

Dr Sara Anne Thornton

Interdisciplinary research | Conservation | Peatlands | Livelihoods

s.thornton.p@gmail.com



+447518424922



(S) sara.thornton91



@Thornton SA



https://thorntonconservation.com/

CURRENT APPOINTMENT

Postdoctoral Research Associate (until May 2023)

University of Leicester, School of Geography, Geology and the Environment, UK, and Borneo Nature Foundation, Indonesia.

Researcher Co-Investigator on project: 'Drought and peatland fires in Indonesian Borneo: Understanding drivers and impacts to build resilience through sustainable development'. NERC-GCRF (NE/T010401/1). PI: Prof Frank van Veen (University of Exeter). Responsibilities: Lead on guiding interdisciplinary working for the project, researcher on objectives related to livelihoods, fisheries, and fish surveys.

PAST APPOINTMENTS

2019-2020 **Lecturer in Human Geography**

University of Leicester, School of Geography, Geology and the Environment, UK Lectured and led seminars and coursework marking for the 3rd year Undergraduate course 'Contemporary Environmental Challenges'.

2018-2019 **ESRC Postdoctoral Fellow**

University of Leicester, School of Geography, Geology and the Environment, UK Project: 'Sustainable Livelihoods in Indonesian Tropical Peatlands'. Role: Principal Investigator, ES/S01165X/1. Funded by the UK Economic and Social Research Council (ESRC).

2018 **Postdoctoral Research Assistant**

University of Leicester, School of Geography, Geology and the Environment, UK Project: 'SUSTAINPEAT', looking at overcoming barriers to sustainable livelihoods and environments in smallholder agricultural systems on tropical peatland. Role: Transcribed interviews and assisted with workshops held in Indonesia.

Postdoctoral Research Assistant 2018

University of Leicester, Department of Genetics and Biology, UK

Project entitled: 'Enhancing the development of field skills and student engagement through multimedia technology'. Role: Designed and conducted guestionnaires.

Postdoctoral Research Associate 2017-2018

University of Leicester, School of Geography, Geology and the Environment, UK Project: 'Development of Research Impact on the Ecosystem Services Provided by Tropical Peatlands'. Role: Designed a teaching support booklet using tropical peatlands as a case study for the new A-level Geography curriculum in the UK (see 'Outreach Publications'). Organised a teacher away-day focusing on the importance of tropical peatlands (See 'Workshops Organised').

EDUCATION

2013-2018

PhD in Interdisciplinary Conservation and Tropical Peatland Socio-Ecology University of Leicester, School of Geography, Geology and the Environment,

UK. and Borneo Nature Foundation (BNF), Indonesia

Doctorate entitled: (Un)tangling the Net, Tackling the Scales and Learning to Fish: An Interdisciplinary Study in Indonesian Borneo. Available online: https://bit.ly/2KshuS0

Supervision: Prof Susan Page (University of Leicester), Prof Caroline Upton (University of Leicester) and Dr Mark Harrison (University of Leicester and BNF).

2009-2013 BSc (Hons) Ecological Science (Conservation and Ecological Management) University of Edinburgh School of GeoSciences, UK.

Awarded 2:1. Dissertation entitled: Reconciliation of the Causes of Deforestation in Central Kalimantan with the Implementation of the EU/Indonesia FLEGT-VPA: A Literature Review.

PUBLICATIONS

Peer-reviewed articles (S: Submitted, IP: In progress)

- S Harrison, M.E., Wijedasa, L.S., Cheyne, S.M., Page, S.E., Cole, L., Imron, M.A., Sugardjito, J., Choiruzzad, S.A.B., **Thornton, S.A.** *et al.* Tropical peatland conservation is important in the context of COVID-19 and potential future (zoonotic) disease pandemics. *PeerJ.*
- Thornton, S.A., Setiana, E., Kris yoyo, Page, S.E., Harrison, M.E. and Upton, C. (2020) Towards Biocultural Approaches to Peatland Conservation: The Case for Fish and Livelihoods in Indonesia. *Environmental Science & Policy*, 114:341-351: https://doi.org/10.1016/j.envsci.2020.08.018.
- 2019 Thornton, S.A., Cook, S., Astiani, D., Hapsari, K.A., Varkkey, H., Cole, L.E.S., Dargie, G.C., Sjogersten, S., Zawawi, N.Z., Page, S.E. 'Pushing the limits': Experiences of Women in Tropical Peatland Research. *Marine and Freshwater Research*, Special Issue on Women in Freshwater Science, 71(2):170. Doi:10.1071/mf19132
 - Harrison, M.E., Bramansa Ottay, J., D'Arcy, L.J., Cheyne, S.M., Anderson, K., ... **Thornton, S.A**., Upton, C., Wich, S.A., van Veen, F. Forest and Peatland Conservation in Indonesian Borneo: Challenges and Directions. *People and Nature*. Early version available: https://doi.org/10.1002/pan3.10060
- 2018 **Thornton, S.A.**, Dudin, Page, S.E., Upton, C. & Harrison, M.E. Peatland fish of Sebangau, Borneo: diversity, monitoring and conservation. *Mires and Peat*, 22(04), 1-25. Doi: 10.19189/MaP.2017.OMB.313
- 2017 Husson, S.J., Limin, S., Adul, Boyd, N.S., Collier, S., Cheyne, S.M., D'Arcy, L.J...**Thornton, S.A.**, Tremlett, C., Yeen, Z. and Harrison, M.E. Biodiversity of the Sabangau Tropical Peat-swamp Forest, Indonesian Borneo. *Mires and Peat*, 22(05):1-50. Doi: 10.19189/MaP.2018.OMB.352
- 2016 Wijedasa, L. S., Jauhiainen, J., Könönen, M., Lampela, M., Vasander, H., LeBlanc, M. C.,..**Thornton, S.A** & Lupascu, M. Denial of long-term issues with agriculture on tropical peatlands will have devastating consequences. *Global Change Biology*, 23(3):977-982.
- IP **Thornton, S.A.,** Carmenta, R., Astiani, D., Tribolet, C. and Page, S.E. Clearing the haze: resolving misconceptions surrounding Indonesian peatland fires. *Land Use Policy.*
 - **Thornton, S.A.** What is 'Interdisciplinary'? Taking the within-individual perspective to foster more equitable approaches to conservation. *Geoforum.*
 - Harrison, M.E., Ripoll Capilla, B, Cosmopolis-Del-Carpi, C.H., Husson, S.J., Mang, S., Page, S.E., Purwanto, A., Siegert, F., **Thornton, S.A**. and Struebig, M.J. Impacts of Wildfires on Biodiversity in Indonesian Borneo.

Cole, L., Hapsari, A., Hawthorne, D, Roucoux, K., **Thornton, S.A.** and Girkin, N. Tropical peatlands in the Anthropocene: Past to present. *The Anthropocene*.

Girkin, N., Cooper, H., Ledger, M., **Thornton, S.A.,** O'Reilly, P. and Cole, L. Tropical Peatlands in the Anthropocene: Present to future. *The Anthropocene*.

Books

2020 Chapman, R.H. and **Thornton, S.A.** (Joint first authors) <u>Top Spec Geography: The Carbon and Water Cycle</u>. Top Spec Geography Series, Geographical Association, UK.

Other publications

Thornton, S.A., Carmenta, R., Astiani, D., Tribolet, C. and Page, S.E. The 'life of fire' on Indonesia's peatlands. Report commissioned by APRIL Group.

Lees C., Gibson C., Jaafar Z., Ng H.H., Tan H.H., Chua K.W.J., **Thornton S.A.** and Van Veen F.J.F. (Eds.) <u>Assessing to Plan: Next steps towards conservation action for threatened freshwater fishes of the Sunda region</u>. IUCN Conservation Planning Specialist Group, Apple Valley, MN, USA.

- Thornton, S.A., Green, S., Cook, S and Wright, L. and Page, S.E. Tropical Peatlands: Their global importance and role in the water and carbon cycles. University of Leicester. Also available in Indonesian (https://bit.ly/2KbhpSR) and Spanish (https://bit.ly/2IpN3Ni).
- Thornton, S.A., Dudin, Limin, S.H., Page, S.E., Upton, C. and Harrison, M.E. Peatland fish of Sabangau, Borneo: Ecology and implications for future monitoring and conservation. International Peatland Congress, Kuching, Malaysia.

Thornton, S.A., Setiana, E., Kris yoyo, Limin, S.H., Page, S.E., Harrison, M.E. and Upton, C. Fishing communities of Sabangau, Borneo: Knowledges, practices and values. International Peatland Congress, Kuching, Malaysia.

Harrison, M.E., Ripoll Capilla, B., **Thornton, S.A.,** Cattau, M.E and Page, S.E. Impacts of the 2015 fire season on peat-swamp forest biodiversity in Indonesian Borneo. International Peatland Congress, Kuching, Malaysia.

EDITORIAL DUTIES AND PROFESSIONAL MEMBERSHIP

Reviewer for natural science, social science, and interdisciplinary journals: Social and Cultural Geography; People and Nature; Forestry Ideas; Restoration Ecology; Mires and Peat

Reviewer for World Resources Institute

Member of UK Tropical Peatland Working Group, International Peatland Society, British Ecological Society, WI-IUCN SSC Freshwater Fish Specialist Group, American Geophysical Union

ADDITIONAL TEACHING/SUPERVISION EXPERIENCE

2018 – on. Mentor for Eka Cahyaningrum, BSc (Indonesian researcher).

2017 Demonstrator/Tutor for undergraduate course 'Research Design and Methods (with Dissertation Planning)', University of Leicester, School of Geography, Geology and the Environment.

Demonstrator/Tutor for undergraduate course 'Landscape-Ecosystem Dynamics', University of Leicester, School of Geography, Geology and the Environment.

Coursework marker for undergraduate course 'Fieldwork Skills for Professional Geographers (BA and BSc)', University of Leicester, School of Geography, Geology and the Environment.

2016	Guest lecturer for undergraduate course 'Contemporary Environmental Challenges', University of Leicester, School of Geography, Geology and the Environment.		
	Demonstrator/Tutor for undergraduate course 'Working with Geographical Information', University of Leicester, School of Geography, Geology and the Environment.		
2015 - 2016	Guest lecturer for postgraduate course 'Living with Environmental Change', University of Leicester, School of Geography, Geology and the Environment		
2015	Field supervisor of two BSc student dissertation projects (University of Leicester) in Indonesia. Project fieldwork lasted one month for each project.		
	Coursework marker for undergraduate course 'Environment Nature and Society', University of Leicester, School of Geography, Geology and the Environment.		
2013	Coursework marker for undergraduate course 'Environment Nature and Society', University of Leicester, School of Geography, Geology and the Environment.		

Courses completed:

Preparing to teach in Higher Education, 2013, University of Leicester, UK.

AWARDS/GRANTS

Grant and award success of over £337,000 in value:

- 2020 **Researcher Co-Investigator NERC-GCRF (£152,332.32).** Project: 'Drought and peatland fires in Indonesian Borneo: Understanding drivers and impacts to build resilience through sustainable development'. PI: Prof Frank van Veen. Total value of the GCRF funding: £3.75 Million.
 - **Turtle Conservation Fund (\$4,939).** Turtle Conservation Fund. Project: 'Understanding distribution and threats to enhance conservation of the Bornean River Turtle (*Orlitia Borneensis*) and other freshwater turtle species in Indonesian Borneo'.
- 2019 Early Career Researcher Funding (£676). University of Leicester Doctoral College.
- 2018 ESRC Postdoctoral Fellowship (£110,382). UK Economic and Social Research Council. Project: 'Sustainable Livelihoods in Indonesian Tropical Peatlands'.
 British Ecological Society Outreach Grant (£1,895). British Ecological Society. Awarded to support the exhibition: 'Into the Swamp: Stories from the Peatlands of Borneo'.
- 2017 School of Geography, Geology and the Environment (£500). University of Leicester. Awarded to support the workshop '(Re)connecting Struggles'.

 Research Fund of Professor Goodwin (£500). University of Leicester. Awarded to support the workshop '(Re)connecting Struggles'.

 The Graduate School Researcher Development Fund (£500). University of Leicester. Awarded to support the workshop '(Re)connecting Struggles'.
- 2016 Allan Robertson Grant (€250). The International Peatland Society. Awarded to help cover costs to attend the IPC 2016 in Kuching, Malaysia
- 2015 Allan Robertson Grant (€500). The International Peatland Society. Awarded to help me complete my PhD data collection in Indonesia.
- 2014 **Rufford Foundation Small Grant (£5,678).** The Rufford Foundation. Awarded to support PhD fieldwork in Indonesia.
- 2013 College of Science & Engineering Match-Funding PhD Studentship (£57,893).
 University of Leicester. Awarded for PhD research under the supervision of Prof Susan Page, Dr Caroline Upton and Dr Mark Harrison.
- James Rennie Bequest (£500). The University of Edinburgh. Awarded to support travel to Indonesia for position as volunteer coordinator for Borneo Nature Foundation.

 Peter Marsh Prize (£400). The University of Edinburgh. Awarded to support travel to Indonesia for position as volunteer coordinator for Borneo Nature Foundation.
- James Rennie Bequest (£500). The University of Edinburgh. Awarded to support travel to Indonesia for position as research assistant for Borneo Nature Foundation.
- 2010 James Rennie Bequest (£500). The University of Edinburgh. Awarded to support travel

PRIZES/COMPETITION AWARDS

Finalist for Speak Up for Food Security science communication competition
Global Food Security programme. I won a place on the 2-day science communication
Masterclass (14th-15th March).

Engaging with Parliament event participant

I won a place on this half-day training event held by the Industry and Parliament Trust (IPT). This event was sponsored by the ESRC Impact Accelerator Account and the University of Leicester.

2017 Best Postgraduate Researcher Image

Images of Research, the University of Leicester. Photograph entitled "Senyum". http://www2.le.ac.uk/news/blog/2017-archive/february/from-black-holes-to-ancient-fossils-innovative-images-highlight-university-research

2011 **Stebbing Commemoration Prize**

The University of Edinburgh School of GeoSciences. Awarded for my performance as best student in 'Applied Ecology and Environmental Management.

INVITED KEYNOTE SPEAKER

- 2019 "In the Line of Fire: Peatlands, Sustainability and the UN Sustainable Development Goals". The Global Promotion and Mediation of the UN's Sustainable Development Goals, 16th September. Conference organised by the Media Discourse Centre, De Montfort University, Leicester.
- 2017 "On Peatlands, Haze and Hope". The International School of Hilversum International Baccalaureate Graduation Ceremony, 16th September. The Netherlands.

INVITED WORKSHOP/EVENT PARTICIPATION

- "Pushing the Limits: Experiences of Women in Research". EDI (Equality, Diversity and Inclusion) Event, University of Leicester, UK, 19th February. I was invited to hold this event, presenting the results of our paper Thornton et al. (2019), and discussing challenges facing women in fieldwork and future steps for the department and school to better supporting women in science and academia.
- 2019 Sundaic Freshwater Fishes IUCN Red List Review Workshop, Singapore 28th January 1st February. IUCN Global Species Programme, Freshwater Biodiversity Unit. Invited as a conservation expert.
 - "Palm Oil Debate", University of Leicester Student Union, UK, 13th February. As part of the Student Union's Go Green Week: I was invited as a notable academic from the university (alongside Prof Susan Page) to discuss the issues surrounding palm oil and debate questions with the attendees.
- "Developing International Collaborations to Address Fire and Other Conservation Issues in Central Kalimantan, Indonesia" Workshop BNF-University of Exeter 14-22 October. The workshop involved Indonesian and international academics, NGO and government partners. Workshop outputs have been published as a peer-reviewed article (Harrison *et al.*, 2019), available online: https://besjournals.onlinelibrary.wiley.com/doi/10.1002/pan3.10060
 - "Protest camps in International Context", Everybody's Reading Festival, Leicester, UK, 5th October. I was invited to discuss my experiences in the UK anti-fracking movement and Preston New Road anti-fracking camp alongside Prof Gavin Brown

(University of Leicester), Dr Fabian Frenzel (University of Leicester) and Dr Uri Gordon (Durham University).

WORKSHOPS/EVENTS ORGANISED

- Tropical Peat Research Group Meeting, 30th January, University of Leicester, UK.

 This one-day meeting brought together tropical peatland researchers from across the UK to present our research, network and discuss future directions of tropical peatland research in the UK.
- "Into the Swamp: Stories from the Peatlands of Borneo", 2-8th April, Newarke Houses Museum, Leicester, UK. This six-day exhibition in Leicester city centre took visitors into the swamps of Borneo, through the photographs and stories of field researchers from the University of Leicester and BNF. The event had 248 attendees, and the overall rating from feedback was 9.4/10 (standard deviation of 0.8). Photographs: https://thorntonconservation.com/into-the-swamp-exhibition-photos/
- Tropical Peatland Away-Day for A-level Geography Teachers, 5th December, University of Leicester, UK. Geography A-level teachers from across Leicestershire were invited to come and listen to peatland experts. Talks covered: an introduction to global peatlands, an introduction to tropical peatlands, the role of tropical peatlands in the water and carbon cycles, threats that they face and their importance to communities and livelihoods (globally and locally). Participants reported being extremely likely (7/10) or very likely (3/10) to use the information presented in their future lessons.
 - "Reconnecting Struggles", 5th June, Attenborough Arts Centre, Leicester, UK. A one-day workshop bringing together academic staff, students, activists, artists and members of the public to engage in interactive conversations to align and share strategies of solidarity. Scholars were invited who have actively been involved with the Black Lives Matter campaign, activists from the No Dakota Access Pipeline (NoDAPL, North Dakota), Palestinian activists and human rights spokespersons, along with local feminist artists, scholars and authors from Leicestershire:

 https://reconnectingstruggles.wordpress.com/

ADDITIONAL PRESENTATIONS (CONFERENCES, INVITED SEMINARS)

- "Stepping into the quagmire: The challenges and opportunities of interdisciplinary peatland science". Invited Speaker at the American Geophysical Union Fall Meeting 2020. Session entitled: Old Peat, New Voices: Frontiers in Global Peatland Research from Early Career Researchers [Oral].
 - "Interdisciplinary research in Indonesia's tropical peatlands: fish and fishing livelihoods". UK Tropical Peat Working Group Meeting, University of Leicester. [Oral]
- 2019 "An interdisciplinary study of the peatland fish of Sebangau: Fish diversity and the important of fish and fishing to local communities". Invited seminar given at Nanyang Technological University, Asian School of the Environment. [Oral]
- 2018 "An interdisciplinary study of the peatland fish and fishing in Sebangau, Indonesian Borneo". Tropical Peat Ecosystem and Restoration Conference, Palangkaraya, Central Kalimantan, Indonesia [Oral].
 - "The importance of fish(ing) to tropical peatland communities in Borneo" 50th IPS Anniversary Jubilee Symposium "Peatlands: past, present and future" Rotterdam, Netherlands [Oral]
 - "The diversity of peatland fish of Sabangau, Central Kalimantan (Indonesia)". 50th IPS Anniversary Jubilee Symposium "Peatlands: past, present and future" Rotterdam, Netherlands [Poster]
 - "The Tropical Peatlands of Borneo". Invited Guest Speaker for the Leicestershire and Rutland Wildlife Trust Group meeting, UK [Oral]

- 2017 "Peatlands Matter: Ecosystem Services and their importance for livelihoods".

 Presentation at the Tropical Peatland Teacher Away-Day, University of Leicester, UK
 [Oral]
 - "An interdisciplinary study of the peatland fish and fishing in Borneo: Ecology, values, and implications for future conservation". Workshop: Developing International Collaborations to Address Fire and Other Conservation Issues in Central Kalimantan, Indonesia. Invited workshop participant. Organised by the Borneo Nature Foundation and University of Exeter, Falmouth Campus, UK. [Oral]
 - "The Importance of Fish and Fishing to Local Communities in Indonesian Borneo". Presented to A-Level Geography students at Rugby School, Rugby, UK [Oral]
- "Peatland Fish of Sabangau, Kalimantan: Surveys for future monitoring and conservation". International Peat Congress, Kuching, Malaysia [Oral] "Fishing communities of Sabangau, Borneo: Knowledges, practices and values". International Peat Congress, Kuching, Malaysia [Poster] "Peat-swamp forests of Indonesia and the fires of 2015: Why we should all care". Presented to staff at Alaska Community Action on Toxics (ACAT), Anchorage, U.S.A [Oral]
- 2015 "Evaluating the ecological and cultural services provided by tropical forest ecosystems: A case study in Central Kalimantan, Indonesia". Presented to the Indonesian Ministry of Research and Technology, Jakarta, Indonesia [Oral]
- "Ecosystem and cultural values of forest in Indonesia". The Annual Conference of the Society for Tropical Ecology (gtö) in Freising, Germany [Poster]
 "Ecosystem and cultural values of forest in Indonesia". The Scottish Tropical Ecology and Biology Conference, Glasgow, UK [Poster]
- 2013 "Working as a Tropical Ecologist". Presented at the International School of Hilversum to children aged 10-11 years (The Netherlands) [Oral]

NEWSLETTER ARTICLES & PROJECT FEATURES

- May 2020: "<u>Doclight: Dr Sara Thornton</u>". Interview with the University of Leicester Doctoral College.
- January 2020: "Sara's Story". British Ecological Society, Grant Stories.
- December 2019: "New Paper Out: "Pushing the Limits": Experiences of Women in Tropical Peatland Research". Peatlands International, 4.2019, page 13. International Peatland Society.
- November 2018: "21st of November: Celebrating fish and the strange species of Sebangau".
 The Borneo Nature Foundation.
- January, 2018: "(Un)tangling the Net, Tackling the Scales, and Learning to Fish". The Borneo Nature Foundation.
- March 2017: "<u>Stunning images showcase project to support conservation of Indonesian river and forest habitats to protect wildlife</u>". The University of Leicester, News and Events.
- March 2017: "Project to support conservation of Indonesian river and forest habitats to protect wildlife". The University of Leicester, Press Release.
- March 2017: "<u>An Interdisciplinary Project: Fish and the Importance of Fish(ing) to Human</u>
 <u>Communities in Sabangau, Indonesia</u>". UK Tropical Peatland Working Group.
- March 2016: "From the river to writing up: the journey of a fish PhD student": The Borneo Nature Foundation.
- October 2015: "<u>The fires of Indonesia: the ongoing human and natural crisis</u>". UK Tropical Peatland Working Group.
- October 2015: "Sabangau at risk: Fires raging across Bornean Rainforests and Peatlands".
 EcoPost.
- April 2015: "<u>Discovering the fish of the Sabangau Forest and what they mean to local communities</u>": The Borneo Nature Foundation.
- September 2014: "<u>Evaluating the ecological, economic and cultural services provided by freshwater fishes in Central Kalimantan, Indonesia</u>". Newsletter of the IUCN Freshwater Fish Specialist Group, pages 35-37.
- June 2014: "<u>Hello Monday: Sara and her fish</u>": The Borneo Nature Foundation

ADDITIONAL RESEARCH EXPERIENCE

2012	Volunteer Coordinator, Borneo Nature Foundation, Sebangau Forest (Indonesia)			
	Deer Monitoring Assistant, Scottish Natural Heritage, Taynish National Nature			
	Reserve (Scotland)			
2011	Research Assistant for Ecological Monitoring and Forest Research Team,			
	Borneo Nature Foundation, Sebangau Forest (Indonesia)			
2011-2012	Biodiversity and Conservation Officer, Countryside Ranger Service, Edinburgh			
	(Scotland)			
2010	Research Assistant, Operation Wallacea, Pacaya-Samiria Nature Reserve (Peru)			

MEDIA ENGAGEMENT

2019 BBC Radio Leicester, 2nd April

Interviewed by Ben Jackson during the opening of the exhibition 'Into the Swamp', discussing threats facing peatland areas in Indonesia.

BBC Radio Leicester, 28th March

Interviewed on live radio by Ben Jackson introducing the exhibition 'Into the Swamp' and discussing personal experiences of working in tropical peatlands.

LANGUAGES

	Understanding	Speaking	Writing
English	Mother tongue	Mother tongue	Mother tongue
Dutch	C2	B2	B2
Indonesian	B1	B1	A2

<u>Common European Framework of Reference for Languages:</u> Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

ADDITIONAL SKILLS AND INTERESTS

Microsoft Office (including Microsoft Access), Adobe Illustrator, SPSS, MiniTab, NVivo, MapSource, Social media (Facebook, Twitter, Wordpress), Scuba Diving (Open Water Certified), Pottery, Leicester Friends of the Earth.