



Research Briefs

Culture

Slave descendants retain artefacts of African culture

While kinship and political structures could not be transferred from Africa to the Caribbean under conditions of forced migration, Africans and their descendants retained certain behaviours, such as kinetic expressiveness, artistic skills and mental epistemologies, during the slavery and post-slavery periods. According to author Maureen Warner-Lewis of the University of the West Indies, a number of these behaviours relate to music (including instrumentation, orchestral and rhythmic morphologies and dance choreography) and language (syntax and vocabulary items and proverb formulations). Other behaviours retained vary from religious ideas and forms, foods and culinary combinations, and female hair and dress aesthetics to structures of economic activity and cooperation.

Critical Arts. 2011;25:547–555.

Animal ecology

Black rhinos doing well in Kruger

Small populations challenge conservators to ensure the persistence of rare and threatened species such as the black rhino. Numbers of black rhinos in relation to landscape features in the south of the Kruger National Park were estimated by Sam Ferreira and a team of SANPARKS researchers. Age and sex were assigned to individuals to derive the population age distribution, and hence to estimate the survival and the fecundity of the subpopulation. Block counts were corrected in relation to historical strip transects, and showed that 95% of black rhinos resided in the southern part of the park. The population is increasing at 6.75% per annum as a result of a high survival rate, and an estimated intercalving rate of 2.45 years. The population data suggest that subadult male and female black rhinos have the lowest annual survival, while dependent calves and adults have the highest annual survival.

S Afr J Wildlife Res. 2011;41:192–204.

Engineering

Collaboration in South African engineering research

The production of publications in engineering in South Africa has expanded over the last three decades, which has implications for the growth and development of the economy. Drawing on a sample range of years of the publications stored in the ISI Web of Knowledge, the engineering publications of South Africans for a 30-year period from 1975–2005 were analysed by Radhamany Sooryamoorthy of the University of KwaZulu-Natal. His analysis shows that the number of researchers per publication has grown, that the number of countries collaborating with South Africa has increased, and that the number of sole-authored papers has decreased. Domestic collaboration between researchers within South Africa has decreased, while international collaboration has grown considerably.

S Afr J Ind Eng. 2011;22:18–26.

Entomology

Terrible hairy flies are not extinct!

The most extraordinary and unusual looking dipteran – *Mormotomyia hirsuta* Austen, 1936, which is commonly known as the frightful hairy fly or terrible hairy fly – was rediscovered by a team led by Robert Copeland from the International Centre of Insect Physiology and Ecology and the National Museums of Kenya (both in Nairobi), at the summit of Ukasi Hill in eastern Kenya 62 years after last being seen alive. Using an arsenal of modern tools including scanning electron micrography and DNA analysis, researchers from South Africa, Kenya and Germany (led by Ashley Kirk-Spriggs of the National Museum in Bloemfontein) have detailed the morphology, anatomy, biology, natural history and genetic variation of this bizarre dipteran. The remarkable diversity observed at the level of both nuclear and mitochondrial DNA, together with evidence for a recent genetic bottleneck, suggests that this population may exist within a larger, as yet undetected, framework. Nevertheless, the type locality hosts the only documented population of one of the world's rarest species, and the inclusion of *M. hirsuta* in the IUCN Red List of Threatened Species is proposed.

Afr Invertebr. 2011;52:363–390 and Afr Invertebr. 2011;52:145–165.

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African customary law

Ritual bull killing and societal values on a collision course in South Africa?

The issue of animal slaughtering for cultural or religious purposes is a global issue, and elicits important questions pertaining to religious freedom and animal protection. A diverse society such as South Africa's necessitates an approach of legal accommodation, requiring that government adopts a system of accommodation to permit minorities to carry out their religious obligations. However, Christa Rautenbach of North-West University argues that freedom of religion and the need to preserve the primary ways of life that constitute a community's religious identity do not mean that there is no reason to permit injurious practices just because they are rooted in a minority religion. Rituals that do not pass the test of constitutionality should not, she argues, prevail merely because they are part of a religion. She discusses some of the problems that arise when religion and law collide, and possible ways of dealing with them.

In: Bennett TW, editor. *Traditional African religions in South African law*. Cape Town: UCT Press, 2011; p. 63–89. ISBN 978-1-91989-538-3.

Biodiversity

Spiders are more important than you think!

As a signatory to the Convention on Biological Diversity, South Africa is obliged to develop a strategic plan for the conservation and sustainable use of biodiversity. Although invertebrates comprise over 80% of that biodiversity, they are under-studied. The South African National Survey of Arachnida was launched in 1997 to help redress this situation. SH Foord from the University of Venda and co-authors report that although the Savanna Biome has been particularly neglected in the past, so far 1230 species of spider have been recorded from the South African Savanna. Besides being numerically important, spiders, like insects, can be useful bio-indicators because most are sensitive to pollution and habitat alteration. They are also important biological controllers in agro-ecosystems, forming up to 70% of the predators in some crop-dominated landscapes. The survey, which is ongoing, uses a standardised collecting protocol that allows the use of volunteers without compromising the information collected. New techniques to speed up the identification of specimens and share distributional information are being developed.

Trans Roy Soc S Afr. 2011;66(3). In press 2012.

Philosophy of law

Judicial review, constitutional juries and civic constitutional fora: Rights, democracy and law

Christopher Zurn from the University of Kentucky argues that, according to a specific conception of the ideals of constitutional democracy – deliberative democratic constitutionalism – the proper function of constitutional review is to ensure that constitutional procedures are protected and followed in the ordinary democratic production of law. This is because the ultimate warrant for the legitimacy of democratic decisions can only be that they have been produced according to procedures that warrant the expectation of increased rationality and reasonability. He also contends that three desiderata for the institutionalisation of the function of constitutional review follow from this conception: structural independence, democratic sensitivity and the maintenance of legal integrity. He evaluates three broadly different ways of institutionalising constitutional review: solely in appellate courts; in deliberative constitutional juries of ordinary citizens; and in a combined system of constitutional courts and civic constitutional amendment fora – and argues that the third arrangement would perform best at collectively fulfilling the sometimes antithetical desiderata.

Theoria. 2011;58:63–94.