



AGRICULTURAL RESEARCH COUNCIL
PLANT PROTECTION RESEARCH INSTITUTE
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PROGRESS REPORT 2009-2010

PPRI Ref: 14/5/3/J12904/7

PROJECT TITLE: THE SOUTH AFRICAN NATIONAL SURVEY OF ARACHNIDA

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PREPARED FOR:

Client: SANBI

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PROGRESS REPORT 2009/2010

SOUTH AFRICAN NATIONAL SURVEY OF ARACHNIDA

PERIOD 01 APRIL 2009 – 31 MARCH 2010

RESEARCH ORGANISATION: Agricultural Research Council

PROGRESS REPORT FOR PERIOD: 1 April 2009 — 31 March 2010

TOTAL AMOUNT SPENT: R300 000

PROJECT LEADER: Prof A.S. Dippenaar-Schoeman

ASSISTANT PROJECT LEADER: Mr C.R. Haddad

INTRODUCTION

SANSA is an umbrella project dedicated to unify biodiversity research on spiders in South Africa, and is coordinated by a team at the Agricultural Research Council in collaboration with the South African National Biosystematics Institute. SANSA runs on a national basis in collaboration with other institutions with an interest in the arachnid fauna. The aims are to describe and document the fauna for conservation assessments and sustainable use. It addresses aspects including the following: surveys; on-line biodiversity informatica; awareness through road-shows, talks and lecture series; media releases; product development and an online virtual museum; capacity building through the training of post-graduate students, as well as in-house training; and an electronic newsletter.

The SANSA Steering Committee

Prof Michelle Hamer (Chairperson)
 Solly Nkoana (Threatened Species Manager)
 Prof Chris Chimimba (UP)
 Prof Ansie Dippenaar-Schoeman (project manager)
 Ian Engelbrecht (GDACE)
 Charles Haddad (assistant project manager)
 James Harrison (Transvaal Museum)
 Astri Leroy (Spider Club)
 Dr Gerhard Prinsloo (ARC)

MILESTONES AND DELIVERABLES

The following milestones and deliverables are listed in the contract. They were all addressed.

AMMENDED CONTRACT (to end December 2010)

- Due to the large number of specimens sampled that still need to be processed, the Steering Committee recommended that an annotated checklist must be prepared of the spiders of South Africa (2000 species), which will indicate those species that need to be assessed for Red Listing at a later stage, and which will provide a preliminary broad statement about the conservation value of each species.
- Update interim distribution maps to be made available on the SABIF website.
- Ongoing identification of material.
- Hold two meetings of the Steering Committee.
- Coordinate visits by overseas specialists and /or send material abroad for identification.
- Maintain and promote the virtual museum.
- Maintain and update the project website.
- Continue with training of taxonomists and parataxonomists.
- A visit by one specialist from abroad.
- Publish the newsletter quarterly.
- Promote public awareness participation by continuing public talks, courses etc.
- Meet the financial management requirements as set out by steering committee and SANBI.
- Produce a proposal for the next phase of SANSA.

DELIVERABLES:

- Field surveys conducted.
- An annotated checklist of the spiders (2000 species), which will indicate those species which need to be assessed for Red Listing at a later stage, and which will provide a preliminary broad statement about the conservation value of each species.
- Up-to-date interim distribution maps, posted on the SABIF website.
- Descriptions and scanned figures of South African taxa available via an online database.
- Project database updated with new records from field surveys, literature, museum collections and other surveys.
- Copy of project database available to SANBI with associated metadata.
- Copy of Threatened Species database containing arachnid Red Listing information available for SANBI.
- Continued identification of specimens.
- Training of taxonomists and parataxonomists.
- Visit by one specialist from abroad.
- Quarterly newsletters.
- Up-to-date web site.
- Courses, lectures and talks.
- Virtual museum being populated and promoted.
- Two Steering Committee meetings held.
- Final project and financial report approved by steering committee. Report is to include a section on "lessons learnt" during the project.
- Proposal for the next phase of SANSA.

SUMMARY OF ACTIVITIES 2009-2010

HIGHLIGHTS

The SANSA team was nominated for an NSTF award in the category for teams. From the more than 20 teams nominated, they were happy to be elected as finalists and to receive a certificate during the NSTF Annual Meeting held at Gallagher Estate.

DATA CONSOLIDATION

- Number of specimens entered into the NCA database: **5982** entries represented by > **23 928** specimens.
- Number of images taken of identified species: **550**.
- Number of Virtual Museum entries: **1107 (2500)** photographs).
- Number of entries into SANSA database: **1360**.

SURVEYS

- Surveys undertaken by the SANSA team: **10 grids** were sampled.
- Other surveys - conserved agents (**9**); student projects (**11**); other projects (**2**); citizen scientists (**10**); by-catches (**3**).

IDENTIFICATIONS

- More than 10 000 specimens (spiders and scorpions) were counted and identified.
- Other surveys - conserved agents (**2400**); student projects (**4800**); other projects (**280**); citizen scientists (**971**); by-catches (**240**).
- However, >15 000 specimens still needed to be identified and databased.
- Foreign visitors to assist with identifications: **2**.

PRODUCT DEVELOPMENT

- New species discovered and described : **54**.
- Bio-informatica made available through the online AFRAD database.
- First endemic species list for spiders, pseudoscorpions and solifugids for South Africa.
- New book: **1**.
- Publications: **27**.
- Conference presentations: **5**.

AWARENESS

- Newsletters: **3**.
- Media reports: articles appeared in Spider Club News, PPRI news, AFRAS newsletter, Beeld, Lig, Mail & Guardian and Volksblad.
- Talks and lectures: **10**.
- Awareness: radio talks: RSG & Radio Laeveld (**66**).
- TV presentations: **2**.

CAPACITY BUILDING

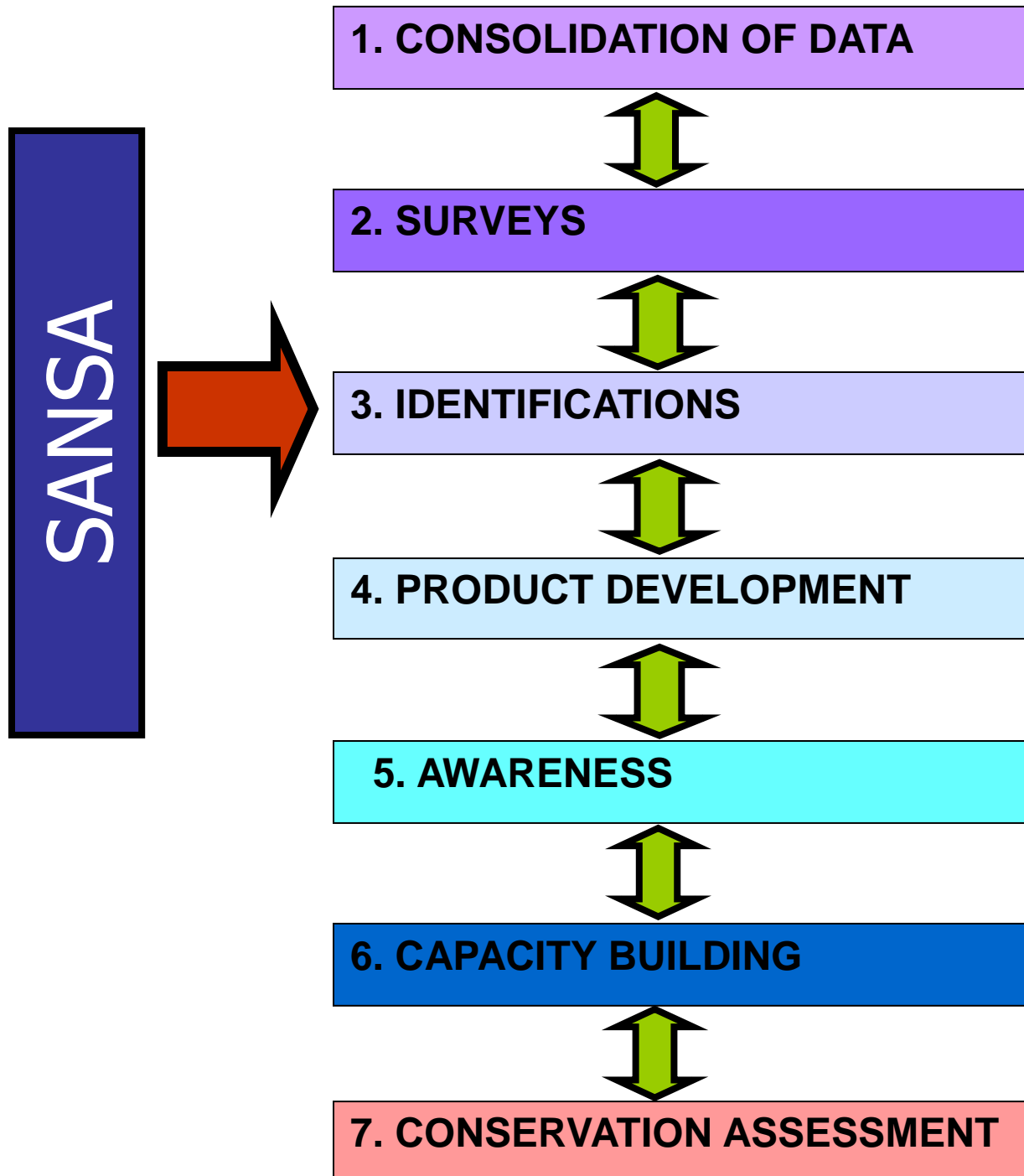
- 1 MSc completed
- 3 MSc's in progress
- 2 PhD's in progress
- 1 M.Tech in progress

RED DATA ASSESSMENT

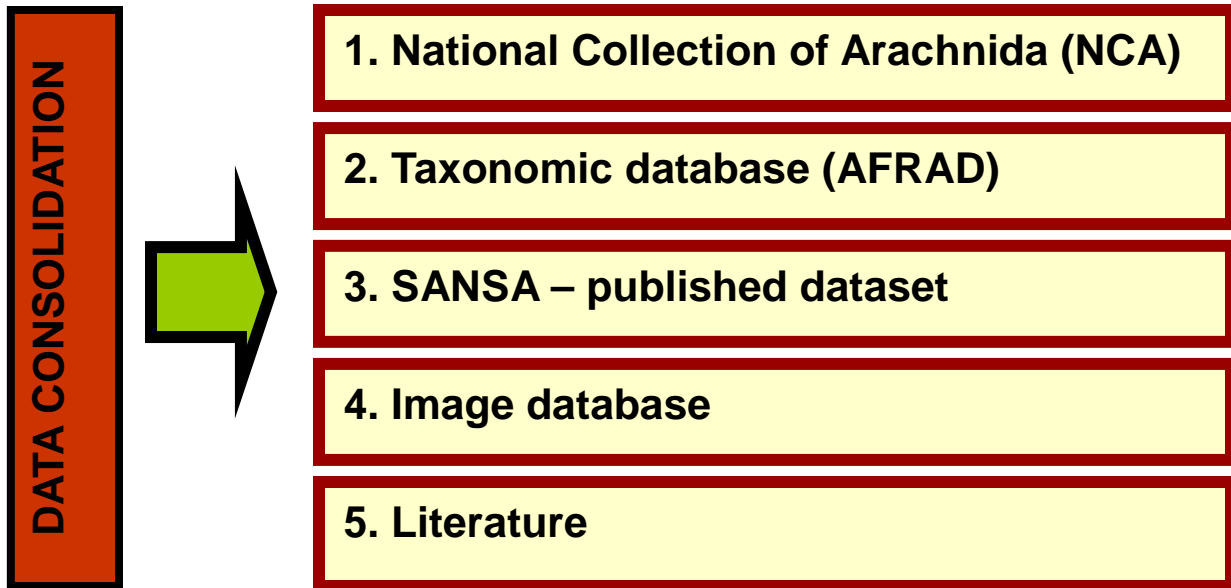
- Document being prepared to list all 2000 spider species with preliminary assessment of conservation status.

MAIN ACTIVITIES

The main activities of SANSA consist of consolidating all data into a relational database; to do gap analyses regularly and determine where to undertake surveys in areas not yet sampled; to identify and database all the sampled material; to undertake taxonomic research to describe and revise species; to make people aware of the arachnids; and to develop infrastructure and build capacity through support to young researchers busy with post-graduate qualifications based on Arachnida research. All these activities contribute to an increase in our knowledge about the group and provide the basis for the compilation of data for conservation assessments and preparation of Red Data lists.



1. CONSOLIDATION OF DATA

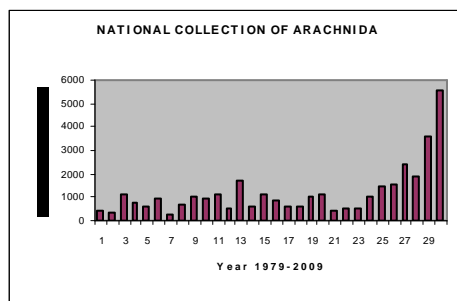


1. NATIONAL COLLECTION OF ARACHNIDA (NCA)

- The NCA was relocated during the report period to a new facility at Roodeplaat. This involved the relocation of the large > 50 000 alcohol collection.
- A total of **5982** records representing about **23 928** specimens were identified, geo-referenced and data-based during the report period.
- Since the start of SANSA phase 2 there has been a dramatic increase in number of annual NCA entries, as shown below.



New building and facility for the National Collection of Arachnida



NCA and record of entries since 1979

1. CONSOLIDATION OF DATA—*continued*

2. TAXONOMIC DATABASE (AFRAD)

- This online bio-informatica system is available online on the ARC web site (www.arc.agric.za see quick link AFRAD).
- It is a database containing information on all African Arachnida (except the Acari).
- Data on all 72 African spider families and > 200 genera and species are already available and can be printed as fact sheets.
- The information is richly illustrated with photographs and black and white line drawings.
- All newly identified species are photographed for this database.
- It contains important information on species' distribution in Africa, essential to determine endemism.
- More than **550** images were added to AFRAD during 2009-2010.

3. SANSA PUBLISHED DATASET

- The SANSA published database contains information on all the species information from published papers on African Arachnida housed in 16 museums throughout the world.
- Information on all newly published papers (both on taxonomy and ecology) are added annually.
- The total number of entries to the SANSA database is presently **13600** geo-referenced records of which **1360** were added during the report period.

4. IMAGE DATABASE

- The Image Database consist out of two sets of data: images taken under microscopes and photographs received from the public for the virtual museum.
 - * **Microscope images:** During the report period > **550** images were taken of known species and added to the AFRAD database.
 - * **Virtual museum:** Great deal of public interest from amateur and professional naturalists resulted in the following entries: 2009 (**806** entries) & 2010: **301**(3 months) – total **1107** (2500 photographs).



Dendryphantès purcellii Peckham & Peckham, 1903
South Africa, Free State, Golden Gate National Park



Photographs: Charles Haddad

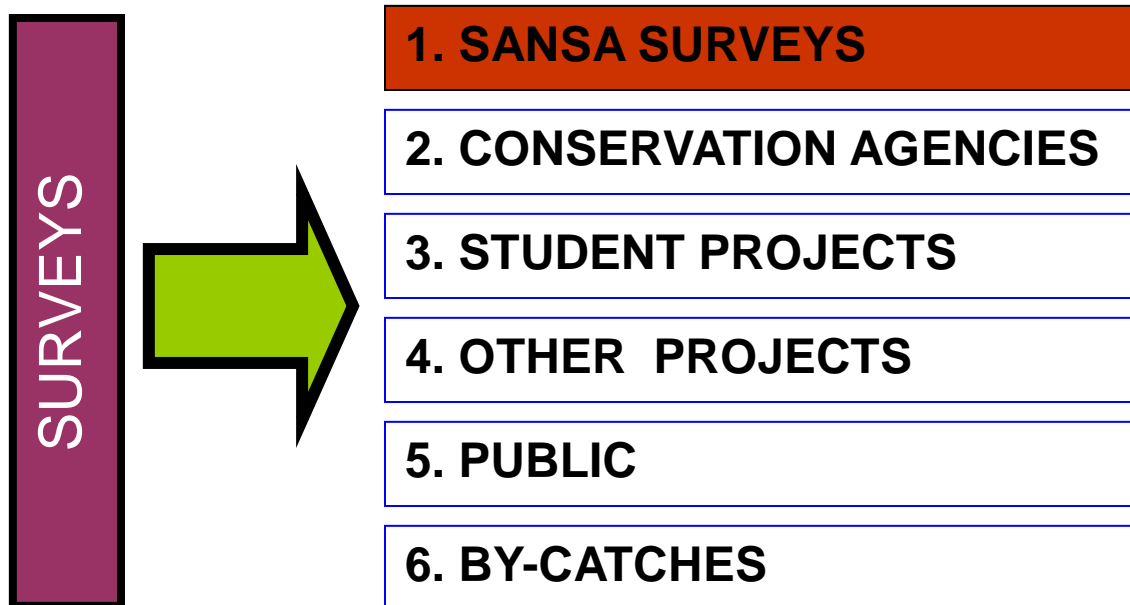
Images taken under microscope



Photographs received for Virtual Museum

2. SURVEYS

Large series of specimens are received annually from SANSA surveys, as well as different groups and institutes, resulting in >10 000 specimens being sorted and identified annually. All of these data form part of the final SANSA database for conservation assessments.



1. SANSA SURVEYS

- GRID 2427 Marakele Nature Reserve (Limpopo Province—Stefan Foord)
- GRID 2226 Zeerust (North-West—Stefan Foord)
- GRID 2622 Soetvlakte farm, near Hotazel (Northern Cape—Robin Lyle)
- GRID 2722 Tswalu Kalahari Reserve (Northern Cape—Robin Lyle)
- GRID 3017 Noup, near Kleinsee (Northern Cape—Robin Lyle)
- GRID 2331 Ophathe Game Reserve (KwaZulu-Natal—Charles Haddad)
- GRID 2530 Lydenburg (Mpumalanga—Johann van As)
- GRID 2829 Platberg Nature Reserve (Free State—Johann van As)
- GRID 2533 Addo National Elephant Park (Eastern Cape—Linda Wiese)
- GRID 3324 Baviaanskloof (Eastern Cape—Allet Honiball)

2. CONSERVED AGENCIES

- Pretoria National Botanical Garden = 45 specimens
- iSimangaliso Wetlands Park = 270 specimens
- Mkhambathi Nature Reserve = 1200 specimens
- Patrick Meyer (Cape Nature) = 20 specimens
- Suikerbosrand Nature Reserve = 10 specimens
- Graham Elliot (Kruger National Park) = 280 specimens
- Kwande Nature Reserve, near Grahamstown = 30 specimens
- Ndumo Nature Reserve (fogging) = >40 000 specimens



Stefan Foord and his team

2. SURVEYS—continued

3. STUDENT PROJECTS

- Kruger National Park (effects of fire), University of Pretoria = 350
- Sani Pass (gradient studies), University of Pretoria = >700
- Erfenis Dam Nature Reserve (spider ecology), University of the Free State = 450
- Dullstroom (grassland survey), Tshwane University of Technology = 1200
- Mkambathi Nature Reserve (biodiversity), University of KwaZulu-Natal = 1283
- Mfolo Nature Reserve (biodiversity), Walter Sisulu University = 287
- Silaka Nature Reserve (biodiversity), Walter Sisulu University = 35
- Brand-se-Baai and Koingnaas (biodiversity), University of Cape Town = 78
- Farm Doornkloof, Riemland, Free State (biodiversity), University of the Free State = 70
- National Botanical Gardens in Bloemfontein (biodiversity), University of the Free State = 80
- Table Mountain Survey (biodiversity), University of Cape Town = 250

4. OTHER PROJECTS

- Spider Club (Kruger National Park) = 80
- Thuthuka Savanna Biome (Atherstone Nature Reserve) = 200

5. PUBLIC

- Gouritz Mond (Helen Leibel) = 270
- Hermanus (Victor Hamilton-Atwell) = 101
- Kommetjie (Swannie) = 20
- Oudshoorn (Zanie van der Walt) = 35
- Worcester (Hennie van der Walt) = 35
- Jeffreys Bay (Linda Wiese) = 180 & unidentified
- Clocolan (Allen Jones) = 30
- Loxton (Chris Stuart) = 25
- Swellendam = 200
- Koos Geldenhuys = 75

6. BY CATCHES

- Limpopo Valley (Blue swallow survey) = ?? unidentified
- SARCA (Reptile survey) = 40



Fogging in Ndumo Nature Reserve



Collecting at Atherstone Nature Reserve

3. IDENTIFICATIONS

Large series of material are sorted and identified for the SANSA project. Most of the sorting and identification is undertaken at ARC-Plant Protection Research Institute, the University of the Free State and University of Venda. At the start of SANSA phase 2 nobody anticipated the large number of specimens that would be sampled. This is the cause of the present bottleneck of the project, as all the collected material needs to be databased for the final conservation assessments. This has resulted in the project being extended until the end of December 2010.

PRESENT STATUS OF MATERIAL AT HAND

- Identified and waiting to be databased: 2400
- Identified to family level only: 1200
- Unsorted and unidentified: >15 400

SPECIALISTS FROM ABROAD

- Rudy Jocqué (Belgium) - Zodariidae and Linyphiidae
- Tony Russell-Smith (UK) - Lycosidae and Linyphiidae
- Wanda Wesolowska (Poland) - Salticidae
- Lorenzo Prendini* (USA) - Scorpiones
- Matjaz Kuntner (USA) - Nephilidae
- Jan Bosselaers (Belgium) - Some Corinnidae and Liocranidae
- Tharina Bird* (Namibia) - Ammoxenidae and Solifugae

* visited PPRI during report period

LOCAL TAXONOMISTS

- Ansie Dippenaar-Schoeman (ARC-PPRI) - most families
- Charles Haddad (UFS) - Corinnidae, Salticidae, Gallieniellidae and various other families
- Leon Lotz (NMBA) - Miturgidae, Archaeidae, Sicariidae and Opiliones
- Stefan Foord (UNIVEN) - Hersiliidae
- Robin Lyle (TMSA) - Corinnidae: Trachelinae
- Annette van den Berg (ARC-PPRI) - *Tibellus* (Philodromidae)
- Petro van Niekerk (retired) - some Thomisidae



Unidentified material at ARC-PPRI

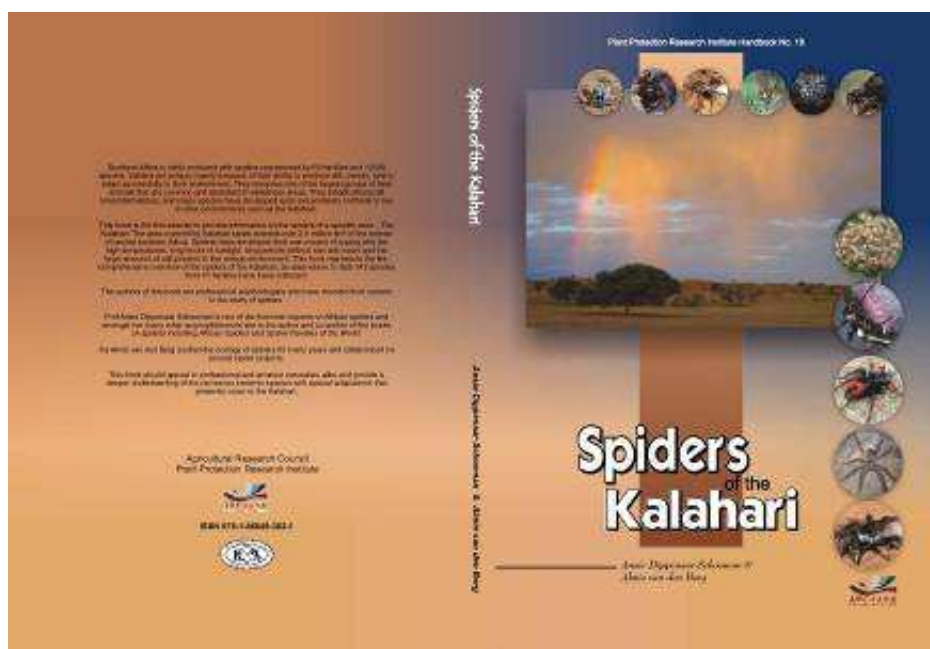


Dr Lorenzo Prendini visited ARC-PPRI to identify scorpions

4. PRODUCT DEVELOPMENT

SUMMARY

- Publications: 27.
- New book: 1.
- New spider families (1), new genera (6), new species (54).
- New records for South Africa: >100.
- First endemic species lists:
 - spiders (1040 spp.)
 - pseudoscorpions (90 spp.)
 - solifugids (92 spp.)
- This data was used in the National Spatial Biodiversity Assessment (NSBA) for 2010.



The new "Spiders of the Kalahari" book by Ansie Dippenaar-Schoeman and Almie van den Berg



Evarcha striolata and *Thyenula fidelis*, two of the new jumping spiders described from Ndumo Game Reserve

4. PRODUCT DEVELOPMENT—continued

1. SCIENTIFIC PUBLICATIONS

BOSELLAERS, J. 2010. Will the real *Trachelas pusillus* please stand up? Notes on the type specimen of *Trachelas pusillus* Lessert, 1923 (Araneae, Corinnidae). *Journal of Afrotropical Zoology* **6**: 23-27.

DIPPENAAR-SCHOEMAN, A.S. & MYBURGH, J.G. 2009. A review of the cave spiders (Arachnida: Araneae) from South Africa. *Transactions of the Royal Society of South Africa* **64**: 53-61.

HADDAD, C.R. 2009. *Vendaphaea*, a new dark sac spider genus apparently endemic to the Soutpansberg Mountains, South Africa (Araneae: Corinnidae). *African Invertebrates* **50**: 269–278.

HADDAD, C.R. & BOSELLAERS, J. 2010. A revision of the genus *Medmassa* Simon, 1887 (Araneae: Corinnidae) in the Afrotropical Region. *Zootaxa* **2361**: 1–12.

HADDAD, C.R. & DIPPENAAR-SCHOEMAN, A.S. 2009. A checklist of the Non-Acarine Arachnids (Chelicerata: Arachnida) of the De Hoop Nature Reserve, Western Cape Province, South Africa. *Koedoe* **50**(#149): 1-9.

HADDAD, C.R., HONIBALL, A.S., DIPPENAAR-SCHOEMAN, A.S., SLOTOW, R. & VAN RENSBURG, B.J. 2010. Spiders as potential indicators of elephant-induced habitat changes in endemics and forest, Maputaland, South Africa. *African Journal of Ecology* **48**: 446–460.

HADDAD, C.R., LYLE, R., BOSELLAERS, J. & RAMIREZ, M. 2009. A revision of the Afrotropical genus *Austrachelas* Lawrence, 1938 (Araneae: Corinnidae), and its transfer to the Galieniellidae. *Zootaxa* **2296**: 1–38.

HADDAD, C.R. & RUSSELL-SMITH, A. 2010. A comparison of spider diversity patterns in the Mkomazi Game Reserve, Tanzania and the Ndumo Game Reserve, South Africa (Arachnida: Araneae). *African Journal of Ecology* **48**: 418–427.

JOCQUÉ, R. 2009. Some keep it short: on the radiation in the Afrotropical spider genera *Capheris* and *Systemoplacis* (Araneae, Zodariidae) without male pedipalp complexity increase. *Journal of Afrotropical Zoology* **5**: 77-148.

KUNTNER, M. & CODDINGTON, J.A. 2009. Discovery of the largest orbweaving spider species: the evolution of gigantism in *Nephila*. *PLoS ONE* **4**: e7516. doi:10.1371/journal.pone.0007516.

LOTZ, L.N. 2009. Harvestman (Arachnida: Opiliones) in southern Africa - an annotated catalogue with notes on distribution. *Navorsing van die Nasionale Museum, Bloemfontein* **25**: 1-46.

LOTZ, L.N. (in press). Three new harvestmen species from southern Africa (Arachnida: Opiliones). *Journal of Afrotropical Zoology*.

LYLE, R. & HADDAD, C.R. 2009. *Planochelas*, a new genus of tracheline sac spiders from West and Central Africa (Araneae: Corinnidae). *Annals of the Transvaal Museum* **46**: 91–100.

MILLER, J.A., CARMICHAEL, A., RAMIREZ, M.J., HADDAD, C.R., ŘEZÁČ, M., JOHANNESSEN, J., KRAL, J., WANG, X.P., SPAGNA, J.C. & GRISWOLD, C.E. 2010. Phylogeny of entelegyne spiders: affinities of the family Penestomidae (NEW RANK), generic phylogeny of Eresidae, and asymmetric rates of change in spinning organ evolution (Araneae, Araneoidea, Entelegynae). *Molecular Phylogenetics and Evolution* **55**: 786–804.

MILLER, J.A., GRISWOLD, C.E. & HADDAD, C.R. (in press). Taxonomic revision of the spider family Penestomidae (Araneae, Entelegynae). *Zootaxa*.

MUELELWA, M.I., FOORD, S.H., DIPPENAAR-SCHOEMAN, A.S. & STAM, E.M. (in press). Towards a standardized and optimized protocol for rapid assessments: spider species richness and assemblage composition in two savanna vegetation types. *African Zoology*.

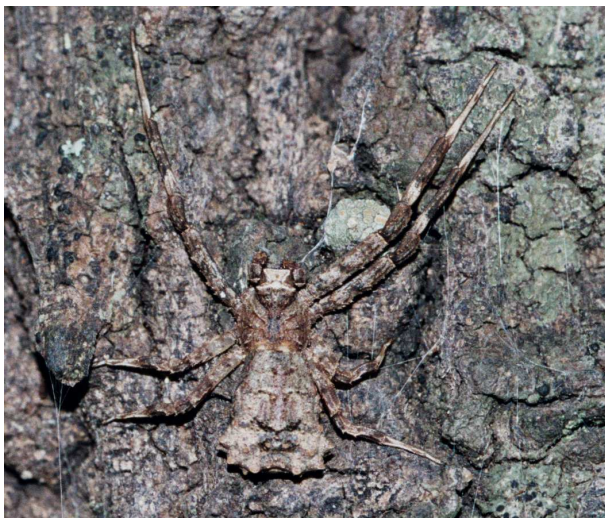
RUSSELL-SMITH, A., JOCQUE, R. & ALDERWEIRELDT, M. 2009. A revision of the African wolf spider genus *Amblyothele* Simon (Araneae, Lycosidae, Piratinae). *ZooKeys* **16**: 149-180.

VAN NIEKERK, P. & DIPPENAAR-SCHOEMAN, A.S. 2010. A revision of the spider genus *Simorcus* Simon, 1895 (Araneae: Thomisidae) of the Afrotropical Region. *African Entomology* **18**: 66–86.

WESOŁOWSKA, W. 2009. New species of jumping spiders from South Africa (Araneae: Salticidae). *Contributions to Natural History* **12**: 1409–1413.

WESOŁOWSKA, W. 2009. A revision of the African spider genus *Nigorella* (Araneae: Salticidae). *Annales Zoologici* **59**: 517–525.

WESOŁOWSKA, W. & HADDAD, C.R. 2009. Jumping spiders (Araneae: Salticidae) of the Ndumo Game Reserve, Maputaland, South Africa. *African Invertebrates* **50**: 13-103.



Simorcus cotti, one of the species redescribed in the generic revision of Van Niekerk & Dippenaar-Schoeman (2010)

4. PRODUCT DEVELOPMENT—*continued*

2. BOOK

DIPPENAAR-SCHOEMAN, A.S. & VAN DEN BERG, A.M. 2010. *Spiders of the Kalahari*. Plant Protection Handbook no 17, ARC-PPRI, Pretoria. 120 pp.

3. SEMI-SCIENTIFIC

DIPPENAAR-SCHOEMAN, A.S. 2009. Poor violin spiders frequently falsely blamed. *Pest News Autumn*: 6.

DIPPENAAR-SCHOEMAN, A.S. 2009. The scorpion tail spiders. *SANSA Newsletter* 9: 14-15.

DIPPENAAR-SCHOEMAN, A.S. 2009. Venomous spiders. *SANSA Newsletter* 9: 11.

DIPPENAAR-SCHOEMAN, A.S. 2009. Huidige status van sonspinnepkoppe in Suid-Afrika (Arachnida: Solifugae). *SA Journal of Natural Science & Technology/SA Tydskrif vir Natuurwetenskap & Tegnologie* 28: 176-177.

DIPPENAAR, A.S., HELBERG, L. & DIPPENAAR-SCHOEMAN, A.S. 2009. Die Afrika Arachnida Databasis (AFRAD): 'n web gebaseerde bio-inligtingsdatabasis. *SA Journal of Natural Science & Technology/SA Tydskrif vir Natuurwetenskap & Tegnologie* 28: 177-178.

DIPPENAAR-SCHOEMAN, A.S. & JONES, A. 2009. First record of a bird-dropping spider genus *Cyrtarachne* from South Africa. *SANSA Newsletter* 8: 14-15.

DIPPENAAR-SCHOEMAN, A.S. & MARAIS, P. 2009. First record of *Crossopriza lyoni* (Blackwall, 1867) from South Africa, *SANSA Newsletter* 10: 14.

DIPPENAAR-SCHOEMAN, A.S. & VAN DEN BERG, A. 2009. First record of Nematodes parasitizing spiders in South Africa. *SANSA Newsletter* 10: 15.

4. LECTURES

DIPPENAAR-SCHOEMAN, A.S. 2009. The South African National Survey of Arachnida (SANSA). Workshop of the Threatened Species Programme, SANBI, Kirstenbosch.

DIPPENAAR-SCHOEMAN, A.S. 2009. Spiders and scorpions of medical importance. Annual lecture to 5th year medical students University of Pretoria

DIPPENAAR-SCHOEMAN, A.S. 2009. Spiders and scorpions of medical importance. Lecture to 5th year Medical Students.

DIPPENAAR-SCHOEMAN, A.S. 2010. The South African National Survey of Arachnida (SANSA). Handover function SABIF data Kirstenbosch.

MARAIS, P. & DIPPENAAR-SCHOEMAN, A.S. 2009. The SANSA project. SABIF workshop, Kirstenbosch.

5. CONGRESS

The 16th Congress of the Entomological Society of Southern Africa took place from 5-7 July 2009, in Stellenbosch. Five presentations dealt with arachnids, two of which were presented at the special symposiums on invertebrate conservation in conserved areas.

DIPPENAAR-SCHOEMAN, A.S. [paper]. National Surveys – the way to go for invertebrates.

DIPPENAAR-SCHOEMAN, A.S. & HADDAD, C.R. [paper]. South African National Survey of Arachnida – a wealth of information on the arachnids in conserved areas.

DIPPENAAR-SCHOEMAN, A.S. & VAN DEN BERG, A.M. [poster]. Spiders, the farmers' best friend.

ENGELBRECHT, I.A., DUIGAN, P. & KOEN, D. [paper]. Invertebrate species lists in protected area management: are they useful?

FOORD, S.H., MUELELWA, M.M., DIPPENAAR-SCHOEMAN, A.S. & STAM, E.M. [poster]. Spiders, Surrogates and Rapid Assessment in the Savanna Biome, South Africa.

5. AWARENESS

Several activities including talks to the public and schools, TV and radio broadcasts, and media releases were undertaken by the team. Regular update of the webpage and the distribution of an electronic newsletter continued.

Public talks

DIPPENAAR-SCHOEMAN A.S. 2009. Spiders as unique arachnids. Invited to present Duerden Lecture at Rhodes University. (May 2009).

DIPPENAAR-SCHOEMAN A.S. 2009. Spinnekoppe in en om die huis. Informal talk at Botanical Gardens.

DIPPENAAR-SCHOEMAN A.S. 2009. The wonder world of spiders. Open day at the Pretoria Zoo. Pretoria Zoological Gardens.

LOTZ, L. 2009. General spider talk to honorary Nature Conservators.

LOTZ, L. 2009. General spider talk at the National Botanical Gardens in Bloemfontein.

MARAIS P. & VAN DEN BERG, A. 2009. Why are spiders so unique? Sci-Enza Holiday School, University of Pretoria (2 lectures).

MARAIS P., 2009. Why are spiders so unique? Talk for primary school children at Irene.

MARAIS. P. 2009. Spiders. Children Group. Cornwall Hill.

VAN DEN BERG A. & MARAIS, P. 2009. Spiders as part of the holiday programme at Sci-Enza, University of Pretoria.

Radio

DIPPENAAR-SCHOEMAN A.S. 2009. Spinnekoppe in en om die huis. Station: Rippel (live broadcast, afternoon programme).

DIPPENAAR-SCHOEMAN A.S. 2009. "Natuur vrae. Live broadcast 23h00-24h00. Station: RSG.

DIPPENAAR-SCHOEMAN A.S. 2009. As part of the "Hoe verklaar jy dit?" panel of RSG answered questions during 8 broadcasts.

DIPPENAAR-SCHOEMAN A.S. 2009. 50 live broadcasts of radio programmes for Radio Laeveld.

Television

Broadcast of Wildnet (Ltd): Friend or foe? (programme SABC2)



Filming on the Wildnet set



Open day at the Zoological Gardens



SANSA Newsletter

6. CAPACITY BUILDING



René Fourie completed her M.Sc study at the University of the Free State on the ecology of spiders in the Erfenis Dam Nature Reserve. She received an NRF Travel Grant from SABI to visit the Royal Museum for Central Africa in Tervuren, Belgium to study the Atypidae spiders in their collection. The revision of the genus *Calommata*, one of the candidates for Red Data listing, will be submitted for publication shortly.

Alet Honiball submitted her M.Sc at the University of Pretoria. The title of her study is "A revision of genera of the subfamily Dietinae (Araneae: Thomisidae)."



Kyle Harris received his MSc degree from the University of Pretoria. Kyle studied habitat specificity of beetles and spiders, and variation in a habitat system characterized by different levels of prickly pear (*Opuntia stricta*) invasions in the Kruger National Park.

Charles Haddad is busy with his Ph.D study at the University of the Free State revising genera of the family Corinnidae.



IN-HOUSE TRAINING AS PARATAXONOMISTS

- Sma Mathebula (ARC-PPRI)
- Petro Marais (ARC-PPRI)
- Annette van den Berg (ARC-PPRI)
- Students involved in survey work at University of Pretoria and the Tshwane University of Technology.



7. CONSERVATION ASSESSMENT

AMMENDED CONTRACT

Due to the large number of specimens sampled that still needs to be processed the Steering Committee recommended that an annotated checklist must be prepared of all South African spiders (2000 species), which will indicate those species which need to be assessed for Red Listing. This will provide a preliminary broad statement about the conservation value of each species. This document must be completed by the end of December 2010.

FORMAT

CODES TO USE FOR ARACHNIDA ENDEMICITY STATUS

VALUE LEVEL OF ENDEMICITY	
6	Endemic-known only from type locality / one locality only
5	Known from one province only, wider than type locality
4	Known from two adjoining provinces only
3	South Africa >two provinces
2	Southern Africa (south of Zambezi and Kunene Rivers)
1	Afrotropical Region
0	Cosmopolitan or introduced
VALUE LOCAL ABUNDANCE	
3	Very rare 1-3 specimens / locality
2	Rare 4-10 specimens / locality
1	Abundant 10-20 specimens / locality

The sub-indices range from 0 to 9. It is based on the two sub-indices relating to geographical distribution and abundance, the sum of the scores for the two sub-indices. A common, widespread, not-threatened and highly-tolerant species would score 1 (0 + 1), while a highly range-restricted, threatened and sensitive species would score 9 (6 + 3).

EXAMPLE

Ammoxenus coccineus Simon, 1893

Distribution in South Africa: type only as *Afrique australe**. **Northern Cape:** Bingap 184 (-28.90, 22.98); 70 km SE Kakamas (-28.12, 20.27); Benfontein Nature Reserve (-28.82, 24.82); Langberg 138 (-28.92, 24.60); 10 km from Hopetown, Belmont (-29.61, 24.02); 4 km W of Hopetown (-29.62, 24.02); Coboop duine (-28.75, 19.35). **North West:** Molopo, near Vostershoop (-25.75, 22.95). **Western Cape:** Gifkop 166, Calvinia (-29.95, 19.40); Swartduinkop, Kenhardt (-29.40, 21.18).

Records from conserved areas: 1

Records from agro-ecosystems: 0

Known distribution: Botswana, Namibia, South Africa, Zambia.

Conservation status: *endemicity*: 2; *abundance*: 2 [4].

Taxonomic status: 3. (code use to indicate whether recently revised or not)

Suspected to be under threat: no.

BUDGET 2009 –2010

SANSa ACTIVITY	SANBI
Project manager	30000
Assistant manager	23820
Survey managers	50000
Financial & admin manager	25820
Data capturer (PM)	28000
Data capturer (Sma)	25000
Student	5 000
Fieldwork (S&T)	54360
Equipment	0
Foreign visitor	20000
Steering committee	1000
	258000
TOTAL	258000
VAT	42000
GRAND TOTAL	300000

POSITIVE OUTPUTS OF SANSA PROJECT

1. Expansion of scientific collections through SANSA field work, student projects and public participation.
2. Increased quantity of specimens becoming available for taxonomic research, covering a much broader geographical area than previously available museum material.
3. Discovery of new genera and species.
4. New distribution records for the South African fauna.
5. An image library for each species.
6. Complete datasets on the arachnid fauna of South Africa.
7. Datasets available for testable theories and patterns, e.g. indicator species, macro-ecological patterns, invasive species, global warming, species richness of habitats and biomes, impacts of agriculture and anthropogenic disturbance on species, baseline data for long-term monitoring, and assessment of regional endemism.
8. By-products: checklists, field guides, posters, AFRAD datasets, first Red Data list in preparation.
9. Increased awareness and public participation.
10. Students and staff trained in spider identification, specimen processing, statistics and databasing.
11. Greater collaboration with conservation agencies by providing arachnid data for use in management planning.
12. Improved knowledge of the natural history of particular species.
13. Increased publication outputs on the South African fauna, covering taxonomy and systematics, ecology, biology and biodiversity.

WHY NATIONAL SURVEYS ARE IMPORTANT

- Provide a national umbrella to work under
- Sharing of knowledge
- Sharing of expertise
- A multifaceted approach to tackling challenges
- A national focus – helps in funding proposals
- Collation of data into one database
- Making a wealth of information available to end users