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The HAA is dedicated to the study and conservation of African reptiles and amphibians. Membership is open to anyone with an interest in the African herpetofauna. Members receive the Association's journal, *African Journal of Herpetology* (which publishes review papers, research articles, and short communications – subject to peer review) and *African Herp News*, the Newsletter (which includes short communications, natural history notes, geographical distribution notes, herpetological survey reports, venom and snakebite notes, book reviews, bibliographies, husbandry hints, announcements and news items).

Newsletter Editor's Note

Articles shall be considered for publication provided that they are original and have not been published elsewhere. Articles will be submitted for peer review at the Editor's discretion. Authors are requested to submit manuscripts by e-mail in MS Word '.doc' or '.docx' format.

The views and opinions expressed in articles are not necessarily those of the Editor.

Cover Photograph: *Nucras taeniolata* from Groendal Wilderness Area, Eastern Cape Province, South Africa. Photograph by: Werner Conradie. Canon EOS 450D (1/160, F32, ISO 100).

Kawai, Ushio (Texas Tech University); Mori, Akira (Kyoto University); Horita, Juske (Texas Tech University); Hori, Michio (Kyoto University); Perry, Gad (Texas Tech University)

Analysis of diet and trophic position of lizards in a dry forest of northwestern Madagascar, using stomach contents, feces, and stable isotopes

Madagascar is one of the hottest biodiversity hotspots and contains over 400 species of reptiles, and many of them endemic. The Malagasy forest is rapidly disappearing because of clearing and other human activities, making conservation of flora and fauna an international priority. Many studies of reptilian taxonomy and biogeography have been conducted, but ecological studies are few. During the rainy season (November to March) of 2009-2012, we conducted a dietary study of lizards living in a dry forest of northwestern Madagascar. The study focused on four diurnal species (*Lygodactylus tolampyae*, *Oplurus cuvieri*, *Phelsuma kochi*, and *Zonosaurus laticaudatus*) and one nocturnal species (*Blaesodactylus ambonihazo*) in disturbed and less disturbed habitat in Ankarafantsika National Park. Diets were examined by stomach flushing and feces, and stable isotope ratio was analyzed to determine their trophic positions. Stomach contents and feces analysis showed that the lizards mainly utilize invertebrates, predominantly insects such as Hymenoptera and Coleoptera but also plant materials such as fruits. The results of stable isotope analysis indicated that trophic dynamics of these lizard species differed between habitats.

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Kuhn, Arianna (Villanova University); Bauer, Aaron; Todd, Jackman (Villanova University)

Molecular phylogenetics of South African flat geckos (Gekkonidae: Afroedura) Loveridge, 1944 and the recognition of seven new species

The Family Gekkonidae comprises over 900 species in 54 genera and is nearly cosmopolitan in its distribution. Among the areas of highest gekkonid diversity is the geologically complex and ecologically diverse region of southern Africa. A number of gecko genera endemic to this region have been studied phylogenetically, but one diverse genus of particular biogeographic interest for which no explicit phylogenetic hypotheses have been published is *Afroedura*. The members of this genus are restricted in their distributions chiefly to rocky areas of South Africa but a limited number of species extend northwards into Namibia, southern Angola, Zimbabwe, and southern Mozambique. The distribution of flat geckos, however, is highly fragmented and most species are allopatric. We investigated phylogenetic relationships for 14 of the 18 recognized species and subspecies of *Afroedura*, using nine molecular markers, six of which have never been used in a comparative framework for squamates. Using Likelihood and Bayesian analyses, a species tree was estimated that identified four distinct clades corresponding to discrete biogeographic regions. *Afroedura hawaquensis*, the only representative taxon from the southwestern Cape, is sister to all other *Afroedura*. Other groups include an Eastern Cape clade comprising *A. karroica*, *A. tembulica*, and *A. amatolica*, and a tropical clade — *A. bogerti*, *A. africana*, *A. loveridgei*, and *A. transvaalica*. Remaining species fell into an Eastern clade distributed chiefly in Mpumalanga and Limpopo provinces of South Africa and in Swaziland. This final clade includes several recognized species — *A. lang*i, *A. marleyi*, *A. major*, and *A. multiporis*, but also seven new species, all previously distinguished on morphological grounds but as yet undescribed. These new taxa highlight the significance of the Eastern Escarpment and adjacent regions for *Afroedura* and provide further evidence for discrete areas of endemism in this part of the subcontinent. *Afroedura*'s area of greatest diversity complements those of other rupicolous geckos in the genera *Pachydactylus* and *Goggia*, which show their greatest richness in the southwestern Cape and in arid regions of the Northern Cape and Namibia.

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Leache, Adam (University of Washington)

Biogeography of African Agama lizards

African lizards in the genus *Agama* are a diverse and widespread component of squamate diversity in Africa. Their extensive distribution across Africa makes them an ideal group for investigating continent-wide biogeography. *Agama* lizards are also exceptionally diverse morphologically and behaviorally and have evolved a variety of social structures, habitat preferences, body sizes, and sexual dimorphic colorations. In collaboration with 15 researchers from across Europe, Africa, and the United States, I present a comprehensive phylogeny for African *Agama* lizards that captures nearly all species diversity and paves the way for new insights into continent-wide analyses of diversification and biogeography. Estimating phylogenetic relationships using a combination of two mitochondrial genes and four nuclear genes provides strong support for unique evolutionary radiations within each region of Africa. The phylogeny also supports the parallel evolution of body sizes, habitat preferences, and social structures, and transitions in this suite of characters are correlated. The weak support for critical nodes at the base of the phylogeny result in estimates of the historical connections between areas and ancestral character states with wide confidence intervals. Reducing this error by estimating a phylogeny with increased support is being accomplished with new DNA sequence capture techniques that target 500 homologous nuclear loci simultaneously.

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