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COMMITTEE OF THE HAA CHAIRMAN

Graham Alexander, School of Animal, Plant and Environmental Sciences, University of the Witwatersrand, Johannesburg 2050, South Africa.

E-mail: graham.alexander@wits.ac.za

SECRETARY

Buyi Makhubo, Department of Herpetology, National Museum, P. O. Box 266, Bloemfontein 9300, South Africa.

E-mail: buyi.makhubo@nasmus.co.za

TREASURER

Johan Marais, Suite 150, Postnet X4, Bedfordview 2007, South Africa.

E-mail: johan@africansnakebiteinstitute.com

JOURNAL EDITOR

John Measey, Department of Zoology, Nelson Mandela Metropolitan University, Port Elizabeth, South Africa, South Africa.

E-mail: john@measey.com

NEWSLETTER EDITOR

Jessica da Silva, South African National Biodiversity Institute. Kirstenbosch Research Centre, Cape Town, South Africa.

E-mail: africanherpnews@gmail.com

ADDITIONAL MEMBERS

Michael Bates, Department of Herpetology, National Museum, P.O. Box 266, Bloemfontein 9300, South Africa. *E-mail: herp@nasmus.co.za*

Aaron Bauer, Department of Biology, Villanova University, 800 Lancaster Avenue, Villanova, Pennsylvania 19085, USA.
Email: aaron.bauer@villanova.edu.

Shelley Edwards, Department of Zoology and Entomology, Rhodes University, Grahamstown, South Africa. *E-mail: s.edwards@ru.ac.za*

Bryan Maritz, Department of Biodiversity and Conservation at the University of the Western Cape. *E-mail: bmaritz@uwc.ac.za*

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evidence from the wild and captivity that *C. angulata* females can retain eggs until embryonic development has progressed to the hatching stage, conforming to the accepted definition of viviparity in reptiles. Hatching in *C. angulata* occurs in March to April at the start of the rainy season. Consequently, early clutches of this species incubate for 12 months whereas late clutches incubate for 3-4 months, the duration required for artificial incubation. Our observations of viviparity were of eggs laid in early autumn, indicating that instead of laying the eggs late in the previous year, the females carried developing embryos until hatching normally occurs for the species. We propose that facultative viviparity in angulate tortoises is limited to late-season clutches that do not undergo developmental arrest, and represent yet another reproductive strategy that ensures this species' success.

ECOLOGICAL NICHE PARTITIONING, HOMERANGE AND RESOURCE UTILIZATION IN DESERT LIZARDS (*MEROLES ANCHIETAE* AND *M. CUNEIROSTRIS*) FROM THE NAMIB DESERT, NAMIBIA

NOVALD K. IYAMBO^{1*}, CHRISTIAN T. CHIMIMBA^{1,2}, LOW DE VRIES³ & ANDREW E. MCKECHNIE¹

¹Department of Zoology & Entomology, University of Pretoria, Private Bag X20, Hatfield, 0028 South Africa; ²DST-NRF Centre of Excellence for Invasion Biology (CIB), Department of Zoology & Entomology, University of Pretoria, Private Bag X20, Hatfield 0028, South Africa; ³National Zoological Gardens of South Africa, PO Box 754, Pretoria 0001 South Africa.

Ecological communities are composed of organisms that co-exist in a particular habitat, and the co-existence of closely related species in an ecological community has intrigued ecologists for a long time. Sympatric species partition resources in three fundamental dimensions, namely: spatial (space), temporal (time), and trophic (food). Within lizard communities, the fundamental niche dimensions are often independent of each other, although they sometimes interrelate. For instance, the mode of foraging (type or way of acquiring food) can influence the three niche dimensions. In this study we compare the morphology, activity patterns, microhabitat characteristics, thermal biology, water expenditure and feeding ecology of two diurnal sympatric lacertid lizard species of the Namib Desert, Namibia: the Shovel-snouted lizard, *Meroles anchietae*, and Wedge-snouted lizard, *Meroles cuneirostris*. Analyses of carbon and nitrogen stable isotope ratios in plant, arthropod, and lizard tissues will be used to estimate trophic levels, and isotopic mixing models to quantify the dietary contribution of various food sources

(arthropods and plant material) across seasons. Lizard diet will be estimated from the abundance and frequency of occurrence of arthropod prey within faecal pellets. The inverse of Simpson's (1994) diversity measure will be used to estimate dietary niche breadth, while Pianka's similarity index will be used to estimate the symmetrical dietary niche overlap. Little is known about how desert lizards maintain their water balance and hydration levels. Do they decrease their water output to conserve water better or do they increase their water input by drinking more water each day? These questions can be addressed by measuring daily water flux rates (in ml/day) in free-ranging animals using isotopic markers. The Benguela current that is responsible for most of the weather patterns in the Namib Desert is warming as a result of increasing climate change thus resulting in less fog production. We will attempt to link the available data on the prediction of climate change (decreasing fog production) along the fog gradient to assess the distribution and abundance of the two species. Home range size reflects various aspects of the behaviour of animals. The two focal species are known to have overlapping home ranges as they have been observed in both habitats. Using minimum convex polygon method, the sites for active lizards will be used to create a map of the movement patterns to estimate the home range size and the degree of

overlap between the two species.

PREVALENCE OF AMPHIBIAN CHYTRID FUNGUS ACROSS THE CONGO RIVER DRAINAGE BASIN

KATE JACKSON^{1*}, ANGE-GHISLAIN ZASSI-BOULOU², SYLVESTRE BOUDZOU MOU², LISE-BETHY MAVOUNGOU², CHIFUNDERA KUSAMBA³, JENNIFER MEECE⁴, KURT REED⁵, RAYNA BELL⁶, DAVID BLACKBURN⁷, SONIA GHOSE⁸ & ELI GREENBAUM⁹

¹Biology Department, Whitman College, Walla Walla, WA 99362, USA; ²Institut National de Recherche en Sciences Exactes et Naturelles, Avenue de l'Auberge Gascogne, Cité Scientifique (Ex-ORSTOM), Château d'eau, Brazzaville, Congo; ³Laboratoire d'Herpétologie, Département de Biologie, Centre de Recherche en Sciences Naturelles, Lwiro, Democratic Republic of Congo; ⁴Emerging Infectious Disease Laboratory, Marshfield Clinic Research Foundation, 1000 North Oak Avenue, Marshfield, WI 54449, USA; ⁵Department of Pathology and Laboratory Medicine, University of Wisconsin School of Medicine and Public Health, 600 Highland Avenue, Madison, WI 53792, USA; ⁶Smithsonian Institution, PO Box 37012, MRC 162 Washington, DC 20013-7012; ⁷Florida Museum of Natural History, University of Florida, 3215 Hull Rd, Gainesville, FL 32611, USA; ⁸Department of Evolution and Ecology, 2320 Storer Hall, UC Davis, One Shields Avenue, Davis, CA 95616, USA; ⁹Department of Biological Sciences, 500 W. University Avenue, University of Texas at El Paso, El Paso, TX 79912, USA.

Amphibian chytrid fungus (*Batrachochytrium dendrobatidis*, Bd) has been implicated as an important factor in the decline of amphibian species worldwide. The origin of Bd