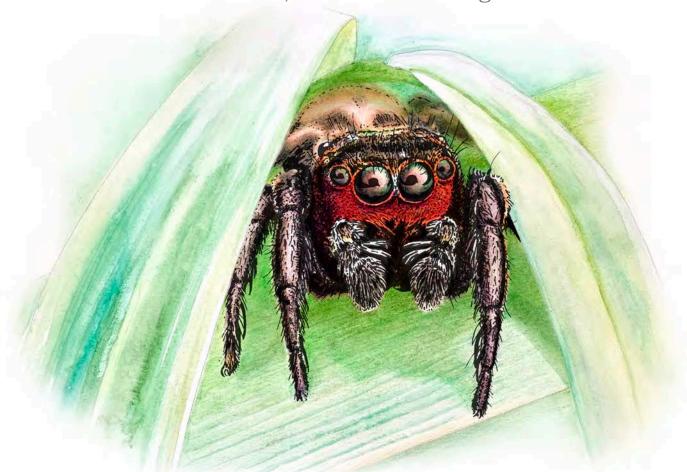
The Spider Club NEWS

December 2021



Vol. 37, No. 4

"The Spider Club provides a fun, responsible, social learning experience, centred on spiders, their relatives, and on nature in general."



SUMMER EDITION

WWW.SPIDERCLUB.CO.ZA

Follow us on Facebook

CONTENTS

About the Spider Club	2
From the Hub	3
Snippets	4
Book Review	7
Observations	9
Recent Events	14
Moreleta Kloof Nature Reserve – 10 October 2021	14
ROODEPLAAT CAMPUS, ARC GROUNDS – 21 NOVEMBER 2021	17
BLOEMFONTEIN SPIDER WALK, FREE STATE NATIONAL BOTANICAL GARDEN — 5 DECEMBER 2021	21
Cape Town Spider Walk, Kenilworth Racecourse Conservation Area — 5 December 2021	31
Call for Verified Spider Bites in Southern Africa	35
Mantidflies: Hitchhikers with a Taste for Spider Eggs	42
Jumping for Jumpers: Robert Wienand's focus on photographing jumping spiders	46
Anka se Goggastories	54
Summer Spider Drawing Competition	58
Spider of the Month	60
Spider of the Year 2021	65
On a Lighter Note	66
Upcoming Events	69

About the Spider Club

The Spider Club of Southern Africa is a non-profit organisation. Our aim is to encourage an interest in arachnids – especially spiders and scorpions – and to promote this interest and the study of these animals by all suitable means.

Membership is open to anyone – people interested in joining the club may apply to any committee member for information.

Field outings, day visits, arachnid surveys and demonstrations, workshops, and exhibits are arranged from time to time. A diary of events and outings is published at the end of this newsletter.

Contact us

WEBSITE: http://www.spiderclub.co.za EMAIL ADDRESS: info@spiderclub.co.za



at "The Spider Club of Southern Africa"

Your committee; always available and ready to help:

Astri Leroy (chairperson)	073 168 7187	astri@spiderclub.co.za
Rudolph Steenkamp (newsletter editor)	084 626 8182	rudolphsteinkampf@gmail.com
Roulla Janse van Rensburg (social secretary)	083 300 9609	roulla.jvr@gmail.com
Jarrod Michael Todd (events organiser)	067 833 2191	jarrod.todd37@gmail.com
Henning Boshoff (additional member)	071 556 7055	boshoffhenning@gmail.com
Desiré Pelser (webmaster)	076 926 1121	des@earthandoceans.co.za

Acknowledgements:

Our sincere gratitude goes to the following people for this edition of the newsletter:

- All the photographers of the photos used in this edition. Without you, these pages would be very dull.
- Astri Leroy, of course, for all her contributions, and informing me of any new content, as well as the entire SCSA Committee (Roulla, Jarrod, Henning, and Desiré) for their contributions.
- Jeanne van Aswegen, my colleague and superior half, for proofreading and editing the newsletter.
- Joleen Coetzee for her beautiful front cover drawings.
- Everyone on SCSA for all the interesting content.
- All the readers of this newsletter, and all the positive feedback we receive. Of course, keep the negative feedback coming, so that we can improve on this newsletter.



From the Hub

The year 1975 is a long, long time ago when six of us sat round a table and The Spider Club of Southern Africa was born. For me it has been an epic journey with many adventures, lasting friendships forged, friends lost, and others found. The Spider Club became my baby, then my child, and now as an adult, the club has a life of its own. As with all parenting, there have been heated discussions and warm makings up. It is hard to let go, but let go I must because I am now the grannie

and the able, enthusiastic, and knowledgeable new admins must be allowed to get on without my interference. In the meantime, please indulge me with some reminiscences of days gone by. That's what old folk do – reminisce. My involvement with the Spider Cub and the broader world of arachnology has taken me to Europe, the Americas (including the Galapagos Islands), Madagascar, and several countries in Africa, but the best memories are of Spider Club events (now called Spider Walks) in South and Southern Africa. I can go waaaay back and in future newsletters offer some highlights. I won't bore you this time because Rudi tells me this is going to be a whopping, bumper Spider Club News.

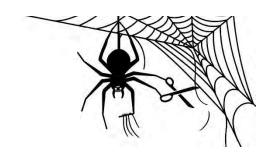
The "new brooms" – Rudi, Jarrod, Roulla, Henning, and Desiré – are really doing a fantastic job running the club and arranging Spider Walks away from Gauteng, which has sparked interest all over the country. It is so good that there is such an interest in the little things that run the world (invertebrates, including spiders) and our membership is getting to the point that it rivals, and in some cases exceeds, that of other natural history interest groups. At present, we have 534 registered Spider Club members. And, of course, there's our wonderful Spider Club News editor, Rudi Steenkamp, who pulls it all together.

Happy spidering and enjoy this Spider Club News!

Astri Leroy December 2021

EDITOR'S NOTE: Yes, it is indeed a long newsletter, thanks to all the new Spider Walks that were held. It would have been even longer if we could have covered the Durban Spider Walk, but unfortunately it will have to wait for the autumn edition. It is always tough to limit the space when there are so many beautiful spiders found, and shrinking the photos so that they can all fit on a page or two will not do them justice. I have always liked to properly showcase our beautiful spiders and our talented photographers. I hope you enjoy them as much as I do!

Snippets



More Spider Walks coming your way

Due to popular demand, the Spider Club committee decided to bring the Spider Walks to other parts of the country. What we need are dedicated people to organise these walks in their area. For now, we want to focus on the different provinces. So far, we have managed to find organisers in the Free State (Rudi Steenkamp and Ruan Booysen), the Western Cape (Wessel Pretorius), KwaZulu-Natal (Desiré Pelser), and the Northern Cape (Frans Pretorius). We are even considering SCSA Spider Walks in Namibia. The first of these walks outside Gauteng took place in Bloemfontein and Cape Town on 5 December (see pages 21-34).

The SCSA committee thanks all the people who agreed to lead these walks. This shows dedication to the club and to our eight-legged friends. While we are not allowed to collect in some places due to not having a permit, the species lists (accompanied by photos) will certainly help to determine the distribution of spiders in South Africa.

Ansie's new email address



Many of us press on Ansie Dippenaar-Schoeman's button every now and then, especially where crab spiders are concerned. Unfortunately, after 54 years at the

Agricultural Research Council (ARC), she has retired. She will still continue with SANSA, though, but her ARC email address is no longer in use. People can now contact her at dippenaaransie@gmail.com. The SANSA

newsletter will now be distributed by Ruan Booysen instead of by Petro Marais.

Survey on spider bites

Associated Prof. Volker Herzig and Dr Tobias Hauke are calling on everyone who has experienced a confirmed spider bite (as well as scorpion stings and centipede bites) to fill in a survey. The project description reads as follows:

The purpose of this research project is to examine bite and sting incidents caused by spiders, scorpions or centipedes in humans to develop a better understanding of the circumstances and scope of outcomes. If you have been bitten by a spider or a centipede or stung by a scorpion, you are invited to participate in this research project. In case of children being the victims of arachnid or centipede bites or stings, we would ask a parent or guardian to complete the survey on behalf of the child. We would ask everyone to fill out a separate questionnaire for each incident.

The survey can be accessed here: https://docs.google.com/forms/d/e/1FAIpQLSepTKrz3n37 xW3m5nDPyVqilwJiCHI9p8YMuJYzx kK7IYKOw/viewform?fbclid=IwAR16Khjpbim9Q9IUdnxCjKnKYokLrl3V wjY7TU5K6qY4DziyDCzXv76O3Q

There is also a separate survey for people whose pets have been a victim of a spider or centipede bite or scorpion sting. This will contribute to our very limited knowledge of the effects of their venom on our animal friends. The link to this survey is available on the above link.

World Arachnida Catalog



Danilo Harms, head of the Department of Arachnology at the Zoological Museum Hamburg, Germany, circulated the following message:

It's been 4 years in the making but here it finally comes - The World Arachnid Catalog: A complete taxonomic inventory and online catalogue for eight arachnid orders. An upgrade to the famous World Spider Catalog and the former smaller arachnid order catalogues. For the first time in history all taxonomic papers for these orders will be available online and free of charge! All species are listed with their synonyms and primary data, and distribution maps for type localities provided. The catalogues will be updated regularly. This is a milestone in arachnology and a fantastic collaboration with Mark Harvey and Wolfgang Nentwig. Check out the first release: https://wac.nmbe.ch/

Heliophanus mating under study

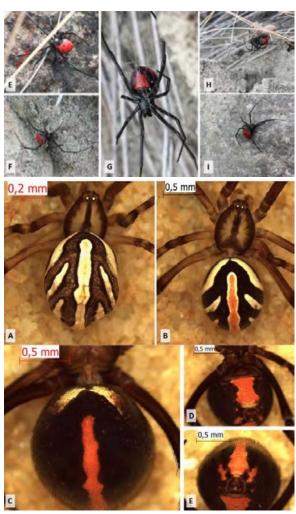


Dr Michael Vickers from the USA will spend the next two years in Bloemfontein to study the

reproductive biology of *Heliophanus* spp. from the grasslands of central South Africa. His aim is to determine what role bright colours and mating dances play in mate preferences. Apart from observing their behaviour by recording mating displays and the females' response, he will also closely examine scale patterns and structures. This study will form the basis for future research on using behavioural and physiological aspects in species recognition.

Two new Latrodectus species described

Two new species of widow spider (*Latrodectus*) from Colombia were recently described¹, namely *L. garbae* and *L. hurtadoi*. Before this, Colombia had only two Latrodectus species (*L. curcaviensis* and *L. geometricus*). Together with our recently described Phinda button spider (*L. umbukwane*), which was the first new *Latrodectus* species to be described in almost 30 years, the global count now stands at 34 *Latrodectus* species.

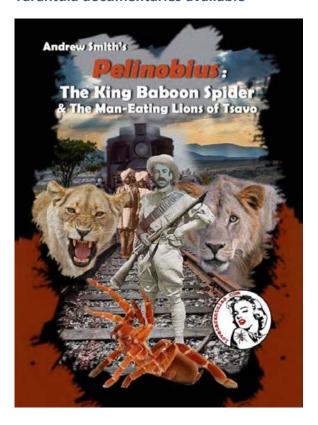


L. garbae (top) and L. hurtadoi (bottom).

dry forests in the Magdalena Valley- Colombia. *Species*, 22(70):243-265.

¹ Rueda, A., Lozano, D., Valentina, M-C., Velásquez-Vélez, M.I., Amézquita, A., Parra, D. & Realpe, E. 2021. Phylogeny of the genus Latrodectus (Araneae: Theridiidae) and two new species from the

Tarantula documentaries available



Andrew Smith's latest documentary is an epic three-hour study of the tarantula spiders of East Africa. At lovetarantulas.com, Pelinobius, Ceratogyrus, Pterinochilus, and Eucratoscelus are studied, with the first field footage ever filmed of these spiders. Not only does he look at these spiders in the field, but also breeding and the history of their collection 120 years ago. Available as a download or a DVD collector's 2x DVD boxset, which has the bonus documentary, titled Desert Tarantulas. Order from lovetarantulas.com.

Peter Weygoldt passes away

The International Society of Arachnology (ISA) recently circulated this sad news:

Dear ISA members,

I am sorry to have to inform you that the German arachnologist Peter Weygoldt died last Saturday.

Peter was for many years professor of zoology at the University of Freiburg. He was an honorary member of our society, and the recipient in 2013 of our highest honour: the Simon Award. This award was conferred in recognition of his extraordinary contributions to arachnology. These include the seminal 1979 Weygoldt and Paulus study into arachnid phylogeny - the first to formally apply cladistic methodology and still highly relevant today.

Peter is also the only arachnologist to my knowledge to have authored standard textbooks on two different arachnid orders (pseudoscorpions and whip spiders) and more recently carried out much work of the highest quality into whip spider behaviour and systematics in particular.

A Festschrift in his honour was also published in 2018 in the journal *Zoologischer Anzeiger*:

https://www.sciencedirect.com/journal/zoologischer-anzeiger/vol/273

I would like to extend my deepest condolences to his family, friends and colleagues.

Yours sincerely,

Jason Dunlop (Secretariat)

Astri Leroy had the privilege to meet Peter and his wife, Sylvia, back in 1999 in Namibia while searching for tailless whip scorpions (Amblypygi). This is what she wrote in the newsletter:

The cherry on the top was of course the postcolloquium outing to the Brandberg. We stayed at Uis – a place best avoided but it was only a place to sleep so it didn't matter. After a quick swim the mountain beckoned and we spent Saturday afternoon and evening on the White Lady side till well after dark when we hunted with torches – always good. On Sunday the Croucamps and Leroys accompanied the Weygoldts to the western side of the Brandberg in the Anis River valley where we hunted whipspiders (amblypygids or tailless whip scorpions). This is serious, serious work and the Anis River valley will never be quite the same after Sylvia Weygoldt's efforts. She wields a mean crowbar.

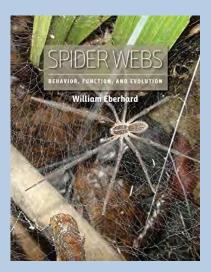
Book Review

by Astri Leroy

SPIDERS SPIN AND SO DOES MY HEAD; a non-professional's review of an amazing book, titled

Spider Webs: Behavior, Function, and Evolution

by William Eberhard



655 pages, hard cover, also available as an e-book published by The University of Chicago Press, 2020. ISBN-13:978-0-226-53460-2

Approximate cost in ZAR: R2 000.00

Before I even begin, let me clarify that this book is a huge tome, dense with facts, new observations, and intriguing questions, and it will take me literally years to read through and digest its content. In my opinion, it does not fall into the "popular science" category. Short reviews by several senior scientists in the fields of animal behaviour, spider and conservation biology, and spider systematics to whom I bow down in utmost respect have written far better reviews than I can because they will understand the content much better. They are John Alcock (Arizona State University), Rainer F. Foelix (author of Biology of Spiders), Samuel Zschokke (a senior lecturer at the University of Basel), and Brent Opell (a Professor of Biology at Virginia Tech). You can check their reviews online.

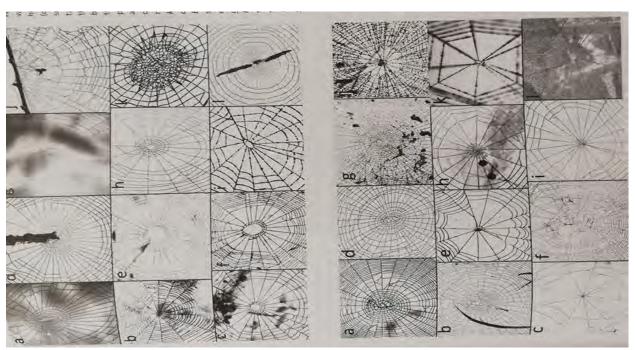
William Eberhard is an emeritus scientist at the Smithsonian Tropical Research Institute in Panama and emeritus professor at the Universidad de Costa Rica. His research interests are animal behaviour, sexual selection, and evolution. "Spider Webs" is a synthesis of his years of observing spiders and their webs in the field, of pulling together previous publications (both his own and those of others), and setting this all out in one enormous publication. So much of what I "knew" about the subject of spiders and their webs is so superficial that most of it is wrong or at least much more complicated than I thought. Although Eberhard's language is easy to understand, many of the concepts are not and I often had to read a paragraph two or three times before I really understood it. For example, likening webs to sieves or fishing nets or even sound detectors is inappropriate for many reasons. Eberhard also points out that orb webs are not the pinnacle of spider web evolution with many spiders abandoning orb webs or even completely abandoning web building while others have greatly modified the original orb web. One of the problems, as the author says on page 489, is that our language does not have a sufficient diversity of commonly used

words to describe the diversity of designs in spider webs. The word "web" in this book refers to a silken prey capturing device and excludes the many other uses spiders make of silk, such as the construction of egg sacs, resting webs, retreats, and so on

The first chapter is an introduction, which explains how alien to most people a spider's world is, with so much of its behaviour tied to the production and use of silk. We humans are predominantly visual animals but web-building spiders' tactile sense is dominant, and vision and hearing play only minor roles. A web spider's physical world consists largely of its own lines, and its major tasks involve producing, finding, and holding lines using its sense of touch. The properties of the silk lines themselves are discussed, as well as the physical and behavioural equipment that spiders use to build and manage webs. The chapter also mentions how web-building spiders find their way around their world, decide where to locate their webs, how they move during web construction, and how they navigate their way around the finished webs.

He gives a brief history of spider web studies and the interesting evolutionary history with indirect dating using fossils of ancient spinnerets to between 390 and 400 million years ago. Apparently orb webs had evolved about 150 million years ago at about the same time as the first birds were around and even before flowering plants had appeared. Phylogeny (relationships) is discussed and Eberhard evaluates previous studies critically because some have been imprecise and controversial. Some authors have simply accepted all published claims at face value, or dismissed or ignored others without justification and repeated these uncritically.

The next nine chapters deal with the function of web designs, of different parts of orb webs, the building behaviour or non-orb weavers and that of orb weavers, web construction behaviour, web ecology and website selection, evolutionary patterns, web diversity, and the evolution of web building. But I have not managed to even skim through this far, so I cannot and will not comment further.



Here is a sample of web illustrations on page 97. Figure 3.11 shows the large variation in orb webs of spiders in the different genera of Tetragnathidae and Uloboridae, and Figure 3.12 illustrates the variations among various genera in the families Araneidae, Nephilidae*, and Theridiosomatidae.

* Status of family/genus as at date of publication.

Astri Leroy

Observations

A second-instar common rain spider (*Palystes superciliosus*) baby after it emerged from the egg sac, and a third-instar baby after it has moulted again. Photos by Rudi Steenkamp.



A grass huntsman (*Pseudomicrommata longipes*) with an eye defect. All eight eyes had these "pupils". Photo by Rudi Steenkamp.



"The bag lady. This tropical tent web spider made up her prey in neat little parcels and hung it from her web. Cool to see! I must say of the many I observed in my dad's garden, she was the only one that did this." – Cecile Roux



"BATTLE LINES DRAWN A line of termite soldier ants face off with a cluster of 16 plus jumping spiders, who want to eat the ant workers and eggs. Taken at Mukuvisi, Harare, Zimbabwe. Have any of you spider boffins seen this behaviour before. ID of spiders and Comments welcome." – Chris Collyer



"Stenaelurillus termitophagous. From the name, you'll see that these have a very specific diet Fun to watch them raiding the termite nests, at some the safety webs they put down as they jump in build up into a dense mat, which shows how many termites end up getting eaten!" – Jonathan Whitaker

"Theridiidae, *Latrodectus rhodesiensis*, female brown button spider out from egg sac on 25/1/2021 being copulated by male *L. rhodesiensis* out of egg sac on 6/3/2021. Photos are taken from video footage. The whole process from beginning to end lasted 1 hour 40 minutes. Photos taken in Polokwane, South Africa." – Sam Jacobsz

Note the embolus of the male's palp. It is the sperm-transferring tube, and is sometimes very long, such as in this case.





Note: This is probably *Palystes* or *Parapalystes* sp., but the specimen will have to be collected to be sure.

Anka Eichhoff found this crowned lynx spider (*Hamataliwa* sp.; Oxyopidae) in the Otjozondjupa Region in Namibia. The spider was sitting on her egg sac, with some of her babies. Prof. Ansie Dippenaar-Schoeman suspects it is *H. rufocaligata*, and says that the "tubercle" on the abdomen can vary from specimen to specimen. If this is *H. rufocaligata*, it will be the first record for Namibia.



Recent Events

MORELETA KLOOF NATURE RESERVE – 10 OCTOBER 2021

by Inez Wilcock

On Sunday the 10th of October, my very enthusiastic and energetic children, Edith (6) and Aaron (7), and myself joined the Spider Walk at Moreleta Kloof Nature Reserve. We joined the Facebook page a while ago to learn more about spiders. The members on the Facebook page have been super helpful in helping us to identify some of the spiders we've found and even helped us with advice on how to care for a poorly baby rain spider that we had found in our home this past cold and dry winter. With help from the group, we were able to rehabilitate and release the feisty little girl once the weather was warmer. The Spider Walk allowed us to finally put some faces to the names we had learned so much from on the Facebook group.

Days before the Spider Walk, my children started announcing to everyone they saw that they would be doing a Spider Walk at the place their niece had her 22nd birthday. These announcements were often met with confusion, not because their niece had her 22nd birthday at the venue but because my children were excited to go out of their way to specially look for spiders and learn more about them with a group of other people. I'm really hoping that the wonder of our natural world never leaves my children. That's a huge reason I am so grateful for spider groups like the one we are a part of. The knowledge and conversations that were shared with my children from people of various ages and stages on the walk left them even more excited at the end of the walk than what they were in the beginning.

The group of people we did the walk with were so welcoming and gentle (especially with my two very confident and talkative kiddos) in helping us learn more about each and every tiny and not so tiny spider we found. The wealth of knowledge was just astounding, and it inspired, and continues to inspire us, to learn more about these beautiful creatures. There was such excitement every time a rock, log, or other object was turned over or net was swished and revealed a spider, scorpion, little worm snake, or gecko/lizard eggs.

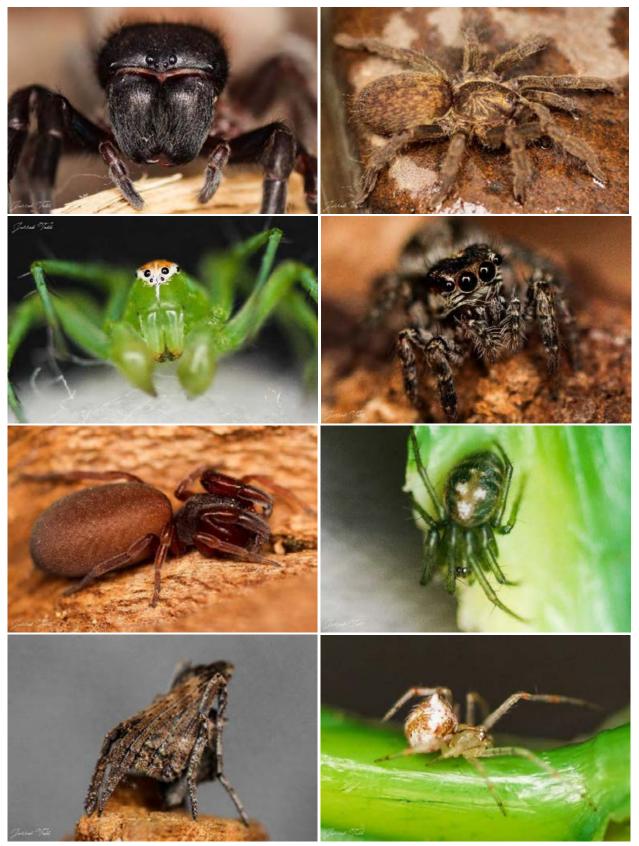
Aaron says that his favourite part of the walk was getting to hold a baby dwarf baboon spider and seeing a large rock scorpion. Edith enjoyed talking to all the people and finding some newly hatched lizards under a rock.

After the walk, my children proudly announced to anyone who was willing to listen (strangers and family) that they had attended a Spider Walk and found lots of cool spiders.

This was our first Spider Walk, but definitely not our last. Thank you for allowing us to be a part of these amazing walks.

Inez Wilcock

The following are just some of the photos that Jarrod Todd took of the spiders found at Moreleta Kloof Nature Reserve.



Top to bottom, left to right: Velvet spider (cf. *Dresserus* sp.); golden brown baboon spider (*Brachionopus pretoriae*); grass lynx spider (*Oxyopes* sp.); jumping spider (*Menemerus* sp.); palp-footed spider (*Palpimanus* sp.); cucumber spider (*Prasonica seriata*); twig orb-web spider (*Cyphalonotus* sp.); comb-footed spider (cf. *Chrysso* sp.).

FAMILY	GENUS/SPECIES
Araneidae	Neoscona sp.
	Prasonica seriata
	Eriovixia excelsa
	Cyphalonotus sp.
Bemmeridae	cf. Spiroctenus sp.
Cheiracanthiidae	Cheiracanthium sp.
Clubionidae	Clubiona sp.
Corinnidae	Afroceto sp.
Eresidae	cf. Dresserus sp.
Gnaphosidae	Zelotes sp.
	cf. Theuma sp.
Lycosidae	cf. Hogna sp.
	Other spp.
Oxyopidae	Oxyopes spp.
Palpimanidae	Palpimanus sp.
Philodromidae	Philodromus sp.
Phyxelididae	cf. Vidole sp.
Pisauridae	Euprosthenopsis sp.
	Rothus sp.
Salticidae	Heliophanus sp.
	Menemerus sp.
	Natta sp.
Scytodidae	Scytodes sp.
Theraphosidae	Brachionopus pretoriae
Theridiidae	cf. Chrysso sp.
Thomisidae	Oxytate sp.
	Other spp.

ROODEPLAAT CAMPUS, ARC GROUNDS – 21 NOVEMBER 2021

by Bronwen Klaas



A preserved specimen in the ARC's collection. Photo: Bronwen Klaas.

This was only my second official Spider Walk with the Spider Club as a visitor. My two German friends, Johannes and Angela, joined me on this adventure. I felt like a complete newbie not having focused on my spider IDs recently. So what better than to be welcomed on the day by our energetic organiser, Jarrod Todd. We were quickly pointed in the direction of what felt like a spider museum. We were allowed to peruse the comprehensive catalogue and plethora of meticulously arranged spiders frozen in time in one of two preservation elixirs. Interestingly, specimens are now being preserved in almost pure alcohol rather than chloroform, which allows genetic testing to be carried out.

After perusing countless drawers of spider specimens and feeling a little bit like a Jurassic Park scientist, it was off to the briefing and onwards to my favourite part: head down, bum up, searching!

Not even 20 metres out of the gate and we were already onto our first find! A cucumber spider, *Prasonica* sp. How pretty this little green beastie was! This was the first of many interesting finds. Shortly after we were called over for one of the world's greatest camouflage grasshoppers and an inch worm.

What I really enjoyed about trekking through the grass with the members of the Spider Club is that while spiders are the target, no little creepy beast is left uninspected or unadored, from very large brown grasshoppers, to "long-antlered" katydids, strange large ants, and stalk-eyed flies! This last one not only gave Jarrod a new move in his happy-dance repertoire after seeing a photo of one in the ARC hall but also left us reminded that there's always room for something of the magical and unexpected.

Flies with eyes on the end of stalks weren't the most outrageous truth I was about to uncover. My world was rocked when I was kindly explained that spiders have multiples of two eyes. There are spiders with no eyes, then in multiples of two until they reach the standard/common eight-eyed spiders.



A cucumber spider (*Prasonica* sp.). Photo: Bronwen Klaas.







From left to right: A wall jumping spider (*Menemerus* sp.), a rosy-banded crab spider (*Misumenops rubrodecoratus*), and a grass lynx spider (*Oxyopes* sp.). Photos: Jarrod Todd.

One of the incredible mentions about this diverse group of people who we were lucky to join on a spider hunt is the vast knowledge and generosity in sharing their experience. Not only do I enjoy wandering up to see what had been found, but also getting quick IDs and often an interesting fact as well. Thanks to everyone who let me stick my nose, and camera, into their nets.

Getting eye-to-eye acquainted with the gorgeous weirdos that give most people the creeps is part of the charm of a spider hunt. What really makes this outing so memorable, are the people you meet on the walk who share a giggle, teach you something you didn't know, and show you how to look for spiders. I say "how" because there are spiders everywhere! My German friends were most amazed at how many spiders there were along the path. From the trees next to the road, to the grass fields and even at the dam's water edge.

Our memorable moments included the flower mantis that changes from statue-still to world-class long-distance runner — and a double whammy in a rotten log when Roulla found my first velvet spider; and how soft and silky they look! Shortly after, tucked away in a hollow, we found a *Nigorella* sp. salti. I've heard of these giants of the Salticidae family, but to see one up close is a different level of euphoria.



Left: A velvet spider (Eresidae). Photo: Bronwen Klaas. Right: A Nigorella sp. jumping spider. Photo: Jarrod Todd.

There were more crab spiders on this hike than I've ever seen. Someone had also found a baboon spider and a palp-footed spider out in the fields.

I felt particularly lucky to find a silver grass lynx spider, *Oxyopes* sp. and red velvet mites along the water's edge. There's something special to be said about the vixen red these mites are veiled in. They remain one of my favourite arachnids.



Left: A grass lynx spider Oxyopes sp. Right: A red velvet mite (Trombidiidae). Photos: Bronwen Klaas.

I also felt fortunate to have seen the pinhead-sized beetle-mimic jumping spider that someone had found. As always, the Salticidae overwhelmed my joy as I watch a little salti perfectly demonstrate water tension as he climbed off his photo platform.



Top left: One of the undetermined grass lynx spiders (*Oxyopes* sp.). **Top right:** A beetle-mimic jumping spider (cf. *Pachyballus* sp.). **Bottom:** One of the diurnal solifuges (romans) in the genus *Solpugema*. Photos: Bronwen Klaas.



From left to right: A flattie (*Selenops* sp.), a masked crab spider (*Synema* sp.), and a running spider (*Thanatus* sp.). Photos: Jarrod Todd.

Angela was overjoyed and mesmerised by the solifuge, a diurnal red roman (*Solpugema* sp.) that she saw. It was so nice to share my love of all things spidery with my friends and watch their appreciation grow for these tiny wonders.

Thank you to everyone who shared their time and experience with us!

Bronwen Klaas



Left: Grass huntsman spider (*Pseudomicrommata longipes*). **Top right:** Jumping spider (*Thyene thyenioides*). **Bottom right:** Flower crab spider (*Thomisus* sp.). Photos: Jarrod Todd.

BLOEMFONTEIN SPIDER WALK, FREE STATE NATIONAL BOTANICAL GARDEN – 5 DECEMBER 2021

by Ruan Booysen



Attendees of the Bloemfontein Spider Walk looking through leaf litter sifted by Ruan. Photo: Garrie Gazza Wright.

Almost every month, The Spider Club of Southern Africa hosts a "Spider Walk" event to spark interest in spiders in the public. These walks are both very adventurous and educational for people of all ages and provide very good data regarding the diversity and distribution of spiders in South Africa. There are several myths about spiders, and during these walks the public are free to ask any of the more experienced people any questions they may have about our eight-legged friends.

Generally, these events are hosted in and around Gauteng, but this year Rudi Steenkamp, the editor of The Spider Club News, and I took the opportunity to host the first ever Spider Walk event in the Free State in the National Botanical Garden in Bloemfontein on 5 December 2021. It was amazing to see how many people were interested in attending such an event, especially one that involves looking for spiders — an activity that many people would not deem as "fun"! This was great

news as it meant there is a very good possibly that more will be coming! As part of the agreement with the gardens, we were allowed to keep the spiders for use in another related spider research project in the gardens.

On the day of the event, a small group of enthusiasts and photographers from Gauteng drove to Bloemfontein to join us. An additional 26 people also joined us, and we all gathered in front of the main entrance where Jarrod Todd informed everybody of what we would be doing and provided some basic information on the safety of handling spiders. Everyone was provided with sweep nets and vials for collecting spiders. After all the admin was completed, we set out and our journey began.



Some of the young ones geared up and eager to find some spiders. Photo: Helét van der Merwe.

As soon as we entered the gardens, people already started looking around in the plants and on the trees to see what could be found. I also brought a sieve along to see what can be found in the leaf litter, but due to the rain during the week leading up to the event, the litter was very wet and finding spiders was not easy. Luckily, we did find some, but they were mostly juvenile flat-bellied ground spiders (Gnaphosidae) and ground crab spiders (*Xysticus havilandi*, Thomisidae) that are very common in this type of microhabitat. After this, we moved on and wandered off towards the grasslands on the outskirts of the garden. Upon arriving at the grassland area, some people were already sweeping through the grass and others carried on with the hiking trails. At this point, everyone had formed a few groups that kind of stuck together, enjoying the event at their own leisure.



Liezl Whitehead, Samantha Zwiegers, and her budding young entomologist daughter searching for spiders. Photo: Rudi Steenkamp.

The majority of the time, spiders were collected by means of sweep netting through the grass, beating of trees and bushes, and hand collecting under rocks, on the ground, and in grass tussocks. This area, in my opinion, was the most productive area we visited as the majority of the spiders came from this small area. So, I decided to join in on the fun and did a few rounds of beating to see what I could find. Apart from some of the very cool insects we have found, some of the most notable arachnid finds was a small, rare, black male jumping spider called *Xuriella prima* (Salticidae). We also found another jumping spider called *Rumburak laxus*,

the first record of this species for Bloemfontein. The beats also yielded some undescribed/undetermined comb-footed spiders (*Theridion* spp., Theridiidae) and stone nest spiders (*Achaearaneae* sp., Theridiidae). Some of the more common spiders found were the hairy field spiders (*Neoscona subfusca*, Araneidae) that showed some stunning pattern variation within the same species! We also found many tree crab spiders, specifically the camelback tree crab spider (*Tmarus cameliformis*, Thomisidae).



Left: A male *Xuriella prima* jumping spider. Photo: Rudi Steenkamp. **Top right:** A female jumping spider, *Rumburak laxus* (Salticidae), a first record for Bloemfontein. Photo: Ruan Booysen. **Bottom right:** One of many twig crab spiders (*Tmarus* cf. *cameliformis*) found in the beats. Photo: Rudi Steenkamp.

The sweep netting yielded fewer spiders than the beating did, but there were still a few interesting finds. The grasses (and leaves of trees) were flooded with lynx spiders of the genus *Oxyopes* (Oxyopidae), some with some beautiful bright orange colouration, such as the males of *O. pallidecoloratus*, and some with brown/beige patterns such as *O. bothai*. The grasses were also crawling with young grass running spiders (*Tibellus* spp., Philodromidae), flower crab spiders (*Thomisus stenningi*, Thomisidae), and a single subadult male Hewitt's crab spider (*Hewittia gracilis*, Thomisidae). I also searched the grass tussocks by hand and found similar species, and additionally found several young leaf-curling sac spiders (*Clubiona* spp., Clubionidae) and a female of a soon-to-be described species of pale ground spider (*Leptodrassex* sp., Gnaphosidae), one of two species for Bloemfontein.



Top left: A female pale ground spider, *Leptodrassex* sp. (new) found hiding in the grass tussocks. Photo: Ruan Booysen. **Middle and bottom left:** Grass lynx spiders (*Oxyopes bothai*). **Right:** A subadult male Hewitt's crab spider (*Hewittia gracilis*). Photos: Rudi Steenkamp.

After spending a bit of time in the grasslands, we decided it was time to move on to the hill trails to see what we could find. The habitat changed from mostly grassland to a rocky hill with a few grasses in between and some trees along the pathway. The trees along the path were beaten and rocks were lifted as we walked. This was where we found some burrowing scorpions (*Opistophthalmus carinatus*, Scorpionidae) and a few orange jumping spiders (*Cyrba nigrimana*, Salticidae). The males of these jumping spiders are a beautiful orange and the females are red-brown in colour. Making our way down the hill, I noticed a very large African bont tick (*Amblyomma hebraeum*, Ixodidae) on a rock, waving her legs in the air, probably waiting for a host to pass by. This is a nice contrast to their typical behaviour where they run, very quickly, towards their hosts. While I was looking at this tick, another small black critter caught my eye, which seemed like an ant mimic. After picking it up to get a closer look, I realised that this was a male grass-stitching zodariid (*Chariobas* sp., Zodariidae). This species is still undescribed and another good find

to add to the list! Someone also collected one of the tree velvet spiders (*Gandanameno fumosa*, Eresidae), but this specific individual was huge! Her leg span was at least 40 mm.



Two other arachnids found on the walk. **Left:** A robust burrowing scorpion (*Opistophthalmus carinatus*). **Right:** An African bont tick (*Amblyomma hebraeum*). Photos: Rudi Steenkamp.



A male (left) and female (right) orange jumping spider (*Cyrba nigrimana*). Photos: Jarrod Todd and Rudi Steenkamp.



An undescribed grass-stitching zodariid ($\textit{Chariobas} \ \text{sp.; Zodariidae} \ \text{)}. \ \textit{Photo: Jarrod Todd.}$

At this point, probably half of the people who started with "our group" were not there anymore and were probably at the restaurant enjoying a meal. This was our cue to start moving down to join them. The restaurant was busy due to the buffet event going on, but that did not stop us from bringing in all our gear and spiders to sort and photograph (with permission of course!). This was a wonderful event, and it was well worth the effort as we found many interesting critters and we met many other spider folks who were very enthusiastic about our eight-legged friends.



Gauteng and Bloemfontein finally meet... From left to right: The Gautengers: Garrie Gazza Wright, Roulla Janse van Rensburg, Jarrod Todd, and Henning Boshoff; and the Bloemfonteiners: Rudi Steenkamp and Jeanne van Aswegen. Photo: Brendon Muller.

Ultimately we collected more than 100 arachnids (mostly adults) from three orders, 20 families, 41 genera, and 49 species. Many other juveniles were seen in the field, but I did not collect any juveniles as they are not always easy to identify to species level. Some of these juveniles included *Tibellus* (Philodromidae), *Clubiona* (Clubionidae), *Ansiae* (Thomisidae), *Oxyopes* (Oxyopidae), and *Neoscona* (Araneidae). I included a preliminary species list below.

Thank you to everyone who made this event possible and to all the members of the public and the Spider Club who joined us!

Ruan Booysen

An approximate species list. Some spiders found are not listed here due to not making it to the lab.

ORDER	FAMILY	GENUS	SPECIES	MALES	FEMALES	JUVENILES	ADULTS
Acari	Ixodidae	Amblyomma	hebraeum		1		1
Araneae	Araneidae	Argiope	sp. Indet.			1	0
Araneae	Araneidae	Hypsosinga	lithyphantoides		1		1
Araneae	Araneidae	Neoscona	subfusca	2	4	2	6
Araneae	Araneidae	Pararaneus	cf. cryptoscapus			1	0
Araneae	Cheiracanthiidae	Cheiracanthium	furculatum		1	1	1
Araneae	Clubionidae	Clubiona	sp. Indet.			1	0
Araneae	Eresidae	Gandanameno	fumosa		1		1
Araneae	Gnaphosidae	Leptodrassex	sp. (new)		1		1
Araneae	Gnaphosidae	Theuma	sp. Indet.			1	0
Araneae	Linyphiidae	Agyneta	habra		1		1
Araneae	Linyphiidae	Genus Indet.	sp. Indet.		1	1	1
Araneae	Lycosidae	Pardosa	crassipalpis	1	4	2	5
Araneae	Lycosidae	Proevippa	fascicularis	5	3		8
Araneae	Lycosidae	Proevippa	schreineri	2			2
Araneae	Lycosidae	Proevippa	sp. Indet. 1		2		2
Araneae	Oxyopidae	Oxyopes	bothai	1	1	1	2
Araneae	Oxyopidae	Oxyopes	cf. pallidecolouratus	1	1		2
Araneae	Oxyopidae	Oxyopes	jacksoni		2		2
Araneae	Oxyopidae	Oxyopes	sp. Indet.			1	0
Araneae	Philodromidae	Philodromus	sp.			1	0
Araneae	Philodromidae	Thanatus	sp. (new?)	2	1	1	3
Araneae	Phyxelididae	Vidole/Themacrys	sp.			1	0
Araneae	Salticidae	Cyrba	nigrimana	2	1		3
Araneae	Salticidae	Evarcha	prosimilis		1		1
Araneae	Salticidae	Heliophanus	sp.	6	4		10
Araneae	Salticidae	Rumburak	laxus		1	1	1
Araneae	Salticidae	Thyene	thyenioides	1			1
Araneae	Salticidae	Tusitala	barbata	1			1
Araneae	Salticidae	Xuriella	prima	1			1
Araneae	Scytodidae	Scytodes	elizabethae	1	2	2	3
Araneae	Selenopidae	Anyphops	sp.	_	_	2	0
Araneae	Sparassidae	Pseudomicrommata	longipes		1	_	1
Araneae	Tetragnathidae	Leucauge	sp. Indet.		_	2	0
Araneae	Theridiidae	Achaearaenea	sp.			1	0
Araneae	Theridiidae	Steatoda	capensis		1	-	1
Araneae	Theridiidae	Theridion	sp. Indet. 3	1	-		1
Araneae	Theridiidae	Theridion	sp. Indet. 1	-		1	0
Araneae	Theridiidae	Theridion	sp. Indet. 2			1	0
Araneae	Thomisidae	Ansiae	tuckeri			1	0
Araneae	Thomisidae	Hewittia	gracilis			1	0
Araneae	Thomisidae	Oxytate	sp. (new?)	2		1	2
Araneae	Thomisidae	Runcinia	erythrina	1			1
Araneae	Thomisidae	Thomisus	sp.	_		1	0
Araneae	Thomisidae	Thomisus	stenningi		1	1	1
Araneae	Thomisidae	Tmarus	cf. cameliformis		2	3	2
Araneae	Thomisidae	Xysticus	havilandi		1	3	1
Araneae	Zodariidae	Chariobas	sp. (new)	1	1		1
Scorpiones	Scorpionidae	Opistophthalmus	sp. (new) carinatus	2	1		3
acor piones	Scorpionidae	οριστορητιπαίπιας	carmatus		1	21	
		Totals		33	40	31	73
						104	•

Here are a few other photos taken of the spiders on the Bloemfontein Spider Walk:



Left: Female tree crab spider (*Tmarus cameliformis*) pretty well camouflaged on a branch. **Right:** A male wolf spider (*Proevippa schreineri*) drinking water from the soil. Photos: Ruan Booysen.



An unknown female hammock-web spider of the family Linyphiidae. Maybe a *Limoneta* sp. Photo: Ruan Booysen.



There was no shortage of jumping spiders (Salticidae) on the walk. On the left is a female *Evarcha prosimilis*, and on the right a *Tusitala barbata*. Photos: Rudi Steenkamp.



Some of the many *Heliophanus* spp. jumping spiders found. All the *Heliophanus* spiders we found will go to Dr Michael Vickers for his research (see Snippets, p. 5). Photos: Rudi Steenkamp.



A beautiful *Thyene* sp. Unfortunately this jumping spider did not make it to the lab for identification. Photo: Jarrod Todd.



Left: Silver marsh spider (*Leucauge* sp.). **Top right:** A pale ground spider (*Theuma* sp.). **Bottom right:** One of a few green grass crab spiders (*Oxytate* sp.) found. Photos: Rudi Steenkamp.



Left: A very small mature male false house button spider (*Theridion* sp.), about 2 mm in body length. **Middle:** A female false pajama spider (*Hypsosinga lithyphantoides*). **Right:** A male green grass crab spider (*Oxytate* sp.), one of a few that are possibly a new or undescribed species. Photos: Rudi Steenkamp.



A male grass lynx spider (*Oxyopes* sp.; Oxyopidae). Photo: Rudi Steenkamp.



A tree velvet spider (*Gandanameno fumosa*), and a rough size comparison. Photos: Rudi Steenkamp.



Variation in the abdominal patterns of *Neoscona subfusca*. Photos: Rudi Steenkamp.

CAPE TOWN SPIDER WALK, KENILWORTH RACECOURSE CONSERVATION AREA – 5 DECEMBER 2021

by Silvia Viruly and Wessel Pretorius



Back row, left to right: Barry Bailey, Nerine Schaper, Deon Friis, Natasha-Leigh Cronje, Safiyyah Hattas (KRCA), Marijke Rabe, Fayruz Prins (KRCA), Jeltje van den Bosch, Silvia Viruly, Bernard Seymour Hall, Anneke van den Bosch, Helene Booyens, Werner Erasmus, Andries Cilliers, Wessel Pretorius and Janet Pretorius. Front row: Anel Friis, Tim Kruger, Norman Larsen, Julian Rabie, Selmarie Erasmus, and Benjamin Pretorius. Stef Schmid arrived late. Photo: Norman Larsen

On Sunday 5 December, arachnophiles and naturalists met at the Kenilworth Racecourse Conservation Area (KRCA) to do what spider enthusiasts do!

I was member of the Johannesburg Spider Society many years back and now that I've moved to Cape Town, I'm thrilled to see so many people interested in studying and teaching about spiders and helping conservationists update their species lists. This turned out to be a good refresher course for me, jogging my memory and extending my knowledge on spiders and on flora and other fauna.

Sunday was overcast but this did not deter us (around 20) to go out to find, photograph, and then ask Norman or Wessel to identify and tell us the spider's name and its habits. Many other creatures and exquisite flora were photographed as they all belong the unique biosphere at Kenilworth Racecourse. Benjamin, Julian, and Selmarié were our youngest explorers and did an excellent job with nets by collecting and then releasing the spiders on the spot where they had found them.

Many thanks go to Safiyyah Hattas and Fayruz Prins from KRCA and Anneke and Jeltje van den Bosch from Friends of KRCA.

Many spiders were identified, from wolfies to velvets and others. The following is a list of spiders found:

FAMILY	GENUS/SPECIES	NUMBER
Eresidae	Gandanameno cf. fumosa	3
Linyphiidae	Microlinyphia sterilis	1
Lycosidae	Pardosa cf. manubriata	1
Pisauridae	Euprosthenopsis pulchella	LOTS!
Salticidae	Evarcha prosimilis	1
	Heliophanus sp.	2
Sparassidae	cf. Parapalystes sp.	1
Theridiidae	Theridion sp.	3

Silvia Viruly

I have had a relatively short spider journey compared to most spider lovers who frequent the Facebook spider groups. On my very first post, made on 3 February this year, I was looking for an identification of a small spider that visited me while I was working on a ladder, one whose name I can now never forget: a grey wall jumping spider (*Menemerus bivittatus*).

I read about the many Spider Walks in Gauteng and wondered if we would ever have one near Cape Town. Little did I know that Roulla Janse van Rensburg would ask me to host our first ever Western Cape Spider Walk.

The event was held at the Kenilworth Racecourse Conservation Area, a 53-hectare area that is one of the last places to protect some of the most endangered Cape Flats sand flora. A total of 21 people, including two from the conservation team, joined early on an overcast and windy day to search the fynbos shrubbery for spiders and whatever else we could find. The long grasses were filled with sheet webs made by the numerous sheet-web nursery-web spiders (*Euprosthenopsis pulchella*), many of the webs containing spiderlings. After wandering through the bushes for a bit, I found an old tree stump still firmly rooted in the ground. Kneeling down, I saw a very fast spider that I did not recognise. I tried to catch it but it was so fast and nimble, dodging through the grass roots and in between the wood and the bark. It took me a few minutes to finally collect it in a vial, and oh man, was I surprised: a small huntsman spider with bands under the legs and a very unique pattern on both the dorsal and the ventral sides. We do not have a proper identification yet, but we suspect it is a mature male *Parapalystes* sp. Despite the wind picking up, we managed to find a few other species of spiders.

I am excited about the future and looking forward to many more Spider Walks in the Western Cape in the near future.

Wessel Pretorius



Attendees looking through the grass and fynbos. Photo: Norman Larsen.



There were many sheet-web nursery-web spiders (Euprosthenopsis pulchella) in the grass. Photos: Deon Friis.



Left: Possibly an arid rain spider (*Parapalystes* sp.). One of the more interesting spiders found during the day. Photo: Wessel Pretorius. **Right:** Julian Rabie holding a tree velvet spider (*Gandanameno* cf. *fumosa*). Photo: Anneke van der Bos.



Euprosthenopsis pulchella spiderlings in their nursery web. Photo: Deon Friis.

Call for Verified Spider Bites in Southern Africa

B. Carbuccia¹, C.E. du Plessis ², R. Steenkamp³, H. Boshoff³, & A. Leroy³

¹Mission Spider, 101 rue des Lavoirs, 30360 Deaux, France; ²Department of Medicine, Faculty of Medicine and Health Sciences, Stellenbosch University, South Africa; ³The Spider Club of Southern Africa



A gravid long-legged sac spider (Cheiracanthium cf. furculatum) with no "aggressive" tendencies.

In the last few years, research on spider bites has demonstrated the pivotal importance of the study of spiders from a medical perspective (Isbister & Gray, 2002; Isbister & White, 2004; Stuber & Nentwig, 2016; Vetter & Isbister, 2008). Studies on venom, although they provide useful insight into the range of possible effects of an envenomation (Schenberg & Pereira Lima, 1971), do not necessarily give an accurate image of what these effects look like on humans, and how frequent and representative of typical envenomation they are (Bucaretchi *et al.* 2000). In addition, potency and the effects of spider venom can vary from one model species to another; for instance, rats and rabbits are much less sensitive to *Phoneutria nigriventer* venom than mice (Schenberg & Pereira Lima, 1971). Furthermore, venom and its effects are not the only parameters at play in the evolution and outcome of a spider bite. The onset of secondary infection, for instance, is one of the most common complications; although it is most often caused by bacteria from the patient's skin, fingernails, or environment, some spider species may carry pathogenic bacteria on their fangs (Dunbar *et al.*, 2020), which can make skin lesions a possible, but not venom-induced, consequence of their bite (Dunbar *et al.*, 2020, 2021).

The value of spider bite research extends well beyond the obvious benefits of allowing more accurate identification and more efficient treatment of actual envenomation: worldwide, spider bites, particularly cytotoxic spider bites, are one of the most commonly misdiagnosed medical entities (Bennett & Vetter,

2004; Derraik *et al.*, 2008; Du Plessis & Reuter, 2021; Isbister & Whyte, 2004). Many different medical conditions can cause idiopathic lesions similar to necrotic spider bites (Du Plessis & Reuter, 2021; Vetter & Bush, 2002a), and are quite often erroneously identified as such by medical professionals, based solely on clinical findings (Derraik *et al.*, 2008; Dominguez, 2004; Du Plessis & Reuter, 2021). Sometimes, consequences for the patient, who receives inadequate treatment, can be disastrous (Du Plessis & Reuter, 2021). Besides the direct consequences for individual patients, erroneous and/or uncertain diagnoses of alleged bites from a particular species lead to more cases of misdiagnosis, by blurring the clinical picture and making necrotic spider bites seem much more common and likely than they actually are (Stuber & Nentwig, 2016; Vetter & Bush, 2002b). In turn, uncertain spider bite diagnosis by medical professionals exacerbates fear of spiders in the general public, leading to considerable numbers of self-diagnosed "spider bites" that add to the confusion (Du Plessis & Reuter, 2021; Suchard, 2011). Misdiagnosis of skin lesions as spider bites is such a widespread problem that it can contribute significantly in obscuring outbreaks of transmissible skin diseases, such as community-acquired MRSA (Dominguez, 2004) and delaying or misleading medical response, with potentially serious consequences for both the infected patients and their community.

There are several known instances of spider species that were incorrectly believed to be a common cause of skin necrosis, based on uncertain diagnosis, anecdotal cases, and circumstantial evidence, but were eventually proved as unlikely culprits by studies on verified bites. In Australia and New Zealand, between the early 1980s and early 2000s, *Lampona* spp. ("white-tailed spiders") were widely regarded as medically significant spiders, and as a common cause of extensive necrosis in humans (White & Weinstein, 2014). These assumptions were based on suspected bites (Spring, 1987) and a single case of verified bite (Gray, 1989). However, large prospective studies on verified spider bites conducted in the early 2000s compiled more than 100 verified *Lampona* bites and several hundreds of bites from various species (Isbister & Gray, 2002, 2003; Isbister, 2004), but failed to report on any case of skin necrosis; thus demonstrating that this was not a common, or even typical, consequence of their bites.

Between the late 1920s and the late 1980s, wolf spiders (Lycosidae, mainly *Lycosa erythrognatha*) were believed to cause necrotic bites in Brazil (Lucas, 1988), based on experiments conducted on rabbits in the late 1920s, and extrapolation of the observations to suspected bites on humans. Eventually, a large prospective study including 515 verified bite cases (Ribeiro *et al.*, 1990) did not yield any case of necrosis, and the assumptions about their medical significance were abandoned.

A similar scenario involved various species in the genus *Cheiracanthium* from North America, Australia, Asia, the Pacific, and Europe (Vetter *et al.*, 2006). In North America, despite the absence of medical concern in its European home range, the invasive *Eratigena agrestis* ("hobo spider") was commonly blamed for necrotic lesions, based on observations from experiments on rabbits (Vest, 1987a), extrapolated to lesions on humans diagnosed on circumstantial evidence (Vest, 1987b), and one lesion resulting from a verified bite on a person with a history of phlebitis (Centers for Disease Control, 1996). However, later research showed there were no differences between the venom of North American and European hobo spider populations (Binford, 2001), that its venom had negligible cytotoxicity, that the spider was unlikely to act as a vector of bacteria such as MRSA (Gaver-Wainwright *et al.*, 2011), and finally that verified *Eratigena agrestis* bites were actually an extremely rare occurrence (McKeown *et al.*, 2014).

It is therefore crucial to establish a clear distinction between reports of verified spider bite cases, where the spider was seen biting and identified by a relevant authority, and those where the diagnosis was based solely on clinical findings and/or circumstantial evidence (Stuber & Nentwig, 2016). It is also important to

provide the literature with as many verified bite accounts as possible, specifically in geographical areas where they are still scarce, such as Southern Africa.

South African literature on necrotic spider bites is quite rich (Figure 1), particularly on bites by *Cheiracanthium* spp. (long-legged sac spiders). Compared to other parts of the world, Southern Africa is the most prolific provider of literature on *Cheiracanthium* bites (Figure 1), but one of the least prolific when it comes to verified bites (Figure 2).

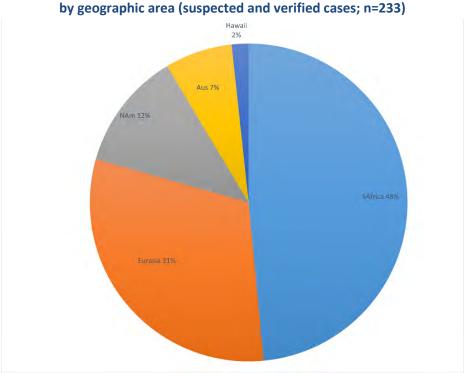
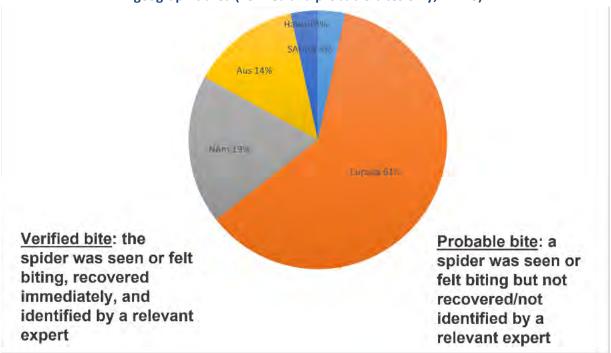


Figure 1: Cases of *Cheiracanthium* bites recovered from the literature, by geographic area (suspected and verified cases; n=233)





A summary of the Cheiracanthium bites obtained from the literature is provided in Table 1.

Table 1: Summary of *Cheiracanthium* bites from the literature

Publication	Country	No. of cases	Spider seen/felt biting?	Necrosis?	Other sources reporting same cases	Full-text obtained	Context of bite	Supplementary details
Newlands <i>et al.</i> , 1980	South Africa	6	No	Yes	0	Yes	Not reported	
Newlands & Atkinson, 1988	South Africa	18	No	Yes	0	Yes	Not reported	
Newlands & Atkinson, 1990	South Africa	39	No	Yes	0	No	Not reported	
Matthews, 1994	South Africa	32	No	Yes	0	Yes	Not reported	
Muller et al., 2012	South Africa	1	No	Yes	0	Yes	Not reported	
Chrysostomou, 2012	South Africa	11	No	Yes	0	Yes	Not reported	
Marais, 2021	South Africa	1	Yes	Yes	0	Yes	Putting on clothing with spider in it	
Du Plessis, 2019	South Africa	2	Yes	No	0	Yes	Putting on clothing with spider in it (1)	
Dippenaar- Schoeman <i>et al.</i> , 2021	South Africa	2	No	Yes	Müller et al., 2017	Yes	Not reported/during sleep	No explicit mention of a spider found; one of the two cases mentioned elsewhere as suspected
Bird et al., 2021	South Africa	1	Yes	Yes	0	Yes	Spider trapped in shoe while driving	
Maretic, 1962	Germany	1	Yes	Yes	Vetter et al., 2006	No	Not reported	
Muster et al., 2008	Germany	6	Yes	No	0	Yes	Accidentally touching the spider indoors (2), outdoor activities (2), handling the spider (2)	Includes 2 probable bites (spider seen but not kept, described by patient)
Spielman & Levi, 1970	USA	5	No	Yes	0	No	Not reported	
Divito et al., 2009	USA	1	No	Yes	0	Yes	No spider found (some present in locker room)	
Furman & Reeves, 1957	USA	1	Yes	No	Vetter <i>et al.</i> , 2006	Yes	Sleeping (awakened by bite)	
Gorham & Rheney, 1968	USA	1	Yes	No	Vetter et al., 2006	Yes	Slapped the spider while lying in bed	
Allred, 1980	USA	1	Yes	No	Vetter et al., 2006	Yes	Putting on clothing with spider in it	
Krinsky, 1987	USA	1	Yes	No	Vetter et al., 2006	No	Not reported	
Vetter et al., 2006	USA/Australia/Eurasia	54	Yes	No	39 cases from lit. including the 6 aforementioned	Yes	10 indoors (USA), 7 outdoors (Aus), 3 indoors (Aus)	20 directly observed + 39 verified cases from lit.
Pepe, 2000	Italy	1	Yes	Yes	0	Yes	Putting on clothing with spider in it	Probable bite (spider seen but not kept, described by patient)
Papini, 2012	Italy	10	Yes	No	0	Yes	Accidentally touching the spider (2)	2 observed cases + 8 from lit.
Zuniga Carrasco, 2017	Mexico	1	Yes	Yes	0	Yes	Not reported	Probable bite (spider seen but not kept, described by patient)
Ori, 1975	Japan	5	Yes	No	0	Yes	Handling the spider (3), sleeping (1), outdoor working (1)	
Isbister & Gray, 2002	Australia	3	Yes	No	Vetter <i>et al.</i> , 2006 (10 cases)	Yes	7 outdoors, 3 indoors	13 Cheiracanthium bites among 750 verified spider bites; no necrosis observed
Isbister, 2004	Australia	3	Yes	No	0	Yes	Not reported	3 Cheiracanthium bites among 163 spider bites on children; no necrosis observed
Fasan <i>et al.</i> , 2008	Austria	1	Yes	No	0	Yes	Putting on clothing with spider in it	
Emstov et al., 2012	Russia	19	Yes	No	0	Yes	Not reported	
Nentwig, 2013	Switzerland	3	Yes	No	0	Yes	Sleeping (1), putting on clothing with spider in it (1), handling the spider (1)	
Varl et al., 2017	Slovenia	3	Yes	No	0	Yes	Accidentally touching the spider (1), handling the spider (1), outdoor working (1)	
Total		233		119				

That is why we are calling for reports of verified spider bites from members of The Spider Club of Southern Africa and their families, friends, and acquaintances. We are looking for bites by any spider species or genus, as knowing which are the ones most commonly involved in bites on humans is valuable information in itself. However, for a bite report to be considered a verified bite, a few conditions need to be met:

- The offending spider must have been seen or felt biting or found, alive or dead, in the immediate vicinity of the bite site (on the skin or in the clothing).
- The report has to be accompanied by a photo of the spider, which has to be of sufficient quality to allow identification, at least to genus level. It is even better if the spider is kept and sent to one of our local experts for identification.
- The person who reports the bite must be the one who received it, or must have directly witnessed the moment of the bite.
- The report must include the complete sequence of the evolution of the bite, in as much detail as possible, until total disappearance of the symptoms.

Any report fulfilling these criteria may be sent by email to the following address: benjamin.carbuccia@edu.mnhn.fr

Currently, two similar initiatives are also under way and aiming to gather data on verified spider bites, so reports are worth sharing there as well:

- A large-scale global survey of bites and stings by spiders, scorpions and centipedes worldwide, led
 by Prof. Volker Herzig and Dr Tobias Hauke:
 https://docs.google.com/forms/d/e/1FAIpQLSepTKrz3n37 xW3m5nDPyVqilwJiCHI9p8YMuJYzxk
 K7IYKOw/viewform?fbclid=lwAR1fHj3Z8DZxRfhnvjrW5oq c0k61bPtLeSeekmGwVh--cGgGLS JmH2t9E
- A Facebook group, created by members of the Spider Club, dedicated to verified bites by *Cheiracanthium spp.* in Southern Africa: https://www.facebook.com/groups/477435633519829

References

Binford, G. 2001. An analysis of geographic and intersexual chemical variation in venoms of the spider *Tegenaria agrestis* (Agelenidae). *Toxicon*, 39(7):955-968.

Bucaretchi, F., Deus Reinaldo, C.R.D., Hyslop, S., Madureira, P.R., De Capitani, E.M. & Vieira, R.J. 2000. A clinico-epidemiological study of bites by spiders of the genus *Phoneutria*. *Revista do Instituto de Medicina Tropical de São Paulo*, 42:17-21.

Centers for Disease Control. 1996. Necrotic arachnidism: Pacific Northwest, 1988-1996. *MMWR Morbidity and Mortality Weekly Report*, 45:433-436.

Derraik, J.G., Sirvid, P., Vink, C. & Hall, G. 2008. White-tail tales. *The New Zealand Medical Journal (Online)*, 121(1269).

Dominguez, T. 2004. It's not a spider bite, it's community-acquired methicillin-resistant *Staphylococcus* aureus. The Journal of the American Board of Family Practice, 17(3):220-226.

Dunbar, J.P., Khan, N.A., Abberton, C.L., Brosnan, P., Murphy, J., Afoullouss, S., O'Flaherty, V., Dugon, M.M. & Boyd, A. 2020. Synanthropic spiders, including the global invasive noble false widow *Steatoda nobilis*, are reservoirs for medically important and antibiotic resistant bacteria. *Scientific Reports*, 10(1):1-11.

Dunbar, J.P., Vitkauskaite, A., O'Keeffe, D.T., Fort, A., Sulpice, R. & Dugon, M.M., 2021. Bites by the noble false widow spider *Steatoda nobilis* can induce *Latrodectus*-like symptoms and vector-borne bacterial infections with implications for public health: A case series. *Clinical Toxicology*, 2021:1-12.

Du Plessis C.E. & Reuter H. 2021. Cytotoxic spider bites: Cases of mistaken identity. *South African General Practitioner*, 2(4):137-142.

Gaver-Wainwright, M., Zack, R., Foradori, M. & Lavine, L. 2011. Misdiagnosis of spider bites: Bacterial associates, mechanical pathogen transfer, and hemolytic potential of venom from the hobo spider, *Tegenaria agrestis* (Araneae: Agelenidae). *Journal of Medical Entomology*, 48(2):382-388.

Gray, M. 1989. A significant illness that was produced by the white-tailed spider, *Lampona cylindrata*. *The Medical Journal of Australia*, 151:114-116.

Isbister, G. 2004. Prospective cohort study of definite spider bites in Australian children. *Journal of Pediatrics and Child Health*, 40(7):360-364.

Isbister, G. & Gray, M. 2002. A prospective study of 750 definite spider bites, with expert spider identification. *QJM: An International Journal of Medicine*, 95:723-731.

Isbister, G. & Gray, M. 2003. White-tailed spider bite: A prospective study of 130 definite bites by *Lampona* species. *The Medical Journal of Australia*, 179:199-202.

Isbister, G. & White, J. 2004. Clinical consequences of spider bites: Recent advances in our understanding. *Toxicon*, 43:477-492.

Isbister, G. & Whyte, I. 2004. Suspected white-tail spider bite and necrotic ulcers. *Internal Medicine Journal*, 34(1-2):38-44.

Lucas, S. 1988. Spiders in Brazil. *Toxicon*, 26(9):759-772.

McKeown, N., Vetter, R. & Hendrickson, R. 2014. Verified spider bites in Oregon (USA) with the intent to assess hobo spider venom toxicity. *Toxicon*, 84:51-55.

Ribeiro, L., Jorge, M., Piesco, R. & De Andrade Nishioka, S. 1990. Wolf spider bites in Sao Paulo, Brazil: A clinical and epidemiological study of 515 cases. *Toxicon*, 28(6):715-717.

Schenberg, S. & Pereira-Lima, F. 1971. *Phoneutria nigriventer* venom: Pharmacology and biochemistry of its components. In: Bucherl, W. & Buckley, E.E. *Venomous Animals and Their Venoms: Venomous Invertebrates*. Saint Louis: Elsevier Science. pp. 279-297.

Spring, W. 1987. A probable case of necrotizing arachnidism. *The Medical Journal of Australia*, 147:605-607.

Stuber, M. & Nentwig, W. 2016. How informative are case studies of spider bites in the medical literature? *Toxicon*, 114:40-44.

Suchard, J. 2011. "Spider bite" lesions are usually diagnosed as skin and soft-tissue infections. *The Journal of Emergency Medicine*, 41(5):473-481.

Vest, D. 1987a. Envenomation by *Tegenaria agrestis* (Walckenaer) spiders in rabbits. *Toxicon*, 25(2):221-224.

Vest, D. 1987b. Necrotic arachnidism in the northwest United States and its probable relationship to *Tegenaria agrestis* (Walckenaer) spiders. *Toxicon*, 25(2):175-184.

Vetter, R. & Bush, S. 2002a. The diagnosis of brown recluse spider bite is overused for dermonecrotic wounds of uncertain etiology. *Annals of Emergency Medicine*, 39(5):544-546.

Vetter, R. & Bush, S. 2002b. Reports of presumptive brown recluse spider bites reinforce improbable diagnosis in regions of North America where the spider is not endemic. *Clinical Infectious Diseases*, 35(4):442-445.

Vetter, R. & Isbister, G. 2008. Medical aspects of spider bites. Annual Reviews of Entomology, 53:409-429.

White, J. & Weinstein, S. 2014. A phoenix of clinical toxinology: White-tailed spider (*Lampona* spp.) bites: A case report and review of medical significance. *Toxicon*, 87:76-80.

Mantidflies

Hitchhikers with a Taste for Spider Eggs

by Rudi Steenkamp



An adult mantidfly; one of the species whose larvae parasitise spider eggs. Photo: Rudi Steenkamp.

Mantidflies are insects in the order Neuroptera, which includes antlions, lacewings, owlflies, etc., and are in the family Mantispidae. Their front legs resemble those of mantises (order Mantodea), but they lack footpads and are not used for walking, like in the Mantodea. Some species mimic wasps, but like mantises, they also use their front legs to catch insects, mostly nocturnal insects. While adult mantidflies, or mantispids, are predators, their larvae are parasitic, and the host species depends on the species of mantidfly. For example, some members of the subfamily Symphrasinae target wasp, bee, or scarab beetle larvae, while some members of the Calomantispinae target spider eggs².

Mantispid eggs are very small, usually smaller than 0.5 mm. From personal observations at our house in Bloemfontein, they often lay their eggs on leaves before autumn. When the leaves fall to the ground and the larvae hatch, they are already in a good spot to find spiders that you would often find in leaf litter. I found many leaves with mantispid eggs on them last year, but this year, I mostly found them either on wooden poles or on outside walls.

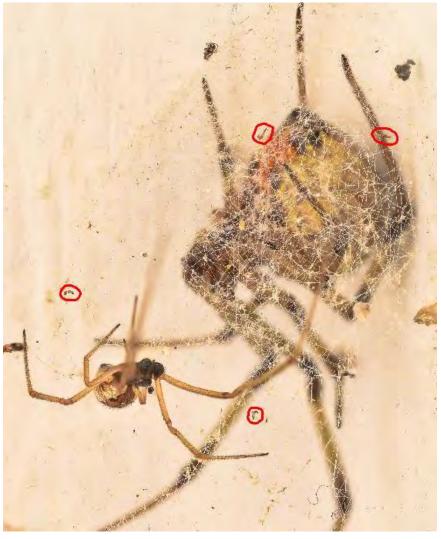
² Engel, M.S. & Grimaldi, D.A. 2007. The neuropterid fauna of Dominican and Mexican amber (Neuropterida, Megaloptera, Neuroptera). *American Museum Novitates*, 3587:1-58.



Left: A clutch of mantispid eggs, each smaller than 0.5 mm. **Top right:** Hundreds, if not thousands, of mantispid eggs on a single leaf. **Bottom right:** Close-up of a batch of eggs where the larvae are close to hatching. You can see their eyes through the eggs. Photos: Rudi Steenkamp.



Recently hatched mantispid larvae on a dead leaf on the ground. Photo: Rudi Steenkamp.



Four mantispid larvae (circled in red) waiting in a Latrodectus geometricus web, with a male (front) waiting to mate with the female (back). Photo: Rudi Steenkamp.

brown (Latrodectus web, which was inside our house, about 10 metres away from the closest place they could have hatched. That doesn't sound far, but for something not even 1 mm long, it's quite a distance. How they find the eggs is unclear. They would then sit and wait in the web until the spider lays her eggs, and then either dig through the silk, or enter the sac while it is being constructed.

When the larvae hatch, they usually stay close to the eggs for a few days. They then have one of two options: go find a spider egg, or wait until a spider passes by and then latch on³. In the former case, I've noticed that they can actually walk surprisingly long distances. For example, I found four mantispid larvae in

button spider

geometricus)

The other option is to hitch a ride on a spider. When a larva finds a spider, it climbs on top and often positions itself near the spider's pedicel, and sometimes even enter the spider's book lungs. It will remain here until the spider lays her eggs. To stay alive during the wait, they will often feed on the spider's haemolymph, or blood, but their end destination is the egg sac. If the larva happens to climb onto a male spider, it will wait until the male finds a female, and then during mating or cannibalisation, will climb onto the female and resume the wait there. Tym Leppek, from Fountain, Colorado, in the USA, posted a photo of a mantispid larva on a male Thanatus sp. running spider, showing the preferred location for these larvae.



A mantispid larva attached near the pedicel of a *Thanatus* sp. philodromid. Photo: Tym Leppek.

The Spider Club News: December 2021 - Volume 37, No. 4

³ Redborg, K.E. 1998. Biology of the Mantispidae. *Annual Review of Entomology*, 43:175-194.

What happens inside the egg sac is another story. Ruan Booysen posted the following on our Facebook group after he examined a spitting spider egg sac ander a microscope:

Sort of spider related. While working through some spitting spider (*Scytodes*) material from Iziko Museum, I came across this... The first photo shows a normal egg sac of *Scytodes caffra* (preserved in ethanol) with 52 eggs-with-legs. Then the next "egg sac" is not quite what you think. For context, there were two females in this sample, each with one of these egg sacs. The strange looking egg sac is actually the pupa of a mantially (Neuroptera: Mantispidae), coincidentally similar in size to the actual *Scytodes* egg sac. I think the larvae may have devoured all the eggs as there are a bunch of empty egg "casings" around it inside the cocoon. The larvae itself also seemed to have made its own cocoon inside the spider's egg sac. The remaining images are of the pupa with the cocoon removed.



The Spider Club News: December 2021 - Volume 37, No. 4

Jumping for Jumpers

Robert Wienand's Focus on Photographing Jumping Spiders

by Robert Wienand



From an early age I had a passion for nature and recall days after primary school searching every little nook and cranny for spiders — much to my mother's distress! Fortunately for her, my passion shifted to birds and the attraction of finding new species.

After school, my interest in nature was fuelled as I was fortunate enough to guide safaris throughout Southern and East Africa. It was a wonderful time in my life, but the realisation of what I missed is hitting home more now than ever.

Of course all that time outdoors meant that I wanted to photograph and share what I saw. My focus was always birds and mammals, but an interest in butterflies, dragonflies, reptiles, and frogs made me look at suitable camera equipment or rather lenses in order to capture these better. With birds and mammals, the idea was mostly to get more zoom to get closer to the species, but with the smaller

creatures, the aim was to get close enough with the lens to get the shot. I have to admit that through the years, spiders were never as big a focus for me, but where I noticed something interesting, I certainly spent some time admiring the species.

I recall moving to Nelspruit in 2012 and feeling like a whole new world had opened up to me with nature on my doorstep and all sorts of species now being regulars in my garden. At one stage, I stumbled upon Vida van der Walt's incredible macro images of jumping spiders. I was amazed that something so small could be captured with that amount of detail. At that time (October 2014), I reached out to her to get

some advice, and she kindly shared information with me. This was the first time I had heard about photo stacking. I was excited to try this "new" technique and after finding a weevil, I took my first set of photos for a stack (image right). Of course, the results were less than admirable, but Vida in all her kindness remarked, "Well done with your stacking!" To be honest, at that stage I was not hooked on all the work involved in stacking images and the interest was somewhat short-lived.



First ever focus stack of a weevil.



First attempt at a Natta horizontalis

It was only in December 2020 that I made contact with Vida again. Her photos popping up on Facebook from time to time and me sharing her images with friends and other avid photographers ensured that I was reminded of the brilliance attainable in macro photography. The reason for me getting in touch with her again was, while sitting outside one afternoon, a pretty little jumping spider with red dots

(*Natta horizontalis*) graced us with its presence. I had never seen anything like it before and this was just the trigger I needed to dust off my macro lens and get some photos. The results were laughable. I have always set myself high standards with my photography and am my own worst critic, and one thing was sure – I had fallen way short of the mark!

I had so many questions. If I have a Canon 100 mm f/2.8 macro lens, am I not supposed to get more detail and close-up shots of my subject? My background is all black, and I wanted some colour? How on earth am I going to photograph this spider that runs around non-stop? (Not realising then, that the species that was frustratingly difficult to photograph was typically one of the more difficult species to get photos of.) Again, Vida only had kind words. "It's a beautiful photo and spider, Robert," she commented when I shared the above photo with her.

Over the course of 2021 and many messages back forth between myself and Vida and a lot of her patience and coaching, I was able to different macro trv photography techniques and get a much better understanding for real macro photography and the challenges involved with getting the shot. I remember the photo (see right) of a male



Hasarius adansoni (male)

Hasarius adansoni, which was the first "close-up" photo I managed of a jumping spider. The excitement because I was able to see those big eyes for the first time was shared by my wife and daughters, who suddenly had a new appreciation for these little gems.

After all my years of bird watching and having seen many species, it was refreshing to know that there were so many jumping spiders around and so many different colours, shapes, and sizes too. The beauty of these can only really be appreciated through a macro lens.

It did not take long for me to find 10 different species in my garden and I still continue finding more both in the garden and in our house. Probably the most exciting find to date was the below species, which may be a new species for South Africa and a suggestion from Prof. C. Haddad at this stage is a possible *Thiratoscirtus* species.



Possible *Thiratoscirtus* species

While my macro photography has improved somewhat, it continues to be a work in progress.

For now I am using a Canon 5D Mark III, with the same 100 mm f/2.8 lens, except I have added a Raynox DCR-250 magnification lens to assist with getting closer to the smaller jumping spiders and for more detail. I have a Canon 580EX Speedlight and a homemade diffuser, which have helped eliminate blow-out on white areas and adds a nice soft light, especially to the eyes. My stacking is still done in Photoshop, and I may in time move to using either Zerene Stacker or Helicon, but at this stage I am satisfied with the results in Photoshop, except that even after stacking, there is a lot of work left in touching up the image.

As I type this, I have now recorded 102 jumping spider species and look forward to adding many more to this list.

Below are a few images from this year. I only have one concern at this stage and that is maintaining the delicate balance in spending time looking for and photographing spiders and spending the same time with my family whom I equally treasure.



Parajotus refulgens (male)



Icius nigricaudus (male) – apparently the first photographed specimen



Plexippus petersi (male) – a first record for South Africa



Portia schultzi



Veissella durbani – a regular in my garden in Nelspruit



Dendryphantes species from Ermelo – possibly D. purcelli



Thyenula fidelis (male) – common in my garden in Nelspruit



Asemonea species – possibly A. clara



Stenaelurillus guttiger (female)



Phlegra species from Ermelo

Anka se Goggastories

deur Anka Eichhoff

Astri het dit goed gedink dat ons weer 'n Afrikaanse stuk of twee in die nuusbrief insluit, en het my verwys na Anka Eichhoff se Goggastories, wat 'n paar stories oor spinnekoppe insluit. Die volgende paar stukke is direk vanaf Anka se blog. Ons sal van haar ander stories in toekomstige nuusbriewe insluit. Om haar stories te lees, besoek haar webwerf by https://www.kyffhauser.co.za/Goggastories.htm

Reusewyfie en Dwergmannetjie: Trichonephila senegalensis

Ons ken hulle almal! Die groot, vet wyfies sit in die middel van reuse vertikale goudgeel wawielwebbe wat tussen bosse en/of bome hang. Hier wag hulle vir prooi wat in die web verstrengel raak en suig dit dan uit. Die harde kutiendele van die prooi word in bollatjies in die middel van die web as stabilimentum in 'n string opgehang.

Die dwerg-mannetjies, ek het al agt in een wyfie se web getel, beweeg afwagtend op die kant van die web; elkeen soek 'n kans om by die wyfie uit te kom. Dis gevaarlik, want sy sien hulle nie as liefie nie, maar as prooi om te vreet. 'n Goeie kans om Madame onbeskadig te bereik is wanneer sy met 'n maaltyd besig is. Die waaghalsigste mannetjie word of gevreet of kom by haar uit om te paar. Versigtig kruip hy op die onderkant van haar agterlyf en streel dit, wil sê, plaas sy spermapakkie in

die geslagsopening. Dan stop hy die opening toe of met

saamgekoekte sperma of met die afgebreekte punt van sy voettaster, waarmee hy die spermapakkie in posisie gebring het. So verseker hy dat sy sperma gebruik gaan word en nie sy mededinger s'n nie. So gedaan, vlug hy weer na die webkant toe. Sy lewenstaak is afgehandel.

> Sy kan meermaals bevrug word en dan tot 9 000 rooi eiers produseer. Een eierpakkie is so groot soos 'n groot albaster. Hierdie ronde eierbal word toegespin in baie sterk glansende sydrade en dan 'n hele ent (tot so ver as 2 m) vanaf die web tussen die boom/bos se blare vasgemaak. Die wit "wattebol" word dan nog met blare bedek (op foto regs) en word sodoende



onsigbaar. Van hierdie eierpakkies kan daar drie of vier elk op 'n ander plek (soms selfs 'n ander struik of boom of bos wat naby groei) weggesteek, voorkom. Na ongeveer 100 dae klim die kleintjies uit. So broei die kleintjies van die verskeie eierpakkies ook op verskillende datums uit. Die kleintjies bly redelik lank (langer as vier weke) in die wattebol. As hulle bietjie groter word, bou hulle 'n ruim web, ongeveer vuisgroot, waarin hulle bedags sit (op foto links van eierpakkie). Saans of wanneer hulle vlug, verdwyn hulle weer in die wattebal en die web is leeg.

Goed om te weet: Hulle gif is neurotoksies van aard (senuweegif) soos die van die knopiespinnekop, maar baie flouer. Die byt is seer, die bytplek kan rooi verkleur, blasies vorm op die vel (dit verdwyn binne een dag), spiere kan kramp en allergiese reaksie mag voorkom; alles nie baie aangenaam nie, maar geen rede om paniekerig te word nie. Die spinnekop is NIE aggressief nie, maar dis ook nie 'n speelding nie.

Interessant om te weet: • As gevolg van amberspinnekopvondse (spinnekoppe wat in amber vasgevang was) weet ons dat hierdie soort spinnekoppe al ongeveer 23 miljoen jaar gelede bestaan het.

 Hulle kan hulle bene laat afbreek, bv. as hulle by een been gevang is, en dan met die orige bene wegkom. Gewoonlik breek die been tussen die eerste en tweede lid,d.w.s. net agter die lid naaste aan die liggaam. Die been groei weer wanneer die spinnekop vervel.

• Hulle webbe is so groot, dat daar redelik dikwels spinnekoppe met kleptomaniese neigings (kleptoparasiete) op die buitenste dele skuil en van die prooi neem wat of te

klein is vir *Trichonephila* of wat oor bly. Dat hulle toegespinde prooi uit die web **steel** en wegdra, is onwaarskynlik, in elk geval nog nie bewys nie.

• In die web word 'n string saamgekoekte kosafval (kutiendeeltjies) aangebring as stabilimentum. Hierdie string donker bollatjies mislei dalk ook vyande (opties) en gee so kans vir die spinnekop om weg te kom.

BAIE interessant is hulle webbe en sy. Die kleur is goudgeel, die sy het baie lang en sterk drade .







Vertikale web van voor gesien

...van die kant

....teen die sonlig

Die sin van die geel kleur is, dat dit vir insekte, soos bye bv., beter **sigbaar** is. Insekte word aangelok deur geel kleur. Merkwaardig en uiters intelligent is dat die *Trichonephila* spinnekoppe hulle webbe so bou, dat die ligweerkaatsing maksimaal benut word en die **reenboogkleurige refleksies die insekte aanlok**. Nut vir die mens: Polinesiërs het die wawielweb afgehaal, daarvan 'n balletjie gevrommel, dit in die water gegooi, waar die net-balletjie oopgevou het en vissies daarmee gevang kon word.

Mediese nut: Van *Trichonephila*-gene is in melkbokke geplaas om van die melk dan 'n biostaal te vervaardig. Dis baie sterk, baie elasties en baie bestand teen hitte en koue, maar ook baie duur om te vervaardig.

Met *Trichonephila*-sy kan snye/wondes toegewerk word, sonder dat infeksie ontstaan; die sy is steriel. M.b.v. *Trichonephila*-sy kan beseerde senuwees herstel word, want nuwe senuselle groei probleemloos aan die sydrade vas (navorsers werk nog hieraan).

Visvangerspinnekop by die vlei Nilus sp



Gedurende 'n goeie reënseisoen as die vleie goed water kry, hou hulle die water ook redelik lank. So is dit dan ook nie verbasend nie, om spinnekoppe in die lang vleigrasse en biesies op te spoor. Teen die sonlig een laat namiddag het ek toe spinnekopneste bo in saamgeweefde graspunte ontdek. Soos ek nader gekom het, kon ek tot my verbasing by elke nes 'n groot spinnekop sien wagstaan. Selfs toe ek baie naby was, het hulle nie padgegee nie. Waar bees die gras kortgevreet het, het sulke neste onder teen/in die respol gesit. Selfs toe ek die bondel grashalms met die nes daarin afbreek, het die ma-spinnekop met haar eierkokon daar bly sit.

Dit was een van die visvangerspinnekop spesies (*Nilus* of *Dolomedes*) uit die familie *Pisauridae*, die **kinderkamerweb-spinnekoppe**. Dit lyk nogal na die groot *Euprosthenopsis australis* spinnekoppe, wat so graag in ons tuine hulle groot vangwebbe en tonnelweb in die plante bou.



Soos al die
Pisauridae dra
hulle die
eierpakkie
saam met
hulle tot kort
voordat die
kleintjies
uitbroei. Dan
bou hulle die
sogenaamde
kinderkamer,

'n ruim, koepelvormige omhulsel waarin die eierkokon opgehang word. Daarin vertoef die kleintjies nog tot hulle minstens tweekeer vervel het. Die ma-spinnekop hou nog vir 'n geruime tyd wag, tot sy skielik eendag nie meer daar is nie.

By een vlei het ek sommer naby mekaar *Nilus* spinnekoppe gesien wat of van dieselfde spesie met verskeie kleurvariasies is of aan verskeie spesies behoort. Daar is blykbaar nog nie so baie oor hierdie spinnekoppe in



Namibië nagevors nie, behalwe by die noordelike grensriviere wat permanent water voer.

←Waarskynlik is dit Nilus margaritatus; ek het dit in al die vleie en panne asook by waterreservoirs en -krippe by veeposte opgemerk.

Visvangerspinnekoppe kan op en onder die wateroppervlak beweeg. Dikwels kan 'n mens sien, dat hulle op die water dryf. As hulle 'n prooi sien, duik hulle af om dit te gryp. Haartjies op



die onderkant van die abdomen by die longopeninge vang lugblasies vas en maak sodoende asemhaling moontlik. Om weg te kom, spring hulle in die water en sit daar teen die kripmuur of 'n plantdeel en wag tot die gevaar verby is. Hulle vang nie net vissies of paddavissies, maar ook insekte, ander spinnekoppe, selfs klein akkedissies. Langs water is daar altyd genoeg kos.

Visvangerspinnekoppe kom wêreldwyd voor behalwe in Antarktika.

Moontlike kleurvariasies van *Nilus margaritatus* wat hier op die plaas (noordoostelike deel van sentrale Hoogland Namibië) voorkom.



Ander Nilus spp. Moontlik verskillendes



Daar is op internet interessante artikels, fotos en videos van visvangerspinnekoppe. Gaan kyk gerus, bv. hierdie een: https://www.dailymail.co.uk/news/article-3768717/Now-S-fish-supper-Gruesome-moment-water-dwelling-Nilus-spider-gobbles-dinner-one-go.html

Inligtingsbronne: Ansie Dippenaar-Schoeman (Dankie!!)

Revision der Thalassius Spinnen (Petra Sierwald) en persoonlike. korrespondensie met P.Sierwald...(Thank you!)

Teks en fotos: Anka Eichhoff (Junie 2018) updated November 2021

Summer Spider Drawing Competition

Here are the results of our "Summer Spider" drawing competition. Members of our Facebook group were requested to draw a "summer spider".

There weren't many entries, but we received enough entries from children to have a children's category. Due to the limited number of entries from adults, we will only showcase the winners.

The winner in the adult category is Christil Viljoen, with this spider enjoying a cocktail in its hammock on the beach. She created the drawing in MS Paint.



The winner in the children's category is Jeanele van Wyk (14 years old), with some sunflowers as a backdrop.



Marelise Jacobs' beautiful drawing of a jumping spider didn't fall in the "summer spider" theme, but her drawing received the most votes, so it deserves to be showcased here.



The Spider Club News: December 2021 - Volume 37, No. 4

Spider of the Month

Here are the spiders of the month for October, November, and December. Members on our Facebook group nominate photos throughout the month, and at the beginning of each month, vote in a poll.

OCTOBER



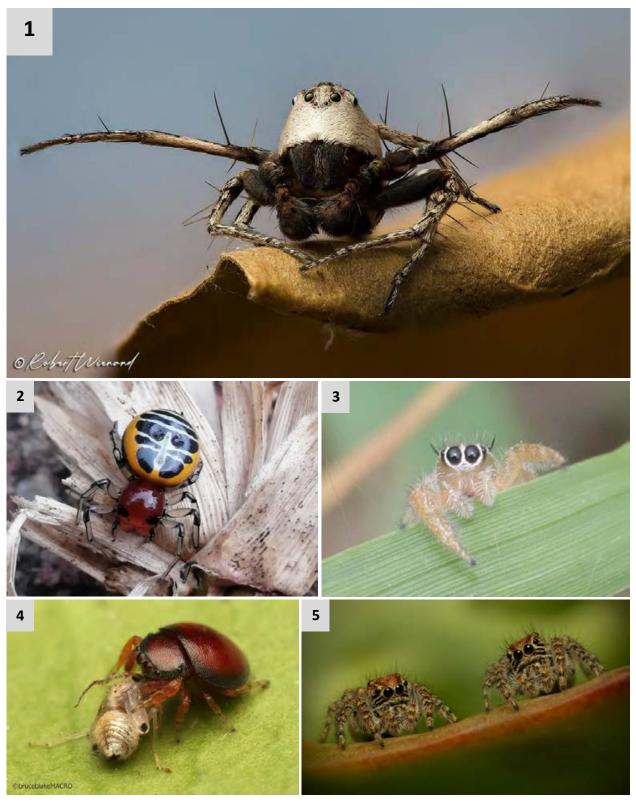
(1) Burrowing wolf spider (*Hogna* sp.), Dawie Broekman. (2) Pelican spider (*Afrarchaea cornuta*), Rudi Steenkamp. (3) Hooked orb-web spider (*Poltys furcifer*), Bart Wursten. (4) Rain spider (*Palystes* sp.), Andréa Myburgh. (5) Velvet spider (*cf. Gandanameno*), Jarrod Michael Todd.

NOVEMBER



(1) Dune huntsman (*May* cf. *bruno*), Chantelle Bosch. (2) Jumping spider (*Thyene thyenioides*), Rudi Steenkamp. (3) Bolas spider (*Cladomelea debeeri*), Suncana Bradley. (4) Flower crab spider (*Thomisus* sp.), Dawie Broekman. (5) Feather-legged wolf spider (cf. *Proevippa* sp.), Rudi Steenkamp.

DECEMBER



(1) Crowned lynx spider (*Hamataliwa* sp.), Robert Wienand. (2) Ladybird crab spider (*Camaricus nigrotesselatus*), Klarissa Keet. (3) Jumping spider (*Thyene thyenioides*), Cecile Roux. (4) Beetle jumping spider (*Pachyballus* sp.), Bruce Blake. (5) Jumping spiders (cf. *Icius* sp.), Andrew Court.

Honourable Mention

These are a few spiders that didn't win Spider of the Month, but that deserve to be showcased.



Left: Unknown hackled orb-web spider (Uloboridae), photographed by Bruce Blake. **Right:** A mesh-web spider (*Chresiona* sp.; Amaurobiidae) photographed by Robert Wienand.



Left: A mushroom theridiid (*Phoroncidia* sp.; Theridiidae), photographed by Desiré Pelser. **Right:** Two green theridiids photographed by Bruce Blake. *Exalbidion* was suggested for both.



Left: An orb-web spider (Araneidae) found by Jarrod Michael Todd. *Coelossia* sp. was suggested. **Right:** One of the "strawberry theridiids"; one of many species that are still undetermined/undescribed. *Ruborridion* sp. was suggested.



Left: A *Pelenes modicus* jumping spider, photographed by Rudi Steenkamp. **Right, from top to bottom:** A tree trapdoor spider (*Moggridgea* sp.; Migidae), by Desiré Pelser; a bomis crab spider (*Parabomis* cf. *martini*; Thomisidae), by Cecile Roux; and a false wolf spider (*Griswoldia* sp.; Zoropsidae), by Andrea Sander.

Spider of the Year 2021

Here are the three winners of the Spider of the Year (SOTY). At the end of each year, members on the Facebook group vote for their favourite Spider of the Month (SOTM).

First place goes to Robert Wienand for this photo of a crowned lynx spider (*Hamataliwa* sp.; Oxyopidae), which was the December SOTM. This is the first time he is among the SOTY top three.

Second place goes to Rudi Steenkamp, for his "smiling" *Rhene konradi* jumping spider inside her retreat. This was the March SOTM. Rudi won the 2020 SOTY with a pelican spider (*Afrarchaea cornuta*), but donated the prize money to Ruan Booysen, who found the spider. This year, the prize money was donated to Ubuntu Wildlife Trust, who also focuses on spider conservation, especially in the sand forest habitat in KwaZulu-Natal.

Third place goes to Hannes Claassens for his velvet spider (*Stegodyphus* sp.; Eresidae), which was the January SOTM. This is suspected to be one of the solitary *Stegodyphus* species. Hannes also won third prize in the 2020 SOTM, also with an eresid.



On a Lighter Note

Like news bulletins on television, we like to conclude the newsletter on a lighter note. Here are a few "lighter" posts from Facebook:









Comment

Share

Like

Someone shared this post by Letitia Martha Langenhoven on SCSA.



"Made a cake for an awesome little lady that turned 9 todayes"

A spider Christmas tree. Posted by Emad Eldein Abdelhadei (not sure if he is the creator). Also, a spider snowman.



Upcoming Events

DIARY 2021 www.spiderclub.co.za

NORTHERN CAPE



Join Frans Pretorius (event host) on first Spider Walk in the Northern Cape in many years. There are quite a few interesting spiders in this type of habitat, so please come help us find them. In addition to the Spider Club's fee (R50 adults, R10 children under 12), there is also a R20 hiking fee. For more information about the venue and for directions, visit https://www.redsands.co.za/. Book on info@spiderclub.co.za, SMS 067 833 2191, or on our Facebook page. When booking, please give us your cell phone number and we will set up a WhatsApp group for the event.

OTHER

We don't have any other confirmed events yet, but we are planning Spider Walks for a few areas, including:

Gauteng (To be announced [TBA])
Western Cape (Cape Town, Renosterveld Reserve, and Plettenberg Bay)
Free State (Bloemfontein)
Mpumalanga (TBA)
Limpopo (TBA)
KwaZulu-Natal (TBA)

These are only the areas where we are considering to hold events, but nothing has been finalised yet. Please keep an eye on our Facebook group (https://web.facebook.com/groups/101951926508391/) or on our website (https://www.spiderclub.co.za/events/category/events/). Alternatively, register as a member of The Spider Club of Southern Africa (https://www.spiderclub.co.za/register/) to receive email notifications about any confirmed events.

We charge for attendance at field and certain other events: **R50 per adult and R10 per child 11 years and under, cash only, with the option of paying R150 PER FAMILY for annual subscription.** Some venues will also require an entrance fee that must be paid by each individual. For field trips we will supply vials, magnifiers, plastic pill bottles, and some other basic collecting equipment, but please bring your own if you have as well as any reference books, a picnic lunch, adequate water, a hat, and good walking shoes. **Book on info@spiderclub.co.za** or **067 833 2191 or on our Facebook page**. When booking, please give us your cell phone number and we will set up a WhatsApp group for the event.



Join our community on Facebook to meet like-minded people and stay updated on upcoming events https://www.facebook.com/groups/101951926508391/

Watch this space!

Keep your eyes on your e-mail and our Facebook page as other events may be organised, sometimes at quite short notice. We will attempt to give you fair warning. And remember that Norman Larsen is at the Cape Union Mart Adventure Centre, Canal walk in Cape Town for the first three Saturdays and the last Sunday of the month between 11 am and 12 pm to demonstrate and talk about SPIDERS!