

### *Recent Peer-reviewed Publications of Rina Grant*

- Kohi, E.M., W.F. de Boer, M. Slot, S. van Wieren, J.G. Ferwerda, C.C.R. Grant, I.M.A. Heitkonig, H.J. Knecht, N. Konx, F. van Langevelde, M.J.S. Peel, R. Slotow, C. van der Waal & H.H.T. Prins. 2010. Effects of simulated browsing on growth and leaf chemical properties in *Colophospermum mopane* saplings. *African Journal of Ecology*, 48 . 190-196.
- Skidmore, A.K., J.G. Ferwerda, O. Mutanga, S. van Wieren, M.J.S. Peel, C.C. Grant, H.H.T. Prins & Bektas Balcik. 2010. Forage quality of savannas — Simultaneously mapping foliar protein and polyphenols for trees and grass using hyperspectral imagery. *Remote Sensing of Environment* 114. 64-72.
- Treydte, A.C., C.C. Grant & F. Jeltsch. 2009. Tree size and herbivory determine below-canopy grass quality and species composition in savannas. *Biodiversity and Conservation* 18. 3989-4002.
- van der Waal, C., H. de Kroon, W.F. de Boer, I.M.A. Heitkonig, A.K. Skidmore, H.J. de Knecht, F. van Langevelde, S. van Wieren, C.C.R. Grant, A.L. Page, R. Slotow, E.M. Kohi, E. Mwakiwa & H.H.T. Prins. 2009. Water and nutrients alter herbaceous competitive effects on tree seedlings in a semi-arid savanna. *Journal of Ecology*
- Codron, D., Codron, J., Lee-Thorp, J. A., Sponheimer, M., Grant, C. C., and Brink, J. S. 2009. "Stable Isotope Evidence for Nutritional Stress, Competition, and Loss of Functional Habitat As Factors Limiting Recovery of Rare Antelope in Southern Africa." *Journal of Arid Environments* 301-9.
- Grant C. C., R. G. Bengis, D. Balfour, and M. J. S. Peel. 2008. Controlling the distribution of elephant. Chapter 7. Pages 247-277 in R.J. Scholes and K.G. Mennell, editors. *Elephant Management: A Scientific Assessment for South Africa*. Wits University press, Johannesburg.
- Druce, D.J., G. Shannon, B. Page, R. Grant, & R. Slotow. 2008. Ecological Thresholds in the Savanna Landscape: Developing a Protocol for Monitoring the Change in Composition and Utilisation of Large Trees. *PLoS ONE* 3(12): e3979. doi:10.1371/journal.pone.0003979 3. 2008.
- Shannon, G., Druce, D. J., Page, B., Eckhardt, H. C., Grant, R., and Slotow, R. 2008. "The Utilization of Large Savanna Trees by Elephant in Southern Kruger National Park." *Journal of Tropical Ecology* 24. 281-289.
- Ratnam, J., Sankaran, M., Hanan, N., Grant, C. C. R., and Zambatis N. 2008. "Nutrient Resorption Patterns of Plant Functional Groups in a Tropical Savanna: Variation and Functional Significance." *Oecologia* ?
- Codron, D., Codron, J., Lee-Thorp, J. A., Sponheimer, M., de Ruiter, D., Sealy, J., Grant, C. C. R., and Fourie, N. 2007. "Diets of Savanna Ungulates From Stable Carbon Isotope Composition of Faeces." *Journal of Zoology* 27321-29.
- Smit, I. P. J., Grant, C. C., and Whyte, I. J. 2007. "Elephants and Water Provision: What Are the Management Links?" *Diversity and Distributions*, 13666-69.
- Smit, I.P.J., Grant, C.C. & Devereux, B.J. 2007. Do artificial waterholes influence the way herbivores use the landscape? Herbivore distribution patterns around rivers and artificial surface water sources in a large African Savanna park. *Biological Conservation* 136: 85-99.
- Smit, I.P.J., Grant, C.C. & Whyte, I.J. 2007. Landscape-scale sexual segregation in the dry season distribution and resource utilization of elephants in Kruger National Park, South Africa.

- Diversity and Distributions, 13: 225-236.
- Grant, C. C., Scholes, 2006. The importance of nutrient hot-spots in the conservation and management of large wild mammalian herbivores in semi-arid savannas. *Biological Conservation* **130**: 426-437.
- Codron, J., Lee-Thorp, J. A., Sponheimer, M., Codron, D., Grant, C. C., de Ruiter, D., 2006. Elephant (*Loxodonta africana*) diets in the Kruger National Park, south Africa: Spatial and landscape differences. *Journal of Mammalogy* **87**, 27-34.
- Codron, D., Codron, J., Sponheimer, M., Lee-Thorp, J. A., Grant, C. C., de Ruiter, D., 2005. Assessing Diet in Savanna Herbivores Using Stable Carbon Isotope Ratios of Faeces. *Koedoe* **48**, 115-124.
- Codron, J., Codron, D., Lee-Thorp, J. A., Sponheimer, M., Bond W.J., de Ruiter, D., Grant, C. C. R., 2005. Taxonomic, anatomical, and spatio-temporal variations in the stable carbon and nitrogen isotopic compositions of plants from an African savanna. *Journal of Archeological Science* **32**, 1757-1772.
- Grant C. C. (Ed) 2005. Elephant effects on biodiversity: an assessment of current knowledge and understanding as a basis for elephant management in Sanparks. Scientific Report 3/2005. Scientific Services, Skukuza.
- Redfern, J. V., Grant, C. C., Gaylard, A., Getz, W. M., 2005. Surface water availability and the management of herbivore distributions in an African savanna ecosystem. *Journal of Arid Environments* **63**, 406-424.
- Dunham, K. M., Robertson, E. F., Grant, C. C., 2004. Rainfall and the decline of a rare antelope, the tsessebe (*Damaliscus lunatus lunatus*), in Kruger National Park, South Africa. *Biological Conservation* **117**, 83-94.
- Grant, C. C., de Buys, A., 2003. Linking the herbaceous vegetation changes to water provision in the northern plains of the KNP. *African Journal of Range and Forage Science* **20**, 149.
- Mutanga, O., H. H. T. Prins, A. K. Skidmore, S. van Wieren, H. Huizing, C. C. R. Grant, M. J. S. Peel, and H. C. Biggs. 2004. Explaining grass-nutrient patterns in a savanna rangeland of southern Africa. *Journal of Biogeography* **31**:819-829.
- Grant, C. C., Scholes, M. C., 2003. Determining the scales at which nutrients act as drivers of herbivore distribution in the Kruger National Park. *African Journal of Range and Forage Science* **20**, 74.
- Sponheimer, M., Grant, C. C., DeRuiter, D., Lee-Thorp, J. A., Codron, D. M., Codron, J., 2003. Diets of impala from Kruger National Park: evidence from stable carbon isotopes. *Koedoe* **46**, 101-106.
- Sponheimer, M., Lee-Thorp, J. A., DeRuiter, D., Smith, J. M., van der Merwe, N. K., Reed, K., Grant, C. C., Ayliffe, L. K., Robinson, T. F., Heidelberg, C., Marcus, W., 2003. Diets of Southern African Bovidae: stable isotope evidence. *Journal of Mammalogy* **84**, 471-479.
- van der Waal, C., Smit, G. N., Grant, C. C., 2003. Faecal nitrogen as an indicator of the nutritional status of kudu in a semi-arid savanna. *South African Journal of Wildlife Research* **39**, 33-41.
- Bengis, R. G., Grant, C. C., De Vos, V., 2003. Wildlife diseases and veterinary controls as determinants of heterogeneity in savannah ecosystems. In *The Kruger Experience, ecology and management of savanna heterogeneity*, eds. J. T. Du Toit, K. Rogers, & H. C. Biggs, Island Press, New York.
- Margules, C. R., Grant, C. C., Poon E., Deacon A., MacFadyen S., Biggs, H. C., Sithole H., 2003. A suggested biodiversity survey and monitoring program for Kruger National Park. Conservation Services, Skukuza, Kruger National Park.
- Naiman, R. J., Braack, L. E. O., Grant, C. C., Kemp, A. C., Du Toit, J. T., Venter, F. J., 2003. Interactions between species and ecosystem characteristics. In *The Kruger Experience, ecology and management of savanna heterogeneity*, eds. J. T. Du Toit, K. H. Rogers, & H. C. Biggs, pp. 221-241. Long Island Press, Washington.
- Redfern, J. V., Grant, C. C., Biggs, H. C., Getz, W. M., 2003. Surface-water constraints on herbivore foraging in the Kruger National Park, South Africa. *Ecology* **84**, 2092-2107.
- Grant, C. C., Davidson, T., Funston, P. J., Pienaar, D. J., 2002. Challenges faced in the conservation of

rare antelope: a case study on the northern basalt plains of the Kruger National Park. *Koedoe* 45, 45-66.

Grant, C. C., Peel, M. J. S., Zambatis, N., van Ryssen, J. B. J., 2000. Nitrogen and phosphorus concentration in faeces: an indicator of range quality as a practical adjunct to existing evaluation methods. *African Journal of Range and Forage Science* 17, 81-92.

Grant, C. C., van der Walt, J. L., 2000. Towards an adaptive management approach for the conservation of rare antelope in the Kruger National Park - outcome of a workshop held in May 2000. *Koedoe* 43, 103-112.