

## Dr Sallie Louise Burrough

School of Geography and the Environment, Oxford University, South Parks Rd, Oxford OX13QY  
[sallie.burrough@ouce.ox.ac.uk](mailto:sallie.burrough@ouce.ox.ac.uk), [www.eci.ox.ac.uk/people/burroughsallie.php](http://www.eci.ox.ac.uk/people/burroughsallie.php)

### Research Interests

Long-term climate variability, landscape dynamics and ecological change in dryland systems. Implications of environmental change for human populations past and present. Specialist skills include geomorphology, geochronology (Luminescence dating) and long-term ecology.

### Academic Posts

- 2014-2017: **Trapnell Fellow of African Environments**, Environmental Change Institute, University of Oxford, Research Associate, Long-term Ecology Laboratory, Zoology, Oxford.
- 2010-2014: **Leverhulme Post-Doctoral Researcher**, *Floods and droughts: environmental dynamics in the Upper Zambezi Valley*. School of Geography and the Environment & Long-term Ecology Laboratory, Department of Zoology, University of Oxford (contract extension to enable REF return)
- 2009-2010: **Drapers Company Junior Research Fellow (stipendiary)**, Hertford College, University of Oxford, *Palaeolithic mega-lakes & early human occupation of the Kalahari*.
- 2009: **Lecturer** (sabbatical cover) Department of Geography, Kings College London, Desert Environments.

### Education

- 2005-2008: **D.Phil., Geography, Oxford University**. *Late Quaternary Palaeolacustrine Environments of the Kalahari, Botswana*.
- 2003-2006: **MSc., Quaternary Science, University of London**  
Distinction and Elsevier prize (best overall MSc performance)
- 1999-2002: **BA (Hons) Geography, Oxford University**. 1st Class  
Gibbs prize (highest 1st class FHS Geography)  
Henry Beckett dissertation prize (best undergraduate dissertation)

### Awards, Grants and Prizes

**2016: Leverhulme Grant** Landscape archaeology of the Kalahari: How did major hydrological shifts affect Stone Age mobility and landscape use in the late Quaternary? (Co-I)

**2015: Award for Excellence** – Oxford University Reward and Recognition Scheme, for an outstanding and exceptional contribution to the University

**2015: John Fell Fund:** Testing the asymmetry of African humid periods.

**2015: Leverhulme Grant** (145k) Testing the importance of lake-climate feedbacks for African hydroclimate variability (Co-I)

**2014: National Geographic Global Exploration Award** (16k) “Megalake records of Kalahari climate change” (PI)

**2014: QRA Award** “Dating the desert” In conjunction with RLAHA

**2012: Oxford University Fell Fund** (£4.5k) “People and environment in western Zambia” (PI)

**2010: Leverhulme Grant** “Floods and droughts in the Upper Zambezi Valley” (£140k)

**2009: Boise Fund**, Oxford University (£12k) (Co-I)

**2009: Royal Society International Travel Grant** (£1.3k)

**2009: Royal Geographical Society Small Grant** (3k) (PI)

#### Student Awards/Prizes (2001-2008)

INQUA Travel Bursary

British Society for Geomorphology **Conference Grant**

**NERC Studentship** (DPhil), Geography, Oxford

St Catherine’s College **Graduate Scholarship**

CC Reeves **Graduate Scholarship**

Royal Society **Dudley Stamp Memorial Award**

QRA **New Researchers Award**

**Elsevier Prize**, RHUL, London

Full **NERC MSc Studentship**, RHUL, London

**Gibbs Prize**, Oxford (*highest 1st Class Geog BA Hons*)

Henry Beckett **Dissertation Prize**, Oxford

**Kaye Scholarship** (Geography), St Catherines, Oxford

**Shell Prize**, Oxford (*outstanding field-based coursework*)

*Expedition Leader’s Award* (British Sports Trust), *Wilderness Medical Training* (RGS), *Military Training Awards: Qualifications 1 & 2* (Leadership and Management; First aid at work (St Johns).

## Other Institutional and Professional Responsibilities

---

**Deputy Director**, Oxford Luminescence Dating laboratory, University of Oxford.

**Scientific Advisory Board Member**, Humans and the Biosphere, International Union for Quaternary Science

**Chair, Early Career Researcher Committee (ECR)** (2013-2015), International Union for Quaternary Science

**Governing Body Fellow** (2009-2013), Hertford College, Oxford

**Fellow** of the Higher Education Academy (awarded 2015)

**Teaching:** Broad range of lecturing, tutoring & supervision (incl. Earth Systems, Dynamics, Desert Environments, Quaternary Environmental Change, Quaternary Environmental Reconstruction, Long-term Ecology, Statistics)

Final Honours School and DPhil Transfer **Examination Assessor**, School of Geography, Oxford

**Fellow** of the Royal Geographical Society, London

## Organisation of Scientific Meeting

---

**Session Convener:** European Geosciences Union: "Late Quaternary palaeoenvironments of African drylands"

**Co-organiser:** UK Luminescence and Electron Spin Resonance Dating Meeting, Oxford, September 2010.

**Organiser:** 3<sup>rd</sup> International Southern Deserts Conference, Upington, South Africa, September 2008

## Major Publications

---

Lancaster, N., Bristow, C., Bubenzer, O., **Burrough, S. et al** (2016) The INQUA Dunes Atlas Chronologic Database. *Quaternary International*

**Burrough SL**, (2016) Late Quaternary environmental change and human occupation of the southern African interior in Jones, S & Stewart B (Eds) *Africa from MIS 6-2: Population Dynamics and Palaeoenvironments*. Springer

Singarayer JS and **Burrough SL**, (2015) Inter hemispheric dynamics of the African rainbelt during the late Quaternary. *Quaternary Science Reviews* 124, 48-67

**Burrough SL**, Willis KJ; (2015) Ecosystem resilience to late-Holocene climate change in the Upper Zambezi Valley. *The Holocene*

**Burrough SL**, Thomas DSG, Willis KJ (2014) Landscape sensitivity and ecological change in western Zambia. The long-term perspective from a Zambian dambo. *Journal of Quaternary Science* 30 (1), 44-58

Thomas DSG, **Burrough SL** (2014) Luminescence-based dune chronologies in southern Africa: analysis and interpretation of dune database records across the subcontinent. *Quaternary International*

**Burrough SL** and Thomas, DSG (2013) Central southern Africa at the time of the African Humid Period: A new analysis of Holocene palaeoenvironmental and palaeoclimate data. *Quaternary Science Reviews* 80, 29-46

Willis KJ, Bennett KD, **Burrough SL**, Macias-Fauria M, Tovar C (2013) Linking long-term perspectives to 21st century management of African landscapes. *Philosophical Transactions of the Royal Society B*, 368 (1625).

**Burrough SL**, Thomas DSG, Bailey RMB, Davies L, (2012) From landform to process: Morphology and formation of lake-bed barchan dunes, Makgadikgadi, Botswana. *Geomorphology* 161-162,1-14

Thomas DSG, **Burrough SL** (2012) Interpreting geo-proxies of late Quaternary climate change in African drylands: implications for understanding environmental and early human behaviour. *Quaternary International*, 253, 5-17

**Burrough SL**, Breman, E and Dodd, C (2012) An insight into past vegetation of the Middle Kalahari Palaeolakes during the late Quaternary. *Journal of Arid Environments* 82, 156-164

Thomas DSG, **Burrough SL** and Parker AG (2012), Extreme events as drivers of early human behaviour in Africa? The case for variability, not catastrophic drought. *Journal of Quaternary Science* 27, 7-12

Thomas DSG and **Burrough SL** (2011) Climatic frameworks: legacies from the past. In Thomas D.S.G. (Ed) *Arid Zone Geomorphology*. 3rd Edition. Wiley, 648 pp.

Telfer MW, Bailey RM, **Burrough SL**, Stone AES, Thomas DSG, Wiggs GSF (2010) Understanding linear dune chronologies: Insights from a simple accumulation model. *Geomorphology*, 120 (3-4), 195-208

**Burrough SL**, Thomas DSG, Singarayer J (2009) Late Quaternary hydrological dynamics in the Middle Kalahari: Forcing and feedbacks. *Earth-Science Reviews* 96, (4), 313-326

**Burrough SL**, Thomas DSG, Bailey, RMB (2009) Mega-Lake in the Kalahari: A Late Pleistocene record of the Palaeolake Makgadikgadi system. *Quaternary Science Reviews* 28, 1392-1411

**Burrough SL**, Thomas DSG (2009) Geomorphological contributions to palaeolimnology on the African continent. *Geomorphology* 103, 285-298

**Burrough SL**, Thomas DSG (2008) Late Quaternary lake-level fluctuations in the Mababe Depression: Middle Kalahari palaeolakes and the role of Zambezi inflows. *Quaternary Research* 69 (3), 388-403

**Burrough SL**, Thomas DSG, Shaw PA, Bailey RM (2007) Multiphase Quaternary high-stands at Lake Ngami, Kalahari, northern Botswana. *Palaeogeography, Palaeoclimatology, Palaeoecology* 253, 280-299