So do you feel like, for [that] the time, that his support of you was unusual for women?

PM: Oh, absolutely. Absolutely. I don't know what he saw in me, but he saw something. And he hired me for \$4.25 an hour.

PEC: Which was good at that time.

PM: I thought that was good. He hired me before I finished my thesis. And I said, Dr. Cross, I really feel like I need to finish my thesis. And he said, "I expect you to finish your thesis. I expect you to."

PEC: Wow.

PM: And he said, "What will it take?" And I said, "I need about two weeks off." And he said, "Here is your office. I'm not going to let anybody bother you. I will keep paying you. You just get it done."

PEC: That must have been heartbreaking [to lose him].

PM: It was.

PEC: Oh, my goodness.

PM: His name was William, or Bill. And my son's name is Bill.

PEC: Oh. That gets me all teary-eyed. Wow.

PM: So that's how I got started in arachnology. He was so encouraging to me. He's the one that paid me to go to the arachnology meeting. He paid my plane ticket. It was a tragedy.

PEC [to Gail]: What about you? Who got you into the field?

GS: So I would say one more thing about Dr. Cross is that he was a generalist, too. I mean, he had deep information about so many groups. And that's something that Pat took on as well, just to not be afraid of knowing many groups.

PEC: Did you all know each other at that time?

GS: We met in 1982 at the Virginia meeting.

PEC: Seriously? At the AAS meeting?

GS: Yeah.

PEC: Oh, wow.

PM: Yeah. I had been married a year to Gary Miller. And every year, we [Pat and Gail] would go back to the arachnology meeting and look forward to talking to each other. And we talked about canning and composting and gardening and just anything. Not necessarily spiders. But that's how we met.

PEC: And when did you decide to get together? If you don't mind me asking.

PM: No, it's an open book [both laugh].

GS: So, my path, I got my degree with George [Uetz]; on the whole, had a good experience, and then got a postdoc for a year at Ohio State. And then from there, I went to Bradley University.

PEC: Who did you postdoc with?

GS: Wayne, I want to say Wayne Andrews? Ash...? Wayne... An arachnologist but he sort of disappeared after that. Ash... started with an A. Okay. But he was sort of not in the picture. I didn't know it at the time, but he was busy not getting tenure. And his life was changing. So, I worked on my own, didn't get a lot done. I got my first job at Bradley University in Illinois. And Pat and I were corresponding, and she, I think happened to mention, that she had five different species of *Schizocosa* in her pitfall traps. And in fact, five species from one trap. And she wanted to know if I would look at them because they were hard to tell apart. And I said, holy crap.

PM: They all looked the same to me.

GS: I mean, I was dreaming of finding more than one species. I couldn't find more than one species.

PEC: So, were you doing behavioral work at the time on Schiz?

GS: Yes.

PEC: And you were leaning towards either staying with behavior or looking at diversity?

GS: Yeah, I was interested in diversifying what I knew. So, I started with *Schizocosa ocreata*, and *S. rovneri*. And then started realizing that there were other ornamentations and animals that looked very much like either *ocreata* or *rovneri*. So, getting curious about that. Around that time, I described [*S.*] *stridulans*. And then Pat said, yeah, I've got five species down here. And it's like, can I come?

PEC: And at that point, did you say, would you marry me? [all laugh]

PM: That was earlier. That was earlier. Way earlier. So, you were already at Albion by the time that you contacted me about...

GS: No, but you sent me some to identify, and that's when I realized that....

PM: And you were at Bradley? Yeah. Oh, okay. Now, these are handwritten letters. Of course. Handwritten. They put a stamp on it. Way back in the day. We don't even know what that is anymore.

GS: So, down the road, just a little bit longer, I moved to Albion, was working at Albion. And then there was the meeting in Canada.

PEC: Who hosted that?

GS: It was in Ottawa. It was in 1990. But the next year was going to be in Oxford [Mississippi]. And I think I sort of invited myself. I said, can I come help with the meeting and maybe we can collect some spiders? And so I did. I came a week early and helped however I could with the meeting, but then we also went out collecting. And that was it.

PEC: For the two of you?

GS: Yeah. And being outside doing field work.

PM: So we had a long-distance relationship for four years. Because she was at Albion.

GS: It took us a few years to unwind. Getting things sorted out.

PM: Gail would come down for the summer in between 91 and 94.

GS: And Pat couldn't move from Mississippi because she had a child. She'd have to leave the child and that was not acceptable. And I was a bit more flexible. I thought, you know, I still have some energy. Albion was okay, but it also was lonely. So I resigned my job at Albion and got a sabbatical replacement at Rhodes College in Memphis. I did that for two years.

PEC: Because that was at least closer to...?

GS: Yeah, I could commute from where Pat lived. And then got the job at University of Mississippi as a lab coordinator. And that was fine. That was a good job. Gary [Miller – Pat's ex-husband] got me that job.

PEC: Oh, wow. And was that your job for the rest of your career?

GS: It evolved, but that was basically it. I mean, over the years, I shifted less from coordinating labs to teaching lectures and sometimes teaching the labs.

PEC: And at that time, were you [Pat] mostly taking care of William [Pat's son]? What was going on with you at that point, career-wise?

PM: Career-wise, I was teaching at a community college. I did that for 25 years. Because it paid my bills.

PEC: Teaching biology?

PM: Yeah. We just sort of shared William [Gary and Pat], you know, back and forth, and it worked. And he loved Gail. One of the turning points in our life was the ice storm of '94. And Gail was in Michigan. I was stuck in Oxford with no power, no heat, no nothing. And I had to go down the hill to make a phone call because I didn't have a phone. And I said, I won't do this again alone. I won't do it. And she said, okay, I'll move.

PEC: Pat talked a little bit about how challenging, how hard it was to lose her mentor because he was so supportive. What did you feel like the atmosphere... Because this would have been that same period of time, the '80s, right? Early '80s. Yeah? So were you getting support? Like, was your advisor supportive of women in science?

GS: Reasonably supportive. I mean, there were things that went on in the lab that would not be tolerated today. Like nobody knew. So I learned there's times to just keep to myself, and that's what I did. My first job... My first job at Bradley was... I was lonely. I was odd for a couple reasons. One, I was the only woman in the department, but that wasn't the biggest reason. The biggest reason, they hadn't hired anybody for the last 30 years. I was the first person they'd hired in forever. So it was like... I was with all these old guys, and they sort of didn't know what to do with me, and I didn't know what to do with them. I mean, they were nice, but it was like... I felt like I didn't really have colleagues. Yeah, yeah. It was odd.

PEC: And were they still active researchers?

GS: Some of them were. Some of them were. Several were not. But teaching was good because I had to really learn biology. You know, there's nothing like teaching to understand why meiosis and mitosis are important. It's like, oh, I get it now. Now I know why I make my students learn this. And then I was invited to apply to the job in Albion where Dean Dillery was, the friend back at the field station. And he was very supportive. He was somewhat patronizing, but very supportive. And that was a friendly department with younger people. And so that worked pretty well. And then there was this [previous] undergraduate honor student who just reminded me today [at the meeting]... [while] I was watching the soccer game [during the 2026 meeting]. She came over during the soccer game, and she [reminded me that she had] said, "I want to do my undergraduate honors thesis with you." And she said, "I want to work on sharks." And I said, "I don't know anything about sharks, but if you want to work with spiders, I'll work with you." It was Eileen [Hebets – host of the 2026 meeting]. It was Eileen. [All laugh.]

PEC: Sharks to spiders.

GS: She just said, okay. And I said, if you want to, you can come down to Mississippi this summer and work on behavioral problems. And she came. What a trooper. She came.

PEC: So who else did the two of you feel like you influenced?

PM: Oh, gosh. Well, you know, our contribution was knowing when certain species of *Schizocosa* were mature and when they were penultimate.

GS: And where to find them.

PM: Yeah. You know, we know where *duplex* is. We know where *stridulans* is. We know where *rovneri* is. So Eileen's students would come through and stay with us. And there must have been 20 different graduate students that stayed with us over the years, and they'd just sleep on the floor, on the couch, you know, on the bed. And we'd cook a big meal. We'd go out at night. And then we would come back in late and have chocolate chip cookies.

GS: And they'd go back with thousands. They could get that number early in the year. Up here [Nebraska], you'd only get one or two species, and you'd have to wait until mid-July to get them.

PM: So we would just collect like crazy. And it's just so diverse there, and so many. And I think that is one of our greatest contributions.

PEC: Did some of those students go on and stay in the field?

PM: I believe they did, for sure. Yeah, Steve Schwartz. We ran into him. Casey Fowler-Finn. Casey, Jay Stafstrom.

GS: Dustin Wilgers...

PM: I wish we had a list of everybody who stayed at our house.

GS: Nuri. Nuri spent two summers with us. Noori Choi. He gave a paper yesterday morning.

PEC: So are you still hosting these?

PM: Well, Noori was the year before last. He stayed at the field station in a little bitty cabin. And the first year he was by himself, and he had no car. And that's where our lab is. And so, you know, we took care of him. And then the second year, he married Minji. And they had just got married in December, and he came back to the field station that summer. They lived in this little bitty cabin. With no car. So, you know, we sort of hosted them. And those are the last ones. Eileen came down last during COVID with two students, with Rowan McKinley. Rowan and Laura had been there twice. He came once with Eileen and Noori, and then he came back the next summer with Laura and him, just the two of them. And that was a month after they had started dating. And now they're married. And he's been back once since then. So just, you know, they just keep coming back.

PEC: So was most of your field work carried out in Mississippi? Where were your field expeditions? Mostly the U.S.?

GS: So, for myself, I started out trying to collect throughout the southeast. And had no idea what a big project that was. I mean, it's, ridiculous to just think I could spot, check, and have any idea what was there. But it was enough to know that there were lots of interesting spiders. Once we were together, we did a lot in North Mississippi. We did a couple of further trips than that, including Florida. And then we started doing some projects with Bob Suter. And that was really fun. And one of those projects was to see how different spiders behaved on water. To see how widespread it was, the ability to row. Because Bob had the equipment to measure and to film that. And Pat had the expertise to identify all these different spiders. And I had sort of an idea about the phylogeny. So we went to Florida. We went to Southern California. We went to Arizona, collecting many different kinds of spiders.

PM: Hawaii.

PEC: Just the two of you or with Bob?

GS: With Bob. To just get a wide range of animals and see what they would do on water. That was a really fun project. And Bob also came down to collect *Dolomedes* when he was actively working on *Dolomedes*.

PM: And we did some work with him on *Geolycosa*. With burrowing behavior and the mechanics of how much energy it takes to throw a bolus out of the burrow. That was fun.

GS: And he had the skills of getting papers written quickly. It's like the best kind of co-authors that can actually write.

PEC: So let me ask one other question about arachnology because you [Gail] were our society treasurer for many years. How did that come about, that you got so involved in the operation of society?

GS: I was coming [to meetings] regularly and there was a need for a treasurer and there weren't that many people. And I thought I can do that.

PEC: And you were fool enough not to step down [for many years – laughs].

GS: Boy, I hadn't been treasurer long when we had our first financial crisis when the cost of the journal [Journal of Arachnology] was going way up and the dues were not going way up and it was like this does not match at all. I think Bill Shear was maybe President. So there were conversations about how to raise more money.

PEC: So for the three of you – Ann [Rypstra, who came to listen in to the interview] and Pat and Gail, how has arachnology changed for the better, how has it changed in more challenging ways? Do you feel like the society itself is doing well? What are your thoughts about the society and its growth?

PM: So many young people.

Ann: I think the society is strong – you can see it with meetings. I mean, we've had meetings with 60 people and this is 160 or [so]. It's not like it's an easy place for a lot of the core people to come to. I think it is optimistic – the demography [of attendees] and the quality of science. I think the quality of science is way better than it was 30 or 40 years ago. I would come to arachnology [meetings] to see my friends and then learn more about spider biology. But I had to go to other meetings to get the conceptual framework. And I think now we can do both things [at the AAS meetings]. There's more big question projects in development and physiology. Different meetings emphasize different things but there are people asking the big questions across the discipline, across the country. If you go for a couple of years you can get cutting edge ecology, cutting edge development, cutting edge systematics and phylogenetics.

PM: When we describe the arachnological society people we say there are as many women arachnologists as there are men and people are surprised.

PEC: So can you touch on that a little, the support of women in the society over the years. I mean, I joined in '82 and I've always felt there is always support for students and women. Do you feel the same?

PM: I think so.

PEC: From the beginning?

PM: From the beginning. At least from our beginning.

GS: Yes, I would say so. And I think I took it for granted and was surprised when other societies were very male dominated like the Entomological Society [of America]. And I wonder why and I think it has to do with money. There's a lot more money, there's more competition. And that competition attracts men.

I would say I haven't heard any bad papers [at this meeting]. The average quality is very, very high. And that's amazing. That did not used to be true. And we've had our stars like Eileen [Hebets], like Ann [Rypstra], [Charles] Dondale.

PEC: What are some other things you want to say about the field, about your life, about the support for scientists, or science in general? Anything?

GS: Well, I think it's a sign of a strong society that the leadership, the President, the Directors, there have been consistently good people and those people have changed over time. I've seen other organizations that don't make that shift to different people being in charge. Somehow we did that – somehow the AAS did that. And that's a sign of health. And I'm amazed at the number of young people. That is just so exciting.

PEC: Anything else you want to add?

PM: Thank goodness for arachnology!

In Memoriam: Petra Sierwald

By Michael L. Draney



Petra in Almirante Bay, Panama, September 2007. Photo by M. Draney.

Dr. Petra Sierwald, Associate Curator of Arachnida and Myriapoda at Negaunee Integrative Research Center, Field Museum of Natural History, Chicago, died 23 May 2026 after a long battle with cancer. She is survived by her husband Rüdiger Bieler, Curator of Invertebrates at NIRC, Field Museum (who contributed to this article); their daughter Anke, son-in-law Kurt Schwartz, and grandchildren Anja and Lukas Bieler Schwartz.

A native of Hamburg, Germany, Petra earned her PhD in Zoology in 1985 at University of Hamburg under Dr. Otto Kraus. Her thesis involved the taxonomy, morphology and homologies of sexual organs of Pisauridae. She did a Postdoctoral Fellowship at Smithsonian Institution under mentor Jonathan Coddington. Charles Griswold

was also an early collaborator and mentor. Throughout her career, she did fieldwork in disparate regions of the world and was a frequent collaborator with Rüdiger on marine biology research as well.

In the 1990s Petra began studying millipedes due to a relative lack of taxonomic workers in this diverse (over 14,000 species) group, and William Shear was her millipede mentor. With Shear and postdoc Jason Bond, she received an NSF PEET Grant (Professionals Enhancing Expertise in Taxonomy) entitled MilliPEET in 1995 and was instrumental in the creation of Millibase (<https://www.millibase.org/>), a millipede analog of the World Spider Catalog. Petra was largely responsible for the key to millipede Orders (<https://www.fieldmuseum.org/page/milli-peat-key>) which has now been translated into 16 languages, and she produced a significant body of work on millipede systematics and functional morphology.

Throughout her career she was active in grants that enhance taxonomic infrastructure and student opportunities in biodiversity science. In 1998, she hosted the joint AAS Annual Meeting/International Congress of Arachnology at the Field Museum, Chicago. It is thought to be the largest gathering of arachnologists in history to that point (I'm told this record held until the Golden, Colorado Congress in 2016). She ran the Field Museum's first Research Experiences for Undergraduates (REU) programs, mentored graduate students and postdocs, and taught at the University of Chicago and other area universities. She was chair of the Museum's scholarship committee for many years, acted as advisor for a number of invertebrate-related museum exhibits, and served as editor for several journals, including a stint as the managing editor of the Journal of Arachnology. She was a lead PI on several NSF Thematic Collections Network grants, including the large Symbiota portal [InvertEBase](#), and most recently, Mobilizing Millions of Marine Mollusks of the Eastern Seaboard, which digitized and made available

relevant holdings from 15 U.S. collections. Petra's great skill was in facilitating networks of people to do research more effectively, and in this she was, I think, ahead of her time.

Nina Sandlin, who worked with Petra as a volunteer at the Field Museum for a quarter of a century, contributed to this remembrance. After first encountering Petra in a video shown at the 1996 "Spiders!" exhibit at The Field, she later had a curiosity-driven spider question and used the Alta Vista search engine - this was before Google - to search for "petra spider," adding "I did not of course expect it to radically change my life."

On a personal note, Petra was my most important professional mentor and I'm forever grateful to her for intellectual development and numerous kindnesses she extended to me, my wife, my collaborators, and my students throughout the years.

References

Anonymous. 2026. In Memory of Dr. Petra Sierwald. Pg 2. South African National Survey of Arachnida SANSA Newsletter 58, Apr-June 2026.

Cushing, Paula. 2025. Interview with Petra Sierwald. *American Arachnology* #95. October 2025.

Siggers, J. Email announcement of Petra's passing by Field Museum president Dr. Julian Siggers. May 2026.

An addendum from the *American Arachnology* editor: during the 2026 AAS meeting in Lincoln, Nebraska, we set out a condolence card for attendees to sign that was then sent to Petra's husband, Rüdiger Bieler, after the meeting. Rüdiger sent the following message to AAS members: "I really want to thank you for sending the condolence messages from the AAS meeting in Lincoln. Over the decades, I have gotten to know many of Petra's colleagues and spider/millipede friends, and it has been heartwarming to read their comments."

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