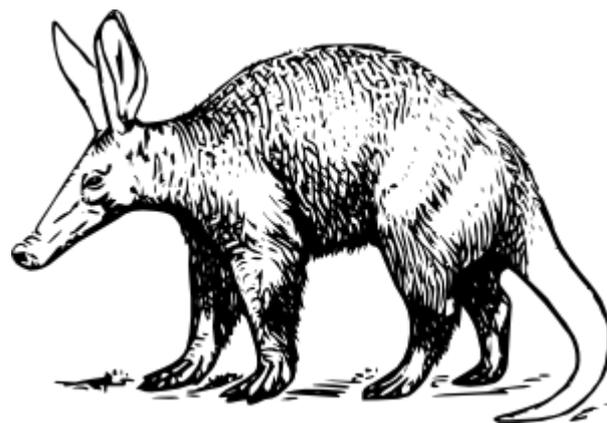


AARDVARK

Newsletter of the Zoological Society of
Southern Africa

For December 2016



Letter from the editors

At last year's ZSSA meeting Leigh Richards and I were tasked with taking over the Aardvark from Teresa Kearney and Vincent Nakin as editors. For the current issue we are pleased to have secured contributions from several younger zoologists who are the future of zoological research in southern Africa. We hope to see many of them as well as all the other members of the ZSSA at the joined meeting of the ZSSA and ESSA in Pretoria in July 2017.

We hope you will enjoy the latest Aardvark and have a peaceful festive season and a less turbulent 2017.

Heike and Leigh

The Current Council

President	Bettine Jansen van Vuuren
Immediate past president	Sarita Maree
Honorary Secretary	Kwezi Mzilikazi
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Editor: African Zoology	Carol Simon & Theresa Wossler
Editor: Aardvark	Leigh Richards & Heike Lutermann
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Archives	Leigh Richards
Student representative	Matt Noakes

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University of Pretoria	10-12

Submit your articles to

hlutermann@zoology.up.ac.za or

elma@mweb.co.za

Letter from the current president

Dear ZSSA Community,

Although 2016 has been a tumultuous year in higher education, the ZSSA is doing very well - due to the continued commitment from its members. Our journal, African Zoology, is doing very well, and for the first time have a presence on Twitter (please follow us to get updates and snippets on the latest articles); preparations for the 2017 conference, hosted jointly with the ESSA, is well underway with some exciting guest speakers lined up; we have hosted our first ever electronic AGM with feedback from several members; and our student representative (Matthew Noakes; UP; matthew.noakes@zoology.up.ac.za) is doing an excellent job of keeping our students involved with society happenings.

This issue of Aardvark has some interesting bits of news about different Zoology departments and institutions, interesting student projects; and general news. A big thanks to Heike Lutermann who has taken over the editorship of Aardvark. The aim of this publication is to keep members updated on general news from members and departments / institutions around the region – although it is often not easy to solicit submissions, Heike has done an excellent job. Aardvark really plays a crucial role in distributing new items, and is essentially the outlet that keeps members informed of every-day happenings.

All the very best for the holiday period. I hope that all our members have a productive, but also relaxing time to start 2017 with vigour.

Prof Bettine van Vuuren
University of Johannesburg
ZSSA President
bettinevv@uj.ac.za



Mammals and mountains in the remote corners of South Africa

When I applied for a senior lectureship at the University of the Free State's Qwaqwa campus, I had to Google the place. And – I kid you not – the campus did not show up on Google Maps. Luckily, things have changed a bit since 2012, and our small Zoology & Entomology department actually shows up in the news occasionally. My colleague Kate Nowak has written quite extensively for National Geographic, and my own research on bat-eared foxes is currently part of a BBC program, "Ingenious animals." My colleagues (five research-active lecturers) are focused on invertebrates: blood parasites, macro-invertebrates, and potworms as indicators of toxins in the environment. I am more partial to the mammals, especially smaller carnivores like the bat-eared fox and yellow mongoose. My speciality is cognitive ecology, examining how different aspects of an animal's social and ecological context affects its cognitive abilities.



Aliza le Roux with habituated bat-eared fox in the Kalahahoto credit: Diana Breshears.

One my study sites is the Kuruman River Reserve, near South Africa's border with Botswana. Here, my students have been following habituated bat-eared foxes, investigating their intelligence, personalities,

and strange parenting behaviour. These foxes are highly unusual mammals because the males invest heavily in raising their offspring. We haven't yet unravelled the mysteries of bat-eared fox parenting, but have made some wonderful discoveries. They are, for example, very good problem solvers – quickly learning to access food in puzzle boxes – and take some unusual approaches to parenting. We've seen males provisioning their pups with dung, and recorded a hungry mother killing a hare that almost matched her in sheer size. The biggest challenge to this study is disease that's prevalent in these small canids, and I am therefore including rabies as a focus of my continuing research.



A bat-eared fox inspecting an xperimental box designed to test episodic memory. Photo credit: Samantha Renda

But I'm not just sticking to the foxes. I'm working with the Endangered Wildlife Trust on research that seeks to reduce the problem of road-kill on South African roads. We've already identified some road-kill hotspots in the country, thanks to a long-standing citizen science project. Watch out for wildlife on the N3 (quite the danger zone), and sign up for the project by going to: <https://www.ewt.org.za/WTP/projects.html> or

searching for the RoadWatch app in your app store.

Our campus is right next door to Golden Gate Highlands National Park (GGHNP), a gorgeous high-altitude grassland ecosystem that people seem to forget because it's just so out of the way. We have regular fires and snow, all of which significantly affects the behaviour of animals and humans in these mountains. And, increasingly, I'm curious about the interactions between humans and wildlife. An MSc student is currently looking at the impact of a vulture restaurant on scavengers in the Park, since it's obvious that carcasses will not attract vultures alone. We're also assessing the relationship



Agnes Mkotywa, an MSc student, adjusting camera traps in the snow for her study of scavenger dynamics in Golden Gate Highlands National Park.

between fast-moving vehicles and large antelope in GGHNP. We've seen some very odd reactions of drivers who notice our camera traps. One guy came to a stop with screeching tyres, and then waited around until he could stop a taxi full of people to come with him and – very carefully – inspect the odd equipment. Slowly, we're bringing the latest in wildlife research to the remote corners of our country. Come and spend some time in Qwaqwa and see what unique discoveries you can make when you look past the Kruger and the big cats!

Dr. Aliza le Roux

Department of Zoology & Entomology
University of the Free State, Qwaqwa Campus
leroux3@qwa.ufs.ac.za

Introducing the new student representative of the ZSSA Matt Noakes



Me holding a southern yellow-billed hornbill chick while visiting a co-worker at Kuruman River Reserve. Photo credit: Tanja van de Ven.

My name is Matt Noakes and I am a PhD student at the Department of Zoology and Entomology at the University of Pretoria, and am part of the 'Hot Birds Project' research group, affiliated with the Percy FitzPatrick Institute for African Ornithology. My research interests focus on vertebrate physiology, with particular emphasis on the thermal biology in birds.

In 2012 I started my postgraduate studies with a BSc (Hons) Zoology supervised by Prof. Andrew McKechnie at the University of Pretoria. My research project investigated thermoregulation in African Green Pigeons (*Treron calvus*) and found that these columbids do not use pronounced heterothermic responses, such as torpor and hibernation. These findings were published in the Journal of Comparative Physiology B and support the hypothesis that pronounced heterothermy may have been selected against in species with a high nocturnal predation risk due to the lethargic state associated with such responses.

My affiliation with the ZSSA began in early 2013 when I received a student award from the society for being the Best Honours Student in Zoology in 2012. Later that year, as a very eager first-year master's student, I attended my first ZSSA conference (and first scientific conference ever) at Tshipise in Limpopo. I presented my Honours work as a poster presentation and won the Best Student Poster award. This conference reinforced my passion to become a researcher in the field of zoology by introducing me to a host of new topics and high quality research projects as well as allowing me to interact with students and academics from various institutions across southern Africa.



Receiving the award for Best Student Poster Presentation at the 2013 ZSSA conference at Tshipise – pictured here with the previous ZSSA president, Sarita Maree, (Aardvark 2013).

My master's project focused on quantifying variation in seasonal acclimatisation among populations of a widespread southern African passerine, the white-browed sparrow-weaver (*Plocepasser mahali*). This research involved substantial fieldwork over 2013 and 2014 at sites across South Africa, ranging from the harsh climate of the Kalahari Desert to the

comparatively milder climates of Frankfort and Polokwane. I found that Kalahari sparrow-weavers were more heat tolerant than the other populations during summer, but that this difference disappeared in winter. This was the first study to show birds can significantly enhance their capacity to handle hot conditions during summer. I was privileged to present these findings at an international conference in Australia, the 2014 symposium for the Australian and New Zealand Society of Comparative Physiology and Biochemistry. My presentation won an award for the Best Spoken Paper by a Masters Student and I also later published this study in the Journal of Experimental Biology.



White-browed sparrow weaver. Photo credit: Ben Smit.

In 2015 I attended my second ZSSA conference, this time in Grahamstown, where I presented part of my master's research. I thoroughly enjoyed this conference and again found it an invaluable experience in my quest to become a young academic in southern Africa. As part of this conference visit I also attended the ZSSA annual general meeting and was intrigued to learn about the inner workings of the council and issues facing our region's top zoologists. I received my MSc Zoology with distinction in late 2015 and published a second scientific paper

from my master's work on variation in seasonal metabolic adjustments and cold tolerance among sparrow-weaver populations in Physiological and Biochemical Zoology.



Catching sparrow-weavers from their nests at night using handheld nets – pictured here with one of my field assistants, Alexandra Howard. Photo credit: Andrew McKechnie.

Currently, I am working towards my PhD Zoology, with a project following on from my master's research by investigating the sources and mechanisms responsible for inter-population thermoregulatory variation in passerines. I am continuing to monitor seasonal acclimatisation of birds in the Kalahari Desert, while simultaneously monitoring environmental factors that could be driving these adjustments. A major part of my doctoral studies will also investigate the flexibility of the thermoregulatory traits of birds in response to climatic conditions different to those at their native site.

During the upcoming summer, I am translocating sparrow-weavers from various sites along a climatic gradient to aviaries in the Kalahari Desert. Through monitoring their physiological and behavioural responses, I will determine the extent that these birds can acclimatise to handle climates hotter than they

currently experience. In addition, I will conduct acclimation experiments in the Small Animal Physiological Research Facility recently built at the University of Pretoria, to further investigate flexibility in avian heat tolerance, cold tolerance and other metabolic responses. It is my hope that this work will contribute to our understanding of the evolution of avian thermal physiology, providing insights into what adaptive thermoregulation means for birds faced with changing climates.

I was elected as the new student representative for the ZSSA earlier this year, when the council asked for a student to be selected from the Department of Zoology and Entomology at the University Pretoria. This department will be the host of the 2017 ZSSA and ESSA Combined Congress, and I am eager to be actively involved in organising the conference. I am excited to take up the role as the new student representative of the ZSSA and am committed to improving communication between the students and the council, as well as making the ZSSA more accessible via social media.

Matt Noakes

Department of Zoology & Entomology,
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The Bearded 'Giants' of the Drakensberg

We have unwittingly bestowed upon the Bearded Vulture *Gypaetus barbatus* a notorious name. Lammergeier, which means "lamb-vulture", was the title the species has, and continues to hold as they were thought to be the chief killer of farmers' precious lambs. This idea, as well as many superstitious traditional beliefs, has added to the incorrect perception and persecution of these endangered birds. The persecution of vultures generally comes through poisoning (both directly and indirectly), the muthi trade, and collisions with powerlines and infrastructure. Additionally, their persistence is threatened by a declining food supply, reduced availability of nesting sites and the encroachment of human-settlement. Unlike many other raptor species, climate change does not seem to be a predominant factor affecting Bearded Vulture survival.



Bearded Vulture at Vulture Restaurant in the Drakensberg. Photo credit: Melanie Burke.

Perhaps its reputation, as well as our ignorance, has also added to the lack of conservation efforts focused on this vulture. However, vultures are receiving more attention as we realize the crucial role they play in healthy ecosystems. Vultures are vital in removing and disposing of carcasses and decaying matter

which has the potential to harbour a plethora of bacteria and viruses which pose serious threats to human and livestock health. Vultures thus play an important role in reducing the potential for disease spread and 'spillover' in healthy ecosystems. As a consequence of this, their immune system has become well adapted to dealing with a high toxic load, higher than any other known bird. Studies of their immunology (a hot topic) may reveal insights into disease and disease tolerance.



Melanie Burke at her graduation. Photo credit: Sonja Krueger.

I am currently working on my masters degree under the supervision of Dr. Sandi Willows-Munro and Dr Sonja Krueger at UKZN. This project has given me the amazing opportunity of working on these paradoxically beautiful vultures. Why the Bearded pose such a peculiar and puzzling study species is because

they are sparsely distributed across an extremely large range. Albeit severely reduced, populations are found in Europe, Asia and Africa. Of particular interest to me is that there is an isolated population in the Drakensberg of South Africa.

In my project I will examine the genetic diversity of the South African population using microsatellite loci. We will also be including samples from Europe and Asia so that we can examine the connectivity of the isolated South African population to other populations of Bearded Vultures. Besides looking at the genetic variation in current South African and European populations, historical samples from museum records are also being analysed to ascertain whether the low diversity observed in the species is due to 21st century persecution, or whether it is perhaps a relic of their evolutionary history. This has given me opportunities to interact with institutions, and to work towards a common goal.

Thus far, my study has taken me on a steep learning curve from the genetics laboratory to the field in search of these spectacular birds. To experience both these extremes reminds me daily why I chose the project and why South Africa is an incredible country to be conducting research in.

Melanie Burke and Dr. Sandi Willows-Munro

School of Life Sciences

University of KwaZulu-Natal, PMB

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Otter research at the Mammal Research Institute, University of Pretoria



African clawless otter. Photo credit: Rowan Jordaan.

Despite their charismatic nature and widespread occurrence throughout most of southern Africa, we know surprisingly little of the two resident otter species here. African clawless otters (*Aonyx capensis*) and spotted-necked otters (*Hydricotis maculicollis*) occupy freshwater systems throughout the region, feeding mostly on crabs and fish. This is largely due to the fact that otters are mostly cryptic and active after dark, making them difficult to observe and study. Unfortunately, populations of both species are increasingly threatened. Perceived population declines, likely associated with habitat loss, water pollution, alien vegetation and direct conflict with humans have led to the 2015 listing of both species as Near Threatened on the IUCN Red List of Threatened Species. These assessments are confounded by the availability of only limited information on their actual presence in certain areas, and no recent estimates of population densities.

We recently started a number of small research projects at the Mammal Research Institute, Department of Zoology & Entomology of the University of Pretoria aimed at getting a better understanding of the ecology of otters, as well as their interactions with people. As

starting points some of the first work has focussed on describing the diets of otters at various locations across the country. To do this Rowan Jordaan (MSc candidate) has been using traditional methods of prey identification in collected faecal material, as well as the analyses of stable isotope ratio analyses in whisker samples collected from otters. Results from these components have illustrated evident long-term stability in the population level diets of otters in some of the coastal locations around South Africa. However, individual animals evidently show a lot of dietary variability, particularly where they forage both in marine and freshwater environments. Rowan has additionally been collecting behavioural data of otters, both from direct observations as well as camera traps. These efforts have yielded some interesting insights into various aspects of otter behaviour, notably the first data on the dive behaviour and hunting strategies of spotted-necked otters.



Rowan Jordaan pointing out an otter latrine. Photo credit: Marié de Vos.

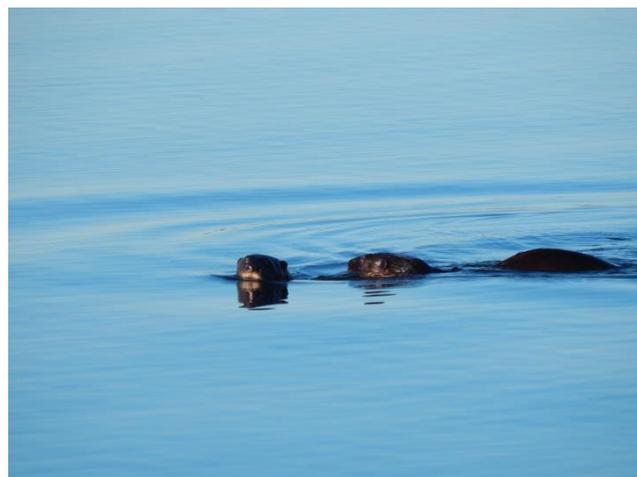
Otters potentially also play an important ecosystem role by transferring nutrients from aquatic systems to terrestrial ones through their faecal deposits in communal latrines. For example, North American river otters facilitate considerable nutrient input through such latrines, where associated impacts on

vegetation have also been recorded. Shannon Conradie has been investigating the role of otter latrines in the transfer of nutrients between aquatic- and terrestrial systems for her BSc honours research project. This work has focussed on a bushveld system, where her early results suggest that otters do indeed play such a role, albeit on a localised scale. Like most research projects it has generated many more questions, and future research will hopefully be able to assess their nutrient transfer roles also in other biomes with different climate, soil and vegetation characteristics.



Marié de Vos scanning an otter latrine for PIT tags Photo credit: Rowan Jordaan.

While the opportunity to catch a glimpse of an enigmatic animal like an otter is often seen as an asset on fishing estates, their presence can also be a problem for owners and managers. This is because otters are efficient predators able to reportedly remove substantial numbers of fish, leading to economic losses. Their nocturnal habits and crafty nature make them difficult to deter, and land owners sometimes resort to catching and/or killing otters as a control measure. However, very little is known about the fish stock losses that can be attributed to otters, and even less about the effects of otter persecution on their population status. To provide some answers, Marié de Vos (MSc candidate) is assessing the effects of



Spotted-necked otter foraging in a dam. Photo credit: Marié de Vos.

otters, as well as other predators, on farmed fish populations. Her study approach includes the permanent tagging of stocked fish with passive integrated transponders (PIT tags) in a closed dam system, and the subsequent monitoring of the population size. By keeping track of how the fish population declines after each stocking event and recording how many fish are removed by anglers, she is obtaining estimates of how many fish are removed by predators.



African clawless otters on camera traps. Photo credits: Marié de Vos.

A central aim of most of our otter research is to both get some insight of threats to their populations, and how otters are likely to

cope with expected habitat and climate changes. Future research will therefore also include studies aimed at assessing population densities of otters in a number of different aquatic systems to help tease out factors affecting their persistence and population health. With this in mind we would really like to hear about any otter sightings and reports across southern Africa - please contact Dr. Trevor McIntyre (tmcintyre@zoology.up.ac.za).

Trevor McIntyre

Mammal Research Institute
Department of Zoology & Entomology
University of Pretoria
tmcintyre@zoology.up.ac.za

1ST ANNOUNCEMENT

8 November 2016



CSIR, PRETORIA 3-7 JULY 2017

2017 COMBINED CONGRESS OF THE ENTOMOLOGICAL AND ZOOLOGICAL SOCIETIES OF SOUTHERN AFRICA TO BE HELD AT THE CSIR INTERNATIONAL CONVENTION CENTRE, PRETORIA, SOUTH AFRICA

The Entomological (ESSA) and Zoological (ZSSA) Societies of Southern Africa hold biennial congresses, which provide an opportunity for scientists, managers, researchers and students in their respective fields to interact with their peers and meet and share ideas with partners in industry.

Members of the ESSA, ZSSA, and any other researchers working in the broad fields of entomology or zoology in southern Africa, are invited to attend the Combined 20th Congress of the ESSA and the 38th Congress of the ZSSA in Pretoria, South Africa.

The organising committee aims to facilitate an open and inclusive space for researchers working on all aspects of entomology or zoology in southern Africa to present their work and be exposed to different perspectives.

The Combined Congress of the ESSA and ZSSA in 2017 is hosted by the Department of Zoology and Entomology at the University of Pretoria,
<http://www.up.ac.za/zoology-entomology>



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA

WHEN

The Combined 20th Congress of the ESSA and the 38th Congress of the ZSSA will take place between 3-7 July 2017.

WHERE

CSIR International Convention Centre in Pretoria, South Africa.

The CSIR ICC is situated close to all the central amenities of Pretoria, and easily accessible from all major road routes in Gauteng Province. It is also serviced by a regular bus from the Hatfield Gautrain station, which provides a direct link for visitors to Pretoria from OR Tambo International Airport and Johannesburg. The CSIR ICC features state-of-the-art audiovisual equipment operated by experienced technicians, which will ensure that

IMPORTANT DEADLINES

Closing date for submission of abstracts:
15 March 2017

Closing date for early discounted registrations and payment:
15 May 2017

Closing date for regular registrations and payment:
15 June 2017



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delegates are afforded the best opportunity to present their work. Three auditoriums have been booked for the Combined Congress, which will provide space for three concurrent sessions and enable a wide range of themes and presenters to be included in the programme.

Pretoria is located close to diverse African environments with unique study systems. The city is located on the interface between the grassland and savannah biomes, and in close proximity to internationally-renowned natural areas, including the Kruger National Park, Pilanesberg National Park, and the UNESCO World Heritage-listed "Cradle of Humankind", Vredefort Dome and uKhahlamba/Drakensberg Park. Pretoria is also on the doorstep of the newly proclaimed UNESCO Magaliesberg Biosphere Reserve. This central location not only provides excellent opportunities for research but also recreation.

PLENARY SPEAKERS

The organising committee for the Combined Congress of the ESSA and ZSSA is delighted to announce the participation of the following internationally recognised and respected scientists who will deliver keynote addresses at the meeting.

Prof. Daniel Simberloff

Daniel Simberloff is the Nancy Gore Hunger Professor of Environmental Studies in the Department of Ecology and Evolutionary Biology at the University of Tennessee, USA. He received his PhD from Harvard (under E.O. Wilson) in 1969.



He was a recipient of the Eminent Ecologist Award by the Ecological Society of America in 2006, elected to the U.S. National Academy of Sciences in 2012, and awarded the Ramon Margalef Prize in Ecology

in 2012 and the Wallace Prize of the International Biogeographical Society in 2015.

He has authored over 350 peer-reviewed papers and has been involved in some of the most vigorous debates in the history of ecology and conservation biology (e.g., island biogeography; reserve design; null models in community ecology; consequences of biological control; assisted migration; novel ecosystems).

Prof Phil Stevenson (UK)

Professor Phil Stevenson is Professor of Plant Chemistry at the University of Greenwich and has worked at the University since its merger with the Natural Resources Institute in 1996. He also held a position with NRI for his post-doctoral work between 1992 and 1995 and throughout this period was employed on a joint basis with the Jodrell Laboratory at the Royal Botanic Gardens, Kew; an arrangement that continues today.



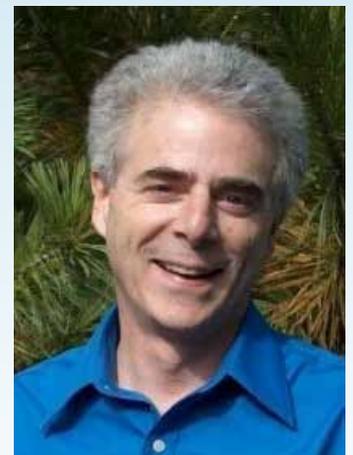
Professor Stevenson obtained his BSc studying Applied Biology at Brunel University in 1988 and was awarded a PhD on Resistance Mechanisms in *Arachis* spp. to the Tobacco armyworm *Spodoptera litura* from the University of London in 1992 before carrying out his post-doctoral work on resistance mechanisms in Chickpea (*Cicer* spp.) to the fungal pathogens *Botrytis* grey mould and *Fusarium* wilt.

Prof. Bill Karasov

Bill Karasov is a Professor in the Department of Forest and Wildlife Ecology at the University of Wisconsin-Madison, USA.

He received his PhD from the University of California, Los Angeles in 1981. Prof. Karasov is interested in the physiological ecology of terrestrial vertebrates, particularly the ecological implications of how they process energy, nutrients, and toxins. He has authored over 300 peer-reviewed papers, multiple book chapters, and a leading textbook on physiological ecology.

He has served on the editorial boards of several journals: *Functional Ecology* (2002-2004), *The Auk* (2000-2004), *Physiological and Biochemical Zoology* (1998-2001), *Ecology* (1995-1997), and *American Journal of Physiology* (1993-2001).



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PROGRAMME

Programme at a glance:	
Monday 3 July 2017	
15:00-18:00	Registration
18:30-20:30	Welcoming reception
Tuesday 4 July 2017 - Day 1	
08:00-09:00	Registration
09:00-09:30	Welcome and opening address
09:30-10:30	Plenary speaker: Prof. Daniel Simberloff
10:30-11:00	BREAK
11:00-13:00	Concurrent session 1 (8 talks)
13:00-14:30	LUNCH
14:30-15:00	Concurrent session 2 (6 talks)
15:00-15:30	BREAK
15:30-16:30	Concurrent session 3 (4 talks)
16:30-17:00	BREAK
17:00-18:00	ESSA AGM
18:30-20:30	Poster viewing function
Wednesday 5 July 2017 - Day 2	
08:30-09:00	Day registration
09:00-10:00	Plenary speaker: Prof. Phil Stevenson
10:00-11:00	Concurrent session 4 (4 talks)
11:00-11:30	BREAK
11:30-13:00	Concurrent session 5 (6 talks)
13:00-14:30	LUNCH
14:30-15:00	Concurrent session 6 (6 talks)
15:00-15:30	BREAK
15:30-16:30	Concurrent session 7 (4 talks)
16:30-17:00	BREAK
17:00-18:00	ZSSA AGM
18:30-22:30	Student function
Thursday 6 July 2017 - Day 3	
08:30-09:00	Day registration
09:00-10:00	Plenary speaker: Prof. Bill Karasov
10:00-11:00	Concurrent session 8 (4 talks)
11:00-11:30	BREAK
11:30-13:00	Concurrent session 9 (6 talks)
13:00-14:30	LUNCH
14:30-15:00	Concurrent session 10 (6 talks)
15:00-15:30	BREAK
15:30-16:30	Concurrent session 11 (4 talks)
16:30-17:00	Closing remarks and thanks
18:30-22:30	Conference dinner and awards
Friday 7 July 2017	
Workshops & Excursions	
Departure	

THEMES

The organising committee for the Combined Congress aims to bring together scientists, managers, professionals and students from throughout southern Africa who are working on common themes in animal biology, conservation and management, rather than separating delegates based on taxonomic lines.

Some of the thematic areas that may be represented at the Combined Congress include but are not limited to the following:

- Animal sociality
- Biogeography, taxonomy and phylogenetics
- Biological control of plants, invertebrates and vertebrates
- Biological invasions
- Climate change: from physiology to macroecology
- Cognition, learning and memory
- Conservation (including ecology, policy and action, restoration, sustainable harvesting and production)
- Diseases, parasites and vectors
- Integrated pest management
- Movement (including dispersal, foraging, migration, landscape connectivity)
- Nutrition: from physiology to ecology
- Plant-insect interactions
- Population and community ecology
- Reproductive biology (including behavior, evolution, physiology)
- Sensing the environment: patterns, processes and manipulation for human benefit

CALL FOR SYMPOSIUM PROPOSALS

Proposals for symposia of broad appeal that are not defined by taxonomic group are now invited. In particular, the organising committee looks forward to receiving proposals for symposia that are multidisciplinary, inclusive, draw together researchers working throughout southern Africa, and foster communication between members of the ESSA, ZSSA, and other delegates.

Proposals for symposia should include the following:

- Symposium title not exceeding 15 words
- Name, affiliation and email address of each symposium organiser
- Symposium synopsis not exceeding 500 words, which includes background on the symposium topic, a rationale for the symposium, and the theoretical and potential tangible outcomes expected from the symposium
- List of names of potential symposium participants, including affiliation

If a symposium is accepted for inclusion in the programme, it is the responsibility of symposium



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organisers to invite potential speakers and ensure that they have registered and submitted abstracts for the Combined Congress.

The organising committee will review the quality of abstracts for symposia. To ensure that symposia are of a high standard, the criteria used to review abstracts for symposia will be the same as for all other submissions to the Combined Congress.

The organising committee for the Combined Congress is not in the position to provide financial support for the attendance of symposium organisers or participants.

Proposals for symposia should be sent by email to Chris Weldon cwweldon@zoology.up.ac.za before Friday 2 December 2016

REGISTRATION FEES

All delegates are required to register online at www.savetcon.co.za

Registration includes:

- Conference bag
- Welcoming reception
- Poster viewing function
- Lunches
- Morning and afternoon tea, coffee

Optional extras:

- Student function
- Gala dinner

Registration fees are on a sliding scale based on full or student membership of the ESSA or ZSSA. A discounted "early-bird" rate is available if proof of payment is received before 31 March 2017.

A day registration rate is also available, which includes conference attendance, morning and afternoon tea, and lunch on the day attended.

Student delegates are invited to attend a student function on the evening of Tuesday 4 July 2017. This is an excellent opportunity for young entomologists and zoologists to meet and establish connections with their peers. A small attendance fee is charged for planning and catering purposes.

A congress dinner is planned for the evening of Thursday 6 July 2017. This is always an enjoyable event where delegates can relax and socialise after a stimulating few days. Awards for best student talk and best poster voted by members of the ESSA and ZSSA will be presented during the congress dinner.

Early Registrations Payments before 31 March 2017	
Members	R 3 600.00
Non-Members	R 4 000.00
Students Members	R 2 100.00
Regular Registrations Payments after 31 March 2017	
Members	R 4 000.00
Non-Members	R 4 500.00
Students Members	R 2 400.00
Late/ On Site Registrations Payments after 31 May 2017	
Members	R 4 500.00
Non-Members	R 5 200.00
Students Members	R 2 600.00
Day Registrations	
Members	R 1 500.00
Non-Members	R 1 850.00
Students Members	R 9 50.00
Social events	
Student Function	R 80.00
Conference dinner	R 400.00

ACCOMMODATION

There is a range of accommodation options near the CSIR ICC, including hotels and guesthouses. The organising committee will be contacting some of these establishments to negotiate discounted rates and will communicate this information at a later date.

In addition, the organising committee is in the process of negotiating budget accommodation in the student residential accommodation of the University of Pretoria. This accommodation will be available to all delegates who wish to use this more affordable option. Transport will also be arranged from the residential accommodation to the CSIR, daily.

To assist us in reserving sufficient rooms at the University of Pretoria residences and transport, please contact the Conference Secretariat to indicate your interest in this option before **Friday 2 December 2016**.

TRADE EXHIBITION AND SPONSORSHIPS

Interested companies should contact the Conference Secretariat for more information and to book exhibition space.

CONFERENCE SECRETARIAT



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*The Entomological Society of Southern Africa
and the
Zoological Society of Southern Africa*

http://www.savetcon.co.za/01_ESSA_ZSSA2017/index.html

