.........obviously “Fang” is a mygalomorph!

(Published in The Star, Johannesburg on 28th June 2012)
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DISCLAIMER

THE VIEWS OF THE CONTRIBUTORS TO THIS PUBLICATION DO NOT NECESSARILY COINCIDE WITH THOSE OF THE SPIDER CLUB OF SOUTHERN AFRICA.
Who are we?

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.

Mission Statement

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

Contact Us

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Visit our website, and send us photos and news that we can post there!

.... At the Spider Club of Southern Africa page

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Goodness, more than half the year has passed. Despite winter not really being “spider season” we have been busy with identification workshops (see pages 9 & 10) and planning future events. This year’s Yebo Gogga was held in May (see page 8 for story and photos). As usual it was hard work but most rewarding. So many people don’t even think about spiders or if they do it is with mild suspicion, fear or even loathing, so it is always great to see people’s minds being changed from fear to interest and sometimes fascination. Somehow children’s faces say it all. The Identification Workshop at PPRI’s Roodeplaat campus on 9th June was great and there is another one on 25th August. If you want to really learn how to identify spiders, while helping to sort specimens for the scientists I thoroughly recommend these events. A less formal Identification Workshop was held at the Joburg Zoo on 23rd June, so you see there was quite a lot going on despite it being winter.

I would like to share a quite dramatic event that occurred last week: On Thursday, the Roodepoort SPCA were alerted to a West Rand woman having dyed some vervet monkeys brown to try to make them look like capuchins. Of course it is illegal to have vervets in captivity so her place was raided and many other creatures were found to be in her possession, including a large number of spiders. Most of the latter were exotic tarantulas but the staff at the SPCA thought some might be indigenous. They called us to confirm this and John went there to check. Sure enough two were Ceratogyrus darlingi (horned baboon spiders), a male and a female. The woman said she was just holding the spiders for someone until the buyer could collect them. “No ways”, said the SPCA, “we are confiscating EVERYthing”. The buyer phoned John, furious as he was getting a real bargain, but “Tough!” said John, they are ALL going to the National Zoo in Pretoria where they will be well looked after”. By Friday they were safely at the zoo with Elizabeth Grieb, well housed and the biggest already on show to the public where John went to have a look and take some photos. All’s well that ends well for the spiders, although I am not sure what has happened to the monkeys and other animals.

Arachnological plans for the rest of this year and well into 2013 have been laid. Check the diary on the last page and PLEASE JOIN IN if you can. Unless someone can arrange something for September you can have the month off without us nagging you to join in and our first field trip for the new season will be in Barberton on the first weekend of October. So let’s go spidering from then on ....

Yours in arachnology,

Astri Leroy

Right: Ceratogyrus darlingi – Photo © Astri Leroy
From the Editor:

Last year I was fortunate enough to acquire from Des Louw his pristine copy of the monograph The Spiders of Great Britain and Ireland, by Michael J. Roberts, published in three volumes in 1987. I now seem to be visiting Britain much more often than in the past, and although the weather often makes it unpleasant to go out and find spiders, it is always a good plan to have a basic idea of what one could find. I bought the Collins Field Guide Spiders: Britain and Northern Europe by the same author. Michael Roberts has raised taxonomic illustration to an art form, and his work must have taken many years. His work comprises beautiful paintings of the spiders, and detailed drawings of male palps and female epigynes, making ID of British species much easier. I plan to publish something on the work of Michael Roberts in the near future, once I get permission to reproduce some examples of his work.

In the meantime, we have received more news from our friend Lenny Vincent in California, concerning his research with Rick Vetter into urban brown button spiders (known as brown widow spiders in the USA), which is very relevant to us in South Africa. A summary of this work is included in this issue.

On the local front, we were happy to learn that Charles Haddad has been awarded his PhD from the University of the Free State. His dissertation was entitled “Advances in the systematics and ecology of the African Corinnidae spiders (Arachnida: Araneae) with emphasis on the Castianeirinae”. Well done, Charles! More information on his achievement and his paper can be found in SANSA News No. 16, obtainable at ARC’s website at http://www.arc.agric.za/home.asp?pid=3291, where all the back numbers of the newsletters can be found, though inexplicably, not issue No. 1.

Other news gleaned from the latest SANSA newsletter is of Robin Lyle’s appointment as Senior Research Technician at ARC. Robin is also studying for her doctorate, and her dissertation subject is the taxonomic revision of the Mygalomorph trapdoor spider sub-family Idiopinae in the Afrotropical region. Good luck, Robin, with both your new career and your doctorate.

Please let me know if there are other subjects concerning spiders and other arachnids that you would like to see featured in the newsletter.

Yours in spidering

Joan Faiola

Scorpion spider *Platyoides walteri*
Male – Photo © John Leroy
Books

REVISION AND CLADISTIC ANALYSIS OF 
PHOLCUS AND CLOSELY RELATED TAXA 
(ARANEAE, PHOLCIDAE) Dr. Berhard A. Huber
:Zoologisches Forschungsmuseum Alexander Koenig 
Soft cover, 508 pages, colour plates, 
photomicrographs and line drawings of specimens’ 
habitus and genitalia as well as SEM illustrations

Available from NHBS on line bookshop. NHBS 
Price: £197.00/ $309/€244 approx.

(To those of you who are still learning the family 
names the Pholcidae are the daddy longlegs spiders.)

Some second hand copies are available from 
Amazon.com and Amazon.co.uk for about a third of 
the cost of new.

This is another of those completely amazing scientific publications that are so detailed it must have taken 
years to complete. Well, I know it took at least 10 years. Every time I look at work such as this it takes my 
breath away with its scope, detail and the dogged hard work that must have gone into it.

In this publication, Huber deals with 10 genera on the family Pholcidae which include 320 species, 83 of 
which he re-describes, a new genus is proposed and 112 species are newly described. He proposes a 
cladistic analysis based on morphological features which show their relatedness to each other.

Let me remind you (as the introduction on page 8 reminded me) that the family Pholcidae is amongst the 
most species-rich with around 1100 species already described and when Huber’s revisions are finished there 
will be more! The family has a world-wide distribution with the most species found in the tropics and 
subtropics although sadly we don’t have that many species in South Africa. Many are synanthropic. 
Synanthropic means they live alongside people and as a result several have moved from continent to 
continent with us.

I reckon this is a milestone in spider taxonomy but as a peer reviewed monograph it is not a reading book 
but a taxonomic reference book for specialists.

P.S. I find the family fascinating, from the tiniest: “Spermaphora” (the genus may be revised out, so to speak, 
hence the inverted commas) to the biggest: Artema species, the care of their eggs and young, their social life 
and the fact that they can be found almost everywhere, from caves and garden sheds to tropical rainforests 
and the arid Nama Karoo. In fact because most people kind of ignore them I am determined to find out 
more about them, just for the sake of it. Astri.
**Events Reports**

**Klipriviersberg Nature Reserve 15\textsuperscript{th} April 2012**

Spider Club members and members of the Friends of Klipriviersberg got together to explore this beautiful reserve close to the city of Johannesburg. The Klipriviersberg is a small mountain range, and a number of different habitats can be found in the reserve, but mainly Highveld grassland, and beautiful koppies that yield interesting creatures such as the protected scorpion *Opistophthalmus pugnax* and the local theraphosid, *Harpactira hamiltoni* – also protected of course.

Rossouw Lambrechts found the most interesting spiders of the day, a male and female Orange Lungless Spider, *Diplogena* sp. in the family Caponiidae, discovered under a rock.

The Friends of Klipriviersberg have asked the Spider Club to conduct an ongoing survey of the arachnid fauna of the reserve, which will start from September onwards. Anyone who is interested in joining us should contact any committee member. Visits will be ad hoc, and probably planned at short notice.

![Above left: Astri and Jeremy exploring](photo Cari Williamson)  
![Above right: Female *Diplogena* sp.](photo)

**Yebo Gogga Yebo Amablomo at Wits University 16\textsuperscript{th} to 20\textsuperscript{th} May 2012**

Report by Joan Faiola and Photographs by Astri Leroy

Yebo Gogga at Wits is now being managed by Donald McCallum, who decided to move the expo to May. For the Spider Club this made a lot more sense, because we could collect a better selection of animals for show. One factor we did not count upon was the height and position of the sun in the sky! We were in our normal position on the upper ground of the Life Sciences building at Wits, but the sun was now a serious problem, as it shone directly through the windows on to our tables. We were forced to play musical spiders to try to keep our treasured animals from getting hot and stressed.
But this was our only problem. We had lots of interesting spiders to show, and for the first time we had some whip-spiders, which created a lot of interest among the visitors. We also had a good selection of scorpions, and of course plenty of rain spiders to wow the crowds.

Once again, we had help during the weekday shifts from Luisa Amaro, who is so good with the schoolchildren, and loves to show off the rain spiders and scorpions.

The character of the expo differs between weekdays and weekend – during the week about 1 800 children walked through the doors in huge school groups. They are enthusiastic, but cannot spend too much time at the stand. At weekends it is more relaxed, as families come to visit, and there are numerous talks in the lecture auditoria. This year, Astri Leroy gave two talks, but unfortunately we were unable to arrange a speaker to talk on scorpions.

This expo is so worthwhile, as many children and families are exposed to nature, and we always win many more friends for spiders and their kin.

Thanks to all Spider Club members who worked so hard, and made our stand the success it always is.

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**Spider Identification Workshop at ARC, Roodeplaat – 9th June 2012**

Report by Philip Fouché, with Photographs by Bertus Louw

Spider Identification day... How will I ever be able to do that? That’s the thought that went through my mind as I was making my way to the Agricultural Research Council’s Roodeplaat Campus, on the 9th of June 2012. A small group of about 15 people, almost glued to microscopes, sat at the square arrangement of tables in the Arachnology department of the campus.
The hallway that leads to the storage facility is decorated with posters and charts about nature conservation and other information. This campus boasts an incredible collection of about 80 000 arachnid specimens, each of these have been individually identified and sorted into families and orders. With the specimens being preserved in alcohol they have to be checked at least once a year to ensure that alcohol levels are high enough that the specimens don’t dry out.

Even though the knowledge that is necessary to identify such an enormous collection is impossible to learn in one day, we were at least able to help in some way. Spiders had been collected in different locations using various methods and our task for the day, was to sort male and female specimens into individual containers that are labeled for further identification.

With Astri and Robin running from table to table to answer the hundreds of questions that everybody had, a feeling of fascination was felt throughout the room. For many it was their first opportunity to view these wonderful creatures up close and personal.

All in all, I think I speak for all when I say: “The experience was awesome, and the memory unforgettable!”

The people who attended the event were: Jeremy Munton-Jackson, Miemmie Byrch, Rossouw Lambrechts, Leah Ferrington, Daniella Potgieter, the family of Tanya, Grant, Riaan and Nuitta Briel, Peter Duke, Bertus Louw, Igor Potgieter, Astri Leroy and Philip Fouche!

A great big special Spider club thanks to PPRI, Prof. Ansie Dippenaar-Schoeman, Robin Lyle and Petro Marais for making this event possible!
Beginners’ Spider Identification Course at Johannesburg Zoo - 23\textsuperscript{rd} June 2012

Report and photographs by Vanora Naude (JHB Zoo tour guide, newest spider club member and all round lover of anything creepy crawly)

The 23rd June was marked down in my calendar for many months. As soon as I heard that Astri had arranged to do the Spider ID course at the zoo for the Tour Guides the excitement set in.

In the time leading up to the course, I attended Yebo Gogga and finally joined the Spider Club. Eventually the day arrived. The opportunity to spend time with a group of spider-loving people and have the opportunity to learn from them was wonderful.

It was even more incredible to watch a group of people, who under normal circumstances would be calling for the doom, get involved with the microscopes and even hold a live spidey or two.

Events like this are so important especially for people that would normally run a mile in the opposite direction.

As tour guides we are constantly coming in to contact with the public, most of whom are obviously nature lovers but have a minimum size limit and leg count. Anything smaller than their own hand with more legs than their dog is not worth their consideration. There is now a group of tour guides who will hopefully be able to help dispel people’s fears and pass on a little knowledge to visitors should they come across a spider while walking through the zoo.

I am looking forward to getting to know everyone better and learn more about these little creatures that I find so captivating and assisting in spreading the love for anything with more legs than my dog.
Exotic Jumping Spiders in Croydon (UK) and Identifying Arachnids from Photographs

By Pip Collyer – Secretary of the British Arachnological Society

One of the more interesting aspects of opening my e-mails since becoming Secretary is the prospect of receiving from members of the public photos of spiders and harvestmen for identification. Digital cameras and mobile phones have made it so much easier to do this, and I receive around four or five each week. My own identification ability is limited, so luckily I have a panel of Council members and other experienced arachnologists to assist me. The quality of the photos varies from reasonably sharp to what one of the more forthright Council members described as a “blob” when asked to identify a particularly out-of-focus image of a spider.

One photo I received around Christmas came into the blob category but was interesting because it was a seasonal bright red blob. The lady who had sent the e-mail had spotted the spider on her sofa. She had already been online and found that there were a number of red spiders in the genus *Phidippus* in America and as she had received a parcel of Christmas presents from California a few days earlier she thought it might be that. I asked for a better photo but as the next one was no sharper I persuaded her to send me the spider. It was a male jumping spider, but unfortunately was sub-adult, making identification difficult. However, shortly after receipt the spider died and I sent it to Tony Russell-Smith who kindly identified it as *Philaeus chrysops* by comparing it with specimens from Greece. The Californian connection was therefore a red herring and the spider had presumably hitched a lift from its Mediterranean homeland.

Left: Female *Philaeus chrysops* – an attractive Mediterranean species of salticid.

Photo: NL.wikipedia.org

Many of the photos and telephone calls I receive are of, or about, false widow spiders *Steatoda* spp. Unfortunately, the media seem to hype up the dangers of being bitten by one of these, and in any case many people think they have found a black widow spider. One photo of a false widow spider was taken by a fireman with his mobile phone. He had opened up a fire hydrant in Stratford in east London when he spotted the spider and he managed to photograph it before it ran across the pavement and disappeared into a greengrocer’s shop.

Another gentleman sent me an article from his local newspaper of him displaying what was described as a false widow spider which he had found in his house. It was clearly a species of *Tegenaria* (Agelenidae) and not *Steatoda*, and I asked him to send me the spider. It was a male *Tegenaria parietina*, which has the distinction of having the largest leg span of any British spider.
I also get quite a few phone calls, as the RSPCA seem to refer every spider query to the B.A.S. Callers expect an identification from the vaguest of descriptions. One lady who called wanted to know what species of spider was eating all the plants in her garden, and had even poisoned her dog! Another gentleman called on Christmas morning to ask what spider would have been responsible for biting a large chunk out of a banana overnight. Assuming it to be a hoax, I said that a common spider active at this time of year was Santa clausa, but was told very firmly by the caller that he had not been drinking and that his son-in-law was going to sit up with a bucket that night to catch the culprit, as there were small children in the house. He didn’t think it was a mouse, and when I explained that spiders did not eat bananas he was both relieved and grateful.

One of the primary objects of the society is education of people of all ages, and clearly we have some way to go. However, what is gratifying is that there are plenty of members of the public who are sufficiently interested in putting a name to a spider to go to the trouble of e-mailing a photo, and going to the expense of sending a specimen in the post for identification.

(Ed. We can strongly relate to Pip’s experiences with the public, but receiving live baboon spiders by post might give us pause!)

![Spider](image-url)
Many may have heard of this island before, but few will know how unique and exceptional it truly is. Socotra is actually a small archipelago consisting of four islands situated in the India Ocean. The largest of the four islands takes up almost all the landmass of the archipelago and is also called Socotra. This small island is governed by the Republic of Yemen and lies about 240 kilometres east of the Horn of Africa. It is 132 kilometres across and only 50 kilometres wide, so you can imagine that it is a mere speck in the middle of the ocean. According to the scientists, the island was formed by landmass breaking off from the African mainland many millions of years ago and due to its isolation many species occurring on the island can’t be found anywhere else in the world.

Some rumours went about that a tsunami killed off all the natural fauna and flora on the island, but after some research, I found that it only came close. The 2004 tsunami that rocked world headline news did touch Socotra, but most of the island survived. The water did, however, push up 6 metres in some places, and water marks could be found more than 200 metres inland, and for an island of this size, it could have turned out much worse.

People who visit the island describe it as one of the most alien looking places you can find on Planet Earth and this is due to its geological isolation and its unrelenting climate. The combination of extreme heat and drought created some unusual species of flora, and with it comes some intriguing species of fauna. The most obvious is the dragon’s blood tree which has a red sap, and people believed that it was the blood of dragons that flowed from the trees.

But enough about the island and its trees, what about its spiders? Socotra has about 30 spider species that are 100% endemic to the island, but remarkably little information is available on most. Although the island is governed by an Arabic nation, it is situated closer to Africa than to Arabia and, therefore, also has baboon spiders, or to be more specific, one single baboon spider species.

*Monocentropus balfouri*, also known as the Socotra Island Blue Baboon Spider, is the only theraphosid occurring on the island. Unfortunately, due to its extreme rarity, it is also a highly sought after species in the tarantula hobby. In nature, the spider burrows under rocks and according to the native people they are terribly dangerous. On the contrary, these spiders are not terribly dangerous, but do show the typical aggressive, defensive behaviour of most baboon spiders and now folklore deems them immensely venomous. Captive observations of this species have shown some fascinating behaviour, as the mother looks after newly hatched spiderlings and perhaps even feeds them when they are small. They stay together for quite some time after the spiderlings have hatched and don’t turn cannibalistic as many other species do.
On the true spider front, the island sports a number of impressive species, including species of *Argiope*, *Nephila* and *Gasteracantha*, but very little information is known about them. At least five scorpion species are known to be found on the archipelago of which two are from the family Buthidae, a yellowish *Hottentotta socotrensisis* and a darker rarer *Orthochirus bicolor insularis*. Only a single endemic Solifugid is found on the island, and harvestmen are a captivating reddish colour. Unfortunately, due to the political climate of the area, intensive studies and conservation of the island is difficult. With this unique fauna and flora, it makes the island highly susceptible to invasive species and, therefore, UNESCO declared it a world natural heritage site in July 2008. Hopefully this way the environment will be protected, and the unique species will not be lost to the world.

(Editor’s note: many of the species were first described by R.I. Pocock at the end of the 19th Century)
SIGHTINGS

Unusual *Platyoides* sp. (Trochanteriidae) from the Eastern Cape

*Platyoides walteri* is our most commonly found species in this genus. Not so often seen is a striped member of this genus, possibly *P. leppanae*, but it could be an undescribed species, and this specimen was found by Terence Archibald of Upington on a visit to the Eastern Cape. It was found in a woodpile in a garden on Lilyvale farm.

Robin Lyle of ARC has advised: “There are a few species that have a very similar colouration. The first is *Platyoides alpha*, which is only known from the Limpopo Province. Then there is *P. leppana*, which is widely distributed in eastern and southern South Africa. The last species is *P. quinquedentatus*, which is found only in the Western Cape. It seems there are a number of possible new species that have been found through the SANSA surveys. I have a feeling this might be a new species but I can't say for sure without seeing the specimens.”
ARACHNID SCIENCE

The Prevalence of Brown Widow and Black Widow Spiders in Urban Southern California

Summary of a new paper from California with comparison to South African conditions

Lenny Vincent of Fullerton College in Southern California sent us an interesting paper documenting a study of brown widow spiders *Latrodectus geometricus* (known as button spiders in South Africa) in the urban situation in Southern California. I am not aware of a similar study conducted in South Africa. This species is extremely common in the suburbs of South African towns and cities, so the research has some validity in the South African context too.

*L. geometricus* is a cosmopolitan species that is increasing its range throughout the warmer parts of the world. It was first described to science in 1841 by C.L. Koch, and at that time was known from Africa and South America, but its true origin is obscure. Garb et al (2004) suggested Africa as its place of origin because of the wide distribution of brown widow spiders in Africa, and its affinity to a closely related species, the Zimbabwe brown widow spider *L. rhodesiensis*. In South Africa the brown widow spider is most often found near human habitation, although it has sometimes been found in totally natural environments, and like populations elsewhere in the world it thrives in the human context. *L. geometricus* probably moved into Florida in 1935, but only expanded its range into other parts of the USA, including Southern California, in the present century.

Several black widow spider species abound in the warmer areas of the United States, and are present in urban areas too. This is not so true of South African black widow spiders, at least certainly not of urban areas in Gauteng.

The new Californian study set out to compare the abundance and habitat selection of brown widow spiders to that of their local black widow spider *Latrodectus hesperus*. It also set out to establish whether the invasive species was displacing the native species. I imagine that the findings would also form a benchmark for future studies.

The area of the research was the urban Los Angeles basin. Timed searches were conducted in various habitats: urban property, agricultural lands, developed parks, and undeveloped areas. Spiders of both species and their egg sacs were collected, and note made of the precise location of these. The number of collectors at each site, as well as the duration of searches, was noted, in order to estimate the number of locations with brown widow spiders, per collector, per collection hour, to compare the different habitats. Black widow spiders are more secretive, so nocturnal searches were necessary for counts of this species.

Collections were made at 72 sites, involving 96.8 hours of collecting. Brown widow spiders were found at up to 32 locations per collector hour (average 8 locations per collector hour). The spiders made retreats and deposited egg sacs under picnic and patio tables (19%), under patio chairs (12.1%), under overhangs in walls (13.9%) and the rest under playground equipment, in the recesses of garbage bin handles and the lips of pot plants. They did not favour positions under mesh cover such as fabric mesh of patio chairs or metal mesh top patio tables. They were never collected inside homes, and only rarely in garages and sheds, typically if doors had been left open all the time. (This is an interesting finding, as the Spider Club of Southern Africa has received a number of reports of these spiders in garages and sheds.) As one would expect, brown widow spiders were uncommon or absent in natural and agricultural areas, and when found in curled or gathered
leaves of citrus, avocado and apple trees, this was still at urban homes, and occasionally in agricultural orchards situated not far from homes. In contrast, black widow spiders were abundant in agricultural settings, but never in managed tree crop vegetation, and were less common around homes than brown widow spiders. The urban areas where black widow spiders dominated were in a commercial business centre with a stone face exterior and in a series of apartment garages where they emerged from vertical gaps between the door and frame. In some instances (e.g. under the lip of a pot plant) mature females of both species were found within 1 cm of each other.

Most brown widow spiders were found within 1 metre of the ground and occasionally in eaves, whereas black widow spiders exhibited a preference for locations close to the ground. The collection rate at homes for black widow spiders was twenty times lower than for browns.

Because there is no pre-invasion data, whether the brown widow spider has displaced the black cannot be assessed, but anecdotal evidence points to decreased populations of black widow spiders coincidental with the appearance of the brown.

The general public (in both California and South Africa!) needs to be informed that these spiders are very common, and although envenomation risk is possible, the bite of brown widow spiders is less severe than the black, and such spiders bite only when threatened. People also need to be careful where they put their hands when working with any of the micro-habitats listed on below!

Please contact the Spider Club if you would like a PDF copy of this paper.

Title photo of *L. geometricus* (pale form) © John Leroy


Table: The microhabitat choices of *L. geometricus* in southern California

<table>
<thead>
<tr>
<th>Microhabitat</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor furniture and patio items</td>
<td>Garden (contd)</td>
</tr>
<tr>
<td>Table</td>
<td>96</td>
</tr>
<tr>
<td>Chair</td>
<td>61</td>
</tr>
<tr>
<td>Barbecue</td>
<td>6</td>
</tr>
<tr>
<td>Gazebo</td>
<td>3</td>
</tr>
<tr>
<td>Structural building</td>
<td>Greenhouse</td>
</tr>
<tr>
<td>Wooden fence and horizontal supports</td>
<td>38</td>
</tr>
<tr>
<td>Brick wall and overhangs</td>
<td>32</td>
</tr>
<tr>
<td>Bench</td>
<td>20</td>
</tr>
<tr>
<td>Eave</td>
<td>14</td>
</tr>
<tr>
<td>Chain link or wrought iron fence</td>
<td>10</td>
</tr>
<tr>
<td>Stairs, ramps</td>
<td>8</td>
</tr>
<tr>
<td>Shed</td>
<td>7</td>
</tr>
<tr>
<td>Window</td>
<td>6</td>
</tr>
<tr>
<td>Garage door</td>
<td>3</td>
</tr>
<tr>
<td>Shelf</td>
<td>2</td>
</tr>
<tr>
<td>Rock</td>
<td>2</td>
</tr>
<tr>
<td>Botanical and garden</td>
<td>Water faucet (tap)</td>
</tr>
<tr>
<td>Lip of potted plant</td>
<td>20</td>
</tr>
<tr>
<td>Potted plant</td>
<td>15</td>
</tr>
<tr>
<td>Inside small plant or bush</td>
<td>10</td>
</tr>
<tr>
<td>Apple tree</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
</tr>
</tbody>
</table>

Table: The microhabitat choices of *L. geometricus* in southern California

<table>
<thead>
<tr>
<th>Microhabitat</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garden (contd)</td>
<td>2</td>
</tr>
<tr>
<td>Avocado tree</td>
<td>2</td>
</tr>
<tr>
<td>Inside small plant or bush</td>
<td>10</td>
</tr>
<tr>
<td>Apple tree</td>
<td>4</td>
</tr>
<tr>
<td>Composter</td>
<td>2</td>
</tr>
<tr>
<td>Greenhouse</td>
<td>1</td>
</tr>
<tr>
<td>Recreational equipment</td>
<td>33</td>
</tr>
<tr>
<td>Park playground equipment</td>
<td>33</td>
</tr>
<tr>
<td>Diving board</td>
<td>6</td>
</tr>
<tr>
<td>Bike, motorcycle</td>
<td>6</td>
</tr>
<tr>
<td>Household playground equipment</td>
<td>3</td>
</tr>
<tr>
<td>Trampoline</td>
<td>2</td>
</tr>
<tr>
<td>Boat</td>
<td>2</td>
</tr>
<tr>
<td>Water Slide</td>
<td>2</td>
</tr>
<tr>
<td>Household accessories</td>
<td>31</td>
</tr>
<tr>
<td>Trash can</td>
<td>31</td>
</tr>
<tr>
<td>Electrical box, socket</td>
<td>15</td>
</tr>
<tr>
<td>Water faucet (tap)</td>
<td>4</td>
</tr>
<tr>
<td>Hose reel</td>
<td>3</td>
</tr>
<tr>
<td>Water fountain</td>
<td>2</td>
</tr>
<tr>
<td>Mailbox</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
</tr>
</tbody>
</table>
WHY DOES NEPHILA HAVE PIPE-CLEANERS ON ITS LEGS?

Jim de Necker of Cape Town asked the question: Why does the Black-legged Nephila have pipe-cleaners on its legs? Astri Leroy replied:

This isn’t as simple a question as it may seem and certainly there isn’t a single simple explanation!

If you look really closely using a camera with a good macro-lens, a microscope or a strong hand-lens you will see that spiders bodies are covered in various kinds of "hairs". These hairs are more correctly called setae, setules (for very tiny setae), spines, spurs, sensillae, bristles, etc. There are a huge variety of shapes and sizes of these setae with different purposes. Some of the more easily understood uses are to pull and "comb" silk out of the spinnerets and place it where the spider wants. There are brushes and combs (I kid you not!) on the legs and pedipalps for grooming and the setae that divide into every tinier setules that make up the thick brushes of hair called scopulae on the tarsi and metatarsi – the last two leg segments furthest from the body - that enable some spiders to walk upside-down or on very smooth surfaces. These work the same way as gecko feet with both a capillary action and something called Van der Waal’s forces. You can Google those and look them up.

In general many of the "hairs" on spiders' bodies are sensory. Sensory "hairs" on spiders are the hollow chemoreceptors through which they taste and smell the world, very fine, sensitive hairs called trichobothria that can pick up airborne vibrations (hearing hairs), others are simpler tactile hairs somewhat like mammal whiskers and yet others are kind of strain-gauges so that the spider's nervous system can work out which way up it is, if it is being squeezed or is falling, for example.

Then quite a number of New World tarantulas have urticating (irritating) hairs which they can brush off their abdomens into the faces of potential predators.

There are hydrophobic hairs that repel water and which help them to move around on the surface skin of water, there are hairs that stick out sideways from the legs of some spiders that also help them move around on water and in other species can act like snowshoes on shifting sandy surfaces or can break up spiders' outlines so that they are camouflaged against the substrate. There is even an arboreal tarantula that has long, stiff hairs sticking out sideways on its body and appendages that it uses rather like wings to glide from tree to tree. Different coloured hairs all over spider's bodies can be iridescent and yet other hairs are used to emphasize their attraction to the opposite sex as in the displays of jumping spiders and wolf spiders.

I am sure there are more explanations but these are kind of off the top of my head, however I don't know if there is a special reason for the black-legged Nephila to sport those setae that make their legs look like pipe cleaners!
PHOTO GALLERY - FACEBOOK FRIENDS Part 2

The Spider Club of Southern Africa’s Facebook page has more than doubled in the past three months to nearly 400 members, from all over the world, from all walks of life.

To complete the spread started in the last issue, we now feature the photos of Sean Allen, Jeremy Munton-Jackson and Ivan Andersen.

Sean Allen

Sean Allen is an avid and highly talented photographer based in Port Elizabeth, who has his own photographic nature blog, which is worth a visit just for the sheer breadth of material that interests Sean. The subject of each photo in the blog is carefully researched, and Sean labels the subject with the family name, scientific and common names, together with a description. Sean is a member of a photographic club in PE. Sean’s blog can be found at this link: http://www.vuurvliegie.net

Above: Beautiful jumping spider from the Eastern Cape (Salticidae)

Above Left: Beautiful Silver Vlei Spider Leucage sp. (Tetragnathidae)

Above right: Gasteracantha falcicornis (Araneidae) – Kite spider. Fish River Resort outside Port Alfred. A good shot of a spider which is difficult to photograph.

Hairy Field Spider – either Neoscona or Araneus sp. (Araneidae)

Another of Sean’s favourite jumping spiders. (Salticidae)
Ivan Andersen

Ivan is yet another highly skilled macro photographer. He lives in Johannesburg. Ivan likes nature in general, and regularly posts photos of spiders to our page.

On the left is a great shot of a flower crab spider *Thomisus* sp.

Right: a Flattie in the family Selenopidae. Ivan took this intriguing shot of the ventral side of the flatty, which is not often seen, by placing the spider in a glass mug.

Left:
A beautiful crab spider *Misumena tuckeri* now *Ansiea tuckeri* (Thomisidae). Apparently this species was moved from *Misumena* in 2005 to the new genus, *Ansiea*, named after Dr Ansie Dippenaar-Schoeman of ARC.

Right: an amazing close up shot of the crowned nursery web spider *Rothus purpurissatus* (Pisauridae)
Jeremy Munton-Jackson

Jeremy is well known to readers of this newsletter, as he can always be relied on to supply photos taken on our outings. He is a talented photographer who uses an awesome professional Nikon camera. His photos are usually taken without the use of a tripod – no evidence of camera shake despite the weight of his camera. Jeremy always gets his shots in the wild – he does not bring the subjects home where they might be easier to photograph. Jeremy serves on the committee of the Pretoria Photographic Society.

Above left: Tiny pseudoscorpion next to Astri’s fingernail. A distant relative of spiders in the Arachnid order Pseudoscorpiones.

Right: Twig spider, *Cyphalanotus larvatus* (Araneidae)

Below left: Spiky Hairy field spider *Pararaneus cyrtoscapus* (Araneidae)

Below right: Thick-tailed scorpion, *Parabuthus transvaalicus*
DIARY 2012

DISPLAY AT THE COUNTRY MARKET AT SAMMY MARKS MUSEUM 9th August, 2012
This annual event is a lot of fun and if you want to see people react with awe, delight and or horror, come and help at our stand. It is a pleasant way to spend National Women’s Day and gets you out of doors in mid-winter. Please let Christy Mathie know if you are able to help. Cell 072-737-3895 or e-mail diekombuis@yahoo.com.

SPIDER CLUB ANNUAL GENERAL MEETING AT THE NESTLE CENTRE, WALTER SISULU NATIONAL BOTANICAL GARDEN, MALCOLM ROAD, POORTVIEW 19th August, 2012 09h30 for 10h00
We have booked the Nestle Centre till 3 p.m. So if you would like to stay on for a braai we will have a fire available. Please note that braais are not allowed inside of the botanical garden. Tea and coffee will be available. N.B. There is a public concert at the garden that day, so after 10 a.m. parking will be at a premium and from 11 a.m. onwards concert fees will be charged on entry to the garden itself. Of course this does not apply to the Nestle Centre which is outside the main garden. Most of us know this venue very well, but if you need directions please contact us at info@spiderclub.co.za.

SPIDER IDENTIFICATION WORKSHOP at ARC’S Roodeplaat Campus
25 August 2012: 09h00 for 9h30 till 16h00
This will take place at the Arachnology Department, Biosystematics, at the Roodeplaat Campus of the Plant Protection Research Institute. Microscopes, specimens, hands-on help and a light lunch will be provided and those participating will help to sort and pre-identify the enormous number of specimens for the National Collection of Arachnida.

It is a wonderful way to learn how to identify spiders and well worth attending. A spin-off is that it should help to equip citizen scientists (that’s us!) with the skills to become more proficient at identifying spiders and so be able to help the professionals.

NO CHARGE BUT BOOKING ESSENTIAL. Book with Charlotte Livingstone and get directions on 083-439-6614 or e-mail clivingstone@polka.co.za

SPIDER WALK AND TALK at Aloe Ridge Guest Farm, near Barberton, Mpumalanga - Friday evening 5th October, Saturday 6th October 2012
The Barberton Bird Club has booked Astri and John to give a talk on the Friday night and take them for a spider walk on Saturday 6th. Spider Club members from the Lowveld are most welcome to join us. If you come from farther afield you will have to pay your own way, either staying at Aloe Ridge, booking via their website on www.aloeridgeguestfarm.co.za or making your own travelling and accommodation arrangements. Please contact Astri for further information on astri@spiderclub.co.za or 073-168-7187

MACRO PHOTOGRAPHY WORKSHOP given by Jeremy Munton-Jackson
14th October 2012 09h00 – 15h00
Venue to be confirmed. Probably Centurion or Pretoria area. Bring your camera and learn how to use it to photograph the little things in the veld. Convenor Miemmie Byrch. Please book with Miemmie on cell 082 772-3928 or miemmie@inspiredstyle.co.za.

EVENING WALK AT WALTER SISULU NATIONAL BOTANICAL GARDEN
Saturday 3rd November 2012 18h30 – 21h00
This event is organized by the Botanical Society and booking and PRE-PAYING are mandatory. However Astri will need three or four group leaders to show the public spiders and scorpions at night. Please contact Astri if you would like to help. Otherwise for official booking, contact Karen Carstens on botsoc@sisulugarden.co.za or landline (011) 958-5177. If you just pitch without booking and pre-paying you will be turned away.

DAY OUTING TO TRANQUILLITY FARM SOUTH OF JOHANNESBURG
Saturday 10th November 2012
Tranquility Farm in the Hartzenbergfontein Agricultural holdings off the R82 towards de Deur. It should take just under an hour from most parts of greater Joburg. There will be more details when I have them. Start 9am - take picnic lunch. We will ID our catch after lunch. R20 per person for non Spider Club people (that includes children).

OUTING TO THE FARM OF PAUL AND LIZET SWANEPOEL NEAR RUSTENBURG
17th November, 2012. 08h30 for 09h00 – 16h00
All welcome. No charge. It takes over two hours from Johannesburg and less from Pretoria. The Swanepoels, through their son Louis (Monkeybusiness) Swanepoel, have very kindly allowed us to have a day outing on their farm, tucked in behind the Olifantsnek Dam. Bring your family and a picnic lunch. Please bring your own water too.

Directions: (As supplied by Louis) Get on the N4 towards Rustenburg, take the first off-ramp left towards Olifantsnek dam and from there the R30 road towards Derby and Koster. After passing a spaza shop on the left look for a farm sign on the right (a short distance further down the road) saying Paul & Lizet, turn right onto farm road keeping left as much as possible and drive up the mountain till you get to a gate and you are there. GPS Co ordinates are - 25.856884° 27.143612° Convenor Joan Faiola info@spiderclub.co.za or cell 082-565-6025. Louis’ cell if you get lost is 072 978 9629

DIARY 2013

KLOOFENDAL NATURE RESERVE NOCTURNAL SPIDER WALK
2nd February, 2013: 18h00-21h00
Friends of Kloofendal have organized A NOCTURNAL spider walk in this lovely reserve. BOOKING ESSENTIAL AND BRING A TORCH.

Please book with Karin Spottiswoode of Friends of Kloofendal cell 079-693-5608. The meeting place for the guided walks is at the FroK Education Centre, which is situated in the building directly opposite the two impressive big stamp mills and steam engine in the Kloofendal amphitheatre area.

KOKOPELI FARM
27th January 2013: 8.30 for 9am to around 4pm
Bertus has invited the club to visit and explore the farm for spiders on the other side of Magaliesburg town. It is about an hour from the crossroads at the bottom of the Krugersdorp hill. Drive through Magaliesburg’s main road (R509) in a north-westerly direction (in other words Johannesburg/Krugersdorp is behind you and Rustenburg ahead of you); Turn left onto the Koster road (R509), Continue for about 12km. When you pass the tiny Vlakdrif petrol station, slow down and look out for a turn off where you have to turn right (about 900m after the petrol station). There is a smallish sign saying “Magalies Retreat” and another one saying “Rica Piggery”. The road immediately becomes a dirt road. Continue for 5km and then turn left onto another dirt road (There are lots of sign boards saying amongst other “Sikelele” and “Hurland”), Continue for 4km. Turn left at sign saying “Jackson’s Ridge Children’s Ministries” 250m further the road splits - take the right fork. Continue for 1.2km until you see the ”Kokopelli” sign to your left. Turn left. Keep on the main two track road until it ends at a parking area at an adobe (mud-brick) house. Here is a link to Google Maps with directions from Magaliesburg to Kokopelli’s gate: http://goo.gl/maps/hKL4
**EVENING WALK AT WALTER SISULU NATIONAL BOTANICAL GARDEN**

*16th February 2013 18h30 – 21h00*

This event is organized by the Botanical Society and **booking and PRE-PAYING are mandatory**. However Astri will need three or four group leaders to show the public spiders and scorpions at night. Please contact Astri if you would like to help. Otherwise for official booking, contact Karen Carstens on botsoc@sisulugarden.co.za or landline (011) 958-5177. If you just pitch without booking and pre-paying you will be turned away.

**KLOOFENDAL NATURE RESERVE MORNING SPIDER WALK**

*3rd March 2013: 09h00-13h00*

**Friends of Kloofendal** have organized a morning spider walk in this lovely reserve. **BOOKING ESSENTIAL.**

Please book with Karin Spottiswoode of Friends of Kloofendal cell 079-693-5608. The meeting place for the guided walks is at the FroK Education Centre, which is situated in the building directly opposite the two impressive big stamp mills and steam engine in the Kloofendal amphitheatre area.

**WEEKEND AWAY AT THE JOHANNESBURG ZOO’S CONSERVATION FARM, NEAR PARYS - 8th – 10th March 2013**

This will be a weekend of collecting and microscope work with emphasis on identification both in the field and the laboratory. **More details later.**

**EASTER VISIT TO THE EASTERN CAPE - 23rd to 30th March 2013**

I have negotiated the first week of the Easter school holidays with Glynne Godfrey. Their holiday house can accommodate 14 people (4 rooms with 2 single beds and 2 rooms with double beds one of which has double bunks). There is also a small camp site with ablutions next to a dam for any overflow. The area appears to be fairly undeveloped, Glynne sounds SO welcoming and quite excited about the whole thing. I know it is a long way but with invitations to other private land in the area and some very interested people who will join us from Mttha, East London, Port Elizabeth and surrounds, it ought be to stunning. Details of exact location, directions, what to bring, etc., later but the private nature reserve is between the Kleinemonde and Riet Rivers. Check it out on Google. **BOOKING ESSENTIAL.** Book with Astri at info@spiderclub.co.za or 073-168-7187.

**VISIT TO PETER DUKE’S FARM: OFF THE KwaMAHLANGU ROAD NORTHWEST OF PRETORIA - 13th April, 2013. 8:30 for 9am to around 4pm**

Peter has very kindly offered his farm as a venue for a day outing. **More details later.**

Keep your eyes on your e-mail and our Facebook page as other events may be organized, sometimes at quite short notice. We will attempt to give you fair warning and those who do not have access to e-mail will be sent a text message.

Norman Larsen is at the Cape Union Mart Adventure Centre, Canal walk in Cape Town every Saturday between 11 a.m. and 12 noon to demonstrate and talk about SPIDERS!