

# Suggested Reading - South African Bush

## Projects - links to research areas

[Bird Projects](#)

[Small mammal projects](#)

[Plant and habitat Projects](#)

Also check the Operation Wallacea website library pages for publications and research reports

## Bird Projects

**The use of birds as an indicator species in the South African bush environment**

**The impact of *fire management practices / elephant damage* in the bush on the diversity of birds**

Bain DW, Baker JR, French KO & Whelan RJ (2008) Post fire recovery of eastern bristlebirds (*Dasyornis brachypterus*) is context dependant. *Wildlife Research* **35**: 44-49

Botes A, McGeoch MA & van Rensburg BJ (2006) Elephant- and human-induced changes to dung beetle (Coleoptera: scarabaeidae) assemblages in the Maputaland Centre of Endemism. *Biological Conservation* **130**: 573 –583

Davis MA, Peterson DW, Reich PB, Crozier M, Query T, Mitchell E, Huntington J & Bazakas P (2000) Restoring savanna using fire: Impact on the breeding bird community. *Restoration Ecology* **8**: 30-40

Eckardt HC, van Wilgen BW & Biggs HC (2000) Trends in woody vegetation cover in the Kruger National Park, South Africa, between 1940 and 1998. *African Journal of Ecology* **38**: 108-113

Edkins MT, Kruger LM, Harris K & Midgley JJ (2007) baobabs and elephants in Kruger National Park: Nowhere to hide. *African Journal of Ecology* **46**: 119-125

Herremans M (1995) Effects of woodland modification by African elephant *Loxodonta africana* on bird diversity in northern Botswana. *Ecography* **18**: 440-454.

Johnson MD, Sherry TW, Holmes RT & Marra PP (2006) Assessing habitat quality for a migratory songbird wintering in natural and agricultural habitats. *Conservation Biology* **20**: 1433-1444

- Kelsey MG (1992) Conservation of migrants on their wintering grounds: an overview  
*Ibis* **134**: 109-112
- Kuhnert PM, Martin TG, Mengersen K & Possingham HP (2005) Assessing the impacts of grazing levels on bird density in woodland habitat: a Bayesian approach using expert opinion. *Environmetrics* **16**: 717-747
- Levick S & Rogers K (2008) Patch and species specific responses of savanna woody vegetation to browser exclusion. *Biological Conservation*. **141**; 489-498
- McPherson, JM & Jetz W (2007) Type and spatial structure of distribution data and the perceived determinants of geographical gradients in ecology: the species richness of African birds. *Global Ecology and Biogeography* **16**: 657-667
- Moncrieff GR, Kruger LM & Midgley JJ (2008) Stem mortality of *Acacia nigrescens* induced by the synergistic effects of elephants and fire in the Kruger National Park, South Africa. *Journal of Tropical Ecology* **24**: 655-662
- O'Connor TG, Goodman PS & Clegg B (2007) A functional hypothesis of the threat of local extirpation of woody plant species by elephant in Africa. *Biological Conservation* **136**: 329-345
- Parr CL & Andersen AN (2006) Patch mosaic burning for biodiversity conservation: a critique of the pyrodiversity paradigm. *Conservation Biology* **20**: 1610-1619
- Pomeroy D & Dranzoac C (1997) Methods of studying the distribution, diversity and abundance of birds in East Africa: Some quantitative approaches. *African Journal of Ecology* **35**: 110-123
- Ribeiro NS, Shugart HH & Washington-Allen R (2008) The effects of elephant and fire on species composition and structure of the Niassa Reserve, northern Mozambique. *Forest Ecology and Management* **255**: 1626-1636
- Valentine LE, Schwarzkopf L, Johnson CN & Grice AC (2007) Burning season influences the response of bird assemblages to fire in tropical savannas. *Biological Conservation* **137**: 90-101
- van Rensburg BJ, Chown SL, van Jaarsveld AS & McGeoch MA (2000) Spatial variation and biogeography of sand forest avian assemblages in South Africa  
*Journal of Biogeography* **27**: 1385-1401
- Wilson JW, van Rensburg BJ, Ferguson WH & Keith M (2008) The relative importance of environment, human activity and space in explaining species richness of South African bird orders. *Journal of Biogeography* **35**: 342-352

## Small mammal projects

### **The impact of fire management practices / elephant damage in the bush on the diversity of small mammals**

Andrews P & O'Brien EM (2000) Climate, vegetation, and predictable gradients in mammal species richness in southern Africa. *Journal of Zoology* **251**: 205-231

Avenant NL & Cavallini P (2007) Correlating rodent community structure with ecological integrity, Tussen-die-Riviere Nature Reserve, Free State province, South Africa. *Integrative Zoology* **2**: 212-219

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Ferreira SM & Van Aarde RJ (1996) Changes in community characteristics of small mammals in rehabilitating coastal dune forests in northern KwaZulu/Natal. *African Journal of Ecology* **34**: 113-130

Happloid DCD & Happloid M (1986) Small mammals of Zomba Plateau, Malawi, as assessed by their presence in pellets of the grass owl, *Tyto capensis*, and by live-trapping. *African Journal of Ecology* **24**: 77-87

Keesing F (1998) Impacts of ungulates on demography and diversity of small mammals in central Kenya. *Oecologia* **116**: 381-389.

Kerley GIH (1992) Ecological correlates of small mammal community structure in the semi-arid Karoo, South Africa. *Journal of Zoology* **227**: 17-27

Kryštufek B, Haberl W & Baxter RM (2008) Rodent assemblage in a habitat mosaic within the Valley Thicket vegetation of the Eastern Cape Province, South Africa. *African Journal of Ecology* **46**: 80-87

Levick S, & Rogers K, (2008) Patch and species specific responses of savanna woody vegetation to browser exclusion. *Biological Conservation* **141**: 489-498

- Moncrieff GR, Kruger LM & Midgley JJ (2008) Stem mortality of *Acacia nigrescens* induced by the synergistic effects of elephants and fire in the Kruger National Park, South Africa. *Journal of Tropical Ecology* **24**: 655-662
- O'Connor TG, Goodman PS & Clegg B (2007) A functional hypothesis of the threat of local extirpation of woody plant species by elephant in Africa. *Biological Conservation* **136**: 329-345
- Parr CL & Andersen AN (2006) Patch mosaic burning for biodiversity conservation: a critique of the pyrodiversity paradigm. *Conservation Biology* **20**: 1610-1619
- Ribeiro NS, Shugart HH & Washington-Allen R (2008) The effects of elephant and fire on species composition and structure of the Niassa Reserve, northern Mozambique. *Forest Ecology and Management* **255**: 1626-1636
- Valentine LE, Schwarzkopf L, Johnson CN & Grice AC (2007) Burning season influences the response of bird assemblages to fire in tropical savannas. *Biological Conservation* **137**: 90-101

### **Plant and habitat Projects**

#### **The impact of *fire management practices / elephant damage in the bush on habitat diversity***

- Aarde RJ, Ferreira SM, Kritzinger JJ, Dyk PJ, Vogt M & Wassenaar TD (1996) An evaluation of habitat rehabilitation on coastal dune forests in Northern KwaZulu-Natal, South Africa. *Restoration Ecology* **4**: 334-345
- Angelstam PK (1998) Maintaining and restoring biodiversity in European boreal forests by developing natural disturbance regimes. *Journal of Vegetation Science* **9**: 593-602
- Buckland SM, Thompson K, Hodgson JG & Grime JP (2001) Grassland invasions: effects of manipulations of climate and management. *Journal of Applied Ecology* **38**: 301-309
- Bullock JM, Franklin J, Stevenson MJ, Silvertown J, Coulson SJ, Gregory SJ & Tofts R (2001) A plant trait analysis of responses to grazing in a long-term experiment. *Journal of Applied Ecology* **38**: 253-267
- Challenge C, Maillard D, Gaillard JM, Merlot L & Peltier R (2002) Damage to trees in wooded savanna in Zakouma National Park, Chad. *Journal of Tropical Biology* **18**: 599-614

- Eckardt HC, van Wilgen BW & Biggs HC (2000) Trends in woody vegetation cover in the Kruger National Park, South Africa, between 1940 and 1998. *African Journal of Ecology* **38**: 108-113
- Edkins MT, Kruger LM, Harris K & Midgley JJ (2007) baobabs and elephants in Kruger National Park: Nowhere to hide. *African Journal of Ecology* **46**: 119-125
- Grigulis K, Sheppard AW, Ash JE & Groves RH (2001) The comparative demography of the pasture weed *Echium plantagineum* between its native and invaded ranges. *Journal of Applied Ecology* **38**: 281-290
- Guy PR (1981) Changes in the biomass and productivity of woodlands in the Sengwa wildlife research area, Zimbabwe. *Journal of Applied Ecology* **18**: 507-519
- Hunt LP (2001) Heterogeneous grazing causes local extinction of edible perennial shrubs: a matrix analysis. *Journal of Applied Ecology* **38**: 238-252
- Keeley JE & Fotheringham CJ (2001) Historic fire regime in southern California shrublands. *Conservation Biology* **15**: 1536-1548
- Laws RM (1970) Elephants as agents of habitat and landscape change in East Africa. *Oikos* **21**: 1-15
- Lombard AT, Johnson CF, Cowling RM, Pressey RL (2001) protecting plants from elephants: Botanical reserve scenarios within the Addo Elephant National Park, *Biological Conservation* **102**: 191-203
- Moncrieff GR, Kruger LM & Midgley JJ (2008) Stem mortality of *Acacia nigrescens* induced by the synergistic effects of elephants and fire in the Kruger National Park, South Africa. *Journal of Tropical Ecology* **24**: 655-662
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- Parr CL & Andersen AN (2006) Patch mosaic burning for biodiversity conservation: a critique of the pyrodiversity paradigm. *Conservation Biology* **20**: 1610-1619
- Petraitis PS, Latham RE & Nisenbaum RA (1989) The maintenance of species diversity by disturbance. *Quarterly Review of Biology* **64**: 393-418
- Richardson DM, Allsopp N, D'antonio CM, Milton SJ & Rejmanek M (2000) Plant invasions: The role of mutualisms. *Biological Reviews* **75**: 65-93

- Ribeiro NS, Shugart HH & Washington-Allen R (2008) The effects of elephant and fire on species composition and structure of the Niassa Reserve, northern Mozambique. *Forest Ecology and Management* **255**: 1626-1636
- Roques KG, O'Connor TG & Watkinson AR (2001) Dynamics of shrub encroachment in an African savanna: relative influences of fire, herbivory, rainfall and density dependence. *Journal of Applied Ecology* **38**: 268-280
- Sheppard AW, Smyth MJ & Swirepik A (2001) The impact of a root-crown weevil and pasture competition on the winter annual *Echium plantagineum*. *Journal of Applied Ecology* **38**: 291-300
- Sousa W (1984) The role of disturbance in natural communities. *Annual Review of Ecology and Systematics* **15**: 353-391
- Valentine LE, Schwarzkopf L, Johnson CN & Grice AC (2007) Burning season influences the response of bird assemblages to fire in tropical savannas. *Biological Conservation* **137**: 90-101
- Watkinson AR & Ormerod SJ (2001) Grasslands, grazing and biodiversity: editors' introduction. *Journal of Applied Ecology* **38**: 233-237
- van Wilgen BW (2008) Fire management in South Africa's conservation areas: Why bother? *South African Journal of Botany* **74**: 359
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