

Madagascar - 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	List – Madagascar Terrestrial
General	Background	General reading for Madagascar	<p>Book – Bradt H Guide to Madagascar 2006 ISBN 978 1 84162 197 5 978 1 84162 197 5 http://www.bradt-travelguides.com/details.asp?prodid=119</p> <p>Book – extract from the Endangered Species Handbook – 2005 Animal Welfare Institute http://www.endangeredspecieshandbook.org/ Madagascar and other Islands - http://www.endangeredspecieshandbook.org/pdfs/ive/esh_8-225.pdf</p>
ID Guides	Background	General ID	<p>Book - Morris & Hawkins (1999) Birds of Madagascar: a photographic field guide. Pica</p> <p>Book -- Garbutt (2007) Mammals of Madagascar. A&C Black</p> <p>Book - Mittermeier et al (2010) Lemurs of Madagascar 3rd edition. Conservation International</p> <p>Book -- Glaw & Vences (2006) Field guide to the amphibians and reptiles of Madagascar 3rd edition. Vences & Glaw Verlag</p> <p>Book – Schuurman D Madagascar Wildlife - A visitor's Guide.</p> <p>Book – Garbutt, N Madagascar Wildlife - (Bradt Travel Guide)</p> <p>Leaflet –Field Checklist of the Birds of Madagascar http://www.madagascar-library.com/r/1740.html</p> <p>Book –Lemurs of Madagascar Pocket Identification Guide (now in 2 vols – Diurnal and Cathemeral lemurs; Nocturnal lemurs)</p> <p>Books – website - Guides for Madagascar – Use</p>

			search facility (type guides) - http://www.madagascar-library.com/search.html
General	Background	Sampling	Book - Ecological Census Techniques: A Handbook (2 nd Edition) by Sutherland, W.J. 2006. Cambridge University Press, Cambridge.
population evolution endemism biodiversity	Amphibians, Reptiles and Birds	How do bird communities of Madagascar differ from those found on the African mainland?	Other – article Endemic birds of Madagascar and the western Indian Ocean Islands. http://en.wikipedia.org/wiki/Endemic_birds_of_Madagascar_and_western_Indian_Ocean_islands Academic paper – Goodman, S Updated estimates of biotic diversity and endemism for Madagascar Oryx (2005) Vol 39 Issue 01 pages 73-77 http://bama.ua.edu/~jbenstead/Publications_files/Madagascar%20biodiversity%20copy.pdf Report – Hotspots – Madagascar and the Indian Ocean Islands Conservation International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/biodiversity.aspx
populations evolution endemism biodiversity	Amphibians, Reptiles and Birds	How do the Madagascar herpetofauna communities differ from those found in the rest of Africa?	Report – Hotspots – Madagascar and the Indian Ocean Islands Conservation International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/biodiversity.aspx Other – Reptiles of Madagascar - http://en.wikipedia.org/wiki/Category:Reptiles_of_Madagascar Other – Amphibians of Madagascar http://en.wikipedia.org/wiki/Amphibians_of_Madagascar
classification isolation evolution	Amphibians, Reptiles and Birds	What are the main groupings of reptiles and what makes them unique to Madagascar?	Report – Hotspots – Madagascar and the Indian Ocean Islands Conservation International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/biodiversity.aspx Other – Reptiles of Madagascar - http://en.wikipedia.org/wiki/Category:Reptiles_of_Madagascar Book -- Glaw & Vences (2006) Field guide to the amphibians and reptiles of Madagascar 3rd edition. Vences & Glaw Verlag
ecology niche adaptation	Amphibians, Reptiles and Birds	What ecological and main characteristics make Chameleons successful?	Book -- Glaw & Vences (2006) Field guide to the amphibians and reptiles of Madagascar 3rd edition. Vences & Glaw Verlag Academic paper – PhD Carpenter A - The Ecology and exploitation of chameleons in Madagascar - http://www.uea.ac.uk/~chameleo/pdf%20files/Dec%20thesis%20abstract%20&%20contents.pdf
Endemism evolution isolation	Bio-Geography	The 2003 Dreamworks movie Madagascar said there is no place on Earth like it – why did they say this?	Article – website - Conservation International - Madagascar - http://www.conservation.org/explore/africa_madagascar/madagascar/Pages/default.aspx Article – Madagascar and the Indian Ocean Islands – Biodiversity hotspots http://www.biodiversityhotspots.org/xp/hotspots/madagascar/Pages/default.aspx Academic paper - Wilmé, Biogeographic evolution of Madagascar's microendemic biota. <i>Science</i> , Volume: 312 , Issue: 5776 (2006) http://www.sciencemag.org/content/312/5776/1063.short

			<p>Article – Chameleons of Madagascar WildMadagascar.org http://www.wildmadagascar.org/wildlife/chameleons.html</p>
evolution adaptive radiation Isolation	Bio-Geography	<p>Why are the species in the Madagascar so different to those found in Africa?</p>	<p>Report – Hotspots – Madagascar and the Indian Ocean Islands Conservation International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/biodiversity.aspx</p> <p>Academic paper - Wilmé, Biogeographic evolution of Madagascar's microendemic biota. <i>Science</i>, Volume: 312 , Issue: 5776 (2006) http://www.sciencemag.org/content/312/5776/1063.short</p> <p>Academic paper – Rabinowitz, P. D., & Woods, S. (2006). The Africa–Madagascar connection and mammalian migrations. <i>Journal of African Earth Sciences</i>, 44(3), 270-276. http://linkinghub.elsevier.com/retrieve/pii/S1464343X05002220</p> <p>Academic paper – Ali J Mammalian biodiversity on Madagascar controlled by ocean currents Vol 463 4 February 2010 doi:10.1038/nature http://www.mcirano.ufba.br/ftp/aulas/FISB24/seminarios/nature_2008_2010/mammalian_biodiversity_ocean_currents_2010.pdf</p>
evolution speciation isolation adaptation	Bio-Geography	<p>Why are so many endemic species found in Madagascar?</p>	<p>Report – Hotspots – Madagascar and the Indian Ocean Islands Conservation International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/biodiversity.aspx</p> <p>Academic paper - Wilmé, Biogeographic evolution of Madagascar's microendemic biota. <i>Science</i>, Volume: 312 , Issue: 5776 (2006) http://www.sciencemag.org/content/312/5776/1063.short</p> <p>Book – extract from the Endangered Species Handbook – 2005 Animal Welfare Institute http://www.endangeredspecieshandbook.org/Madagascar_and_other_Islands_-_http://www.endangeredspecieshandbook.org/pdfslide/esh_8-225.pdf</p>
Conservation environmental monitoring satellite GIS	Environmental monitoring	<p>How can satellite images help conservation efforts in Madagascar?</p>	<p>Report – Satellite Imagery of Madagascar – Website WildMadagascar.org - http://www.wildmadagascar.org/maps/nasa_satellite.html</p> <p>Academic paper - Shapiro, A. C., & Rohmann, S. O. (2005). Summit-to-sea mapping and change detection using satellite imagery: tools for conservation and management of coral reefs. <i>Revista de Biologia Tropical</i>, 53 Suppl 1(May), 185-193. http://ccma.nos.noaa.gov/publications/biogeography/20ShapiroSum.pdf</p> <p>Article - Satellite Imaginif Corporation – Wildlife and Marine Conservation http://www.satimagingcorp.com/svc/wildlife_and_marine_conservation.html</p>
human impact endangered	Impacts of Man on	<p>What are the main threats</p>	<p>Report – Madagascar – Conservation Action and Protected areas – Hotspots – Conservation</p>

conservation	Madagascan wildlife	to current Madagascan wildlife?	<p>International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/conservation.aspx Academic paper - Lee Hannah, et al. Climate change adaptation for Conservation in Madagascar <i>Biology Letters</i>, Volume: 4 , Issue: 5 (2008) http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2610084/pdf/rsbl20080270.pdf Report – Climate change hastens extinction in Madagascar’s reptiles and amphibians – ScienceDaily june 2008 http://www.sciencedaily.com/releases/2008/06/080609115216.htm Academic paper – PhD Carpenter A - The Ecology and exploitation of chameleons in Madagascar - http://www.uea.ac.uk/~chameleo/pdf%20files/Dec%20thesis%20abstract%20&%20contents.pdf</p>
carbon trading REDD sustainability	Impacts of Man on Madagascan wildlife	Are carbon credits a viable option for protecting forests?	<p>Other - definition - Carbon credits http://en.wikipedia.org/wiki/Carbon_credit Other - website - http://www.un-redd.org/ Articles - Mongabay news articles on Carbon credits - http://news.mongabay.com/news-index/carbon%20credits1.html</p>
Conservation human impact	Impacts of Man on Indonesian wildlife	There are many conflicts between economists and conservations in Madagascar: Can conservation succeed?	<p>Electronic media – BBC Madagascar’s conservation conundrum - http://news.bbc.co.uk/1/hi/world/africa/4433817.stm Report – Madagascar – Conservation Action and Protected areas – Hotspots – Conservation International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/conservation.aspx Academic paper - Lee Hannah, et al. Climate change adaptation for Conservation in Madagascar <i>Biology Letters</i>, Volume: 4 , Issue: 5 (2008) http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2610084/pdf/rsbl20080270.pdf</p>
classification evolution isolation	Mammals	What are the main groupings of mammals on Madagascar and what makes them unique?	<p>Other - List of mammals of Madagascar http://en.wikipedia.org/wiki/List_of_mammals_of_Madagascar Report – Hotspots – Madagascar and the Indian Ocean Islands Conservation International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/biodiversity.aspx Academic paper – Rabinowitz, P. D., & Woods, S. (2006). The Africa–Madagascar connection and mammalian migrations. <i>Journal of African Earth Sciences</i>, 44(3), 270-276. http://linkinghub.elsevier.com/retrieve/pii/S1464343X05002220 Academic paper – Ali J Mammalian biodiversity on Madagascar controlled by ocean currents Vol 463 4 February 2010 doi:10.1038/nature http://www.mcirano.ufba.br/ftp/aulas/FISB24/seminarios/nature_2008_2010/mammalian_biodiversity_ocean_currents_2010.pdf</p>

adaptation evolution speciation isolation	Mammals	What are the differences between small mammals found in Madagascar compared with the rest of Africa?	Report – Hotspots – Madagascar and the Indian Ocean Islands Conservation International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/biodiversity.aspx Academic paper - Elsenberg JF The Tenrecs: A study in Mammalian Behaviour and Evolution Smithsonian Contributions to Zoology (1970) Vol 27, Pages 1-137 Load from http://si-pddr.si.edu/jspui/handle/10088/5115
evolution isolation competition endemism	Mammals	Why are lemurs thriving in Madagascar?	Book - Mittermeier et al (2010) Lemurs of Madagascar 3rd edition. Conservation International Report – Hotspots – Madagascar and the Indian Ocean Islands Conservation International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/biodiversity.aspx Academic paper – Wright PC Lemur traits and Madagascar ecology: coping with an island environment http://www.mendeley.com/research/lemur-traits-and-madagascar-ecology-coping-with-an-island-environment/
Endemism evolution radiation isolation	Mammals	Why are the Tenrecs of Madagascar so unusual?	Article – Tenrecs of Madagascar – Website WildMadagascar.org http://www.wildmadagascar.org/wildlife/tenrecs.htm Report – Hotspots – Madagascar and the Indian Ocean Islands Conservation International http://www.biodiversityhotspots.org/xp/hotspots/madagascar/pages/biodiversity.aspx Academic paper - Elsenberg JF The Tenrecs: A study in Mammalian Behaviour and Evolution Smithsonian Contributions to Zoology (1970) Vol 27, Pages 1-137 Load from http://si-pddr.si.edu/jspui/handle/10088/5115
social behaviour primate	Mammals	How does the social behaviour of a named Madagascan primate help it to survive?	Article - lecture - Leeds University Sellers, B - Primate Behaviour- http://www.leeds.ac.uk/chb/lectures/anthl_11.html Academic paper – Jolly, A Lemur social behavior and primate intelligence (1996) Science Vol 153, pages 501-506 (hard to get hold of!) Article – Ring-tailed lemur <i>Lemur catta</i> Primate Info Net http://pin.primate.wisc.edu/factsheets/entry/ring-tailed_lemur/behav Academic paper – article Kennedy H Ring-tailed lemur <i>Lemur catta</i> http://tolweb.org/treehouses/?treehouse_id=4730