The Spider Club
NEWS

June 2021 Vol 37, No.2

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

WINTER EDITION

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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

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Find us on: facebook at "The Spider Club of Southern Africa"

Your committee; always available and ready to help:

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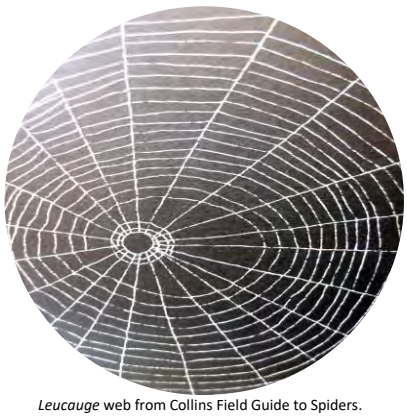
Acknowledgements:

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.
- Jarrod Todd, for being involved in reporting on the spider walks.
- Everyone on SCSA and its sister groups 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.



Leucauge web from Collins Field Guide to Spiders.

From the Hub

Oh dear, you will notice that there is NO DIARY at the end of this newsletter. That's because we don't know when we will be able to be out and about again, nor when we will be able to meet up. Sadly, we had to postpone our visit to the arachnology department at ARC, which was scheduled for 19 June, as they had closed their doors because a staff member had died of COVID-19. We will reschedule when we can.

It seems that the COVID-19 pandemic shows no sign of abating; in fact, the numbers of people infected and even dying are escalating daily. This means that we feel the safety and wellbeing of our members must take top priority and on the advice of a club member who is also a medical doctor we feel it necessary to cancel or postpone all our planned events until the all clear is given. We will, of course, keep you informed via the usual routes: emails, SMSs and WhatApps. Anyway, it seems likely that the present 14-day lockdown will be extended, so please wait patiently for the next event, which we hope will be early this coming summer.

In the meantime, watch the spiders in your home, garden, on the farm, or wherever you are and make notes on their behaviour or whatever interests you about them and send it all to Rudi. He cannot be expected to produce a newsletter in a vacuum. We need YOU to submit content for the newsletter. Posting photos and notes on social media pages is transitory – seen today, gone tomorrow, unless you really search.

So 

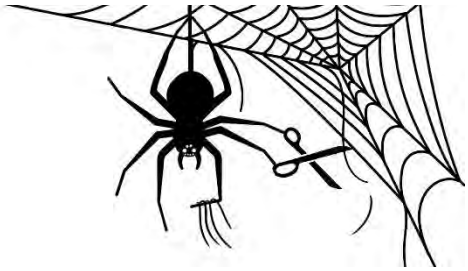
The Spider Club News is sent out to almost 500 people in 25 countries, most of them interested amateurs, but quite a number are well-known arachnologists attached to museums, universities, and other scientific institutions that are always interested in new observations and often pick up on our events and articles in The Spider Club News. For example, Dr Paula Cushing put us in touch with a representative of the IUCN (International Union for the Conservation of Nature) who wanted contacts from Africa who may be interested in advising the IUCN on arachnid-related conservation issues. I put him in touch with Robin Lyle as she is much involved in the spider red list for Southern Africa and they are taking it from there.

Thanks so much for those of you who have contributed, like Anka Eichoff's *Anka se Goggastories* from Namibia and the reports of the Groenkloof spider walk by Jarrod Todd and Andrea Sander's on the event at the Cumberland Private Nature Reserve just next to Pietermaritzburg. Thank you Anka, Jarrod, and Andrea.

Astri Leroy

30 June 2021

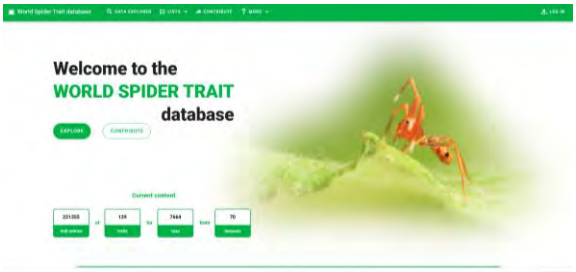
Snippets



AFRAS Colloquium postponed to 2024

The African Arachnology Society (AFRAS) Colloquium would have been held in 2023, but because the International Congress of Arachnology (ICA) has been postponed to the same year, AFRAS decided to postpone their 14th Colloquium to 2024 to allow people to travel for the ICA.

Handy database for spider traits available



The new World Spider Traits database is now available and is a very handy tool for everyone from spider enthusiasts, to amateur arachnologists, to professional arachnologists. It still needs a lot of contributions from all over the world, but its potential is undeniable.

Here you can search spiders according to certain traits. For example, if you are interested in what spider is the fastest, you can search under the trait "running speed". Which spider is the most "promiscuous"? Then search under "number of partners".

Other interesting traits on this database include brain size, silk strength, sound production, type of retreat, primary and secondary defence, degree of sociality, longevity, number of instars, eye number, body length, venom toxicity, web type, strike speed, maternal care, sexual cannibalism, etc.

The International Society of Arachnology (ISA) accompanied the announcement of this database with the following:

"Following the initiative at the last International congress, we developed an online database for archiving and accessing spider traits at a global scale, named The World Spider Trait database (https://spidertraits.sci.muni.cz/). It is a curated database including more than 130 spider traits. Thanks to a number of arachnologists across the globe, the database contains more than 200,000 records for 7,500 taxa. Records are accompanied by extensive metadata (e.g., location, method). The database is curated by an expert team, regularly updated and open to any user."

Parasitic worm found in huntsman

Figure 1: A Gordian worm extracted from a huntsman spider
Source: Govender (2021)

Dr Danny Govender, a disease ecologist for SANParks, recently sent this photo of a Gordian worm, also called horsehair worms, with a huntsman (Sparassidae) as its host. These worms, in the phylum Nematomorpha, are generally 50 to 100 mm long, but in some cases can grow up to 2 m long. Their hosts include a range of arthropods, but rarely are they found in spiders.

Dr Govender sent the following email:

"We saw 2 spiders in the last 2 days infected with Gordian worms. Couple of interesting things:

1. We have seen these "worms" in grasshoppers, crickets, praying mantises, cockroaches, but never in spiders- not sure if others have
2. Both these spiders were caught inside the office or house, and I have not had this particular spider inside dwellings before.

Would be interested to hear your thoughts and possible ID. We also have a video if that will help.

Super-interesting – someone else picked up one of their veranda as well, so this parasitoid must definitely embolden these spiders to enter dwellings and habitats which they normally wouldn't.

Kind Regards,
Danny

Dr Danny Govender (BVSc, MSc)
General Manager: Savanna and Arid Research Unit
Disease Ecologist: SANParks

Fastest animal is an arachnid

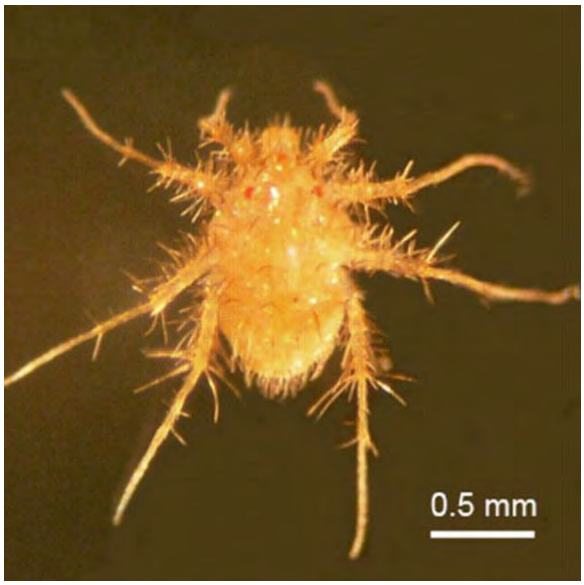


Figure 2: A *Paratarsotomus macropalpis* mite
Source: Wu *et al.* (2010)[1]

The fastest animal in relation to body size is an arachnid. Okay, it isn't a spider but a mite, *Paratarsotomus macropalpis*, found in California, USA. It's big for a mite, about the size of a sesame seed, but the impressive speed of 322 times its body length per second (blps) puts it way beyond the fastest insect, a tiger beetle from Australia (171 blps), and leaves the poor old mammalian cheetah (16 blps) eating dust!

My reference[2] was a tiny paragraph in the local magazine *Very Interesting*, May/June 2021 issue, which, by the way, is worth subscribing to.

Call for *Dolomedes* material

Kuang-Ping Yu, for his PhD research, is asking for *Dolomedes* specimens and their close relatives, which include our very own *Nilus* spp., which, like *Dolomedes* spp., are also called "fishing spiders". He sent the following request:

We have started a research programme into the phylogeny, systematics, and biogeography of *Dolomedes*. Known as raft, fishing, water spiders etc., their distribution is nearly global, with species richness hotspots in East Asia and the Pacific. For his doctoral thesis, Kuang-Ping Yu will focus on these spiders and their outgroups, analyzing their morphology as well as producing a molecular phylogeny. This research builds on an ongoing international collaboration on *Dolomedes* biology with current partners in North America, Europe, Asia, and New Zealand.

We would value more partners that can help us obtain specimens and/or data from these and other regions. One to several individual *Dolomedes* representatives (or their close relatives) preserved in absolute ethanol and ideally representing both sexes, would be appreciated from anywhere. Larger samples that could potentially shed more genetic and morphological structure within or between species would be even better, and could trigger new research collaborations. We can arrange for covering the costs of shipping, and can return the specimens upon examination to public collections of your choice.

If you can provide any assistance in specimen acquisition, please contact either of us:

Kuang-Ping Yu (Kuang-Ping.Yu@nib.si)

Matjaž Kuntner (Matjaz.Kuntner@nib.si)

[1] Wu, W.C., Wright, J.C., Whitaker, D.L. & Ahn, A.N. 2013. Kinematic evidence for superfast locomotory muscle in two species of teneriffiid mites. *Journal of Experimental Biology*, 216(4): 750.

[2] Federation of American Societies for Experimental Biology (FASEB). Mite sets new record as world's fastest land animal. *ScienceDaily*, 27 April. <www.sciencedaily.com/releases/2014/04/140427191124.htm>.

Afropesa: Yet another change in the mygalomorphs

Last year we reported on various changes in the infraorder Mygalomorphae (see Vol. 36, No. 2), and now yet another change has been made. Our Entypesa spp. (formerly family Nemesiidae, commonly called tube trapdoor spiders or wishbone trapdoor spiders) now form a new genus, Afropesa, in the family Entypesidae. This includes the type species, *A. schoutedeni*, and two new species, *A. gauteng*, and *A. schwendingeri*.

According to Zonstein and Ríos-Tamayo[3], "[t]he new genus differs from other genera of the Entypesidae by a unique set of diagnostic characters, including a flanged embolus and the spermathecae with wide bases and lengthened distal lobes. The three included species can be distinguished from each other by a shape of the male tibia and metatarsus I, as well as by the structure of the embolus and configuration of the spermathecae".

The nursery web of *Tibellus asiaticus*

The common name "nursery-web spider" refers to members of the family Pisauridae, but they're not the only spiders to spin these little "nurseries" for their babies to reside in until they disperse. Some green lynx spiders (*Peucetia* spp.; Oxyopidae) have also been observed spinning nursery webs, as well as *Ancylometes* spp. in the family Ctenidae, commonly known as wandering spiders or tropical wolf spiders (the *Ancylometes* spp. were actually once grouped under the Pisauridae).

Jozef Slowik[4], of the University of Alaska museum, recently described this web occurring in *Tibellus asiaticus* (Philodromidae), a species that occurs in eastern Russia, Alaska, Canada, and as far south as Utah, USA. In South Africa, we have 13 recorded Tibellus spp., which we commonly call grass running spiders. According to Slowik (2020), most Tibellus egg sac webs consist of "just the egg sac, which is laid in a crevice between two branches or on a wide blade of grass (*Tibellus oblongus*) (Walckenaer, 1802) Pers. Obs.; Roberts 1987, – although see Leroy & Leroy 2003 for a photo of a larger egg sac web on grass by an undetermined *Tibellus* sp.)". The egg sac web of *T. asiaticus* consists of three concentric layers (see Figure 3).

Figure 3: The tree layers of a *T. asiaticus* nursery web
Source: Slowik (2020)

According to Slowik (2020), [i]t may be that these webs are an adaptive behavior in response to the early fall cold temperatures of the area, which often experiences early freezes".

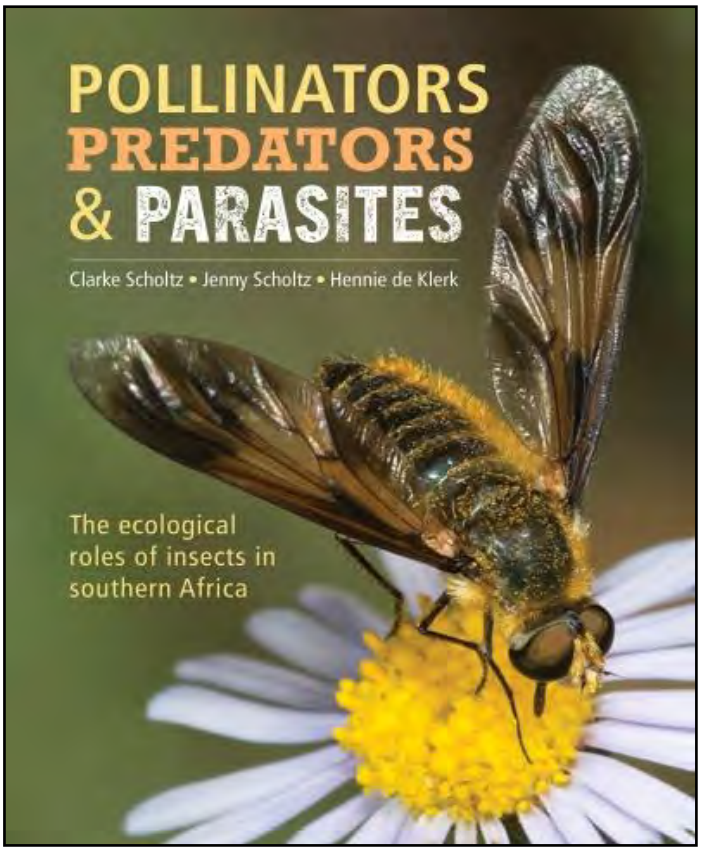
[3] Zonstein, S.L. & Ríos-Tamayo, D. 2021. *Afropesa*, a new spider genus from South Africa (Araneae: Entypesidae). *Israel Journal of Entomology*, 51: 7-34.

[4] Slowik, J. 2020. A description of the nursery web of *Tibellus asiaticus* (Araneae: Philodromidae). *Newsletter of the American Arachnological Society*, 85: 22-24.

Book Review: Pollinators, Predators & Parasites: The Ecological Role Of Insects In Southern Africa

by Astri Leroy

By: Clarke Scholtz, Jenny Scholtz, and Hennie de Klerk
ISBN 9781775845553
Format: Hardback
Published: March 2021
Recommended price: R590, ±R550 online



Insects are called "the small things that make the ecosystem function" (I quote from this book). They are far more ecologically important than any other terrestrial animals, but I am sure you know that. In addition, there are just so many of them, from the larger ones that most people notice to really tiny insects of a millimetre or less in size.

Big fleas have little fleas upon their back to bite 'em,
Little fleas have lesser fleas and so *ad infinitum*.

I really do not think reading through this book over a week or two, trying to absorb huge amounts of data about the most important, varied, and fascinating group of multicellular, land-based animals, gives me the right to write a review but I volunteered to do so, so I will. I hope I can do it justice.

This amazing book has taken 10 years of writing and accumulating information and photos. It details the latest research in the field of entomology, which up to now has mostly been located in scientific publications, generally inaccessible to the interested public and only available to scientists with similar interests. These authors have written a book that is eminently accessible to the ordinary, interested members of the public. Each page I turned gave me new facts and introduced insects hitherto unknown to me.

The authors are Professor Emeritus Clarke Scholtz, a renowned professional entomologist who must be well known to anyone interested in Southern African invertebrates; Jenny Scholtz, a conservationist of note; and Hennie de Klerk, a superb photographer. I am in awe of all of them for this *tour de force*. The book is authoritative and up to date and although it will appeal to academics, it is so clearly written and beautifully laid out that anyone interested in nature and the workings of the most important group of

terrestrial animals on the planet cannot fail to find it fascinating. Approximately 75% of all multicellular organisms found on land are insects and unsurprisingly, Southern Africa, with its varied biomes, has one of the richest insect fauna.

There is a chapter on each of the nine Southern African biomes, as well as an introductory chapter on insects and their ecological role. If you have been receiving Prof. Dippenaar-Schoeman's draft photo guides for spiders, you will be familiar with the Fynbos, Succulent Karoo, Desert, Nama-Karoo, Grassland, Savannah, Indian Ocean Tropical Belt (she calls it Indian Ocean Coastal Belt), Albany Thicket, and Forest biomes. To these biomes, the authors of this book have added freshwater habitats, caves, the coastal zone, and the urban environment. The insect herbivores, pollinators, predators, parasites, soil engineers, etc., are discussed.

P.S.: Arachnids and the other non-insect invertebrates are not left out completely and the authors have chosen to use the name Acacia for our African thorn trees; I like that!

Get this book!

Astri

Spider Walks

GROENKLOOF NATURE RESERVE – 27 FEBRUARY 2021

Text and photos by Jarrod Michael Todd

This walk was unfortunately the last walk of the season, simply because during the winter season spiders and other bugs are far scarcer than they are in the hotter spring and summer months. Arriving at Groenkloof Nature Reserve, the place seemed very woody, with a canopy of trees surrounding us, going up slight hill faces. Once we all arrived, we noticed that there were quite a few of us on this walk, as there was also a large bunch of kids who were all extremely excited to find some cool spiders. Because the group was so large, we decided to split up into two groups as the pathways there were quite narrow. Henning led the first group, while Astri and I led the second group.

We didn't know what we were going to find and if it would even be many, but spiders are literally always EVERYWHERE, and the finds were still quite decent. We started on the shorter hiking trail as we didn't want to be out the whole day; well, I definitely could've been, but the event was set to end early in the afternoon. I remember our group's first find as it was a spider I've been wanting so see for quite some time: a grass huntsman (*Pseudomicrommata longipes*; Sparassidae). It is such a beautiful spider and much smaller than I expected.

The walk took us through different areas, which was great as this allowed us to look through long grasses, tree lines, and even some rocky areas, which are perfect for looking under rocks to find all sorts of critters. The best find of the walk to me came from the rocky areas; there was a cave on this path that went quite deep. While walking there, the first group said they found a violin spider; not just one, but rather an entire cave full of them! I just had to go down into the cave and see them all and man, I was not disappointed! Deeper down into the cave, just in the one section I was looking at, I saw around 10 of them, from juveniles to full adults; they were plentiful. This moment was honestly one of my favourite moments with spiders as before this I hadn't even seen a violin spider. The one we saw was one of the not so commonly seen one, the cave violin spider, *Loxosceles speluncarum*. We were close to the end of the walk and the last spider found was under a rock that Henning lifted up about 50 m from the end of the trail. The spider was a dwarf baboon spider, *Brachionopus pretoriae*.

Below are some images from the walk that I took.

Left: Dark-faced ground spider (*Drassodes* sp.; Gnaphosidae). **Right:** Green grass crab spider (*Oxytate* sp.; Thomisidae)


Left: Hairy field spider (*Neoscona* sp.; Araneidae). **Right:** Dwarf baboon spider (*Brachionopus pretoriae*; Theraphosidae)


Left: Crowned nursery-web spider (*Rothus* sp.; Pisauridae). **Right:** Grass lynx spider (*Oxyopes* sp.; Oxyopidae)


Left: White-striped tailed crab spider (*Monaeses austrinus*; Thomisidae). **Right:** Ground crab spider (*Xysticus* sp.; Thomisidade)


Left: Long-jawed comb-footed spider (*Enoplognatha molesta*; Theridiidae). **Right:** Tube-web spider (*Ariadna* sp.; Segestriidae)


Left: Cave violin spider (*Loxosceles speluncarum*; Sicariidae). **Right:** Sheet-web nursery-web spider (*Euprosthenopsis vuattouxi*; Pisauridae)


Left: Gold-band jumping spider (*Thyene natalii*; Salticidae). **Right:** False button spider (*Steatoda* sp.; Theridiidae)


Left: Grass huntsman spider (*Pseudomicrommata longipes*; Sparassidae). **Right:** Burrowing wolf spider (*Hogna* sp.; Lycosidae)


Left: Burrowing wolf spider (*Hogna* sp.; Lycosidae). **Right:** Long-legged sac spider (*Cheiracanthium* sp.; Cheiracanthiidae)

CUMBERLAND NATURE RESERVE – 26 APRIL 2021

Text and photos by Andrea Sander

Graham, John, and his son watch as Andrea takes photos of a bolas spider (*Cladomelea akermani*; Araneidae).

It was with much anticipation that the spider-loving photographers in KZN looked forward to the spider outing that had been arranged, and in particular to meeting Astri Leroy.

Unfortunately, as things happen, she was unable to make it and we ended up with a group of five on the day: John Roff, his son, Desiré Pelser, Graham, and myself. It is always inspirational to meet up with John as he has such a wealth of knowledge when it comes to the outdoors.

We gathered at the Cumberland Nature Reserve close to Pietermaritzburg in the morning and John, his son, and Graham headed out into the long grass to look for bolas spiders (*Cladomelea* spp.). Desiré and I browsed through the trees near the picnic site and some of the shrubs near the stream.

We made a few discoveries there but soon John and Graham were back, telling us excitedly that they had found a bolas spider and would take us to her. Just before we set off, we found a stunning wolf spider (Lycosidae) hiding in a burrow. John gently teased her web until she made a brief appearance, just long enough for me to get one shot.

Then off we went into the veld. We drove to near the spot that John had marked and there she was, on the grass with her egg sacs. Once we knew what we were looking for, she stood out quite conspicuously. I did not realise that they are actually quite large spiders, about 15 mm in size.

What John had found for us was a female *Cladomelea akermani*. While we were taking photos, John walked a little further and found a second one. This one was possibly more mature and had eight egg sacs; one of which the spiderlings had already hatched.

The most amazing thing to experience was John "singing" to these spiders. He made loud sounds, ranging the tones until the spiders actually reacted to him and opened their legs. The normal resting position has their legs in front of them covering the face. The "singing" allowed us to observe the spines on the carapace. Absolutely beautiful spiders and made the whole day so worthwhile.

Such a pity Astri and the other spider enthusiasts in Gauteng and specifically KZN couldn't join us. Perhaps next time the event will be more favourably supported.

Left: Tailed orb weaver (*Eriovixia* sp.; Araneidae). **Right:** Grass sac spider (*Clubiona* sp.; Clubionidae)

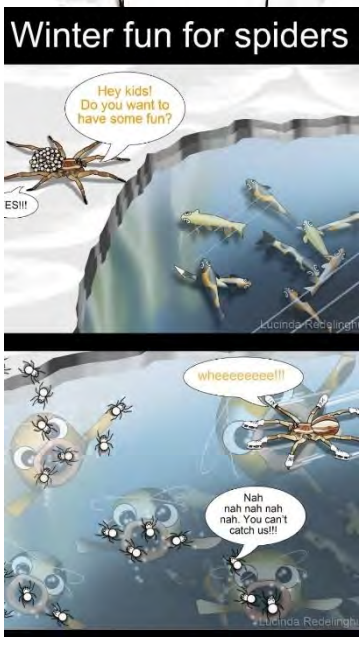
Black-and-white box kite spider (*Isoxya cicatricosa*; Araneidae)

A series of photos showing the bolas spider (*Cladeomelea akermani*) that John found, and her egg sacs. In the bottom right is John singing to the spider to "relax" her, while Desiré takes photos.

Winter Spider Drawing Competition

Here are the results of our very first “seasonal spider” drawing competition. Members of our Facebook group were requested to draw a “winter spider”, using their imagination. The initial plan was to create several categories, such as best drawing in age category, funniest drawing, best drawing, etc., but due to the limited number of entries, we created only two categories: winter spider drawings, and unthemed spider drawings. With 25% of the votes, Leigh Northfield won the themed category with her “Lucas” jumping spider in a Christmas hat. Second and third places both go to Lucinda Redelinghuys, with her drawings of a button/widow spider with a snowflake pattern, and a mother wolf spider taking her children to a frozen pond for some fun and games.

1



The winner of the unthemed category is Nicolette Josling, with her woodlouse spider (*Dysdera crocata*). She also received second place with her drawing of a European garden spider (*Araneus diadematus*). Third place goes to Christil Viljoen, with her drawing of Katz (from the animated series *Courage the Cowardly Dog*) and his spider minion.

People can start submitting their “spring spider” drawings for the September newsletter.

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 die komende nuusbriewe insluit. Om haar stories te lees, besoek haar webwerf by https://www.kyffhauser.co.za/Goggastories.htm

Kinderkamer en Tamboerstokke (Kinderkamerweb-Spinnekoppe)

In my tuin in 'n dik hol Cyphostemma boom (kobasboom of ook meisiebene in die volksmond) woon daar 'n paartjie spinnekoppe, en hulle is **groot** (handpalmgrootte)! Vir mense met 'n vrees vir spinnekoppe sou dit sekerlik flou-val-traumaties wees, vir my tuin en vir my altans 'n groot aanwins, want die spinnekoppe vreet **baie goggas** wat in my tuin nie baie welkom is nie (wat my betref). En hulle is nie gevaarlik vir mens of dier nie, doen goeie werk en is **baie interessant**.

so sit hulle bedags in hulle doekweb

karapaks met maskeragtige versiering

Bedags as dit warmer word en windstil is, sit hulle doodstil in die doekweb, meestal met die twee voorste paar bene dig bymekaar vorentoe gestrek. Die agterste twee paar bene is nie dig bymakaar nie. Die kopborsstuk (karapaks) is op die bokant ietwat verhard en vorm so 'n soort skild, wat versier is met 'n masker-agtige patroon. Vooraan sien 'n mens duidelik voettasters aan weerskante van die mond wat soos 'n klein, dun paar beentjies lyk. Die agterlyf is langwerpig, agter gepunt, vuilgeel van kleur met 'n bruin golfpatroon langs die onderste kant.
Die wyfie se agterlyf is dikker as die mannetjie s'n, sy bene is langer as die wyfie s'n. Die opmerklikste verskil is die vorm van die voettasters (pedipalpe). Waar die wyfie s'n ewe dun is, is die mannetjie s'n voor verdik en lyk soos tamboerstokke (Trommelschläger). In hierdie verdikking gaar hy sy kosbaarste geskenk vir die wyfie op, die sperma, tot dit tyd is vir paring. Dan plaas hy dit by haar geslagsopening aan die onderkant van haar agterlyf.

mannetjie

wyfie

pedipalpe van mannetjie

pedipalp van wyfie

SY woon in die boom **bo** en het haar eie groot tentagtige doekweb, so te sê die stoep en jagkamer, tussen die takke en blare en haar **eie** tonnelweb, wat lei na onder in die "slaap- , broei- en kinderkamer". Die tonnelweb het 'n lengte van ongeveer 15 cm en 'n deursnee van ongeveer 10 cm (4" pyp). Dit is die skuiling, waarin sy blitsvinnig verdwyn as gevaar nader (dis nogal moelik om 'n foto te neem).

HY woon laer af in die boom, het sy **eie** doekweb en sy **eie** tonnelweb wat ook lei na onder in die hol boom. Wanneer en waar hulle ontmoet vir paring weet ek nie, dit geskied diskreet in die donker.

tonnelweb ingang

tonnelweb van die kant gesien

wyfie in tonnelweb

Na paring word die bevrugte eiertjies in 'n eierpakkie bymekaargehou. Die eierpakkie hang onder in die "slaapkamer". As die kleintjies uitkom, bly hulle vir 'n ruk in hierdie beskermde plek onder Ma se toesig totdat hulle uitbeweeg en hulle eie pad vat. Soos hulle groei, vervel hulle, die vel wat uit kutien bestaan groei nie saam nie.

ou broek uitgetrek

Afsluitend nog 'n paar "Wow"-feite oor spinnekopsy:

Die oudste spinnekopsy wat gevind is, was ingesluit in amber (Bernstein) in Lebanon en is 120 miljoen jaar oud.

Spinnekopsy is vyf keer **sterker as staal**, dit kan **rek**, dis **waterdig**, dis **fyner as hare** en breek nie maklik nie (selfs nie by minus 40 grade Celsius), is **bestand teen fungi en bakterië**, is ligter as **katoen**.

Geweet wat BIOSTAAL is? 'n Produk wat ontstaan het deur 'n **sygeen in melkproduserende bokke uit Afrika te plant en dan 'n ekstrak uit die melk te onttrek wat uit syproteïene bestaan**.

Inligtingsbronne:
GOGGAgids Die Geleedpotiges van Suider Afrika (Eric Holm, Ansie Dippenaar-Schoeman)
Filmer's Spiders an Identification Guide for Southern Africa (Martin R.Filmer, revised by Norman Larsen)
Wikipedia
Foto karapaks met maskeragtige versiering: C.A.Schlettwein
Teks en fotos: Anka Eichhoff

September 2016

Spinnekop Leer Ons "High-Tech"-Weefsel vervaardig

Dit is ou nuus, dat ons ingenieurs en argitekte **baie** in die natuur by plante en diere kan leer. Wat die **veer- of kamvoetspinnekop** ons leer, is **spektakulêr**!!!

Uloborus plumipes

kam- of veervoetspinnekop in tipiese houding in sy wollerige vangnet

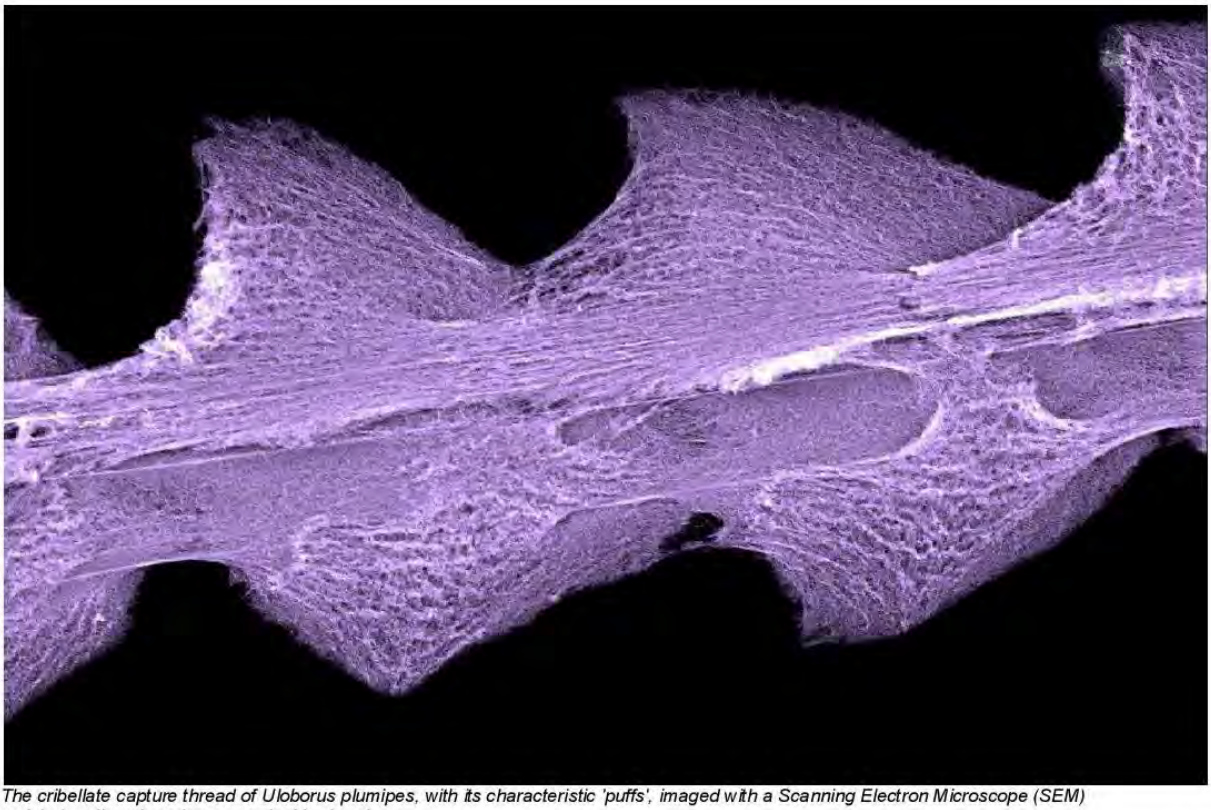
Die spinnekop is **klein**, geskatte 3 tot 5 mm, met uitgestrekte voorbene dubbeld so lank. Dit sit in die middel van sy baie netjiese wawielweb en wag vir prooi, wat uit klein vlieënde insekte bestaan. Omdat die wollerige vangdrade elektries opgelaai is, word die prooi daardeur aangetrek in die web in. Die wollerigheid hou die prooi vas. Nou kan die spinnekop kom en sy prooi uitsuig.

As die voorbene nie langs mekaar is, het die spinnekop 'n prooi beet

Ma en pas uitgebroeide kleintjies wat uit die net weg beweeg

Wat die spinnekop so besonders maak, is dat dit nie 'n gifklier besit om sy prooi te verlam of dood te byt nie. As gevolg van 'n baie besonders gekonstueerde "spin"-meganisme, is die spinnekop in staat om gepluiste drade, wat ook nog elektries opgelaai is, te vervaardig en die dan spiraalvormig in die web aan te bring.

Vereenvoudig kan 'n mens sê, die drade word gepluis met 'n kammetjie, wat aan die punt van die laaste paar lang pote sit. Die "kammetjie" is eintlik hare.
Soos almal weet, word ons hare ook elektries opgelaai, as ons hulle kam, des te meer, as hulle gepluis (*engels: teased, duits: toupiert*) word .....dink maar aan die sestigerjare, waar die dames se hare in "kraaineste" hoog-op die kop gepluis is; 'n mens kon die elektrisiteit eintlik **hoor** terwyl jy kam en pluis!



The cribellate capture thread of Uloborus plumipes, with its characteristic 'puffs', imaged with a Scanning Electron Microscope (SEM)
so lyk dan die gekamde en opgelaaide draad

Ten slotte 'n aanhaling van Professor Vollrath van die universiteit in Oxford UK, wat duidelik maak hoekom **dit die moeite werd is, om die natuur rondom jou waar te neem**:

"Studying this spider is giving us valuable insights into how it creates nano-scale filaments.....If we could reproduce its neat trick of electro-spinning nano-fibres, we could pave the way for a highly versatile and efficient new kind of polymer processing technology."

Die spinnekop kom dikwels in tuine voor. Die web is klein, deursnee 10 tot 15 cm, baie netjies en mooi, hang horisontaal of skuins-horisontaal (ek het al skuins-vertikaal gesien) in skaduagtige plekke (hier by my binne-in 'n doekweb van 'n Pisaurid (GOGGAstories No 16).

Inligtingsbronne: GOGGAgids (Erik Holm en Ansie Dippenaar-Schoeman)
Filmer's SPIDERS (Martin Filmer revised by Norman Larsen)
Google soekmasjien, gee net "Uloborus plumipes spider" in, daar is baie links
www.ox.ac.uk/news/2015-01-28-spider-electro-combs-its-sticky-nano-filaments
Foto: so lyk dan die gekamde en opgelaaide draad :uit bostaande link
teks en fotos: Anka Eichhoff

Oktober 2016

Die Plat-muurspinnekop - oftewel "Flatty"

Familie: **Selenopidae** Genus: **Anyphops**

mannetjie

wyfie

van voor gesien

Ons ken hulle almal, en ons is nie regtig lief vir hulle nie; hulle laat jou skrik as hulle so skielik opdaag en dan weghol en jy hulle nie kan bykom nie!...en dit is **goed so**, want hulle doen ons eerder 'n guns as skade aan. Hulle vang so baie van die lastige insekte wat in ons huise bly: vlieë, muskiete, motte kakerlakke en nog vele meer.

Gewoonlik is hulle vrylewende grondbewoners, wat tussen klippe, op die grond of teen bome skuil. Ten spyte van hulle dekoratiewe patrone en soms ook kleur op die agterlyf, is hulle perfek gekamoefleer teen die agtergrond waarop hulle sit. As gevolg van hulle manier om vir 'n tydperk absoluut bewegingsloos stil op een plek te vertoef, word hulle moeilik raakgesien.....**tensy** hulle in ons huise teen die gewoonlik effekleurige helder muur sit. Daar lyk hulle verskriklik groot en grillerig. Buitendien laat hulle orals in hoeke of agter skilderye hulle "ou klere" na vervelling agter, asook die eiersakkies.

spinnekop versmelt perfek met die grond waarop dit sit

ou pak klere uitgetrek

Hulle spin nie webbe om daarin te bly of prooi te vang nie. Die enigste web wat ek kry, is 'n plat papieragtige sak, waarin die eiertjies gelê word. As die kleintjies uitkom, gaan hulle vinnig uitmekaar, en elkeen soek vir hom 'n eie plekkie om te bly.

plat papieragtige eiersak, kleintjies al uit

oorblyfsels van eiersak en eiervelletjies

Natuurlik het hulle ook nog ander vyande as die mens, en dit is ander spinnekopagtiges, geitjies en akkedisse en selfs mierleeus!

Hierdie een het prooi van 'n mierleeu geword

Hoe goed is sy kanse vir oorlewing nog?

Die volgende drie fotos het my stomgeslaan, toe ek hulle van nader bekyk: Die beenhare vorm van bo gesien perfekte onderbroke konsentriese sirkels! *En:* Die dooie liggaam lyk omgedraai soos 'n simmetriese mandala
En: Op die agterlyf na die spintepels se kant toe pronk 'n perfekte hartmotief.

As **dit** jou nie kan sagter stem teenoor spinnekoppe nie...!

beenhare vorm van bo gesien perfekte onderbroke sirkels

soos 'n mandala perfekte simmetrie in 'n sirkel

dit laat 'n mens glimlag

Inligtingsbronne:

GOGGAgids Die Geleedpotiges Van Suider-Afrika (Erik Holm, Ansie Dippenaar-Schoeman)
Filmer's SPIDERS New revised Edition An Identification Guide for Southern Africa
(Martin R. Filmer revised by Norman Larsen)

Teks en fotos: Anka Eichhoff

Desember 2016

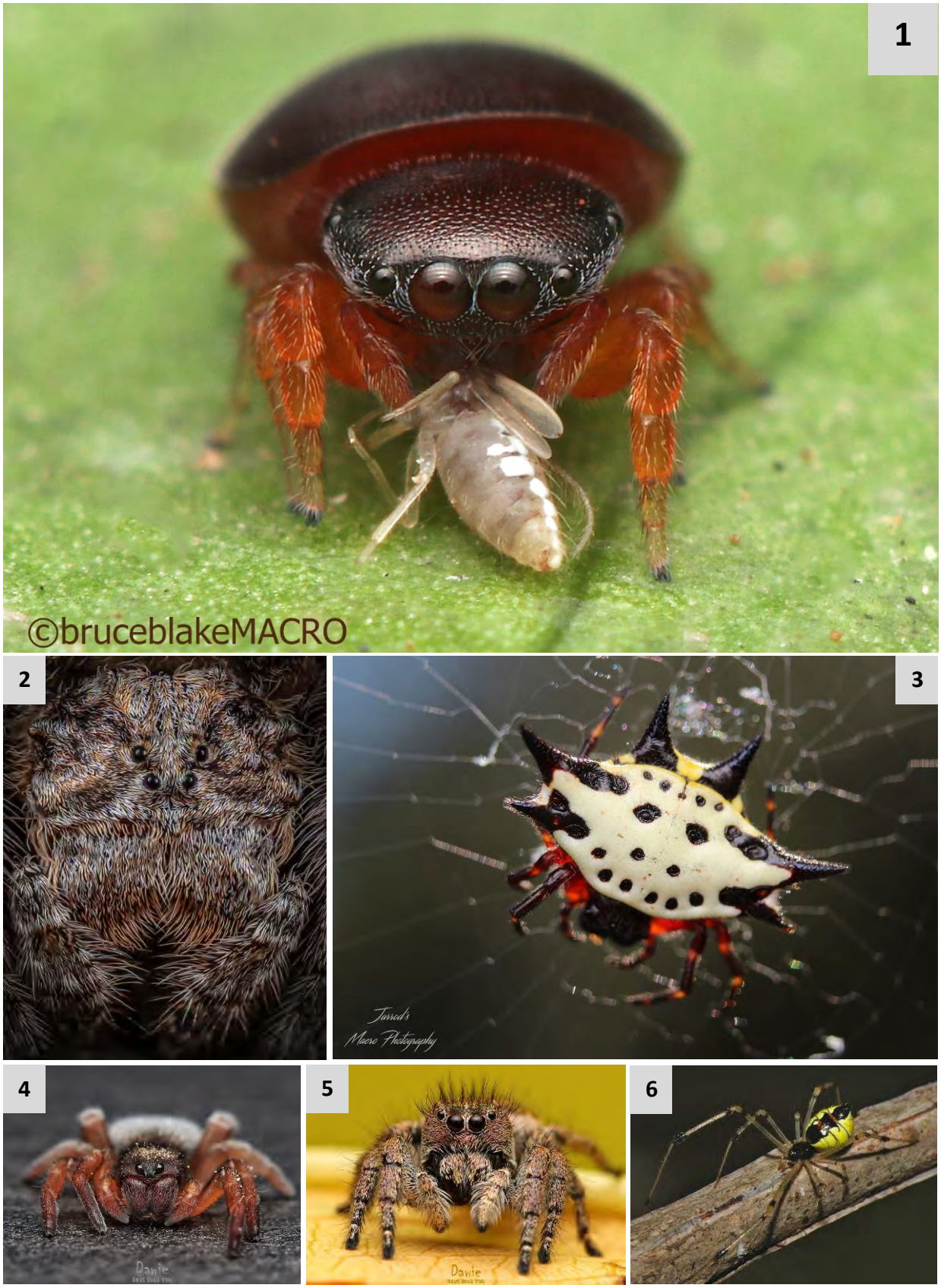
Spider of the Month

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

APRIL

(1) Horned bark spider (*Caerostris sexcuspidata*), Daniel Rautenbach. (2) Tree velvet spider (*Gandanameno* sp.), Jarrod Todd. (3) Beetle jumping spider (*Pachyballus* sp.), Bruce Blake. (4) Flat crab spider (*Platythomisus deserticola*), Vaughan Jessnitz. (5) Tree huntsman (*Olios* sp.), Hannes Claassens.

MAY



(1) Beetle jumping spider (*Pachyballus* sp.), Bruce Blake. (2) Horned bark spider (*Caerostris sexcuspidata*), Samuel Peres Surdut. (3) Short-wing kite spider (*Gasteracantha sanguinolenta*), Jarrod Todd. (4) Velvet spider (Eresidae), Dawie Broekman. (5) Common baryphas (*Baryphas ahenus*), Dawie Broekman. (6) Unknown theridiid (*Chrysso* species group), Jonathan Whitaker.
Third and fourth places received the same number of votes, as well as fifth and sixth places.

JUNE

(1) Unknown velvet spider (Eresidae), Megean Daniel. (2) Velvet lynx spider (*Oxyopes flavipalpis*), Daniel Lee Owen Rautenbach. (3) Buck spoor spider (*Seothyra longipedata*), Sharon Brink. (4) Black-and-white box kite spider (*Isoxya cicatricosa*), Andrea Sander. (5) Kite spider (*Gasteracantha* sp.), Samuel Peres Surdut.

HONORARY MENTION

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

Spiny orb weaver (*Afracantha camerunensis*), taken by Desiré Pelser in Kloof, KZN. This deserves an honorary mention because it's a brilliant photo of a very small and rather rare spider.

Unknown spider, photographed by Jarrod Todd. Some say Theridiidae, and some say Cyatholipidae.

Unknown theridiids (possibly *Exalbidion* sp.). Andrea Sander photographed the one on the left in Waterfall, KZN, and Desiré Pelser the one on the right in Kloof, KZN.

On a Lighter Note

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

After photographing this small jumping spider, Vida van der Walt noticed something strange... the spider had two heads! She posted the following on her Facebook page:

"What can I say? 😆 Not a new two-headed salticid species but a recently moulted one with part of the exuviae stuck on its abdomen. One of the spiders collected during the UFS field trip to the Northern Cape (South Africa). I took these photos at night and if I had the benefit of hindsight 😜 that the little "helmet" on the abdomen will fall off during the night, I would have taken many more photos and made a bigger effort. This cutie has since grown some more and has undergone another shed (the regenerated front leg is now a perfectly normal size). We are not sure which genus it belongs to and will know more once it matures. Feel free to guess or make up your own name.😊"

And here's the "normal" spider once it managed to get rid of the exuvia.

Some other posts from home:

Sometimes a spider is just too dirty to make a good photo, and it's probably not nice for them either, so every now and then I (Rudi) give them a "bath", like this wolf spider (left) and violin spider (*Loxosceles simillima*), that were both covered in paint powder in our garage.

... and from abroad:

This wolf spider from Australia is somehow missing an eye. One of the members gave her an eye patch: