

Indonesia - 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!

Research questions

A level keyword link	Research area	Research questions	Indonesia Terrestrial List
background	General reading	General reading	<p>Book - Malay Archipelago by Alfred Russel Wallace - 1850 but order from Pisces Conservation in ebook format for £14-40 if you contact them directly (tel +44(0)1590 674000 or email pisces@irchouse.demon.co.uk)</p> <p>Book - Song of the Dodo by David Quammen. <i>Best description of island biogeography</i></p> <p>Book - A Naturalist's Guide to the Tropics by Marco Lambertini. <i>Best introduction to tropical forests</i></p> <p>Book - Stuart Robson and Julian Millie 2004 Instant Indonesian: Everything You Need to Speak Indonesian in 100 Key Words and Phrases</p>
Background	General reading	Survival	<p>Book - AS Survival Guide Wiseman, J. 1999. Collins GEM. <i>Best overall guide to field survival</i></p>
Background	General	General ID	<p>Book - Brian J Coates and K.D. Bishop - A Guide to the Birds of Wallacea: Sulawesi, the Moluccas and Lesser Sunda. <i>Best bird ID guide for Sulawesi islands, Indonesia.</i></p> <p>Book - Ruud de Lang and Gernot Vogel - The Snakes of Sulawesi: a Field Guide to the Snakes of Sulawesi with Identification Keys.</p>
indicators human impact conservation sampling	Amphibians, Reptiles and Birds	Which birds are good indicators of undisturbed forests in Sulawesi?	<p>Other- definition - Indicator species http://en.wikipedia.org/wiki/Indicator_species</p> <p>Academic paper - M. Waltert, A. Mardiasuti and M. Muhlenberg. 2004. Effects of Land Use on Bird Species Richness in Sulawesi, Indonesia. Conservation Biology 18(5): 1339-1346 http://www.worldcocoafoundation.org/scientific-research/research-</p>

			<p>library/documents/VanBael2007.PDF</p> <p>Academic paper - Grant E et al - Bird Communities and Habitat as Ecological Indicators of Forest Condition in Regional Monitoring - Conservation Biology, Pages 544-558, Volume 14, No.2, April 2000 http://www.bio-nica.info/biblioteca/Canterbury2000Ecology.pdf</p>
population evolution endemism biodiversity	Amphibians, Reptiles and Birds	How do bird communities of Sulawesi differ from those of adjacent areas?	<p>Book - Brian J Coates and K.D. Bishop - A Guide to the Birds of Wallacea: Sulawesi, the Moluccas and Lesser Sunda islands, Indonesia.</p> <p>Report - Checklist of birds for Buton - http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/Indonesia/Indonesia%20Terrestrial/Checklist%20of%20Buton%20birds.pdf</p> <p>Report - Nurul L. Winarni Martin Jones - Community patterns of birds and butterflies in Lambusango forest, Buton, Southeast Sulawesi in 2006 - http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/Indonesia/Indonesia%20Terrestrial/Bird&butterfly_GEF%20report_2007.pdf</p> <p>Article - website - Endemism in Sulawesi - Birdlife website - Important Bird Areas - IBA's - http://www.birdlife.org/datazone/ebafactsheet.php?id=167</p> <p>Article - Biodiversity Hotspots - Wallacea - http://www.biodiversityhotspots.org/xp/hotspots/wallacea/Pages/biodiversity.aspx</p>
populations evolution endemism biodiversity	Amphibians, Reptiles and Birds	How do the Sulawesi herpetofauna communities differ from those in Borneo?	<p>Book - Ruud de Lang and Gernot Vogel - The Snakes of Sulawesi: a Field Guide to the Snakes of Sulawesi with Identification Keys</p> <p>Academic paper - Gillespie G et al - Herpetofaunal richness and community structure of offshore islands of Sulawesi, Indonesia - Biotropica - 2005, vol. 37, no2, pp. 279-290 [12 page(s) (article)]</p> <p>Article - Biodiversity Hotspots - Wallacea - http://www.biodiversityhotspots.org/xp/hotspots/wallacea/Pages/biodiversity.aspx</p> <p>Other - Definition - website - The Encyclopedia of Earth - Biological diversity in Wallacea - http://www.eoearth.org/article/Biological_diversity_in_Wallacea</p>
ecology sampling human impact	Forest Conservation	How can you quantify the level of forest disturbance?	<p>Academic paper - Watt, D. A. 1998. Measuring disturbance in tropical forests: a critique of the use of species abundance models and indicator measures in general. Journal of Applied Ecology 35: 467-469. http://www.jstor.org/pss/2405213</p> <p>Academic paper - Silk J. W. F. 2004. Assessing tropical lowland forest disturbance using plant morphology and ecological attributes. Forest ecology and Management Vol. 205: 1-5 p241-250. http://www.phylodiversity.net/fslik/ForestEcolManag2005.pdf</p> <p>Book - P. W. Richards, University of Wales, Bangor - The Tropical Rain Forest An Ecological Study 2nd Edition 1996 ISBN: 9780521421942</p> <p>Book - P. W. Richards, University of Wales, Bangor - The Tropical Rain Forest An Ecological Study 2nd Edition 1996 ISBN: 9780521421942</p> <p>Report - Seymour A - Monitoring forest degradation and animal populations in the forests of Central Buton: preliminary results from the pilot study - http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/Indonesia/Indonesia%20Terrestrial/Management/2004%20Forest%20science%20programme%20summary.pdf</p>
sustainability fair trade conservation	Forest Conservation	Are non-timber forest products a substantial income source for villages surrounding Lambusango forest?	<p>Book - P. W. Richards, University of Wales, Bangor - The Tropical Rain Forest An Ecological Study 2nd Edition 1996 ISBN: 9780521421942</p> <p>Other - definition - http://en.wikipedia.org/wiki/Non-timber_forest_products</p> <p>Report - Powling A - Rattans: taxonomy and ecology (LIPI report 2004) - http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/Indonesia/Indonesia%20Terrestrial/Management/Andrew%20Powling%20LIPI%20reports%202004-2005%20Rattan.pdf</p> <p>Report - Malleson R - Socio-Economic Baseline Surveys of Communities Bordering the Lambusango Forest, South East Sulawesi, Indonesia October 2005 - http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/Indonesia/Indonesia%20Terrestrial/socioeconomic/Socio-economic%20baseline%20surveys%20of%20communities%20bordering%20the%20Lambusango%20Forest.pdf</p> <p>Report - Malleson R - Socio-Economic Baseline Surveys of Communities</p>

			<p>Bordering the Lambusango Forest, South East Sulawesi, Indonesia October 2006 – http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/Indonesia/Indonesia%20Terrestrial/socioeconomic/2006%20socioeconomic%20reportver2.pdf</p>
carbon trading REDD sustainability	Forest Conservation	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 ecotourism sustainability	Forest Conservation	How can ecotourism be developed to provide income for the villages around the Lambusango forest or Wakatobi Marine National Park?	<p>Article - Eco-tourism: A sustainable trade? James Mair - DEC 2006 - http://news.bbc.co.uk/1/hi/sci/tech/6179901.stm Report - Malleon R - Socio-Economic Baseline Surveys of Communities Bordering the Lambusango Forest, South East Sulawesi, Indonesia October 2005 - http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/Indonesia/Indonesia%20Terrestrial/socioeconomic/Socio-economic%20baseline%20surveys%20of%20communities%20bordering%20the%20Lambusango%20Forest.pdf Report - Malleon R - Socio-Economic Baseline Surveys of Communities Bordering the Lambusango Forest, South East Sulawesi, Indonesia October 2006 – http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/Indonesia/Indonesia%20Terrestrial/socioeconomic/2006%20socioeconomic%20reportver2.pdf Academic paper - Clifton, J. (2005) Evaluating contrasting approaches to marine ecotourism: dive tourism and research tourism in the Wakatobi Marine National Park, Indonesia. In J. Boissevain & T. Selwyn. Contesting the Foreshore: Tourism, Society and Politics on the Coast. Amsterdam University Press, - http://www.opwall.com/Library/Opwall%20library%20pdfs/Journal%20publications/Clifton%20evaluating%202005.pdf Report - Lambusango Forest Conservation Project, Buton, South East Sulawesi, Indonesia 2009 - http://www.opwall.com/Expeditions/Indonesia/Indonesian%20research%20programme/Lambusango%20End%20of%20Project%20Report.pdf (other earlier reports are available)</p>
Ecology niche trophic level	Forest Conservation	Why are fig trees so important for the forest fauna?	<p>Book - P. W. Richards, University of Wales, Bangor - The Tropical Rain Forest An Ecological Study 2nd Edition 1996 ISBN: 9780521421942 Other - definition - Ficus - http://en.wikipedia.org/wiki/Ficus Other - website - Figweb - http://www.figweb.org/Ficus/index.htm Book - Burrows, J and S - Figs of Southern & South-Central Africa - http://www.figweb.org/Ficus/Fig_book/Figs_of_Africa.htm Electronic media - Video Islands and Evolution: Fig Trees of Sulawesi http://videos.howstuffworks.com/geography/fig-tree-videos-playlist.htm#video-8279 Electronic media - Video Islands and Evolution: Species of Sulawesi Cuscus http://videos.howstuffworks.com/geography/fig-tree-videos-playlist.htm#video-8280 Article - Fruit eating birds at particular risk from Indonesian deforestation 0 Fig-eating specialists may be at a disadvantage http://news.mongabay.com/2007/0320-birds.html</p>
climate change human impact	Impacts of Man on Indonesian wildlife	Have there been any impacts from climate change on the wildlife of Indonesia?	<p>Article - Rainforests and Climate Change www.rainforestfoundationuk.org/Rainforests_and_Climate_Change Article - Fate of the rainforest is 'irreversible' The Independent March 2009 - http://www.independent.co.uk/environment/climate-change/fate-of-the-rainforest-is-irreversible-1643083.html Article - website - Climate Change in Indonesia - http://www.global-greenhouse-warming.com/climate-change-in-Indonesia.html Academic paper-article - March 2007 - DFID - Executive Summary - Indonesia and climate change - working paper on Current Status and Policies - http://www.conflictrecovery.org/bin/PEACEClimateChange-ExecSum.pdf Article - Case M, WWF Climate Change in Indonesia Implications for Humans and Nature http://www.wwf.org.uk/filelibrary/pdf/indonesian_climate_ch.pdf Article - Thomas, C Extinction risk from climate change - Nature 2004 Vol 427, 8 January 2004 http://eprints.whiterose.ac.uk/83/1/thomascd1.pdf</p>

human impact	Impacts of Man on Indonesian wildlife	How has Man altered the fauna of Indonesia?	<p>Article - Rainforests and Climate Change www.rainforestfoundationuk.org/Rainforests_and_Climate_Change</p> <p>Article - Fate of the rainforest is 'irreversible' The Independent March 2009 - http://www.independent.co.uk/environment/climate-change/fate-of-the-rainforest-is-irreversible-1643083.html</p> <p>Article - website - Climate Change in Indonesia - http://www.global-greenhouse-warming.com/climate-change-in-Indonesia.html</p> <p>Academic paper-article - March 2007 - DFID - Executive Summary - Indonesia and climate change - working paper on Current Status and Policies - http://www.conflictrecovery.org/bin/PEACEClimateChange-ExecSum.pdf</p> <p>Article - Case M, WWF Climate Change in Indonesia Implications for Humans and Nature http://www.wwf.org.uk/filelibrary/pdf/indonesian_climate_ch.pdf</p> <p>Reports - Operation Wallacea Research Reports Indonesia Terrestrial - many reports looking at Human disturbance. http://www.opwall.com/Library/Research%20Reports%20-%20Indonesia%20terrestrial.shtml (Rattans, forest degradation, Socio-Eco Sur2.veys no 1 and no 2)</p>
human impact endangered conservation	Impacts of Man on Indonesian wildlife	What are the main threats to current Indonesian wildlife?	<p>Article - Rainforests and Climate Change www.rainforestfoundationuk.org/Rainforests_and_Climate_Change</p> <p>Article - Fate of the rainforest is 'irreversible' The Independent March 2009 - http://www.independent.co.uk/environment/climate-change/fate-of-the-rainforest-is-irreversible-1643083.html</p> <p>Article - website - Climate Change in Indonesia - http://www.global-greenhouse-warming.com/climate-change-in-Indonesia.html</p> <p>Academic paper-article - March 2007 - DFID - Executive Summary - Indonesia and climate change - working paper on Current Status and Policies - http://www.conflictrecovery.org/bin/PEACEClimateChange-ExecSum.pdf</p> <p>Article - Case M, WWF Climate Change in Indonesia Implications for Humans and Nature http://www.wwf.org.uk/filelibrary/pdf/indonesian_climate_ch.pdf</p> <p>Reports - Operation Wallacea Research Reports Indonesia Terrestrial - many reports looking at Human disturbance. http://www.opwall.com/Library/Research%20Reports%20-%20Indonesia%20terrestrial.shtml (Rattans, forest degradation, Socio-Eco Sur2.veys no 1 and no 2)</p>
sampling survey techniques	Mammals	What are the advantages of using harp traps for surveying bat communities?	<p>Academic paper (abstract) M. J. O Farrell and W. L. Gannon. 1999. A comparison of acoustic versus capture techniques for the inventory of Bats. Journal of Mammalogy 80(1): 24-30 http://www.jstor.org/pss/1383204</p> <p>Article - Kingston, T & Rossiter, S - Harmonic-hopping in Wallacea's Bats pp 654 - 657 - NATURE - VOL429 - 10JUNE2004 - Operation Wallacea Library - http://www.opwall.com/Library/full%20pub%20list%20alphabetical.shtml</p>
primates human impact	Mammals	What are the impacts of Buton Macaques on local people and how can these be reduced?	<p>Academic papers: Full reading list from Operation Wallacea Dissertation list IL214 Indonesia Terrestrial - Crop Raiding and Human-Wildlife conflict in Buton Macaques - Suggested Reading - http://www.opwall.com/Library/Dissertation%20reading%20lists.shtml</p> <p>Article -- website - Indonesianfauna.com Sulawesi Macaque - http://www.indonesianfauna.com/sulawesimacaque.php</p>
social behaviour primate	Mammals	How does the social behaviour of a named Indonesian primate help it to survive?	<p>Academic papers: Full reading list from Operation Wallacea Dissertation list IL214 Indonesia Terrestrial - Crop Raiding and Human-Wildlife conflict in Buton Macaques - Suggested Reading - http://www.opwall.com/Library/Dissertation%20reading%20lists.shtml</p> <p>Article -- website - Indonesianfauna.com Sulawesi Macaque - http://www.indonesianfauna.com/sulawesimacaque.php</p> <p>Book - Tuttle, RH - Indonesian Primates (best google search with 'Indonesian primate list' - click on 'indonesian Primates - Google Books Result' A number of key chapters present -</p> <p>Article - lecture - Leeds University Sellers, B - Primate Behaviour- http://www.leeds.ac.uk/chb/lectures/anthl_11.html</p>
sampling population endangered	Mammals	How can you estimate the population levels of large but difficult to spot	<p>Report - Dwiyahreni Asri A. Anoa abundance in Lambusango Forest, Buton, and the influencing factors aug 2006 http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/Indonesia/Indonesia%20Terrestrial/Mammals/Dwiyahreni,%20A,%20ANOAA%20ABUNDANCE%20IN%20LAMBUSANGO%20FORESTS,%20BUTON.pdf</p>

		mammal species such as anoa?	<p>Other - definition - Anoa - http://en.wikipedia.org/wiki/Anoa</p> <p>Article - Ungulate website - rich in references - http://www.ultimateungulate.com/Artiodactyla/Bubalus_depressicornis.html</p> <p>Reports - Reading list Operation Wallacea - IN101 - Biodiversity monitoring of the Lamsango Forest Research Assistant pool - look at mammal section for suggestions. http://www.opwall.com/Expeditions/Indonesia/Indonesian%20research%20programme/Projects/Suggested%20Reading/IN101%20Biodiversity%20monitoring.pdf</p>
indicator species birds	Sampling	Which birds are good indicators of undisturbed forests in Sulawesi?	<p>Other - definition - Indicator species http://en.wikipedia.org/wiki/Indicator_species</p> <p>Academic paper - M. Waltert, A. Mardiatuti and M. Muhlenberg. 2004. Effects of Land Use on Bird Species Richness in Sulawesi, Indonesia. Conservation Biology 18(5): 1339-1346 http://www.conservation.uni-goettingen.de/Waltert%20et%20al%20Birds%20Sulawesi%20Conserv%20Biol%202004.pdf(link unreliable).</p> <p>Reports - Reading list Operation Wallacea - IN101 - Biodiversity monitoring of the Lamsango Forest Research Assistant pool - look at bird section for suggestions. http://www.opwall.com/Expeditions/Indonesia/Indonesian%20research%20programme/Projects/Suggested%20Reading/IN101%20Biodiversity%20monitoring.pdf</p>
radio tracking ecology sampling	Survey methods	What aspects of a medium sized mammal's ecology can be studied from radio tracking?	<p>Report - Malay Civet http://www.adrianseymour.co.uk/scientific_research1.htm</p> <p>Academic paper (abstract) A. P. Jennings, A. Zubaid and G. Vernon. 2009. Ranging behaviour, activity, habitat use, and morphology of the Malay civet (<i>Viverra zanzalunga</i>) on Peninsular Malaysia and comparison with studies on Borneo and Sulawesi. Mammalian Biology In Press. http://top25.sciencedirect.com/subject/environmental-science/13/journal/mammalian-biology-zeitschrift-fr-sugetierkunde/16165047/archive/28 (look down the list)</p> <p>Electronic media -Video Radio tracking cheetahs http://www.youtube.com/watch?v=d3Q40jgtdUY</p>
survey techniques biodiversity	Survey methods	What methods can be used for studying biodiversity in the canopy?	<p>Electronic media -Video David Attenborough, canopy access http://videofift.com/video/David-Attenborough-Life-of-Mammals-8-Life-in-the-Trees</p> <p>Electronic media - website -Dendronautics - http://www.dendronautics.org/page3.htm (masses of valuable links)</p>
survey sampling	Survey methods	What are the advantages and disadvantages of point count surveys for describing forest birds?	<p>Book --Gibbons DW & Gregory RD (2006) Birds. In WJ Sutherland (Ed.) Ecological Census Techniques: A Handbook Cambridge: Cambridge University Press pp 308-350</p> <p>Book -Bird Census Techniques by Colin Bibby, Neil Burgess and David Hill</p> <p>Article - Avian ecology field methods http://en.wikipedia.org/wiki/Avian_ecology_field_methods</p> <p>Academic paper - Martin, T. E., Blackburn, G. A. & Simcox, W. (2010) An assessment of the effectiveness of two methods in describing a neotropical cloud forest bird community. Ornithologica Neotropical. 21, 131-147. - http://www.opwall.com/Library/Opwall%20library%20pdfs/Journal%20publications/Martin%20assessment.pdf</p> <p>Report - Winarani, N & Jones, M - Community patterns of birds and butterflies in Lamsango forest, Buton, Southeast Sulawesi in 2006 - http://www.opwall.com/Library/Opwall%20library%20pdfs/Reports/Indonesia/Indonesia%20Terrestrial/Bird&butterfly_GEF%20report_2007.pdf</p>
evolution wallace adaptive radiation	Wallacea Biogeographical Zone	Why are the species in the Wallacea region so different to other parts of Indonesia?	<p>Report - Biodiversity Hotspots http://www.biodiversityhotspots.org/xp/hotspots/wallacea/Pages/default.aspx</p> <p>Other - Statistics- Why are there so many endemic species? http://www.freewebs.com/wallacea/wallacea.htm</p> <p>Other - definition - website - The Encyclopedia of Earth - Biological diversity in Wallacea - http://www.eoearth.org/article/Biological_diversity_in_Wallacea</p>
evolution wallace endemism	Wallacea Biogeographical Zone	What did Alfred Russel Wallace	<p>Other - definition - website - Life history outline - http://en.wikipedia.org/wiki/Alfred_Russel_Wallace</p> <p>Article - Alfred Russel Wallace: adjoining shoulders of giants</p>

		contribute to biology?	http://www.timesonline.co.uk/tol/comment/leading_article/article6850202.ece Electronic media - Video - Sir David Attenborough reads from Alfred Russel Book - Malay Archipelago by Alfred Russel Wallace - 1850 but order from Pisces Conservation in ebook format for £14-40 if you contact them directly (tel +44(0)1590 674000 or email pisces@irchouse.demon.co.uk) Book - The Song of the Dodo by David Quammen
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