

South Africa - Reading lists and research questions

The following research questions and accompanying reading lists are provided to give everyone a chance to think about the scientific work and research areas that they might encounter at your expedition site. The list is a starting point for those doing CoPE and other extended project work and you may wish to alter the question or go in a slightly different direction but do consult your tutor/Opwall before deciding in your final topic: make sure it is practical and you are really interested in it.

The reading lists are only 'starters' and NOT meant to be a definitive list for your research. You will get many leads from these and we have chosen a good range of sources from academic papers to video clips. We have checked all of the internet links but these constantly change with time so expect some not to work (cut and paste into your web browser address bar if you have an electronic version of this booklet). We have tried to direct you to the summary abstracts of many of the papers cited as they are not easily available unless you have access to a University library or a journal 'on-line'.

Do make use of the research library on the OpWall website - <http://www.opwall.com>
If you do use a reference ALWAYS quote as much detail as you can and if possible, the original citation.

If you want to find further academic papers go to the Mendeley Website - www.mendeley.com/research-papers/. This website allows you to find more references free of charge and the links they provide can even get you to the original article: if not, try cutting and pasting the title into 'google' and you will be surprised what you get!

A level keyword link	Research area	Research questions	South Africa Suggested Reading List
ID guides bush savannah	Background	General	<p>Book - Trees Van Wyck, B, Van Wyck, P & Van Wyck, B. E (2000) Photographic Guide to Trees of Southern Africa., Briza Publications, Pretoria. Branch, B (1998)</p> <p>Book - Reptiles Field Guide to Snakes and other Reptiles in Southern Africa. Struik Publishers, Capetown. http://www.struik.co.za. ISBN 1 86872 040 3</p> <p>Book - Birds Sinclair, I, Hockey, P & Tarboton, W (2002) Sasol Birds of Southern Africa. Struik Publishers, Capetown. www.struik.co.za ISBN 1 86872 721 1</p> <p>Book - Birds Newman, K (2002) Birds of Southern Africa, Struik Publishers, Capetown. www.struik.co.za ISBN 1 86872 761 0</p> <p>Chittenden, H. & Whyte, I.</p> <p>Book - Birds (2009) Roberts Bird Guide: Kruger National Park and Adjacent Lowveld: A Guide to More than 420 Birds in the Region. Jacana Media, Pretoria. www.jacana.co.za ISBN 1770096388</p> <p>Book - Mammals Apps, P. (2000) Smithers Mammals of Southern Africa. Struik Publishers, Capetown. www.struik.co.za. ISBN 1 86872 550 2.</p> <p>Book - Mammals (2009) Cillie B The Pocket Photoguide to mammals of Southern Africa - ISBN: 978-1-919938-77-6 www.sunbirdpublishers.co.za</p> <p>Book - Wildlife Carruthers V (2005) The Wildlife of Southern Africa - a field guide to the animals and plants of the region. Struik Publishers - ISBN 1-86872-451-4</p> <p>Book - Walker, C (1996) Signs of the Wild - a field guide to the spoor and signs of the mammals of southern Africa. Struik Publishers, Capetown. www.struik.co.za. ISBN 1 86825 896 3.</p>
history politics background	Background	General reading	<p>Book - History The AA Guide to South Africa AA Publishing. Excellent summary at the start of history and politics.</p> <p>Book - History (1995) Mandela, N Long Walk to Freedom - Mandela's autobiography - essential background ISBN 0-00-0-</p>

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bush savannah wildlife	Background	Background reading and watching	<p>Article - Barley S (2009) Kenya's lions could vanish within 10 years. New Scientist Online available at http://www.newscientist.com/article/dn17648-kenyas-lions-could-vanish-within-10-years.html</p> <p>Electronic media - BBC Last Chance to See, Episode 3: Northern White Rhino. Available online at http://www.bbc.co.uk/programmes/b00mvbbx</p> <p>Electronic media - BBC Life of Mammals, Episode 4: Plant Eaters</p> <p>Electronic media - BBC Life of Mammals, Episode 5: Meat Eaters</p> <p>Electronic media - BBC Planet Earth, Episode 7: Great Plains</p> <p>Electronic media - The Secret Life of Elephants BBC Video. Available from NHBS – http://www.nhbs.com/</p>
climate change human impact biodiversity	Biodiversity and Man's impact on wildlife	Are there any impacts from climate change on South African habitats and ecosystems?	<p>Academic paper - Erasmus, B Vulnerability of South African animal taxa to climate change - Global Change Biology Vol 8, Issue 7, pp 679-693, July 2002. http://onlinelibrary.wiley.com/doi/10.1046/j.1365-2486.2002.00502.x/full</p> <p>Article - Thomas, C Extinction risk from climate change - Nature 2004 Vol 427, 8 January 2004. http://www.nature.com/nature/journal/v427/n6970/full/nature02121.html</p> <p>Article - website - Climate change in South Africa - The UN Worldwide campaign on climate change. http://www.sealthedeal2009.org/climate-change-south-africa</p>
conflicts classification field work behaviour	Bush Survival	What are the main species of mammal that pose significant threats to humans completing survey work on foot in South African Parks and how can these threats be reduced?	<p>Article - (2006) Butler, RA When elephants attack http://news.mongabay.com/2006/0627-gabon.html</p> <p>Electronic media - Video - Elephant charging http://www.youtube.com/watch?v=pek-2s7csP8</p> <p>Book - (2007) Foreman SJ How to plan and survive safaris, camping trips, and expeditions in Africa - ISBN 9781430308423 http://www.amazon.com/SURVIVE-SAFARIS-CAMPING-EXPEDITIONS-AFRICA/dp/1430308427</p> <p>Other - website - Africa's most dangerous animals - http://goafrika.about.com/od/africasafariguide/tp/dangerousanimals.htm</p>
conflicts classification field work behaviour	Bush survival	What are the main species of snake that pose significant threats to humans completing survey work on foot in South African Parks and how can these threats be reduced?	<p>Book - (2007) Foreman SJ How to plan and survive safaris, camping trips, and expeditions in Africa - ISBN 9781430308423 http://www.amazon.com/SURVIVE-SAFARIS-CAMPING-EXPEDITIONS-AFRICA/dp/1430308427</p> <p>Book - Reptiles Field Guide to Snakes and other Reptiles in Southern Africa. Struik Publishers, Capetown. www.struik.co.za. ISBN 1 86872 040 3</p> <p>Other - website - Africa's most dangerous animals - http://goafrika.about.com/od/africasafariguide/tp/dangerousanimals.htm</p> <p>Article - Venomous snakes of South Africa - http://www.seanthomas.net/oldsite/venom.html</p>
conflicts classification field work behaviour	Bush survival	How do you determine safe distances to approach various herbivore and predator species on foot?	<p>Book - Estes, R - The behaviour guide to African mammals - http://www.amazon.com/Behavior-Guide-African-Mammals-Carnivores/dp/0520080858</p> <p>Book - Walker, C (1996) Signs of the Wild - a field guide to the spoor and signs of the mammals of southern Africa. Struik Publishers, Capetown. www.struik.co.za. ISBN 1 86825 896 3. Also book available on-line via google.co.uk/books. Paste in full title and 3rd or 4th down list.</p>
population endangered species CITES conservation behaviour	Elephant impacts	How are elephant herds structured?	<p>Article - Quammen D (2008) Family ties: the elephants of Samburu. National Geographic September 2008 available online at http://ngm.nationalgeographic.com/2008/09/samburu-elephants/quammen-text/1</p> <p>Electronic media- Video Elephant societies http://www.pbs.org/wnet/nature/episodes/unforgettable-elephants/echos-family-tree/4488/</p> <p>Academic paper - (2007) Evans, K. & Harris, S. Adolescence in male Africa elephants (<i>Loxodonta africana</i>) and the importance of sociality (Accepted) Animal Behaviour http://www.help elephants.com/pdf/EvansHarris%20male%20sociality%20(2).pdf</p> <p>Academic paper - R. J. Aarde and T. P. Jackson. 2007. Megaparks for metapopulations: Addressing the causes of locally high elephant</p>

			<p>numbers in southern Africa. <i>Biological Conservation</i> 134 (3): 289-297. http://www.up.ac.za/dspace/handle/2263/2622</p> <p>Article - Kruger National park - Elephant cull or killing fields - IFAW http://www.ifaw.org/ifaw_southern_africa/join_campaigns/national_regional_efforts/the_debate_on_elephant_culling_in_south_africa/index.php</p>
population endangered species CITES conservation	Elephant impacts	How can you control elephant population expansion?	<p>Article - Elephant contraception project http://www.elephantcare.org/protodoc_files/new%2006/Elephant_Contraception_Brochure_06_4.pdf</p> <p>Academic paper - R. J. Aarde and T. P. Jackson. 2007. Megaparks for metapopulations: Addressing the causes of locally high elephant numbers in southern Africa. <i>Biological Conservation</i> 134 (3): 289-297. http://www.up.ac.za/dspace/handle/2263/2622</p> <p>Electronic Media - Video Elephant birth control vaccine http://www.makalaliresearch.co.za/Elephants</p> <p>Academic papers - Opwall research library - reading list for Z201 The effects of vasectomising male elephants on herd behaviour - http://www.opwall.com/Library/Dissertation%20reading%20lists.shtml#South_Africa</p> <p>Article - Kruger National park - Elephant cull or killing fields - IFAW http://www.ifaw.org/ifaw_southern_africa/join_campaigns/national_regional_efforts/the_debate_on_elephant_culling_in_south_africa/index.php</p>
population endangered species CITES conservation field work	Elephant impacts	What are the impacts of elephants on bush and forest habitat?	<p>Academic paper - F. W. Ihwagi et al. 2010. The impacts of elephants, <i>Loxodonta Africana</i>, on woody vegetation through selective debarking in Samburu and Buffalo Springs National Reserves, Kenya. <i>African Journal of Ecology</i> Vol. 48(1): 87-95 http://zariba.ingenta.com/content/bsc/afje/2010/00000048/0000001/art00012;jsessionid=15i3habv4a18q.alice</p> <p>Other- Definition Elephants - Effect on the environment http://en.wikipedia.org/wiki/Elephant#Effect_on_the_environment</p>
ecology habitat niche adaptation food chain web	Predators and herbivores	How can the total carrying capacity for herbivores be calculated for a reserve?	<p>Other -Definition Carrying capacity http://www.eoearth.org/article/Carrying_capacity</p> <p>Academic paper - H. Fritz and P. Duncan. 1994. On the carrying capacity for large ungulates of African savannah ecosystems. <i>Proceeding of the Royal Society</i> 256: 77-82 http://www.jstor.org/pss/49597</p> <p>Academic papers - Opwall research reading list - SW202 Factors affecting the population size and distribution of large mammals in the Waterberg Biosphere - http://www.opwall.com/Library/Dissertation%20reading%20lists.shtml#South_Africa</p>
ecology habitat niche adaptation	Predators and herbivores	What are the contrasting habitat requirements of black and white rhinos?	<p>Other -Definition - White rhino - http://en.wikipedia.org/wiki/White_Rhinoceros</p> <p>Other - Definition - Black rhino - http://en.wikipedia.org/wiki/Black_Rhinoceros</p> <p>Report - Habitat differences http://www.savenues.com/wildlife/wildlife_rhino.htm</p> <p>Academic papers - Opwall research reading list - SW202 Factors affecting the population size and distribution of large mammals in the Waterberg Biosphere - http://www.opwall.com/Library/Dissertation%20reading%20lists.shtml#South_Africa</p>
ecology habitat niche adaptation food chain web	Predators and herbivores	Contrast the social structure and niche separation of lions, leopards and cheetahs.	<p>Academic papers - Opwall research reading list - SW202 Factors affecting the population size and distribution of large mammals in the Waterberg Biosphere - http://www.opwall.com/Library/Dissertation%20reading%20lists.shtml#South_Africa</p> <p>Report - Cheetah social structure http://www.bio.davidson.edu/people/vecase/Behavior/Spring2002/Guthrie/SocialStructure.html</p> <p>Report - Social structure leopards http://www.bio.davidson.edu/people/vecase/Behavior/Spring2004/bunton/bunton.html#generalinfo</p> <p>Article - The African Lion - Social Organisation - http://www.bio.davidson.edu/people/vecase/Behavior/Spring2004/shelburne/organization.html</p>
ecology habitat niche adaptation	Predators and herbivores	What methods are used to estimate populations of large	<p>Academic papers - Opwall research reading list - SW202 Factors affecting the population size and distribution of large mammals in the Waterberg Biosphere -</p>

food chain web		herbivores and predators in a reserve?	<p>http://www.opwall.com/Library/Dissertation%20reading%20lists.shtml#South_Africa</p> <p>Academic paper - H. Jachmann. 2002. Comparison of aerial counts with ground counts for Large African herbivores. Journal of Applied Ecology 39: 841-852 http://www.jstor.org/pss/827210</p> <p>Book - Krebs C (2006) Mammals. In WJ Sutherland (Ed.) Ecological Census Techniques: A Handbook Cambridge: Cambridge University Press pp 351-369 http://www.zoology.ubc.ca/~krebs/papers/227.pdf</p>
conservation management sustainability	Reserve management	What are the advantages/disadvantages of completing controlled burning in savannah Parks.	<p>Other - Definition - Controlled burning http://en.wikipedia.org/wiki/Controlled_burning</p> <p>Article - Are fires more important than rain for Savannah ecosystems? Sciencedaily September 26 2008 – http://www.sciencedaily.com/releases/2008/09/080919183823.htm</p> <p>Academic paper - D. Aleper, K. A. Lye, S. R. Moe. 2008. Response of Acacia Sieberiana to Repeated Experimental Burning. Rangeland Ecology and Management 61(2): 182-187 http://www.bioone.org/doi/abs/10.2111/06-179.1</p> <p>Academic papers - OpWall dissertation reading list - SW203 The effects of habitat, elephant damage and fire management on winter bird communities in the Waterberg Biosphere - http://www.opwall.com/Library/Dissertation%20reading%20lists.shtml#South_Africa</p>
conservation management sustainability tourism ecotourism	Reserve management	Does ecotourism provide a significant financial incentive for conservation in South Africa?	<p>Other - Definition of ecotourism - http://en.wikipedia.org/wiki/Ecotourism</p> <p>Academic paper - P. A. Lindsey, R. R. Alexander, J.T. du Toit and M. G. L. Mills. 2005. The potential contribution of ecotourism to African wild dog Lycaon pictus conservation in South Africa. Biological Conservation 123 (3): 339-348 http://www.africanwildlifeconservationfund.org/Research_Team_at_African_Wild/Lindsey_Pubs/Cost%20efficiency%20of%20wild%20dog%20conservation.pdf</p> <p>Academic paper - A. Kiss. 2004. Is community-based ecotourism a good use of biodiversity conservation funds? Trends in Ecology and Evolution 19 (5): 232-237. (paste title into google search bar).</p> <p>Academic paper - Lindsey, P.A., R. Alexander, M.G.L. Mills, S.S. Romañach, & R. Woodroffe. 2007 Wildlife viewing preferences of visitors to protected areas in South Africa: implications for the role of ecotourism in conservation. Journal of Ecotourism 6: 19-33. http://www.africanwildlifeconservationfund.org/Research_Team_at_African_Wild/Lindsey_Pubs/Wildlife%20viewing%20preferences.pdf</p>
human impact conservation	Reserve management	Is trophy hunting justified as a way of raising funds for nature conservation?	<p>Other - Definition Trophy hunting http://en.wikipedia.org/wiki/Trophy_hunting</p> <p>Article - For and against - http://flaflooga.com/trophy_hunting.php</p> <p>Other - Website League against cruel sports -Trophy Hunting Campaign - http://www.league.org.uk/content.aspx?CategoryID=302&ArticleID=284</p> <p>Article and Website - Why Africa Benefits from Sport Hunting. - Shakari Connection http://www.shakariconnection.com/why-africa-benefits-from-sport-hunting.html</p>
conservation management sustainability tourism	Reserve management	Is culling in South African Parks a necessary evil?	<p>Article - Elephant contraception project http://www.elephantcare.org/protodoc_files/new%2006/Elephant_Contraception_Brochure_06_4.pdf</p> <p>Academic paper - R. J. Aarde and T. P. Jackson. 2007. Megaparks for metapopulations: Addressing the causes of locally high elephant numbers in southern Africa. Biological Conservation 134 (3): 289-297. http://www.up.ac.za/dspace/handle/2263/2622</p> <p>Electronic Media- Video Elephant birth control vaccine http://www.makalaliresearch.co.za/Elephants</p> <p>Academic papers - Opwall research library - reading list for Z201 The effects of vasectomising male elephants on herd behaviour - http://www.opwall.com/Library/Dissertation%20reading%20lists.shtml#South_Africa</p> <p>Article - Kruger National park - Elephant cull or killing fields - IFAW http://www.ifaw.org/ifaw_southern_africa/join_campaigns/national_regional_efforts/the_debate_on_elephant_culling_in_south_africa/index.php</p>

			<p>Report - BBC news clip & article South Africa to Allow Elephant Cull http://news.bbc.co.uk/1/hi/world/africa/7262951.stm</p> <p>Academic paper - Van Aarde, R., Whyte, I. and Pimm, S. (1999) Culling and the dynamics of the Kruger National Park African elephant population. <i>Animal Conservation</i> 2: 287-29 http://onlinelibrary.wiley.com/doi/10.1111/j.1469-1795.1999.tb00075.x/abstract</p> <p>Article - South Africa Lifts Ban on Culling http://www.bornfree.org.uk/campaigns/elephants/campaign-action/elephant-cull/</p>
conservation management sustainability	Reserve management	What are the advantages/disadvantages of fenced Parks in South Africa compared to non fenced Parks in Kenya?	<p>Academic paper - M. W. Hayward and G. I. H. Kerley. 2009. Fencing for conservation: Restriction of evolutionary potential or a riposte to threatening processes? <i>Biological Conservation</i> 142 (1): 1-13. http://www.citeulike.org/user/rtiler/article/3757240</p> <p>Report - (2008) Licht, D - Out of Africa: Lessons from Park Management in South Africa - <i>The George Wright Forum</i> Vol 25, No 1 – http://74.125.155.132/scholar?q=cache:IAwZIP6FAIJ:scholar.google.com/+disadvantages+to+fenced+parks+africa&hl=en&as_sdt=2000</p>
Invasive species human impact management conservation biodiversity	Reserve Management	What are the impact of invasive species and how might they be controlled? (chromolaena - a case study)	<p>Other - Definition - Invasive species http://en.wikipedia.org/wiki/Invasive_species</p> <p>Other - Website - Invasive species database. http://www.issg.org/database/welcome/</p> <p>Article - Report - Chromolaena odorata - http://www.boku.ac.at/h912/gglatzel/912315/Students%20Presentations%202010/Chromolaena%20odorata%20presentation.pdf</p> <p>Article - website - Stae of the Environemnet South Africa Invasive species - http://soer.deat.gov.za/420.html</p> <p>Article - Marshall, L Invasive Weed Threatens South African Rhino Sanctuary - <i>National geographic news</i> Sept 16, 2005 http://news.nationalgeographic.co.uk/news/2005/09/0916_050916_triffidweed.html</p>
population endangered species CITES conservation behaviour	Reserve management	How do you determine hierarchy in elephant herds?	<p>Article - Social hierarchy in herd influences elephants movement during scarcity http://www.topnews.in/social-hierarchy-herd-influences-elephants-movement-during-scarcity-24700</p> <p>Academic paper - Wittemyer, G Hierarchical dominance structure and social organization in African elephants, <i>Loxodonta africana</i> - <i>Animal Behaviour</i> Vol 73, Issue 4, Pages 671-681 http://www.mendeley.com/research/hierarchical-dominance-structure-and-social-organization-in-african-elephants-loxodonta-africana/</p> <p>Electronic media- Video Elephant societies http://www.pbs.org/wnet/nature/episodes/unforgettable-</p>
conservation sampling biodiversity transect	Survey methods	The advantages and disadvantages of point and transect counting to describe bird communities?	<p>Book - Gibbons DW & Gregory RD (2006) <i>Birds</i>. In WJ Sutherland (Ed.) <i>Ecological Census Techniques: A Handbook</i> Cambridge: Cambridge University Press pp 308 350</p> <p>Book - Bibby CJ, Burgess ND, Hill DA, Mustoe, SH. (2002) <i>Bird Census Techniques</i> (Second edition). Academic press: London</p> <p>Article - Avian ecology field methods http://en.wikipedia.org/wiki/Avian_ecology_field_methods</p> <p>Book - Howell SNG, Webb S. (2005) <i>A Guide to the Birds of Mexico and Northern Central America</i>, Oxford: Oxford University Press</p> <p>Report – Long, P - Patterns of bird diversity in Kruger National Park, South Africa: insights from distribution modelling using point count data in 2009 - http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/South%20Africa/Kruger%202009%20birds%20report.pdf</p>