

Chad Keates

Herpetologist | Molecular Biologist

Profile

I am a post-doctoral fellow working as a herpetologist at Rhodes University (Wetland Ecology Lab) / South African Institute for Aquatic Biodiversity, with a focus on molecular systematics and ecology. My passion for herpetology has allowed me to work on multiple publications that have resulted in the discovery and description of several new taxa of reptile and amphibians. I often present snake talks and host reptile & frog walks for audiences ranging from toddlers to academics. When I am not in the lab or the classroom, I am out in the field photographing the amazing herpetological diversity that the sub-continent has to offer. In my short time as a herpetologist I have traversed much of Southern Africa, as well as Angola and Zambia on expeditions with the Okavango Wilderness Project (National Geographic) and Hankuzi Expeditions respectively.

Experience

Genetics Lab Technician (ZEML Research Assistantship)

May 2019 - December 2019

I was employed on a contractual basis by ZEML, Rhodes University, to conduct molecular-orientated research on African herpetofauna.

Freelance Geneticist for Port Elizabeth Museum

May 2017 - present

I barcode herpetological samples for ongoing research projects headed by Werner Conradie at Port Elizabeth Museum.

Freelance Public Speaker

August 2017 - present

Although I present most of my snake presentations and demonstrations free of charge, I also deliver paid talks and presentations to clientele in a professional capacity, in and around the Eastern Cape province.

Demonstrator and Tutor

2015 – 2019


I tutored the second-year radio journalism class in 2015 and 2016 and have been a demonstrator for various Zoology and Entomology classes since 2016.

Freelance Consultant (Herpetologist)

2019—present

I consult part-time as a professional herpetologist, lending my services to consulting agencies (i.e. Scherman Environmental) and field exploration companies (i.e. Hankuzi Explorations).

Contact

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Education

PhD (Zoology)

Evolutionary Structuring in the Psammophiidae family (grass snakes)

2021

Rhodes University

Honours (Zoology)

African

Vertebrate Biodiversity

2016

Rhodes University

Bachelor of Arts

Majors: Zoology and

Journalism

2015

Rhodes University

Matric

2012

Trinityhouse Highschool (IEB)



Awards

2015

Dean's List for Academic Merit

2016

Honours Degree Scholarship
Rebate Award

Ewer Award for Best Honours
student in Zoology & Entomology

ZSSA Award for Best Zoology
Honours Student

2017

Master's Degree Scholarship

Academic full colours for Zoology
Honours

Golden Key Member

Laura Starke Memorial Award

2018

NRF Masters Prestigious & Equity
Scholarship

Laura Starke Memorial Award

D & J Ranchhod Bursary

2019

William Waddell Bursary

Environmental Award (Individual
Category)

2020

Ian Mackenzie Scholarship

2021

Rhodes University Postdoctoral
Fellowship 2022/23

Certifications

Full South African Driver's License

Snake Awareness, First Aid for
Snakebite and Venomous Snake
Handling Course (ASI) (African
Snakebite Institute)

First Aid (Level 3)

Handgun Proficiency

Rifle Proficiency

Scientific Engagement

Snake callouts and relocation

2016 - present

Remove and relocate snakes from homes and properties throughout Makana region. Done free of charge with the hope of alleviating human-snake confrontation in the area.

Herpetofauna Awareness Talks & Critter Walks

2017 - present

Present reptile and amphibian awareness talks at Eastern Cape schools, hospitals, clubs and in several other settings. The talks demonstrate South African biodiversity, discuss basic reptile and amphibian biology and behaviour, and educate listeners about the myths and misconceptions surrounding these animals. Talks also discuss correct snake-bite treatment and give attendees an opportunity to see and sometimes touch live specimens. This includes taking members of the public on guided walks and tours, in local areas, to showcase the natural biodiversity of the Eastern Cape

([About Me](#) | [Next Gen Herpetologist](#))

Social Media & Popular Science

Personal Platforms

2017 – present

Disseminate popular science articles, posters and high-quality photography to a broad viewership from around the world to educate people about reptiles and amphibians and the science of herpetology.

Website: [Next Gen Herpetologist](#) | [Young Herpetologist From Southern Africa](#)

Instagram: [Chad Keates \(@nextgenherpetologist\)](#) • [Instagram photos and videos](#)

Facebook: [Next Gen Herpetologist- Chad Keates](#) | [Facebook](#)

YouTube: [Snakes and their Mates - YouTube](#)

Wetland Ecology Lab & SAIAB

2021 - present

In addition to my personal platforms, I also create, manage and curate all the content disseminated through the Wetland Ecology Lab Facebook Page ([Wetland Ecology Lab](#) | [Facebook](#)). I also create popular science on behalf of SAIAB for dissemination to the public.

Recent Field Experience and Project Involvement

Okavango Wilderness Project, Angola (Funders: National Geographic & co) - 2019

Zambian exploration, northern Zambia (Funders: Hankuzi Expeditions) - 2021

SanParks Drakensberg BioBlitz, southern Drakensberg (Funders: SANBI & co) - 2022

Waterberg Biodiversity Project, Waterberg (Funders: FBIP) - 2022

Khakhea-Bray Transboundary Aquifer Project, northern South Africa and Botswana (Funders: JRS Biodiversity through SADC-GMI) - 2021 & 2022

Makuleke Wetlands Project, Kruger National Park (Funders: Universities of Mpumalanga and Venda) - 2021 & 2022

Letaba and Shingwedzi Pan Ecology Project, Kruger National Park (Funders: University of Venda) - 2022



Leadership Roles

2014

Sports Representative for Stanley Kidd House

2015

Senior Student for Stanley Kidd House

2015

Transport Representative for Rhodes Surfing Society

2016

Chairperson for Surfing Society

2019

PhD Representative for Zoology & Entomology Department

2021 & 2022

Manley Flats Cricket Club Secretary

Skills

Molecular Biology

Morphological Biology

Evolutionary Biology

Systematic Biology

Herpetology

Photography

Videography

Science Communication

Social Media Management

Public Speaking

Field Biology

Popular Science

Scientific Outputs

Publications

Keates, C., Conradie, W., Greenbaum, E., & Edwards, S. (2019). A snake in the grass: Genetic structuring of the widespread African grass snake (*Psammophylax Fitzinger 1843*), with the description of a new genus and a new species. *Journal of Zoological Systematics and Evolutionary Research*, 57(4), 1039-1066.

Branch, W. R., Baptista, N., Keates, C., & Edwards, S. (2019). Rediscovery, taxonomic status, and phylogenetic relationships of two rare and endemic snakes (Serpentes: Psammophiinae) from the southwestern Angolan plateau. *Zootaxa*, 4590(3), 342-366.

Conradie, W., Keates, C., Lobón-Rovira, J., Pinto, P. V., Verburgt, L., Baptista, N. L., ... & Júlio, T. (2020). New insights into the taxonomic status, distribution and natural history of De Witte's Clicking Frog (*Kassinula wittei* Laurent, 1940). *African Zoology*, 55(4), 311-322.

Conradie, W., Deepak, V., Keates, C., & Gower, D. J. (2020). Kissing cousins: a review of the African genus *Limnophis* Günther, 1865 (Colubridae: Natricinae), with the description of a new species from north-eastern Angola. *African Journal of Herpetology*, 69(1), 79-107.

Nicolau, G. K., Petford, M., Edwards, S., Busschau, T., Lynch, K., Kemp, L., Balmer, J., Keates, C., Hundermark, C. R., Weeber, J., Conradie, W. (2021). New insights into the geographical distribution, ecology and conservation status of South Africa's endemic Coastal Leaf-toed Gecko, *Cryptactites peringueyi* (Boulenger, 1910), *Herpetology Notes*, 14, 439-450.

Conradie W, Baptista NL, Verburgt L, Keates C, Harvey J, Júlio T, Neef G. (2021). Contributions to the herpetofauna of the Angolan Okavango: Cuando-Zambezi river drainages. Part 1: Serpentes (snakes). *Amphibian & Reptile Conservation* 15(2) [General Section]: 244-278 (e292).

Baptista N.L, Pinto PV, Keates C., Edwards S., Roedel MO., & Conradie W. (2021). A new species of red toad, *Schismaderma* Smith, 1849 (Anura: Bufonidae), from central Angola. *Zootaxa* 5081(3), 301-332.

Lobon-Rovira J, Conradie W, Vaz Pinto P, Keates C, Edwards S, Du Plessis A, & Branch WR. (2022). Systematic revision of *Afrogecko ansorgii* (Boulenger, 1907) (Sauria: Gekkonidae) from western Angola. *Zootaxa*.

Cuthbert RN, Wasserman RJ, Keates C and Dalu T. (2022). Food webs. Dalu T & Wasserman RJ (Eds.). *Fundamentals of Tropical Freshwater Wetlands: From Ecology to Conservation Management* (pp. 517-547). Elsevier.

Keates C, Conradie W, Dalu T, Dondofema F, Riddell, ES, Wasserman RJ. (In Press). Phylogenetic placement of the enigmatic floodplain water snake *Lycodonomorphus obscuriventris* FitzSimons, 1964. *Koedoe*.

Conferences

13th Herpetological Association of Africa Conference (2017). Hluhluwe, RSA. Poster presentation

Joint SANBI & FBIP Forum (2018). St Francis, RSA. Oral presentation

14th Herpetological Association of Africa Conference (2019). St Francis, RSA. Oral Presentation and mini oral presentation

9th World Congress of Herpetology Conference (2020). Dunedin, NZ. Oral Presentation

Southern African Society of Aquatic Scientists Conference (2021), Virtual conference. Oral presentation

