



# SSAG

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

NEWSLETTER

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

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## FOREWORD

While most years are versions of the year that came before, 2020 diverted us all onto a different track. I write this foreword on the one-year anniversary of President Cyril Ramaphosa's announcement of what was supposed to be a 21-day lock down starting on the 26<sup>th</sup> of March 2020. We scrambled to transfer our offices home, figure out how to do everything online and manage a suddenly insular existence. As we witnessed the overwhelmed hospitals in Spain, Italy and the US, we gained a dread of the ways in which this disease would affect us personally. We have had to reconcile ourselves to collective and personal loss, with a global death toll now approaching three million. Economic devastation has meant that many more people than before are struggling to make ends meet. Given the inverted world we find ourselves in, it is all the more remarkable to read departmental listings in this newsletter of student numbers, completed masters and PhD students, conference papers and publications. The continuation of academic programmes has taken an extraordinary effort and tenacity. The society commends this work in sustaining our discipline. We have been reporting noteworthy points following our Council meetings, and would like to repeat some of these points here so that they are on record as part of this newsletter:

- There has been a changing of the guard at the South African Geographical Journal. Brij Maharaj and Trevor Hill (University of KwaZulu-Natal) reached the ends of their terms as editors, leaving the journal, with our enormous thanks, in extremely good health. The society has now appointed Ashley Gunter and David Hedding (University of South Africa) as editors.
- A revision of the constitution was presented to the September 2020 Biennial General Meeting, updating various clauses and allowing for a larger and more regionally representative Council.
- Jennifer Fitchett (University of the Witwatersrand) has been nominated President Elect, to take over as President in 2022.
- The South African National Geography Olympiad, started in 2017, continues to grow from strength to strength and provides a remarkable platform for outreach into high school Geography.
- The Academic and student conference originally scheduled for 2020 was postponed and will now be hosted by the Department of Geography at Rhodes University as an online event in September 2021.

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- The two 2020 Jubilee bursary winners are Monique Lottering (University of the Western Cape) and Morgan Lee (from RU). The Two Honours award winners are Lubanzi Dlamini (University of Zululand) and Tsholanang Rammopo (University of Pretoria). The winner of the Bronze Medal for the Best Master's Dissertation (2019) is Tinashe Kanosvamhira (University of the Western Cape). The winner of the Certificate for the Outstanding Master's Dissertation by coursework (2019) is Raimo Fernandez (Stellenbosch University). Julia Giddy (University of Mpumalanga); Adriaan van der Walt (University of the Free State); Sifiso Xulu (University of the Free State) have been awarded the Centenary award. Congratulations to all these winners.
- The SSAG notes with great pleasure the appointment of Professor Michael Meadows as President of the International Geographical Union, with effect from 1 August 2020. Prof. Meadows is a past President of the SSAG and was also the Secretary-General and Treasurer of the IGU before his election as President. The Society congratulates Prof Meadows on his appointment and wishes him well during his term of office.
- In late 2020, the Council welcomed the following new members: Samuel Adelabu (University of the Free State), Delia Ah Goo (North-West University), Nerhene Davis (University of Pretoria), Julia Giddy (University of Mpumalanga), Adrian Nel (University of KwaZulu Natal), Zarina Patel (University of Cape Town).
- Following a call by Jennifer Fitchett, Students and Young Professionals have constituted themselves as a group in October 2020. Julia Giddy was elected as the chairperson of this group. The group will begin to develop content for the Society's web site and a programme to enable interaction and support.
- In general I would also like to express my appreciation to those who contribute to the work of the Society. In particular, many thanks to those who have contributed content to this newsletter, and to its editors Ndidzulafhi Innocent Sinthumule and Nerhene Davis.

*Richard Ballard*

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## UNIVERSITY OF FORT HARE

*Name of department:*

Geography and Environmental Science

*Head of department:*

Prof. Paul Sumner

*Information about the Geographers and their area of specialisation in the department:*

- Dr A M Kalumba: Environmental Sciences - Environmental Sustainability, Urban Studies, Climate change and GIS-Remote Sensing
- Dr H B Magagula: Physical Geography – Geomorphology, Environmental Studies & Pedology.
- Dr S P Mazinyo: Environmental Studies: Corporate & Urban Sustainability, Food Security & Climate Change
- Ms Z A F Mzitshi: Human Geography – Feminist Geography & Rural Development
- Dr R Pillay: Human Geography, Environmental Studies and Cartography
- Ms S Serame: Human Geography, Remote Sensing, Rural Sustainability and Youth Welfare
- Professor PD Sumner: Physical Geography (geomorphology) and Environmental Studies
- Professor W Nel: Physical Geography, Climatology & Geomorphology
- Mrs K Xoxo: Human Geography, Climate Change & Remote Sensing

**2** *2020/2021 List of publications:*

Ajayi, A.P. and Mazinyo, S.P. (2020). Socio-economic situation and substance use disorder influences on safety practices among truckers. *Open Transportation Journal*, 14, 78 – 85. DOI: 10.2174/1874447802014010078

Busayo E.T., Kalumba, A.M., Afuye, G.A., Ekundayo, O.Y., and Orimoloye, I.R. (2020). Assessment of the Sendai framework for disaster risk reduction studies since 2015. *International Journal of Disaster Risk Reduction*, 50, 101906. <https://doi.org/10.1016/j.ijdr.2020.101906>

Busayo E.T. and Kalumba, A.M. (2020). Coastal climate change adaptation and disaster risk reduction: a review of policy, programme and practice for sustainable planning outcomes. *Sustainability*, 12(16), 6450. <https://doi.org/10.3390/su12166450>

Busayo E.T., and Kalumba, A.M. (2020). Recommendations for linking climate change adaptation and disaster risk reduction in urban coastal zones: Lessons from East London, South Africa. *Ocean & Coastal Management*, 105454. [In Press, Corrected Proof.](#)



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## UNIVERSITY OF FORT HARE

### Publications Continued:

- Ekundayo, O.Y., [Okogbue](#), E.C., Akinluyi, F.O., [Kalumba, A.M.](#) and Orimoloye, I.R. (2020). Spatiotemporal drought assessment using vegetation health index and standardized precipitation index over Sudano-Sahelian region of Nigeria. *African Geographical Review*  
<https://doi.org/10.1080/19376812.2020.1841658>
- Haindongo, P.N., Kalumba, A.M. and Orimoloye, I.R. (2020). Local people's perceptions about Land Use Cover Change (LULCC) for sustainable human wellbeing in Namibia. *GeoJournal*  
<https://doi.org/10.1007/s10708-020-10337-7>
- Hedding, D.W., Calvert, D. R., Tatayah, V., Cole, N, Ruhomaun, K., Khadun, A., Sumner, P.D. and Nel, W. (2020). A comprehensive study of erosivity and soil erosion over a small tropical islet: Round Island, Mauritius. *Land Degradation and Development*, 31(3), 372-382.
- Hedding D.W., Greve, M., Breetzke, G.D, Nel, W. and Jansen van Vuuren, B. (2020). COVID-19 and the academe in South Africa: Not business as usual. *South African Journal of Science*, 116(7/8), 1-3.
- Masiza, W., Chirima, J.G., Hamandawana, H. & Pillay, R. (2020). Enhanced mapping of a smallholder crop farming landscape through image fusion and model stacking. *International Journal of Remote Sensing*, 41(22), 8739-8756. DOI: 10.1080/01431161.2020.1783017
- Orimoloye I. R, Mazinyo S. P., Nel W. and Kalumba, A.M. (2020). Geospatial analysis of wetland dynamics: wetland depletion and biodiversity conservation of Isimangaliso Wetland, South Africa. *Journal of King Saud University – Science*, 32, 90–96.
- Qu, S., Wu, W., Nel, W. and Ji, J. (2020) The behavior of metals/metalloids during natural weathering: a systematic study of the monolithological watersheds in the upper Pearl River Basin, China. *Science of the Total Environment*, 708, 134572
- Rudolph, E.M., Hedding, D.W., Fabel, D., Hodgson, D.A., Gheorghiu, D.M., Shanks, R and Nel, W. (2020). Early glacial maximum and deglaciation at sub-Antarctic Marion Island from cosmogenic <sup>36</sup>Cl exposure dating. *Quaternary Science Reviews*, 231, 106208.
- Owolabi, S.T., Madi, K., and Kalumba, A.M. (2020). Comparative evaluation of spatio-temporal attributes of precipitation and streamflow in Buffalo and Tyume Catchments, Eastern Cape, South Africa. *Environment, Development and Sustainability*.  
<https://doi.org/10.1007/s10668-020-00769-z>
- Owolabi, S.T., Madi, K., Kalumba, A.M., and Alemaw, B.F. (2020). Assessment of recession flow variability and the surficial lithology impact: a case study of Buffalo River catchment, Eastern Cape, South Africa. *Environmental Earth Sciences*, 79:187. <https://doi.org/10.1007/s12665-020-08925-4>

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## UNIVERSITY OF FORT HARE

### *Publications Continued:*

Owolabi, S.T., Madi, K., Kalumba, A.M., and Orimoloye I. R. (2020). A groundwater potential zone mapping approach for semi-arid environments using remote sensing (RS), geographic information system (GIS), and analytical hierarchical process (AHP) techniques: a case study of Buffalo catchment, Eastern Cape, South Africa.

*Arabian Journal of Geosciences* 13: 1184  
<https://doi.org/10.1007/s12517-020-06166-0>

Wang, H., Li, X., Chen, Y., Li, Z., Hedding, D.W., Nel, W., Ji, J. and Chen, J. (2020). Geochemical behavior and potential health risk of heavy metals in basalt-derived agricultural soil and crops: A case study from Xuji County, eastern China. *Science of the Total Environment*, 729, 139058.

Wu, W., Qu, S., Nel, W. and Ji, J. (2020). The impact of natural weathering and mining on heavy metal accumulation in the karst areas of the Pearl River Basin, China. *Science of the Total Environment*, 734, 139480.

Nel, W., Boelhouwers, J.C., Borg, C.J., Cotrina, J., Hansen, C.D., Haussmann, N.S., Hedding, D.W., Meiklejohn, K.I., Nguna, A.A., Rudolph, E.M., Sinuka, S.S. and Sumner, P.D. (2021). Earth science research on Marion Island (1996-2020): A synthesis and new findings. *South African Geographical Journal*.

<https://doi.org/10.1080/03736245.2020.1786445>

Nsubuga, F.N.W., Mearns, K.F., Davis, N.C., Kalumba, A.M., and Komen, K. (2021).

*Exploring the influence of climate change and capital assets on livelihood formations in central region of Uganda. Environment, Development and Sustainability.*

<https://doi.org/10.1007/s10668-020-01020-55>

Sumner P.D. and Nel, W. (2021).

*Commemorating three decades of the Southern African Association of Geomorphologists. South African Geographical Journal.*

<https://doi.org/10.1080/03736245.2020.1859406>

Sumner, P.D., Rughooputh, S.D.D.V., Boojhawon, R., Dhurmea, K., Hedding, D.W., le Roux, J.J., Pasnin, O., Tatayah, V., Zaynab, A. and Nel, W. (2021). *Erosion studies on Mauritius: overview and research opportunities. South African Geographical Journal.*

<https://doi.org/10.1080/03736245.2020.1795915>

Wu, W., Qu, S., Nel, W. and Ji, J. (2021). *The influence of natural weathering on the behavior of heavy metals in small basaltic watersheds: a comparative study from different regions in China. Chemosphere*, 262, 127897.

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### **M** Sc and PhD graduations and

#### supervisors:

*Ajayi, A.P.: The analyses of retail and transport geography of liquified petroleum products in Ibadan Metropolis, Nigeria. PhD Geography - Supervisor Dr S Mazinyo*

*Haindongo, P.N.: Integration of Remote Sensing and Local People's Perspectives in Land Use/Land Cover Change Dynamics Assessment: The Case of Kavango River Basin and its Surrounding Environments in Namibia. PhD Geography – Supervisor: Dr AM Kalumba*

*Jilimine, L.: The impact of agricultural practices on ecosystem services in the rural Ntabelanga catchment: A case study of Shixini Village, Eastern Cape Province, South Africa. MSc Geography - Supervisors: Dr R Pillay and Prof A. Maroyi.*

*Rudolph, E.M.: Towards a reconstruction of Marion Island's glacial history. PhD Geography- Supervisor Prof W Nel and DW Hedding (UNISA)*

*Mapuka, F.N. The characteristics and trends of rainfall on sub-Antarctic Marion Island and associated air circulation patterns. MSc Geography- Supervisor Prof W Nel.*

*Mpemba, A.: Spatiotemporal analysis of land cover change over the Amathole Marine Protected Areas, Eastern Cape Province. MSc Geography - Supervisors Dr S Mazinyo and Dr AM Kalumba.*

*Willie, Y. A.: Spatio-temporal variation of the Land Surface parameters in temperature in King Williams Town, Eastern Cape Province, South Africa. MSc Geography - Supervisor: Dr R Pillay.*

*Ziwele, A.: Evaluation of small-town sanitation services: a case study of Cofimvaba, Intsika- Yethu Municipality, Eastern Cape, South Africa. MPhil. Environmental Studies – Supervisor: Dr AM Kalumba.*

*Chikungwa, A: Small Town Coastal Communities' responses to Climate Variability: A case study of Port Alfred, Eastern Cape Province, South Africa. MPhil. Environmental Studies – Supervisor: Dr AM Kalumba.*

*Fotoyi, T: Household and business recycling programmes as green strategies for municipal waste management in East London, South Africa. MPhil. Environmental Studies - Supervisors: Dr R Pillay and Dr AM Kalumba.*

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## UNIVERSITY OF FORT HARE

### *2020 student numbers :*

1st year:	112
2nd year:	92
3 <sup>rd</sup> year:	15
Honours:	21
MSc:	9
MPhil:	10
PhD:	11

### *Link to departmental*

#### *webpage:*

<https://www.ufh.ac.za/departments/geography/>

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## UNIVERSITY OF PRETORIA

**N** *ame of department:*

Geography, Geoinformatics and Meteorology

**H** *ead of department:*

Professor Serena Coetzee

**I** *nformation about the Geographers and their area of specialisation in the department:*

- **Dr. Adeleke Adedayo; Lecturer- Geoinformatics (Geodesy, Surveying)** [adedayo.adeleke@up.ac.za](mailto:adedayo.adeleke@up.ac.za) 0124203536
- Prof. Archer Emma; Associate Professor- Sustainable agriculture/managed ecosystems and climate in Africa [emma.archer@up.ac.za](mailto:emma.archer@up.ac.za) 012 420 2881
- Prof Beckedahl Heinz; Extraordinary Lecturer-Geomorphology, wetland studies [hbeckedahl@gmail.com](mailto:hbeckedahl@gmail.com) +268 (0) 2518 8859
- Dr. Beraki Asmerom; Extraordinary Lecturer- Meteorology [aberaki@csir.co.za](mailto:aberaki@csir.co.za)
- Dr. Botai Joel; Extraordinary Lecturer - Atmospheric modelling, remote sensing [Joel.botai@weathersa.co.za](mailto:Joel.botai@weathersa.co.za) 012 423 9096
- Prof. Breetzke Gregory; Associate Professor- Geography of crime (GIS) [greg.breetzke@up.ac.za](mailto:greg.breetzke@up.ac.za) 012 420 4318
- Dr. Chirima George; Extraordinary Lecturer – Geoinformatics [ChirimaJ@arc.agric.za](mailto:ChirimaJ@arc.agric.za) 012 310 2672
- **Dr. Claassen Maius;** Extraordinary Lecturer- Environmental science, ecology [mclasse86@gmail.com](mailto:mclasse86@gmail.com)
- **Prof. Coetzee Serena;** Professor, Director: CGIS, HoD- Geoinformatics (spatial data infrastructures) [serena.coetzee@up.ac.za](mailto:serena.coetzee@up.ac.za) 012 420 3823
- Prof. Combrinck Ludwig; Extraordinary Professor- Geodesy [ludwig@hartrao.ac.za](mailto:ludwig@hartrao.ac.za) 012 301 3224
- **Dr. Cooper Antony;** Extraordinary Lecturer- Geographical Information Science (GISc) theory and applications [acooper@csir.co.za](mailto:acooper@csir.co.za) 012 841 4121
- **Dr. Davis Nerhene; Senior Lecturer- Human geography (land reform)** [Nerhene.davis@up.ac.za](mailto:Nerhene.davis@up.ac.za) 012 420 2882
- **Prof. Dyson Liesl;** Associate Professor- Meteorology [Liesl.dyson@up.ac.za](mailto:Liesl.dyson@up.ac.za) 012 420 2469
- **Dr. Engelbrecht Christine;** Extraordinary Lecturer- Meteorology [Christien.Engelbrecht@weathersa.co.za](mailto:Christien.Engelbrecht@weathersa.co.za)



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### *Geographers Continued:*

- **Mr. Esterhuizen Joos;** Lecturer retired end 2020- Geoinformatics (surveying) [Joos.esterhuizen@up.ac.za](mailto:Joos.esterhuizen@up.ac.za) 012 420 4172
- **Dr. Feig Gregor;** Extraordinary Lecturer- Environmental science [gfeig@csir.co.za](mailto:gfeig@csir.co.za)
- **Dr. Garland Rebecca** Extraordinary Lecturer- Regional air quality modelling and environmental health [RGarland@csir.co.za](mailto:RGarland@csir.co.za)
- **Dr. Hansen Christel;** Lecturer- Geomorphology, applied GIS [christel.hansen@up.ac.za](mailto:christel.hansen@up.ac.za) 012 420 4215
- **Dr. Haussmann Natalie;** Senior lecturer- Bio-geomorphology [Natalie.haussmann@up.ac.za](mailto:Natalie.haussmann@up.ac.za) 012 420 4049
- **Dr. Jordan Winifred;** Extraordinary Lecturer- Meteorology [Winifred.Jordaan@weathersa.co.za](mailto:Winifred.Jordaan@weathersa.co.za)
- **Mr. Katumba Samy;** Lecturer- Geoinformatics [Samy.katumba@up.ac.za](mailto:Samy.katumba@up.ac.za) 012 420 4943
- **Mr. Kruger Andries;** Extraordinary Lecturer- Meteorology [Andries.kruger@weathersa.co.za](mailto:Andries.kruger@weathersa.co.za) 012 367 6016
- Prof. Landman Willem; Professor- Meteorology [Willem.landman@up.ac.za](mailto:Willem.landman@up.ac.za) 012 420 3713
- Mr. Loubser Michael; Lecturer- Geomorphology [michael.loubser@up.ac.za](mailto:michael.loubser@up.ac.za) 083 328 5754
- Dr Mathieu Renaud; Extraordinary Lecturer (until end 2019)- Geoinformatics (remote sensing) [mathieurn@aim.com](mailto:mathieurn@aim.com)
- Ms Mdleleni Azile; Work Integrated Learning intern (until March 2020- Geoinformatics [u15099832@tuks.co.za](mailto:u15099832@tuks.co.za)
- Dr. Ndarana Thando; Senior Lecturer- Meteorology [thando.ndarana@up.ac.za](mailto:thando.ndarana@up.ac.za) 012 420 5164
- Dr Nsubuga Francis; Senior Lecturer- Climate change, Land use, Water resources management, Livelihoods [francis.nsubuga@up.ac.za](mailto:francis.nsubuga@up.ac.za) 012 420 2532
- Prof. Olivier Jana; Extraordinary Professor- Meteorology [jana1@mweb.co.za](mailto:jana1@mweb.co.za)
- Dr. Olwoch Jane; Extraordinary Lecturer- Climate change and environmental health [jolwoch@sansa.org.za](mailto:jolwoch@sansa.org.za) +264 (0) 61 223 9977
- Ms Piiper Lauren; Academic intern (until September 2020) – Geoinformatics [u04461615@tuks.co.za](mailto:u04461615@tuks.co.za)

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## UNIVERSITY OF PRETORIA

### *Geographers Continued:*

- Dr. Romoelo Abel; Extraordinary Lecturer- Geo-information Science (remote sensing), earth observation [abel.ramoelo@sanparks.org](mailto:abel.ramoelo@sanparks.org) 087 802 7895
- Dr Rautenbach Victoria; Senior Lecturer- Geoinformatics [victoria.rautenbach@up.ac.za](mailto:victoria.rautenbach@up.ac.za) 012 420 3489
- Dr. Schmitz Peter; Extraordinary Lecturer- Geoinformatics [schimpmu@unisa.ac.za](mailto:schimpmu@unisa.ac.za) 011 471 2262
- Adv. Snijman PJ; Extraordinary Lecturer- Environmental Law [pjsnijman@gmail.com](mailto:pjsnijman@gmail.com)
- Dr. Tsele Philemon; Senior Lecturer- Geoinformatics (remote sensing) [Philemon.tsela@up.ac.za](mailto:Philemon.tsela@up.ac.za) 012 420 4939
- Dr. van Aardt Isa; Extraordinary Lecturer- Meteorology [ivanaardt@vodamail.co.za](mailto:ivanaardt@vodamail.co.za)
- Mr van der Merwe Barend; Lecturer- Geocomputation (AI) [barend.vandermerwe@up.ac.za](mailto:barend.vandermerwe@up.ac.za) 012 420 3699
- Dr van Deveter Heidi; Extraordinary Lecturer- GIS, geomorphology, freshwater ecosystems [hvdeventer@csir.co.za](mailto:hvdeventer@csir.co.za)

- Dr Wright Caradee; Extraordinary Lecturer- Public health, geography [cwright@mrc.ac.za](mailto:cwright@mrc.ac.za)

### *Support staff in the Department:*

- Ms. Cilliers Marinda; Course administrator- Administration CFES [mcilliers@zoology.up.ac.za](mailto:mcilliers@zoology.up.ac.za) 012 420 4048
- Mrs Mahlangu Popi; Lab Assistant [Popi.mahlangu@up.ac.za](mailto:Popi.mahlangu@up.ac.za) 012 420 2880
- Mrs Ngongo Lunga; Departmental administration- Administration and Student Enquiries [Lunga.ngongo@up.ac.za](mailto:Lunga.ngongo@up.ac.za) 012 420 3536
- Ms. Pretorius Erika; Senior technical assistant- GIS support [Erika.pretorius@up.ac.za](mailto:Erika.pretorius@up.ac.za) 012 420 3737
- Mrs van Aardt Corne; Departmental Coordinator -Administration and Finances [Corne.vanaardt@up.ac.za](mailto:Corne.vanaardt@up.ac.za) 012 420 2489
- Mr Snyman Lourens; Senior Cartographer- Geospatial Information Services [lourens.snyman@up.ac.za](mailto:lourens.snyman@up.ac.za) 082 376 4063

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## UNIVERSITY OF PRETORIA

**E***xciting departmental news:*

### **Celebrating trailblazing women in science**

August in [Women's Month](#) in South Africa and celebrates the sacrifices women have made to our society. One of our graduates was [featured](#) by the Presidency of South Africa in 2019. [Dr Mary-Jane Bopape](#), the current Chief Scientist at the South African Weather Service who leads a group of scientists responsible for radar, satellite and lightning detection network data, is developing South Africa's first [weather and climate change modelling system](#). Dr Bopape graduated from the university in 2013 with her thesis titled [Simulations of moist convection using the quasi-elastic equations](#). She was supervised by [Professor Willem Landman](#). For more on Dr Bopape's recent work have a look [here](#) or [here](#).

### **Students win award at SAAG**

Two of our students, Jason le Roux (Masters) and Maleho Sadiki (Honours), were jointly [awarded the prize](#) for the best student work using geospatial analyses and GIS at the recent SAAG biennial conference. Jason has been developing a wetland map for Eswatini (formerly Swaziland) using a combined field work and digital approach. Maleho has been mapping water bodies on Marion Island using remote sensing and GIS methods. Jason was supervised by [Heinz Beckedahl](#), an extraordinary professor in our department, as well as Paul Sumner from the [University of Fort Hare](#).

Maleho was supervised by [Christel Hansen](#) from our department, as well as [Michelle Greve](#) from the [Department of Plant and Soil Sciences](#), also at UP. The two student prizes were awarded during the SAAG conference dinner on Tuesday 17 September 2019 and prizes (a cash prize of R 500.00 each) were sponsored by [Esri South Africa](#). The outgoing SAAG President, Professor David Hedding from [Unisa](#), gave Jason and Maleho their awards on behalf of Esri South Africa. For more on the conference have a look [here](#) or look at our [gallery](#).

### **Two UP lecturers elected to SA Association of Geomorphologists Council**

Dr Christel Hansen and Michael Loubser, both lecturers in the [Department of Geography, Geoinformatics and Meteorology](#) in the [Faculty of Natural and Agricultural Sciences](#) at the University of Pretoria (UP), were recently voted onto the Southern African Association of Geomorphologists (SAAG) Council for the 2019 to 2021 term. Dr Hansen is the current SAAG President and Loubser will serve as Secretary on the Council.

### **BScHons Geoinformatics student wins award at SANSA student workshop**

Maleho Sadiki, a current student enrolled in BScHons Geoinformatics in our department, recently attended the [SANSA Student Workshop](#), held from 7-11 October 2019 in [Hermanus](#), Western Cape. At this workshop Maleho was also awarded the prize for the best student honours presentation.

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## UNIVERSITY OF PRETORIA

### **Departmental news continued:**

For her honours project Maleho has mapped water bodies on Marion Island using remote sensing and GIS methods. She is jointly supervised by [Dr Hansen](#) from our department, and [Dr Greve](#) from the [Department of Plant and Soil Sciences](#)

### **Department receives recognition at GISSA Gauteng award ceremony**

The [GISSA](#) Gauteng Awards and Annual General Meeting were held on Thursday, 28 November 2019 at the Tatso Lounge Bar at Time Square in Pretoria. At the award ceremony institutions and individuals that have contributed to geoinformation science, education or GISSA were acknowledged. The Department of Geography, Geoinformatics and Meteorology was nominated and won the *Professional Education, Training and Capacity building* category, beating the likes of Wits, UJ, ESRI, TGIS, AfriGIS, Intergraph Systems, and Hexagon. [Prof Serena Coetzee](#) and [Dr Victoria Rautenbach](#), as well as [Dr Anthony Cooper](#), an extraordinary lecturer with us were among the nominees for the *Contribution to the development of the Geospatial Industry* category, with Prof Coetzee receiving the runner-up award. Dr Liz Gavin was the winner in this category.

### **Lecturer receives WRC award**

[Dr Liesl Dyson](#) was awarded the Knowledge Tree Innovation Award from the [Water Research Commission](#). This award celebrates outstanding design, process and product development of innovative technologies and was awarded during the gala dinner held on 11 September 2019 during the [4th WRC Symposium](#). She received the reward for the WRC project entitled "*The impact of the predictability of continental tropical lows on hydrological modelling: current state and future projections*".

### **Lecturer elected to the GLOBE Education Working Group**

[Dr. Francis Wasswa Nsubuga](#) was elected to the [GLOBE Education Working group](#) as the Africa representative for another 3 yrs. [GLOBE](#) (Global Learning and Observations to Benefit the Environment) is an international science and education program aimed at providing students and the public the opportunity to participate in data collection and the scientific process. He has been serving on the working group since 2016. The purpose of the Working Groups (WGs) is to enhance the role of GLOBE U.S. and Country Partners and GLOBE Scientists and Educators in shaping the future of the GLOBE Program and supporting the development and implementation of GLOBE worldwide.

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### *Departmental news continued:*

#### **Temperature predictions for 19 towns in South Africa**

There was speculation that COVID-19 follows a seasonal pattern or that the virus does not survive as well in warmer temperatures. Some [evidence](#) suggests that the virus survives better at colder temperatures, similar to other viruses such as [SARS](#). In terms of seasonality, the virus is still too new to have any firm data on how cases will change with the seasons.

•A team of leading South African environmental scientists, from a range of institutions, has been formed under the auspices of the [Department of Science and Innovation \(DSI\)](#) to consider the environmental aspects (including weather, climate and air pollution) of the epidemic in this country and the region. This is just one aspect of DSI's coordinated effort to mobilise South African scientific resources to help mitigate this national crisis. The team is advising the epidemiological modelling group of the [National Department of Health](#) on this issue. The UP contribution is the seasonal forecasting of minimum and maximum temperatures for 19 locations across South Africa. As part of the department's effort to contribute toward the COVID-19 crisis, [Prof Willem Landman](#) and his team have been modelling seasonal expected minimum and maximum temperatures for 19 locations in South Africa.

The forecasts are for three equi-probable categories of above-normal, near-normal, and below-normal. The numbers next to the colour bars show forecast skill as determined over 38 years of hindcasts (or re-forecasts). There is a skill value next to each category, and when that value is **higher** than 500 it means that over the test (verification) period, the model was able to discriminate that category from the other two. The four numbers below the colour bars represent (from top to bottom) the 25th, 33.3rd, 66.7th and 75th percentile values in degrees Celsius of the observed data over the same 38 years.

For more on the archive of seasonal forecasts of not only temperature but also rainfall, please have a look at [Seasonal Forecast Worx](#). For more on COVID-19 please visit the [COVID-19 Corona South African Resource Portal](#).

#### **University of Pretoria one of the top 10 universities of Esri Learn ArcGIS**

The University of Pretoria is one of the top 10 universities worldwide using Esri's [Learn ArcGIS](#) platform (2019 data). This platform includes GIS lessons, as well as guidance on how to teach with GIS.

The Department of Geography, Geoinformatics and Meteorology offers numerous GIS and geomatics courses, making use of both FOSS and proprietary software. Through the Unit for Geoinformation and Mapping the department also performs a supporting role through the provision of data,

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### **D***epartmental news continued:*

GIS software and licenses, as well as analytical and mapping support. This is provided to students and staff alike. By placing [9th in the world](#) in using the Esri platform the department's role in furthering and enhancing GIS-related skills at the university and South African society is highlighted.

### **GGM student announced as the 2020 Esri YSA Winner**

Azile Mdleleni was announced as the 2020 Esri Young Scholar Award winner for her participatory GIS (PGIS) project. For her BScHons Geoinformatics research project, Azile focused on the daily struggles of individuals who live in the informal settlement of Alaska, City of Tshwane.

PGIS is a method which aims to use local knowledge to map an area and places an emphasis on community involvement. This allows for an open line of communication with the community and thus a better understanding of their needs. In this project, this was done through in-depth interviews with community members in order to identify and understand their daily struggles.

The result of the analysis was two visualisations were created (i.e. a web map and a story map) to communicate the results of the interviews.

The web map provided a detailed look at the daily struggles. The web map can be used by community leaders when communicating with local governments and other stakeholders, such as non-profits. The community members would have maps which they helped create and their involvement in the process of decision-making could ultimately lead to empowerment. The main outputs of Azile's project can be accessed here,

<https://storymaps.arcgis.com/stories/c928b339a5bb429cbc445f2be803ed5f> (story map)

and

<https://uparcgis.maps.arcgis.com/apps/webapviewer/index.html?id=1ac9f86179e941ce818d2f08001d83dc> (web map)

### **UP team proposes single address dataset to identify and respond to emerging COVID-19 clusters**

A team from the University of Pretoria (UP) proposed a way forward for establishing and coordinating a single address dataset for Gauteng, which could be adopted by the rest of the country. One address dataset is needed now more than ever, as addresses are imperative to control and slow down COVID-19 infections, says Professor Serena Coetzee, Head of UP's [Department of Geography, Geoinformatics and Meteorology](#). Without a patient's address on the form, they cannot be located, and the geographical spread of the disease cannot be monitored effectively, leading to inaccurate impact assessments and possible overloading of health services.

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### **D***epartmental news continued:*

There is also no way to support such cases in the home environment. “In the current pandemic, this can lead to loss of life if emerging clusters of COVID-19 infections cannot be identified and responded to timeously,” cautions Prof Coetzee. Currently, address data in the Gauteng City-Region is maintained in silos at different government entities, without any coordination and adherence to international standards and good practices. Addresses provided to these government entities – such as when applying for subsidies or for a municipal account – are not always validated and verified against a reference dataset. “This results in duplication, inconsistencies and even fraud, which cost the municipalities, provincial and national governments billions, and damage their reputation,” says Prof Coetzee. The road to better address data in South Africa requires multiple interventions and initiatives, including raising awareness; describing, encouraging and nurturing good practices; and providing policies and legislation to guide government in its work. “More than one government entity could be assigned the mandate to coordinate a national or provincial address dataset,” explains Prof Coetzee. “To move forward, a decision and strong political leadership together with sustainable funding are required.”

Gauteng’s address datasets are maintained at its municipalities, meaning it could lead the rest of the country by example towards a single uniform address dataset that can be used as a reference by everybody.

To support the fight against COVID-19, the South African Bureau of Standards has made SANS 1883 freely available to anyone [here](#). It describes all the different kinds of addresses in use in South Africa, including street, site, and informal addresses. “SANS 1883-2 explains how addresses can be converted into a single uniform data format, regardless of whether they were written on paper, entered in an online form or are part of a municipal geospatial data infrastructure,” Prof Coetzee explains. Using the same names or terms for different kinds of addresses is a first step towards avoiding inconsistencies and confusion. Following the same data format makes it possible to develop tools that verify and validate addresses and to integrate data from different municipalities into a single provincial dataset.

Addresses are key to governance and decision-making in a municipality, province, or country. “They are essential for elections, tax collection, service delivery and emergency response,” explains Prof Coetzee. Because different government entities work within the same geographical space, it makes sense to have a single address dataset that everybody can use. “This eliminates duplication and inconsistencies, reduces costs, and makes it possible to exploit synergies. This leads to a better return on investment for taxpayers’ money.”

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### ***D***epartmental news continued:

#### **Meteorology Honours student wins award**

One of the Department's BScHons Meteorology students, Tsholanang Rammopo, was awarded with one of the 2019 SSAG Outstanding Honours Research Awards. The [Society of South African Geographers \(SSAG\)](#) awards two such awards each year, to highlight outstanding work done by students in the geographical and related sciences. Tsholanang's Honours research report was titled [\*The role of nonquasigeostrophic forcing during cut-off low pressure system onsets over South Africa\*](#) and supervised by [Dr Thando Ndarana](#). The Department would like to congratulate Tsholanang on his outstanding achievement. The Department would also like to thank the [SSAG](#) for their continued support of students and emerging career researchers in the geographical sciences. Three Meteorology BScHons students win awards at the virtual conference of the Society of Atmospheric Sciences (SASAS) for their 180 second research presentations. Manthata Molebohene and Kanyisa Makubalo shared the third prize and Tsholofelo Naledi received the second prize.

#### **New staff members, and one retirement**

In 2020 we welcomed two new members to our team, saying good-bye to one of our team in 2021. [Adedayo](#) and [Samy](#) joined us as lecturers in the [Geoinformatics programme](#), whereas [Lourens](#) joined us as the Senior Cartographer in our [Geospatial Information Services](#) section.

[Adedayo](#) is a geomatics professional, focusing on remote sensing and GIS techniques and applications. His PhD focused on integrating remote sensing and GIS techniques to build a web-based tool that models and evaluates the potentials of building-integrated solar photovoltaic systems. He will be teaching Geometric and Space Geodesy, Surveying, Spatial Statistics, and Geodesy. [Samy](#) is registered with SACNASP as a Pr. Sci. Nat. (Geospatial Science) and his research interests are scattered in the fields of spatial statistics, spatial econometrics, Web GIS, spatial analysis, geospatial data mining, machine learning and online geo-information retrieval. He has a keen interest in studying the spatial dimension of socio-economic phenomena such as poverty, inequality, and diversity/segregation by analysing relevant geospatial data using methods from spatial statistics, spatial econometrics and machine learning. Samy will be teaching Introduction to Geographic Information Systems (GIS), Geospatial Data and Services, as well as spatial analysis. [Lourens](#) is currently enrolled in his PhD Geography at the University of Pretoria. His research interests centre on geographic accessibility, spatial behavioural economics, spatial analysis, and map visualisation. [Joos Esterhuizen](#), who has been with the University of Pretoria for more than 30 years, retired in 2021.

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**D**epartmental news continued:

**Brian Nkala awarded a FES Scholarship to attend the FES New York Fall Academy**

The Department would like to congratulate Brian Nkala, one of our Masters students, on receiving one of the prestigious Fredrich-Ebert-Stiftung (FES) New York scholarships to attend their FES New York Fall Academy: “Young Leaders Needed to achieve the SDGs! Brian was selected as one of 15 successful applicants from a pool of 78 applicants from around the globe. He will now travel to New York to attend the event from Monday, November 8, 2021 until Friday, November 12, 2021.

The FES New York Fall Academy focuses on the Sustainable Development Goals and provides successful applicants an excellent opportunity to deepen their knowledge of the UN 2030 Agenda, as well as the work, structures, and political dynamics of the United Nations. All participants will learn of the practical implications of the 2030 Agenda, with the aim of utilising these for progressive, transformative politics in their home counties.

This is a well-deserved award. Brian, who holds a Bachelor of Science in Environmental Sciences and an Honours degree in Geography and Environmental Sciences from the University of Pretoria, co-founded the Greenline Society at the University of Pretoria.

He believes in using the Internet and technology to transform societies with the aim of changing consumers of technology into producers of technology. Brian also volunteers at several Non-Profit Organizations, facilitated computer classes in a Mamelodi Initiative, is a former country coordinator on digital grassroots, was a member of the Student Representative Council (SRC) at the University of Pretoria in 2016, and was a Youth Fellow with the Internet Society Youth@IGF in 2017. He has also participated in the Internet Governance Forum in collaboration with the United Nations and the Internet society in Geneva Switzerland and is a current Common Purpose Fellow. In 2019 he attended the SUSI Closing Forum Alumni Panel of the 2019 Study of the U.S. Institutes for Global Student Leaders Closing Forum as a SUSI All-Star Alumni in recognition of his leadership and community engagement.

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### 2020/2021 List of publications:

**Albers PN, Wright CY** (2020). Clinical Trial Data Management in Environmental Health Tailored for an African Setting. *International Journal of Environmental Research and Public Health*, 17 (2), pp. 1 - 15.

**Beraki AF**, Morioka Y, Engelbrecht F, Nonaka M, Thatcher M, Kobo N, Behera S (2020). Examining the impact of multiple climate forcings on simulated Southern Hemisphere climate variability. *Climate Dynamics*, 54 pp. 4775 – 4792.

Bidassey-Manila S, Howard G, Bartram J, Brocklehurst C, Colford J, Costa F, Cunliffe D, Dreibelbis R, Eisenberg J, Evans B, Girones R, Hruddy S, Willetts J, **Wright CY** (2020). COVID-19: urgent actions, critical reflections and future relevance of 'WaSH': lessons for the current and future pandemics. *Journal of Water and Health*, 18 (5), pp. 613 - 630.

Blesic S, **du Preez DJ**, Stratimirovic D, Ajtic J, Ramotsehoa C, Martin A, **Wright CY** (2020). Characterization of personal solar ultraviolet radiation exposure using detrended fluctuation analysis. *Environmental Research*, 182 (108976), March: pp. 1 – 8.

Botai C, **Botai OJ**, Adeola A, de Wit J, Ncongwane K, Zwane N (2020). Drought Risk Analysis in the Eastern Cape Province of South Africa: The Copula Lens. *Water*, 12 (7), pp. 1 - 20.

**Breetzke GD** (2020). The Importance of Space and Time in Aggravated Assault Victimization. *Journal of Interpersonal Violence*, 35 (13-14), pp. 2536 - 2557.

**Breetzke GD**, Hedding D (2020). The changing and challenging research landscape in South Africa. *Studies in Higher Education*, 45 (11), pp. 2245 - 2259.

**Breetzke GD**, Pearson A, Tao S, Zhang R (2020). Greenspace and Gun Violence in Detroit, USA. *International Journal of Criminal Justice Sciences*, 15 (1), pp. 247 - 264.

Cadet J, Bencherif H, Cadet N, Lamy K, Portafaix T, Belus M, Brogniez C, Auriol F, Metzger J, **Wright CY** (2020). Solar UV Radiation in the Tropics: Human Exposure at Reunion Island (21° S, 55° E) during Summer Outdoor Activities. *International Journal of Environmental Research and Public Health*, 17 (21), pp. 1 - 12.

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### *P*ublications Continued:

**Chiluwe QW, Claassen M** (2020). Systems perspectives on water security: An applied review and conceptual framework. *Environmental Policy and Governance*, 30 (6), pp. 332 - 344.

**Coetzee SM**, Ivanova I, Mitasova H, Brovelli M (2020). Open Geospatial Software and Data: A Review of the Current State and A Perspective into the Future. *ISPRS International Journal of Geo- Information*, 9 (2), pp. 1 - 30.

**Coetzee SM**, Odijk M, van Loenen B, Storm J, Stoter J (2020). Stakeholder analysis of the governance framework of a national SDI dataset – whose needs are met in the buildings and address register of the Netherlands?. *International Journal of Digital Earth*, 13 (3), pp. 355 - 373.

**Coetzer RH, Adeola AM** (2020). Assessing the Correlation between Malaria Case Mortality Rates and Access to Health Facilities in the Malaria Region of Vhembe District, South Africa. *Journal of Environmental and Public Health*, 2020 (8973739), pp. 1 - 15.

Diffey B, Wallace M, Mistri P, Wernecke B, **Wright CY** (2020). Drivers for Sun Protection in Black South Africans. *Photochemistry and Photobiology*, 96 pp. 943 – 944.

**de Villiers C, Munghemzulu C, Chirima JG, Tsele PL, Mashaba ZO** (2020).

Machine learning algorithms for mapping *Prosopis glandulosa* and land cover change using multi-temporal Landsat products: a case study of Prieska in the Northern Cape Province, South Africa. *South African Journal of Geomatics* (formerly South African Journal of Surveying and Geo-Information), 9 (2), pp. 179 - 197.

**du Preez DJ**, Bencherif H, Begue N, Clarisse L, Hoffman R, **Wright CY** (2020). Investigating the Large-Scale Transport of a Volcanic Plume and the Impact on a Secondary Site. *Atmosphere*, 11 (5), 548: pp. 1 - 11.

**du Preez DJ**, Blesic S, Stratimirovic D, Ajtic J, Ramotsehoa M, Allen M, **Wright CY** (2020). Characterization of personal solar ultraviolet radiation exposure using detrended fluctuation analysis. *Environmental Research*, 182 (108976), March: pp. 1 - 8.

**Geldenhuys M, Dyson LL**, Van der Mescht D (2020). Blocking, gap flow and mountain wave interaction along the coastal escarpment of South Africa. *Theoretical and Applied Climatology*, 139 pp. 1291 - 1303.

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### ***P**ublications Continued:*

Dunn R, Alexander L, Donat M, Zhang X, Bador M, Herold N, Lippmann T, Allen R, Aguilar E, Barry A, Brunet M, Caesar J, Chagnaud G, Cheng V, Cinco T, Durre I, de Guzman R, Htay T, Ibadullah W, Ibrahim M, Khoshkam M, **Kruger AC**, Kubota H, Lee T, Lim G, Li-Sha L, Marengo J, Mbatha S, McGree S, Menne M, Skansi M, Ngwenya S, Nkrumah F, Oonariya C, Pabon-Caicedo J, Panthou G, Pham C, Rahimzadeh F, Ramos A, Salgado E, Salinger J, Sané Y, Sopaheluwakan A, Srivastava A, Sun Y, Timbal B, Trachow N, Trewin B, van der Schrier G, Vazquez-Aguirre J, Vasquez R, Vincent L, Vischel T, Vose R, Yussof M (2020). Development of an Updated Global Land In Situ-Based Data Set of Temperature and Precipitation Extremes: HadEX3. *Journal of Geophysical Research- Atmospheres*, 125 (16), pp. 1 - 28.

Fasina F, Mtui-Malamsha N, Mahiti G, Sallu R, OleNeselle M, Rubegwa B, Makonnen Y, Kafeero F, **Savy JD**, **Fasina MM** (2020). Where and when to vaccinate? Interdisciplinary design and evaluation of the 2018 Tanzanian anti-rabies campaign. *International Journal of Infectious Diseases*, 95 pp. 352 - 360.

**Geldenhuis M**, **Dyson LL**, Van der Mescht D (2020). Blocking, gap flow and mountain wave interaction along the coastal escarpment of South Africa. *Theoretical and Applied Climatology*, 139 pp. 1291 - 1303.

Hedding D, Erofee A, **Hansen CD**, Khon A, Abbasov Z (2020). Geomorphological processes and landforms of glacier forelands in the upper Aktru River basin (Gornyi Altai), Russia: evidence for rapid recent retreat and paraglacial adjustment. *Journal of Mountain Science*, 17 pp. 824 - 837.

Hedding D, Greve M, **Breetzke GD**, Nel W, Jansen van Vuuren B (2020). COVID-19 and the academe in South Africa: Not business as usual. *South African Journal of Science*, 116 (7/8), July/Aug: pp. 1 - 3.

Henrico S, **Coetzee SM**, **Cooper AK** (2020). Is open source GIS feasible in military operations? Evaluation by applying a use case. *Scientia Militaria: South African Journal of Military Studies*, 48 (1), pp. 41 - 61.

Kapwata K, Mathee A, Sweijd N, Minakawa N, Mogotsi M, Kunene Z, **Wright CY** (2020). Spatial assessment of heavy metals contamination in household garden soils in rural Limpopo Province, South Africa. *Environmental Geochemistry and Health* 42 pp. 4181 - 4191

**Kasimona (Milup\_i) ID**, **Somers MJ**, **Ferguson JWH** (2020). Inadequate community engagement hampers sustainable wildlife resource management in Zambia. *African Journal of Ecology*, 58 (1), pp. 112 - 122.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF PRETORIA

### ***P***ublications Continued:

**Kemp NJ, Breetzke GD, Cooper AK** (2020). Modeling the risk of robbery in the city of Tshwane, South Africa. *Cartography and Geographic Information Science*, 48 (1), pp. 29 - 42.

Khosa F, Mateyisi M, van der Merwe M, **Feig G**, Engelbrecht F, Savage M (2020). Evaluation of soil moisture from CCAM-CABLE simulation, satellite- based models estimates and satellite observations: a case study of Skukuza and Malopeni flux towers. *Hydrology and Earth System Sciences*, 24 pp. 1587 - 1609.

**Kurwakumire E, Coetzee SM, Schmitz PMU** (2020). Towards monitoring and managing the production of cadastral information in land information infrastructures using supply chain mapping and the Supply Chain Operations Reference (SCOR) model. *South African Journal of Geomatics (formerly South African Journal of Surveying and Geo- Information)*, 9 (2), pp. 163 - 178.

**Landman WA, Archer E**, Mark T (2020). Citizen Science for the Prediction of Climate Extremes in South Africa and Namibia, *Frontier in Climate*, 2 (5), pp. 1 - 8.

**Landman WA**, Sweijd N, Masedi N, Minakawa N (2020). The development and prudent application of climate-based T forecasts of seasonal malaria in the Limpopo province in South Africa. *Environmental Development*, 35 (100522), pp. 1 - 13.

Linde K, **Wright CY**, du Plessis J (2020). Subjective and objective skin colour of a farmworker group in the Limpopo Province, South Africa. *Skin Research and Technology*, 26 (6), pp. 923 - 931.

**Lokotola CL, Wright CY, Wichmann J** (2020). Temperature as a modifier of the effects of air pollution on cardiovascular disease hospital admissions in Cape Town, South Africa. *Environmental Science and Pollution Research*, 27 pp. 16677 - 16685.

**Makondo JL, Adeola AM**, Makgoale T, **Botai OJ, Adisa OM**, Botai C (2020). Influence of Climate on the Spatiotemporal Distribution of Malaria in Thulamela Municipality, Limpopo Province, South Africa. *Open Public Health Journal*, 13 pp. 246 - 256.

Mangani T, Coetzee H, Kellner K, **Chirima JG** (2020). Socio-Economic Benefits Stemming from Bush Clearing and Restoration Projects Conducted in the D’Nyala Nature Reserve and Shongoane Village, Lephalale, South Africa. *Sustainability*, 12 (5133), pp. 1 - 15.

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### *Publications Continued:*

Martínez B, Gilabert M, Sánchez-Ruiz S, Campos-Taberner M, García-Haro F, Brummer C, Carrara A, **Feig G**, Grunwald T, Mammarella I, Tagesson T (2020). Evaluation of the LSA-SAF gross primary production product derived from SEVIRI/MSG data (MGPP). *ISPRS Journal of Photogrammetry And Remote Sensing*, 159 January: pp. 220 – 236.

Masiza W, **Chirima JG**, Hamandawana H, Pillay R (2020). Enhanced mapping of a smallholder crop farming landscape through image fusion and model stacking. *International Journal of Remote Sensing*, 41 (22), pp. 8739 - 8756.

McNeill J, Snider G, Weagle C, Walsh B, Bissonnette P, Stone E, Abboud I, Akoshile C, Anh N, Balasubramanian R, Brook J, Coburn C, Cohen A, Dong J, Gagnon G, **Garland R**, He K, Holben B, Kahn R, Kim J, Lagrosas N, Lestari P, Liu Y, Jeba F, Joy K, Martins J, Misra A, Norford L, Quel E, Salam A, Schichtel B, Tripathi S, Wang C, Zhang Q, Brauer M, Gibson M, Rudich Y, Martin R (2020). Large global variations in measured airborne metal concentrations driven by anthropogenic sources. *Scientific Reports*, 10 (21817), pp. 1 - 12.

Muofhe T, Chikoore H, Bopape M, Nethengwe N, **Ndarana T**, Rambuwani G (2020). Forecasting Intense Cut-Off Lows in South Africa Using the 4.4 km Unified Model. *Climate*, 8 (129), pp. 1 - 20.

**Ndarana T**, **Rammopo T**, Chikoore H, Barnes M, Bopape M (2020). A quasi-geostrophic diagnosis of the zonal flow associated with cut-off lows over South Africa and surrounding oceans. *Climate Dynamics*, 55 pp. 2631 - 2644.

Pardoe J, Conway D, **Archer E**, Dougill A, Mkwambisi D, Tembo-Nhlema D (2020). Evolution of national climate adaptation agendas in Malawi, Tanzania and Zambia: the role of national leadership and international donors. *Regional Environmental Change*, 20 (118), pp. 1 - 16.

**Phakula S**, **Landman WA**, **Engelbrecht CJ**, Makgoale T (2020). Forecast Skill of Minimum and Maximum Temperatures on Subseasonal-to-Seasonal Timescales Over South Africa. *Earth and Space Science*, 7 (2), pp. 1 – 11.

Raimi A, Roopnarain A, **Chirima JG**, Adeleke R (2020). Insights into the microbial composition and potential efficiency of selected commercial biofertilisers. *Heliyon*, 6 (e04342), pp. 1 – 11.

Räsänen M, Merbold L, Vakkari V, Aurela M, Laakso L, Beukes J, van Zyl P, Josipovic M, **Feig G**, Pellikka P, Rinne J, Katul G (2020). Root-zone soil moisture variability across African savannas: From pulsed rainfall to land-cover switches. *Ecohydrology*, 13 (5), pp. 1 – 20.

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### ***P**ublications Continued:*

**Munghemezulu C, Chirima JG, Tsele PL, Mashaba ZO** (2020). Machine learning algorithms for mapping *Prosopis glandulosa* and land cover change using multi-temporal Landsat products: a case study of Prieska in the Northern Cape Province, South Africa. *South African Journal of Geomatics*, 9 (2), pp. 179 - 197.

**Munthali M, Mustak S, Adeola A, Botai OJ, Singh S, Davis NC** (2020). Modelling land use and land cover dynamics of Dedza district of Malawi using hybrid Cellular Automata and Markov model. *Remote Sensing Applications: Society and Environment*, 17 pp. 1 - 12.

Raimi A, Roopnarain A, **Chirima JG, Adeleke R** (2020). Insights into the microbial composition and potential efficiency of selected commercial biofertilisers. *Heliyon*, 6 (e04342), pp. 1 – 11.

Räsänen M, Merbold L, Vakkari V, Aurela M, Laakso L, Beukes J, van Zyl P, Josipovic M, **Feig G, Pellikka P, Rinne J, Katul G** (2020). Root-zone soil moisture variability across African savannas: From pulsed rainfall to land-cover switches. *Ecohydrology*, 13 (5), pp. 1 – 20.

**Wright CY, Wernecke B** (2020). Using Microsoft® Power BI® to visualise Rustenburg Local Municipality's Air Quality Data. *Clean Air Journal*, 30 (1), pp. 1 – 5.

Merryfield W, Baehr J, Batté L, Becker E, Butler A, Coelho C, Danabasoglu G, Dirmeyer P, Doblas-Reyes F, Domeisen D, Ferranti L, Ilynia T, Kumar A, Müller W, Rixen M, Robertson A, Smith D, Takaya Y, Tuma M, Vitart F, White C, Alvarez M, Ardilouze C, Attard H, Baggett C, Balmaseda M, Beraki AF, Bhattacharjee P, Bilbao R, de Andrade F, DeFlorio M, Díaz L, Ehsan M, Fragkoulidis G, Grainger S, Green B, Hell M, Infanti J, Isensee K, Kataoka T, Kirtman B, Klingaman N, Lee J, Mayer K, McKay R, Mecking J, Miller D, Neddermann N, Ng C, Ossó A, Pankatz K, Peatman S, Pegion K, Perlwitz J, Recalde-Coronel G, Reintges A, Renkl C, Solaraju- Murali B, Spring A, Stan C, Sun Y, Tozer C, Vigaud N, Woolnough S, Yeager S (2020). Current and Emerging Developments in Subseasonal to Decadal Prediction. *Bulletin of the American Meteorological Society*, 101 (6), pp. E869 - E896.

**Meyer JJM, Schutte CE, Hurter JW, Galt NS, Degashu MP, Breetzke GD, Baranenko D, Meyer Laura** (2020). The allelopathic, adhesive, hydrophobic and toxic latex of *Euphorbia* species is the cause of fairy circles investigated at several locations in Namibia. *BMC Ecology*, 20 (45), pp. 1 - 23.

**Olabanji M, Ndarana T, Davis NC, Archer E** (2020). Climate change impact on water availability in the olifants catchment (South Africa) with potential adaptation strategies. *Physics and Chemistry of the Earth*, 120 (102939), pp. 1 - 10.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

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### ***P**ublications Continued:*

Rother H, John J, **Wright CY**, Irlam J, Oosthuizen R, **Garland R** (2020). Perceptions of Occupational Heat, Sun Exposure, and Health Risk Prevention: A Qualitative Study of Forestry Workers in South Africa. *Atmosphere*, 11 (37), pp. 1 – 19

**Sabeta CT**, Mohale D, Phahladira B, Ngoepe E, Van Schalkwyk A, Mogano K, **Chirima JG**, Suzuki T, Makita K (2020). Complete Coding Sequences of 23 South African Domestic and Wildlife Rabies Viruses. *Microbiology Resource Announcements*, 9 (38), pp. 1 - 3.

Somses S, Bopape M, **Ndarana T**, Fridlind A, Matsui T, Phaduli E, Limbo A, Maikhudumu S, Maisha R, Rakate E (2020). Convection Parametrization and Multi-Nesting Dependence of a Heavy Rainfall Event over Namibia with Weather Research and Forecasting (WRF) Model. *Climate*, 8 (112), pp. 1 - 19.

Teare J, Mathee A, Naicker N, Swanepoel C, Kapwata T, Balakrishna Y, **du Preez DJ**, Millar D, **Wright CY** (2020). Dwelling Characteristics Influence Indoor Temperature and May Pose Health Threats in LMICs. *Annals of Global Health*, 86 (1), pp. 1 – 13.

Xulu N, Piketh S, **Feig G**, Lack D, Garland R (2020). Characterizing Light-absorbing Aerosols in a Low-income Settlement in South Africa. *Aerosol and Air Quality Research*, 20 pp. 1812 – 1832

**Twala M**, **Roberts RJ**, **Munghemezulu C** (2020). Detection of magnetite in the Roosenekal area of the Eastern Bushveld Complex, South Africa, using multispectral remote sensing data. *South African Journal of Geology*, 123 (4), pp. 573 – 586.

Vincent K, **Archer E**, Henriksson R, Pardoe J, Mittal N (2020). Reflections on a key component of co-producing climate services: Defining climate metrics from user needs. *Climate Services*, 20 December 2020: pp. 1 - 8.

Vincent K, Conway D, Dougi, SA, Pardoe J, **Archer E**, Bhave A, Henriksson R, Mittal N, Mkwambisi D, Rouhaud E, Tembo-Nhlema D (2020). Re-balancing climate services to inform climate-resilient planning – A conceptual framework and illustrations from sub-Saharan Africa. *Climate Risk Management*, 29 (100242), pp. 1 – 7.

Vicedo-Cabrera A, Sera F, Liu C, Armstrong B, Milojevic A, Guo Y, Tong S, Lavigne E, Kyselý J, Urban A, Orru H, Indermitte E, Pascal M, Huber V, Schneider A, Katsouyanni K, Samoli E, Stafoggia M, Scortichini M, Hashizume, Honda Y, Ng C, Hurtado-Diaz M, Cruz J, Silva S, Madureira J, Scovronick N, **Garland R**, Kim H, Tobias A, Iñiguez C, Forsberg B, Åström C, Ragettli M, Göösli M, Guo Y, Chen B, Zanobetti A, Schwartz J, Bell M, Kan H, Gasparini A (2020). Short term association between ozone and mortality: global two stage time series study in 406 locations in 20 countries. *BMJ-British Medical Journal*, 368 (m108), pp. 1 - 10.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF PRETORIA

### Publications Continued:

Wernecke B, Millar D, Walters M, Ganswindt A, Dziba L, Wright CY (2020). Preventing the next pandemic – A 2020 UNEP Frontiers Series Report on zoonotic diseases with reflections for South Africa. *South African Journal of Science*, 116 (7/8) (8531), pp. 1 - 4.

**Wright CY, du Preez DJ**, Martincigh B, Allen M, Millar D, Wernecke B, Blesic S (2020). A Comparison of Solar Ultraviolet Radiation Exposure in Urban Canyons in Venice, Italy and Johannesburg, South Africa. *Photochemistry and Photobiology*, 96 (5), pp. 1148 – 1153.

**Wright CY, du Preez DJ**, Millar D, Norval M (2020). The Epidemiology of Skin Cancer and Public Health Strategies for Its Prevention in Southern Africa. *International Journal of Environmental Research and Public Health*, 17 (3), pp. 1 – 14.

**Wright CY**, Wallace M, Mistri P, Wernecke B, Kapwata T (2020). Skin Cancer Awareness Among 1 271 Black Africans in South Africa. *Photochemistry and Photobiology*, 96 pp. 941 - 942.

**Wright CY**, Wernecke B (2020). Using Microsoft® Power BI® to visualise Rustenburg Local Municipality's Air Quality Data. *Clean Air Journal*, 30 (1), pp. 1 – 5.

### MSc and PhD

### graduations and supervisors:

Albers, Patricia (2020), PhD. Environmental influences on the effectiveness of the measles booster vaccine among 18-month-old children in a rural community of Limpopo province, South Africa. Supervisor: Caradee Wright.

Buthelezi, Sikhumbuzo (2020), PhD. The risk of exposure to indoor air pollution in low income settlements in Durban, South Africa. Supervisor: Caradee Wright.

Henrico, Susanna (2020), DPhil. Understanding the acceptance and use of open source geospatial software – The case of QGIS in South Africa. Supervisor: Serena Coetzee.

Marumbwa, Farai (2020), DPhil. Drought impact assessment in Southern African biomes. Supervisor: Moses Cho.

Munthali, Maggie (2020), PhD. Analysis of land use and land cover dynamics and its implications on natural resources in Dedza District, Malawi. Supervisor: Nerhene Davis, co-supervisor: Joel Botai.

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## UNIVERSITY OF PRETORIA

### *M* Sc and PhD graduations and supervisors Continued:

Tshehla, Cheledi (2020), PhD. Determination of heavy metal composition of particulate matter in a typical chrome and platinum mine area in Limpopo Province, South Africa. Supervisor: Caradee Wright, co-supervisor: G. Djolov.

Barasa, Benedict (2020), MSc. Evaluation of satellite laser ranging errors associated with pressure sensor height offsets. Supervisor: Ludwig Combrinck, co-supervisor: Joel Botai.

Booi, Lazola (2020), MSc. Examining the spatial association between tuberculosis and alcohol availability in Mamelodi, Tshwane. Supervisor: Greg Breetzke.

Coetzer, RynoHarm (2020), MSc. Assessing the correlation between Malaria case mortality rates and specific socioeconomic factors. Supervisor: A Adeola.

Cullen, Sean (2020), MSc. Optical remote sensing techniques for estimating forageable pasture biomass in semi-arid areas in the Northern Cape. Supervisor: Joel Botai.

Le Roux, Jason (2020), MSc. The hydrogeomorphic distribution of the wetlands in Swaziland, and their prediction. Supervisor: Heinz Beckedahl.

De Villiers, Colette (2020), MSc. Mapping invasive alien plant species using remote sensing: a case study of *Prosopis glandulosa* in Prieska, Northern Cape, South Africa. Supervisor: Cilence Munghemezulu, co-supervisor: Philemon Tsele.

Kemp, Nicolas (2020), MSc. Development of a robbery prediction model for the City of Tshwane Metropolitan Municipality. Supervisor: Greg Breetzke, co-supervisor: Anthony Cooper.

Kruger, Carene (2020), MSc. Composition and stand dynamics of Karee (*Searsia lancea* (L.f.) F.A. Barkley) clusters in the Central Bushveld, Marikana-Brits area, North West Province Supervisor: Prof Coert Geldenhuys.

Ludick, Chantel (2020), MSc. Disaggregating employment data to building level: A multi-objective optimisation approach. Supervisor: Victoria Rautenbach.

Mzoboshe, Skhumbuzo (2020), MSc. Utilization of Indigenous Trees and Its Impact on Species Diversity in Soto, Eastern Cape. Supervisor: Dr IC Madakadza

Nienaber, Willem (2020), MSc. Integrating Heritage Resources Management and Environmental Management processes and practice in accordance with South African legislation and international standards. Supervisor: Advocate PJ Snijman.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF PRETORIA

### *M* Sc and PhD graduations and supervisors Continued:

Nkhabu, Malilomo Francisca (2020), MA. The role of local government in the implementation of Sustainable Development Goals: A case of Tshwane Municipality. Supervisor: Dan Darkey.

Pillay, D (2020), MSc. Investigating the costs and impacts of water leakages in the Midrand region through implementation of the economic model for leakage management. Supervisor: Francis Wasswa Nsubuga.

Schutte, Francois (2020), MSc. The seasonality of crime on the Cape Flats of South Africa. Supervisor: Greg Breetzke.

Tlhatlha, Pheladi V (2020), MSc. Renewable energy strategies for alleviating energy poverty in informal settlements: a case study of Diepsloot South Africa. Supervisor: Francis Wasswa Nsubuga.

Tshivhase, Ndivhuwo Samuel (2020), MSc. Assessment of river health using in Situ Water Quality Parameters and Miniass protocol in the Marico and Crocodile Rivers, North West Province, South Africa. Supervisor: GJ Cilliers.

### *2020 student numbers:*

Degree	Enrolled 2020
BSc: Environmental Sciences	98
BSc: Geography	33
BSc: Geoinformatics	59
BSc: Meteorology	38
BScHons: Geography & Environmental Science	11
BScHons: Geoinformatics	14
BScHons: Meteorology	11
BSocSciHons: Geography & Environmental Science	2
MA: Environment and Society	8
MA: Geography	1
MSc: Environment and Society	14
MSc: Environmental Management	8
MSc: Geography	3
MSc: Geoinformatics	18
MSc: Meteorology	14
PhD: Air Quality Management	1
PhD: Environment and Society	9
PhD: Environmental Management	5
PhD: Geography	12
PhD: Geoinformatics	12
PhD: Meteorology	7

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## UNIVERSITY OF PRETORIA

*Changes to the curriculum or course offerings:*

*Link to departmental webpage:*

<https://www.up.ac.za/geography-geoinformatics-and-meteorology>

Comprehensive information on all our degree program offerings can be found at <https://www.up.ac.za/geography-geoinformatics-and-meteorology/article/20918/academic-programmes>.

### **Geography & Environmental Science**

The BSc Geography and BSc Environmental Sciences degrees were merged into one combined degree (BSc Geography and Environmental Sciences), offering 5 areas of specialisation. These are majors in 1) Geoinformatics, 2) Plant Science, 3) Soil Science, 4) Anthropology, and 5) Heritage and Cultural Tourism. This combined degree will be offered for the first time in 2021.

### **Geoinformatics**

The BSc Geoinformatics and BScHons Geoinformatics degrees were re-accredited by the South African Geomatics Council in late 2019, for the period 2019-2023.

### **Meteorology**

The BSc Meteorology and BScHons Meteorology degrees were streamlined and modified to become *BIP-M compliant according to the World Meteorological Organization (WMO)*.

### **Centre for Geoinformation Science**

The Centre for Geoinformation Science is currently dormant.

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## UNIVERSITY OF ZULULAND

### *Name of department:*

Geography and Environmental Studies

### *Head of department:*

Dr I Moyo

### *Information about the Geographers and their area of specialisation in the department:*

- Dr I Moyo; Political Geography Urban Geography Migration Studies Border Studies [Moyoi@unizulu.ac.za](mailto:Moyoi@unizulu.ac.za) 035 9026340
- Dr ML Mdoka; Senior Lecturer- Atmospheric Science [MdokaML@unizulu.ac.za](mailto:MdokaML@unizulu.ac.za) 035 9026623
- Dr NB Mbatha; Senior Lecturer- Atmospheric Physics and Chemistry [MbathaNB@unizulu.ac.za](mailto:MbathaNB@unizulu.ac.za) 035 9026400
- Mr Mthembu, A.T; Lecturer- Demographics and Community Health; Cultural and Physical Environments [mthembua@unizulu.ac.za](mailto:mthembua@unizulu.ac.za) 035 9026329
- Mrs Ndimande, N.P; Lecturer- Rural Geography and Environmental Management [ndimanden@unizulu.ac.za](mailto:ndimanden@unizulu.ac.za) 035 9026330
- Mr N G Xulu; Lecturer- Environmental Management, Atmospheric Science and GIS [XuluNG@unizulu.ac.za](mailto:XuluNG@unizulu.ac.za) 035 9026331

- Miss Jabulile H Mzimela; n-Gap Lecturer- Environmental Management Human Geography [MzimelaJ@unizulu.ac.za](mailto:MzimelaJ@unizulu.ac.za)

- Prof Jury, M.R.; Research Fellow- Atmospheric Science [mark.jury@upr.edu](mailto:mark.jury@upr.edu)

### *Support staff in the Department:*

- Mrs Khumalo, D; Secretary [khumalod@unizulu.ac.za](mailto:khumalod@unizulu.ac.za) 035 902 6318
- Mr L.C. Shongwe; Senior Laboratory Assistant - Human geography Remote sensing and GIS [ShongweL@unizulu.ac.za](mailto:ShongweL@unizulu.ac.za) 035 902 6332



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ZULULAND

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## UNIVERSITY OF ZULULAND

### **E**xciting departmental news:

In January 2021, the Department of Geography and Environmental Studies welcomed Miss Jabulile H Mzimela an n-Gap Lecturer. She is a Human Geographer whose research lies at the intersection of feminist political ecologies and black Geographies.

Lubanzi Dlamini was awarded the Society of South African Geographers (SSAG) Outstanding Honours Research Award for 2020. This research award was based on her Honours research project titled: Monitoring Mining Disturbance and Restoration over RBM Site in South Africa Using LandTrendr Algorithm and Landsat Data. This was published in a DHET accredited journal, Sustainability. Lubanzi is currently studying for her MSc at the University of the Witwatersrand.

### **2** 020/2021 List of publications:

#### **Authored Books**

**Moyo, I** and Gumbo, T. 2021. Urban Informality in South Africa and Zimbabwe: On Growth, Trajectory and Aftermath. London: Springer.

#### **Edited Books**

**Moyo, I**, Laine, J.P and Nshimbi, C.C. 2021 (Eds). Intra-Africa Migrations: Reimagining Borders and Migration Management. Routledge: London.

Laine, J.P, **Moyo, I**, and Nshimbi, C.C. 2021. Expanding Boundaries: Borders Mobilities and the Future of Europe-Africa Relations. Routledge.

**Moyo, I** Nshimbi, C.C and Laine, J (Eds). 2020. Migration Conundrums, Regional Integration and Development: Africa-Europe Relations in a Changing Global Order. London: Palgrave MacMillan.

Nshimbi, C.C and **Moyo, I** (Eds). 2020. Borders, Mobility, Regional Integration and Development: Issues, Dynamics and Perspectives in West, Eastern and Southern Africa. London: Springer.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF ZULULAND

### *List of publications Continued:*

#### **Book chapters:**

Moyo, I. 2021. Grassroots actors, border interactions and regional integration in the Southern African region and SADC. In, Nshimbi, C.C, Moyo, I and Laine, J.P, Borders, Sociocultural Encounters and Contestations: Southern African Experiences in Global View, 27-36. London: Routledge.

Moyo, I, Nshimbi, C.C and Laine, JP. 2021. Implications of the micro processes of encounter contest in borders. In, Nshimbi, C.C, Moyo, I and Laine, J.P, Borders, Sociocultural Encounters and Contestations: Southern African Experiences in Global View, 141-145. London: Routledge.

Laine, J.P, Moyo, I and Nshimbi, C.C. 2021. Borders as sites of encounter and contestation. In, Nshimbi, C.C, Moyo, I and Laine, J.P, Borders, Sociocultural Encounters and Contestations: Southern African Experiences in Global View, 3-14. London: Routledge.

Nshimbi C.C and Moyo, I. 2021. Sociocultural encounters in geography historicized: Borders, grassroots actors and regional integration in Southern Africa. In, Nshimbi, C.C, Moyo, I and Laine, J. P, Borders, Sociocultural Encounters and Contestations: Southern African Experiences in Global View, 15-26. London: Routledge.

Laine, J.P, Moyo, I and Nshimbi, C.C.2021. Introduction: Migration and Border Politics Amidst the Europe-Africa Relations. In Laine, J.P, Moyo, I and Nshimbi, C.C (Eds), Expanding Boundaries: Borders, Mobilities and the Future of Europe-Africa Relation. London: Routledge.

Laine, J.P, Nshimbi, C.C and Moyo, I. 2021. Closing Remarks: Expanding the Boundaries of Euro–Africa Relations. In Laine, J.P, Moyo, I and Nshimbi, C.C (Eds), Expanding Boundaries: Borders, Mobilities and the Future of Europe-Africa Relation. London: Routledge.

Moyo, I.2020. Beyond post-coloniality in border studies. In James W. Scott (Ed), A Research Agenda for Border Studies. Cheltenham: Elgar

Moyo, I, Nshimbi, C.C and Jussi, J. P. 2020. Migration, modernity and transformation: Africa-Europe migration conundrums in a changing global order. In Moyo, I and Nshimbi, C.C and Laine, J.P. (Eds) Migration Conundrums, Regional Integration and Development: Africa-Europe Relations in a Changing Global Order. London: Palgrave MacMillan.

Moyo, I. 2020. African informal migrant traders in Johannesburg: Experiences on the ground and implications on human mobility in the SADC. In Moyo, I and Nshimbi, C.C and Laine, J.P. (Eds) Migration Conundrums, Regional Integration and Development: Africa-Europe Relations in a Changing Global Order. London: Palgrave MacMillan.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF ZULULAND

### *List of publications Continued:*

#### **Book chapters:**

Nshimbi, C.C, Moyo, I and Laine, P. 2020. Beyond the present: Migration governance for regions and inclusive development. In Moyo, I and Nshimbi, C.C and Laine, J.P. (Eds) Migration Conundrums, Regional Integration and Development: Africa-Europe Relations in a Changing Global Order. London: Palgrave MacMillan.

Nshimbi, C.C and Moyo, I. 2020. Borders, human mobility, integration and development in Africa: An introduction. In Nshimbi, C.C and Moyo, I (Eds). 2020. Borders, Mobility, Regional Integration and Development: Issues, Dynamics and Perspectives in West, Eastern and Southern Africa. London: Springer.

Moyo, I. 2020. Migration and the spatial-mobility of borders in the Southern African region. In Nshimbi, C.C and Moyo, I (Eds). 2020. Borders, Mobility, Regional Integration and Development: Issues, Dynamics and Perspectives in West, Eastern and Southern Africa. London: Springer.

Moyo, I and Nshimbi, C.C. 2020. Borders, mobility and integration in Africa revisited: Towards a new understanding of African realities. In Nshimbi, C.C and Moyo, I (Eds). 2020. Borders, Mobility, Regional Integration and Development: Issues, Dynamics and Perspectives in West, Eastern and Southern Africa. London: Springer.

Nkanyiso Mbatha & Sifiso Xulu. Time Series Analysis of MODIS-Derived NDVI for the Hluhluwe-Imfolozi Park, South Africa: Impact of Recent Intense Drought. In: Prime Archives in Environmental Research. 1st edition, Hyderabad, India: Vide Leaf. 2020. ISBN: 978-93-90014-18-7, <https://videoleaf.com/product/prime-archives-in-environmental-research/>

#### **Peer reviewed Journal articles**

Moyo, I. 2020. On Decolonising Borders and Regional Integration in the Southern African Development Community (SADC) Region. *Social Sciences*, 9, 32:1-12

Moyo, I. and Cele, H.M.S. 2021. Protected areas and environmental conservation in KwaZulu-Natal, South Africa: on HEIs, livelihoods and sustainable development. *International Journal of Sustainability in Higher Education*.

Jury, M.R.2020. Slowing of Caribbean through-flow Deep Sea Research. 180-104682 doi10.1016/j.dsr2.2019.104682

Jury, M.R.2020. Diurnal climate of the Abyssinian highlands International J. Climatology. 404575-4585 doi.org/10.1002/joc.6476

Jury, M.R. and Goschen, W.2020. Inter-relationships between physical ocean-atmosphere variables over the shelf south of South Africa from reanalysis products Continental Shelf Research02 104135 doi.org/10.1016/j.csr.2020.104135

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF ZULULAND

### List of publications Continued:

Jury, M.R. 2020. Meteorology of air pollution in Los Angeles Air Pollution Research 2020 11 1226-1237.  
doi.org/10.1016/j.apr.2020.04.016

Tarkegn, G.B. and Jury, M.R.2020. Changes in the seasonality of Ethiopian highlands climate and implications for crop growth Atmosphere 202011892doi.org/10.3390/atmos11090892

Jury, M.R.2020. Climate trends in the Cape Town area WaterSA 2020468654  
doi.org/10.17159/wsa/2020.v46.i3.8654

Jury, M.R. 2020. Sand transport in the northeastern Caribbean characterized by wind-wave-current data Ocean & Coastal Manag.1985363  
doi.org/10.1016/j.ocecoaman.2020.105363

Jury, M.R. 2020. Coastal gradients in False Bay, south of Cape Town: what insights can be gained from mesoscale reanalysis? Ocean Science 2020 161545-1557  
doi.org/10.5194/os-16-1545-2020

Jury, M.R. 2020. Marine climate change over the eastern Agulhas Bank of South Africa Ocean Science, 161529-1544  
doi.org/10.5194/os-16-1529-2020

Jury, M.R. 2020. Resolution-dependent perspectives on Caribbean hydro-climateHydrology,7 93  
doi:10.3390/hydrology7040093

Jury, M.R. and Fontanez-Vazquez, I.L.2020. Ozone structure in Caribbean hurricanes Heliyon, 65366  
doi:10.1016/j.heliyon.2020.e05366

Nkanyiso Mbatha and Hassan Bencherif, Time Series Analysis and Forecasting Using a Novel Hybrid LSTM Data-driven Model Based on Empirical Wavelet Transform applied to Total Column of Ozone Time Series at Buenos Aires, Argentina (1966-2017): Atmosphere, 11, 457, 2020.

S Xulu, N Mbatha, K Peerbhay, M Gebreslasie: Detecting Harvest Events in Plantation Forest Using Sentinel-1 and-2 Data via Google Earth Engine: Forests, 11 (12), 1283, 2020.

H Bencherif, AM Tohir, N Mbatha, V Sivakumar, DJ du Preez, N Bègue: Ozone Variability and Trend Estimates from 20-Years of Ground-Based and Satellite Observations at Irene Station, South Africa: Atmosphere 11 (11), 1216, 2020.

Lerato Shikwambana, Paida Mhangara, Nkanyiso Mbatha; Trend analysis and first time observations of sulphur dioxide and nitrogen dioxide in South Africa using TROPOMI/Sentinel-5P data: International Journal of Applied Earth Observations and Geoinformation, 91, 2020.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF ZULULAND

### *List of publications Continued:*

Hassan Bencherif, Nelson Bègue, Damaris Kirsch Pinheiro, David Jean du Preez, Jean-Maurice Cadet, Fábio Juliano da Silva Lopes, Lerato Shikwambana, Eduardo Landulfo, Thomas Vescovini, Casper Labuschagne, Jonatan João Silva, Vagner Anabor, Pierre-François Coheur, Nkanyiso Mbatha, Juliette Hadji-Lazaro, Venkataraman Sivakumar, Cathy Clerbaux: Investigating the Long-Range Transport of Aerosol Plumes Following the Amazon Fires (August 2019): A Multi-Instrumental Approach from Ground-Based and Satellite Observations, *Remote Sensing*, 12 (22), 3846, 2020.

René Tato Loua, Hassan Bencherif, Nelson Bègue, Nkanyiso Mbatha, Thierry Portafaix, Alain Hauchecorne, Venkataraman Sivakumar, Zoumana Bamba: Surface Temperature Trend Estimation over 12 Sites in Guinea Using 57 Years of Ground-Based Data: *Climate* 2020, 8(6), 68; <https://doi.org/10.3390/cli8060068>.

Mkololo T, Mbatha N, Venkataraman S, Begue N, Coetzee G, Labuschagne C: Stratosphere–Troposphere Exchange and O<sub>3</sub> Decline in the Lower Stratosphere over Irene SHADOZ Site, South Africa.: *Atmosphere*, 11, 586, 2020.

Nelson Bègue, Lerato Shikwambana, Hassan Bencherif, Juan Pallota, Venkataraman Sivakumar, Elian Wolfram, Nkanyiso Mbatha, Facundo Orte, David Jean Du Preez, Marion Ranaivombola, Situart Piketh, Paola Formenti: Statistical analysis of the long-range transport of the 2015 Calbuco volcanic eruption from ground-based and space-borne observations., *Annales Geophysicae*, 38,1-26, 2020.

P. F. Orte, E. Luccini, E. Wolfram, F. Nollas, J. Pallotta, R. D'Elia, G. Carbajal, N. Mbatha, N. Hlongwane: Comparison of OMI-DOAS total ozone column with ground-based measurements in Argentina, *Official Journal of the Spanish Association of Remote Sensing*, DOI: <https://doi.org/10.4995/raet.2020.13673>, , 57, 2020

### *Conference presentations:*

Cele, HMS and Moyo, I; Protected areas and environmental conservation in KwaZulu-Natal, South Africa: On marginalization, livelihoods and sustainable development 5-6 March 2020 Accelerating the implementation of the SDG's in Africa, Unisa, Pretoria

**Jury MR; Inter-disciplinary earth science research Rutgers Bi-centennial Celebration 13 Nov 2020 (by zoom – virtually)**

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## UNIVERSITY OF ZULULAND

### Conference presentations continued:

Mbatha N ; Cape Point and Zeppelin  
Atmospheric Mercury (Hg) Time Series  
Analysis and Forecasting Using a Novel  
Hybrid LSTM Data-Driven Models 8-10  
December 2020 (by Zoom) 1st “Perspectives  
on Global Change” Research Conference:  
Science Access Conference

Mbatha N; Atmospheric modelling over  
South Africa 17 November 2020 Minamata  
Online: Multimedia modelling of global  
mercury movement organised by “Minamata  
Convention on Mercury”

Mbatha N; International Geosciences  
Colloquium- 10-13, 27 November 2020 and  
1-2 December 2020.

Session-Category: Big Data Analytics and  
Artificial Intelligence in Geosciences Time  
Series Analysis and Forecasting Using a  
Novel Hybrid LSTM Data-Driven Model-  
Based on Empirical Wavelet Transform  
Applied to Total Column Ozone at Buenos  
Aires, Argentina

### **Invited Speaker:**

Mbatha N:

Conference: EARTH AND  
ENVIRONMENTAL SCIENCES  
INTERNATIONAL WEBINAR  
CONFERENCE 2021 (1-2 February 2021)

<https://www.eesiwc.com/speaker/>

## MSc and PhD graduations and supervisors:

Makhathini MSM. Investigating African  
migrant informal enterprises in uMhlathuze  
municipality: Nature, extent and policy  
response. MA-Supervisor; Dr I Moyo

Cele HMS A comparative investigation of  
Indigenous Knowledge Systems in the  
conservation of Protected Areas in KwaZulu-  
Natal, South and Portland, Jamaica. MA-  
Supervisor Dr I Moyo

Xulu, SLRG Investigating the impact of  
Phinda Private Game Reserve on the  
livelihoods of the community of  
Mnqobokazi, Kwazulu-Natal. MSc-  
Supervisor Dr I Moyo

Sibiya L Investigating small-scale commercial  
afforestation and catchment management area  
in Manguzi, uMhlabuyalingana Local  
Municipality, Nwazulu-natal: Livelihoods,  
policy and conflict. MA- Supervisor Dr I  
Moyo

Bukhosini, Z Investigating the impact of and  
response to drought by small scale farmers in  
Mfekayi, Mtubatuba, Kwazulu Natal. MA-  
Supervisor Dr I Moyo

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### *M* Sc and PhD graduations and supervisors Continued:

Maseko, ZTM; Assessing the influence of natural resource conservation on the livelihoods of KwaNibela, KwaZulu-Natal. MA- *Supervisor* Dr I Moyo

Phungula, PT; An analysis of the land rehabilitation programme of the Tronox mine: Environmental justice and the community of Gobandlovu. MA- *Supervisor* Dr I Moyo & Dr NB Mabtha, Dr S Xulu

Mashiyane, ZN; An analysis of the sustainability of small-scale farming in Dukuduku, KwaZulu Natal, South Africa. MA- *Supervisor* Dr I Moyo

### *S* hort description of the curriculum presented:

#### **Undergraduate (NQF levels 5, 6 and 7):**

##### Geography 1 (4GES100)

- Earth Science
- Atmospheric Science
- Environmental Management
- Cultural Environment
- Tourism

##### Geography 2 (4GES200)

- Global Landforms
- Cartography and Thematic Mapping
- Demographics and Community Health
- Sustainable Development
- Hydrometeorology

##### Geography 3 (4GES300)

- Urban Geography
- Recreation Geography
- Land Use and Resource Management
- Environmental Management
- Environmental Fieldwork and Research
- Atmospheric processes and pollution
- Climate dynamics, weather variability and prediction

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF ZULULAND

### Description of the curriculum presented continued:

#### **Postgraduate (NQF level 8):**

- Bachelor of Arts (Honours) – BA Hons
- Bachelor of Science (Honours) – BSc Hons

#### **Postgraduate (NQF level 9):**

- Master of Arts – MA
- Master of Science – MSc

#### **Postgraduate (NQF level 10):**

- Doctor of Philosophy in Geography – PhD

### 2020 student numbers :

<i>First Year</i>	533
<i>Second Year</i>	269
<i>Third Year</i>	149
<i>Honours</i>	6
<i>Masters</i>	12
<i>Doctoral</i>	2

### 2021 student numbers :

<i>First Year</i>	471
<i>Second Year</i>	253
<i>Third Year</i>	147
<i>Honours</i>	13
<i>Masters</i>	7
<i>Doctoral</i>	3

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NORTH -WEST UNIVERSITY

### *Name of department:*

Geography and Environmental Management

### *Head of department:*

- Prof Dirk Cilliers

### *Information about the Geographers and their area of specialisation in the department:*

- Prof Livhu Nemale; Associate Professor- Disaster risk management  
[24539155@nwu.ac.za](mailto:24539155@nwu.ac.za) 018-299-1671
- Dr Christo Coetzee; Senior Lecturer- EMS & Waste management  
[Christo.Coetzee@nwu.ac.za](mailto:Christo.Coetzee@nwu.ac.za) 018-299-1630
- Dr Claudine Roos; Senior lecturer- EMS & Waste management  
[Claudine.roos@nwu.ac.za](mailto:Claudine.roos@nwu.ac.za) 018 299 1477
- Dr Theuns de Klerk; Senior lecturer- GIS  
[Theuns.deklerk@nwu.ac.za](mailto:Theuns.deklerk@nwu.ac.za) 018 299 1583
- Mr Manna Stander.; Lecturer- Human Geography  
[Manna.Stander@nwu.ac.za](mailto:Manna.Stander@nwu.ac.za) 018 299 1587
- Ms Carli Steenkamp; Lecturer- EIA and Environmental Planning  
[Carli.steenkamp@nwu.ac.za](mailto:Carli.steenkamp@nwu.ac.za) 018 299 1523
- Mr Monray Belelie; Lecturer- Climatology
- Dr Joseph Adesina; Temporary appointment Aerosols Climatology Air quality  
[Joseph.Adesina@nwu.ac.za](mailto:Joseph.Adesina@nwu.ac.za) 018-299-1511
- Prof Dirk Cilliers; Associate Professor- Environmental Management / Spatial analysis  
[Dirk.cilliers@nwu.ac.za](mailto:Dirk.cilliers@nwu.ac.za) 018 299 1589
- Prof Stuart Piketh; Professor and Director School of Geo and Spatial Sciences- Climatology and climate modelling  
[Stuart.piketh@nwu.ac.za](mailto:Stuart.piketh@nwu.ac.za) 018 299 1582
- Prof Dewald van Niekerk; Professor- Disaster risk management  
[Dewald.VanNiekerk@nwu.ac.za](mailto:Dewald.VanNiekerk@nwu.ac.za) 018-299-1634
- Prof Luke Sandham; Professor- EIA effectiveness in South Africa  
[Luke.sandham@nwu.ac.za](mailto:Luke.sandham@nwu.ac.za) 018 299 1585
- Prof Roelof Burger; Associate Professor- GIS and climate modelling  
[Roelof.burger@nwu.ac.za](mailto:Roelof.burger@nwu.ac.za) 018 299 4269



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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NORTH -WEST UNIVERSITY

### Associate members in the Research Unit for Environmental Science and Management

- Prof Harold Annegarn; Professor- Air pollution
- Prof Francois Retief; Professor- Environmental Assessment  
[Francois.retief@nwu.ac.za](mailto:Francois.retief@nwu.ac.za)
- Prof Angus Morrison-Saunders; Extraordinary professor, visiting from Murdoch University, Perth- Environmental and Sustainability Assessment [A.Morrison-Saunders@murdoch.edu.au](mailto:A.Morrison-Saunders@murdoch.edu.au)
- Dr Jenny Pope; Extraordinary senior lecturer, visiting from Integral Sustainability, Perth- Environmental and Sustainability Assessment [jenny@integral-sustainability.net](mailto:jenny@integral-sustainability.net)
- Dr Alan Bond; Extraordinary fellow, visiting from University of East Anglia- Environmental and Sustainability Assessment  
[alan.bond@uea.ac.uk](mailto:alan.bond@uea.ac.uk)

### Exciting departmental news:

Prof Dewald van Niekerk was awarded a B rating by the NRF.

Prof Luke Sanham was promoted to full-professor and is also currently acting as the dean for the Faculty of Humanities.

Prof Livhu NemaKonde and Prof Dirk Cilliers were promoted to Associate Professors.

Prof Roelof Burger and Prof Dirk Cilliers were awarded teaching excellence awards by the NWU.

A paper published in the subject group was nominated for best paper of 2020 in the IAPA Journal.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NORTH -WEST UNIVERSITY

### 2020/2021 List of publications:

van Niekerk, D., Coetzee, C. and NemaKonde, L., 2020. Implementing the Sendai Framework in Africa: Progress Against the Targets (2015–2018). *International Journal of Disaster Risk Science*, 11(2), pp.179-189.

Sabela-Rikhotso, P.T.Z., van Niekerk, D. and NemaKonde, L.D., 2021. A critical analysis of the legal frameworks governing oil spill management in South Africa. *Marine Policy*, 127, p.104433.

NemaKonde, L.D., Van Niekerk, D., Becker, P. and Khoza, S., 2021. Perceived adverse effects of separating government institutions for disaster risk reduction and climate change adaptation within the Southern African Development Community Member States. *International Journal of Disaster Risk Science*, 12(1), pp.1-12.

Banda, B., van Niekerk, D., NemaKonde, L. and Granvorka, C., 2021. Integrated development planning in Zambia: Ideological lens, theoretical underpinnings, current practices, views of the planners. *Development Southern Africa*, pp.1-16.

Khoza, S., van Niekerk, D. and NemaKonde, L., 2020. Rethinking Climate-Smart Agriculture Adoption for Resilience-Building Among Smallholder Farmers: Gender-Sensitive Adoption Framework. *African Handbook of Climate Change Adaptation*, pp.1-22.

Banda, B., van Niekerk, D., NemaKonde, L. and Granvorka, C., 2020. Integrated development planning and related financing practice: a comparison case study of Zambia and South Africa. *Journal of Public Administration*, 55(1), pp.44-59.

Khangale, M.M., Van Niekerk, D. and NemaKonde, L.D., 2020. A model for integrating disaster risk reduction in national multi-sectoral planning in South Africa. *Journal of Public Administration*, 55(3), pp.353-369.

Sumbane-Prinsloo, L., Bunt, J., Piketh, S., Neomagus, H., Waanders, F. and Matjie, R., 2020. The influence of particle size on the thermal performance of coal and its derived char in a Union stove. *Energy Geoscience*.

Bègue, N., Shikwambana, L., Bencherif, H., Pallotta, J., Sivakumar, V., Wolfram, E., Mbatha, N., Orte, F., Preez, D.J.D., Ranaivombola, M. and Piketh, S., 2020, March. Statistical analysis of the long-range transport of the 2015 Calbuco volcanic plume from ground-based and space-borne observations. In *Annales Geophysicae* (Vol. 38, No. 2, pp. 395-420). Copernicus GmbH.

Adesina, J.A., Piketh, S.J., Qhekwana, M., Burger, R., Language, B. and Mkhathshwa, G., 2020. Contrasting indoor and ambient particulate matter concentrations and thermal comfort in coal and non-coal burning households at South Africa Highveld. *Science of the Total Environment*, 699, p.134403.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NORTH -WEST UNIVERSITY

### Publications continued:

Redemann, J., Wood, R., Zuidema, P., Doherty, S.J., Luna, B., LeBlanc, S.E., Diamond, M.S., Shinozuka, Y., Chang, I.Y., Ueyama, R. and Pfister, L., 2021. An overview of the ORACLES (ObseRvations of Aerosols above CLouds and their intEractionS) project: aerosol–cloud–radiation interactions in the southeast Atlantic basin. *Atmospheric Chemistry and Physics*, 21(3), pp.1507-1563.

Klopper, D., Formenti, P., Namwoonde, A., Cazaunau, M., Chevaillier, S., Feron, A., Gaimoz, C., Hease, P., Lahmidi, F., Mirandebret, C. and Triquet, S., 2020. Chemical composition and source apportionment of atmospheric aerosols on the Namibian coast. *Atmospheric Chemistry and Physics*, 20(24), pp.15811-15833.

LeBlanc, S.E., Redemann, J., Flynn, C., Pistone, K., Kacenelenbogen, M., Segal-Rosenheimer, M., Shinozuka, Y., Dunagan, S., Dahlgren, R.P., Meyer, K. and Podolske, J., 2020. Above-cloud aerosol optical depth from airborne observations in the southeast Atlantic. *Atmospheric Chemistry and Physics*, 20(3), pp.1565-1590.

Weston, M., Temimi, M., Burger, R. and Piketh, S., 2021. A Fog Climatology at Abu Dhabi International Airport. *Journal of Applied Meteorology and Climatology*, 60(2), pp.223-236.

Mathee, A., Moyes, J., Mkhencele, T., Kleynhans, J., Piketh, S., Moroe, E., Wafawanaka, F., Martinson, N., McMorrow, M., Tempia, S. and Kahn, K., 2021. Housing Quality in a Rural and an Urban Settlement in South Africa. *International Journal of Environmental Research and Public Health*, 18(5), p.2240.

Sumbane-Prinsloo, L., Bunt, J., Matjie, R., Piketh, S., Neomagus, H. and Waanders, F., 2020. The effect of particle size on the pollution reduction potential of a South African coal-derived low-smoke fuel. *Energy Geoscience*, 1(3-4), pp.165-173.

McGill, M.J., Swap, R.J., Yorks, J.E., Selmer, P.A. and Piketh, S.J., 2020. Observation and quantification of aerosol outflow from southern Africa using spaceborne lidar. *South African Journal of Science*, 116(3-4), pp.1-6.

Matandirotya, N.R., Cilliers, D.P., Burger, R.P., Pauw, C. and Piketh, S.J., 2020. Risks of Indoor Overheating in Low-Cost Dwellings on the South African Lowveld. *African Handbook of Climate Change Adaptation*, pp.1-18.

Xulu, N.A., Piketh, S.J., Feig, G.T., Lack, D.A. and Garland, R.M., 2020. Characterizing Light-absorbing Aerosols in a Low-income Settlement in South Africa. *Aerosol and Air Quality Research*, 20, pp.1812-1832.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NORTH -WEST UNIVERSITY

### Publications continued:

Muyemeki, L., Burger, R. and Piketh, S.J., 2020. Evaluating the potential of remote sensing imagery in mapping ground-level fine particulate matter (PM<sub>25</sub>) for the Vaal Triangle Priority Area. *Clean Air Journal*, 30(1), pp.1-7.

Adesina, J.A., Piketh, S.J., Qhekwana, M., Burger, R. and Mkhathshwa, G., 2020. Quantifying the effect of air quality offsets on household air pollution and thermal comfort on the South Africa Highveld. *Clean Air Journal*, 30(1), pp.1-1.

Formenti, P., Klopper, D., Chevaillier, S., D'Anna, B., Desboeufs, K., Doussin, J.F., Feron, A., Giorio, C., Mallet, M.D., Mirande-Bré, C. and Monod, A., 2020, May. Chemical composition and characterization of aerosols off Namibia: results from the AEROCLO-sA project. In *EGU General Assembly Conference Abstracts* (p. 3844).

Weston, M., Piketh, S., Formenti, P., Brocardo, S., Andersen, H. and Voogt, R., 2020, May. Evaluation of next day fog forecast over Namibia using the WRF model. In *EGU General Assembly Conference Abstracts* (p. 19860).

Subramanian, R., Beekmann, M., Malings, C., Feron, A., Formenti, P., Giordano, M., Marticorena, B., Galy-Lacaux, C., Liousse, C., Adesina, J. and Piketh, S., 2020, May. MOPGA/Make Air Quality Great Again: Filling in the air quality data gap in Africa using lower-cost RAMP monitors. In *EGU General Assembly Conference Abstracts* (p. 10942).

Garland, R.M., Marais, E.A., Naidoo, M., Burger, R., John, J., Kwatala, N., Landman, W., Naidoo, S. and Piketh, S., 2020, December. Using Multiple Platforms to Investigate the Impacts of COVID-19 Measures on Air Quality in South Africa. In *AGU Fall Meeting 2020*. AGU.

Roos, C., Cilliers, D.P., Retief, F.P., Alberts, R.C. and Bond, A.J., 2020. Regulators' perceptions of environmental impact assessment (EIA) benefits in a sustainable development context. *Environmental Impact Assessment Review*, 81, p.106360

Cilliers, D.P., Van Staden, I., Roos, C., Alberts, R.C. and Retief, F.P., 2020. The perceived benefits of EIA for government: a regulator perspective. *Impact Assessment and Project Appraisal*, 38(5), pp.358-367.

Alberts, R.C., Retief, F.P., Roos, C., Cilliers, D.P. and Arakele, M., 2020. Re-thinking the fundamentals of EIA through the identification of key assumptions for evaluation. *Impact Assessment and Project Appraisal*, 38(3), pp.205-213.

Retief, F.P., Fischer, T.B., Alberts, R.C., Roos, C. and Cilliers, D.P., 2020. An administrative justice perspective on improving EIA effectiveness. *Impact Assessment and Project Appraisal*, 38(2), pp.151-155.

Sandham, L.A., Huysamen, C., Retief, F.P., Morrison-Saunders, A., Bond, A.J., Pope, J. and Alberts, R.C., 2020. Evaluating environmental impact assessment report quality in South African national parks. *Koedoe*, 62(1), pp.1-9.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NORTH -WEST UNIVERSITY

### *Publications continued:*

- Smith, F.H., Retief, F.P., Roos, C. and Alberts, R.C., 2021. The evolving role of supreme auditing institutions (SAIs) towards enhancing environmental governance. *Impact Assessment and Project Appraisal*, 39(1), pp.67-79.
- Kruger, L., Sandham, L.A. and Van Niekerk, D., 2020. Improved SIA through DRA integration: lessons from a South African legislative comparison. *Impact Assessment and Project Appraisal*, 38(1), pp.71-82.
- Kruger, L., Sandham, L.A. and Van Niekerk, D., 2020. Optimizing SIA: discourses in South African SIA and DRA practice. *South African Geographical Journal*, pp.1-20.
- Matandirotya, N.R., Cilliers, D.P., Burger, R.P., Pauw, C. and Piketh, S.J., 2020. Risks of Indoor Overheating in Low-Cost Dwellings on the South African Lowveld. *African Handbook of Climate Change Adaptation*, pp.1-18.
- Muyemeki, L., Burger, R. and Piketh, S.J., 2020. Research article Evaluating the potential of remote sensing imagery in. *CLEAN AIR JOURNAL*, 30(1).
- Redemann, J., Wood, R., Zuidema, P., Doherty, S.J., Luna, B., LeBlanc, S.E., Diamond, M.S., Shinozuka, Y., Chang, I.Y., Ueyama, R. and Pfister, L., 2021. An overview of the ORACLES (ObseRVations of Aerosols above CLouds and their intERactionS) project: aerosol–cloud–radiation interactions in the Southeast Atlantic basin. *Atmospheric Chemistry and Physics*, 21(3), pp.1507-1563.
- Van Staden, N., Siebert, S.J., Cilliers, D.P., Wilsenach, D. and Frisby, A.W., 2020. Floristic analysis of semi-arid mountain ecosystems of the Griqualand West centre of plant endemism, Northern Cape, South Africa. *Biodiversitas Journal of Biological Diversity*, 21(5).
- Khoza, S., de Beer, L.T., van Niekerk, D. and NemaKonde, L., 2020. A gender-differentiated analysis of climate-smart agriculture adoption by smallholder farmers: application of the extended technology acceptance model. *Gender, Technology and Development*, pp.1-21.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NORTH - WEST UNIVERSITY

### *MSc and PhD graduations and supervisors:*

#### ***MSc***

- PW Bredenkamp Prof van Niekerk
- T Nkolanyane Prof van Niekerk
- N Mkhize Prof van Niekerk
- M Cloete Prof Cilliers
- MC Kaibe Prof NemaKonde
- F Lavhelani Prof Piketh

#### ***M.Env. Man.***

- J Mathipa Prof Cilliers
- C Blignaut Prof Cilliers
- TH Dlomo Dr Roos
- LM Mmolai Dr Roos
- RM Muedi Dr Roos
- A Sohan Dr Roos
- MA Kekana Dr Kruger
- NZ Matlakala Dr Kruger
- N Mkhize Dr Kruger
- L Moreoane Prof Burger
- P Makgoka Ms Steenkamp
- B Galego Ms Steenkamp

#### ***PhD***

- B Banda Prof NemaKonde & Prof van Niekerk
- D Klopper Prof Piketh
- L Muyemeki Prof Piketh
- N Walton Prof Piketh

### *2020 student numbers*

<i>First years</i>	<i>290</i>
<i>Second years</i>	<i>175</i>
<i>Third years</i>	<i>112</i>
<i>Honours</i>	<i>21</i>
<i>Masters</i>	<i>45</i>
<i>A PhD's</i>	<i>14</i>

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NORTH - WEST UNIVERSITY

### *Changes to the curriculum or course offerings:*

*All undergraduate modules have now been aligned across our three campuses. A new honours programme in Geography is now being offered on the Vanderbijlpark Campus.*

### *Link to departmental webpage:*

*<http://natural-sciences.nwu.ac.za/geography-and-environmental-management>*

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### *Name of department:*

Geography and Environmental Studies

### *Head of department:*

- Dr Danie du Plessis

### *Information about the Geographers and their area of specialisation in the department:*

- Prof Helen de Klerk ; Associate professor GIS,- spatial analysis, biogeography, species modelling, fire ecology [hdeklerk@sun.ac.za](mailto:hdeklerk@sun.ac.za)
- Mr Jan de Waal; Lecturer Climate change, flooding risk assessment, urban risk research [janniedw@sun.ac.za](mailto:janniedw@sun.ac.za)
- Prof Ronnie Donaldson; Professor - Urban social geography and tourism studies [rdonaldson@sun.ac.za](mailto:rdonaldson@sun.ac.za)
- Dr Danie du Plessis; CRUISE: Urban & regional planner/ Senior lecturer- Urban planning systems, urban transformation, spatial analysis and modelling of cities and urban systems [ddp@sun.ac.za](mailto:ddp@sun.ac.za)

- Ms Jessica Eichhoff; CGA: GIS operator & social media coordinator- Cartography, digital elevation modelling
- Mr Herman Geyer; CRUISE: Town & regional planner/ Lecturer- Complexity theory, urban systems, economic geography [hsgeyerjr@sun.ac.za](mailto:hsgeyerjr@sun.ac.za)
- Dr Suzanne Grenfell; Lecturer- River and wetland geomorphology, wetland restoration and management, sediment transport in rivers [sgrenfell@sun.ac.za](mailto:sgrenfell@sun.ac.za)
- Dr Anele Horn; CRUISE: Town and regional planner/ Lecturer- Urban & regional planning, development frameworks, urban growth management / monitoring [anelehorn@sun.ac.za](mailto:anelehorn@sun.ac.za)
- Dr Jaco Kemp; Senior lecturer - Earth observation, synthetic aperture radar, photogrammetry [jkemp@sun.ac.za](mailto:jkemp@sun.ac.za)
- Mr Kyle Loggenberg; Lecturer- GIS, earth observation, hyperspectral remote sensing, precision viticulture, crop water stress detection, proximal remote sensing (i.e. using Unmanned Aerial Systems (UAS) and terrestrial platforms) [kyleloggenberg@sun.ac.za](mailto:kyleloggenberg@sun.ac.za)



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# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### *Geographers continued:*

- Dr Eric Mashimbye Lecturer- Remote sensing, geoinformatics, agronomy [ericm@sun.ac.za](mailto:ericm@sun.ac.za)
- Dr Zahn Münch; Lecturer- GIS, spatial decision making [zmunch@sun.ac.za](mailto:zmunch@sun.ac.za)
- Mr Theo Pauw; CGA: Technical officer, GIS & EO analyst- Remote Sensing: GEOBIA, classification, automation, radar, photogrammetry, pre-processing. GIS: Web-based GIS, cartography [theopauw@sun.ac.za](mailto:theopauw@sun.ac.za)
- Mr Atman Prins; CGA: GIS & EO analyst- Machine learning classification, LiDAR data/ point clouds, programming and scripting, very high resolution drone imagery analysis [atman@sun.ac.za](mailto:atman@sun.ac.za)
- Dr Tara Southey; CGA: Technical officer, GIS & EO analyst- Climate & grapevine modelling in the context of climate change for adaption and mitigation, water resource management, machine learning classification, multi-temporal earth observation techniques [tara@sun.ac.za](mailto:tara@sun.ac.za)
- Dr Manfred Spocter; Senior lecturer- Small-town geographies, urban environmental issues, geographies of security, urban social geographies [mspocter@sun.ac.za](mailto:mspocter@sun.ac.za)
- Mr Garth Stephenson; CGA: General manager, GIS & EO analyst- Mapping irrigated areas from earth observation imagery, geographic object-based image analysis, automated land cover / use classification, expert-system, ruleset classification. [garth@sun.ac.za](mailto:garth@sun.ac.za)
- Prof Adriaan van Niekerk; Professor / Director of the CGA- GIT, spatial decision support systems [avn@sun.ac.za](mailto:avn@sun.ac.za)
- Mr Divan Vermeulen; CGA: GIS & EO analyst- Object-orientated image classification [vermeulend@sun.ac.za](mailto:vermeulend@sun.ac.za)
- Prof Gustav Visser; Professor- Urban geography, tourism geography, sexuality and South African institutions and geography in higher education [gvisser@sun.ac.za](mailto:gvisser@sun.ac.za)
- Dr Samantha Williams; Lecturer- Natural resources, livelihoods and governance [samanthawilliams@sun.ac.za](mailto:samanthawilliams@sun.ac.za)
- Ms Lodene Willemse; CRUISE: Lecturer- Urban and human geographies [lodene@sun.ac.za](mailto:lodene@sun.ac.za)

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### Exciting departmental news:

The year 2020 marked the Department's centenary. While celebrations were stymied by the pandemic, there were publications to mark the centenary year. Five papers were published in a special issue of the *South African Geographical Journal* (volume 102, issue 3) entitled 'Reflecting on a Century of Geography at Stellenbosch University'. In addition, two book publications also celebrated the centennial year.

These were:

Donaldson, R. (ed.) (2020). *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African SUNMedia: Stellenbosch.

Visser, G. and De Waal, J. (2020). *A Century of Geography at Stellenbosch University*. African SUNMedia: Stellenbosch.

The centenary year saw Danie du Plessis appointed as Departmental Chair and the staff complement was strengthened with the appointments of Suzanne Grenfell, a physical geographer, and Kyle Loggenberg, a GIT specialist. In addition, Suzanne Grenfell and Zahn Münch were both awarded a NRF C rating. Ronnie Donaldson was one of the recipients of the university's 2020 Research Output Award from the Vice-Rector: Research, Innovation and Postgraduate Studies.

Adriaan van Niekerk was promoted to Professor and Herman Geyer was elected to the steering committee of the IGU Urban Commission. Ronnie Donaldson was fortunate to travel to Brazil just before global lockdown to teach at the annual summer school of the Faculdade de Filosofia, Letras e Ciências Humanas at the University of São Paulo. He presented a series of lectures on urban challenges in South Africa.



Ronnie Donaldson with students at the University of São Paulo

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### Departmental news continued:

A group of 30 geography students from the Cardiff University, Wales, were hosted by the department for a week in March 2020. Gustav Visser and Ronnie Donaldson escorted them on fieldtrips to Cape Town inner city and Khayelitsha, respectively. They concluded the week's visit with a braai with some of our geography students.



Cardiff University students in Khayelitsha

Third-year student, Karen Roets, graduated in December 2020 with a BSc Geoinformatics *cum laude*. She was awarded the national CONSAS prize for this achievement. The CONSAS Foundation awards a cash prize to the best student in Geomatics at universities offering a Geomatics programme recognised by the South African Geomatics Council. Karen is now enrolled in the department's BSc Honours Geoinformatics programme



Karen Roets, winner of the CONSAS prize

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### Departmental news continued:

The year also saw the passing of Piet Eloff (retired lecturer) on 30 December who served the Department from 1974 to 2012. Piet Eloff was a panellist on the SABC's Afrikaans radio station *Radio Sonder Grense*, on Sundays from the 1990s, explaining geographic phenomena. He inspired thousands of undergraduate students to engender a love for Geography with his riveting lectures and received the Rector's Award for Teaching Excellence in 2004

### 2020/2021 List of publications:

**BAFFI S, DONALDSON SE, SPOCTER MA.** (2020) Tourist mobilities in Cape Town: Unveiling practices in the post-apartheid city. *Tourism Planning and Development*, **17**(5):537-555.

**BREYTENBACH A, VAN NIEKERK A.** (2020) Analysing DEM errors over an urban region across various scales with different elevation sources. *South African Geographical Journal*, **102**(2):133-169

**CHYTRÝ M, TICHÝ L, HENNEKENS SM, KNOLLOVÁ I, JANSSEN J, RODWELL J, PETERKA T, MARCENÒ C, LANDUCCI F, DANIHELKA J, HÁJEK M, DENGLER J, NOVÁK P, ZUKAL D, JIMÉNEZ-ALFARO B, MUCINA L, ET AL.** (2020) EUNIS Habitat Classification: Expert system, characteristic species combinations and distribution maps of European habitats. *Applied Vegetation Science*, **23**:648-675.

**DE WAAL JH, WILLIAMS S.** (2020) Reflections on 100 years of geography at Stellenbosch University: the role of physical and environmental geography. *South African Geographical Journal*, **102**(3):282-296.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### Publications continued:

**DONALDSON SE, FERREIRA SLA.** (2020) A century of human geography of Stellenbosch University: Reflections on Urban and tourism Geography. *South African Geographical Journal*, **102**(3):327-343.

**DONALDSON SE, FORSSMAN AO.** (2020) Opening up to the World': An Exploration of Residents' Opinions on and Perceptions of St Helena Island's Tourism Development. *African Journal of Hospitality, Tourism and Leisure*, **9**(6):944-958

**DONALDSON SE.** (2020) Introduction to reflections on a century of geography at Stellenbosch University. *South African Geographical Journal*, **102**(3):273-281.

**GAO Y, QUEVEDO A, SZANTOI S, SKUTSCH M.** (2021) Monitoring forest disturbance using time-series MODIS NDVI in Michoacán, Mexico. *Geocarto International*, **1**:1-18

**GONCHARENKO I, SEMENISHCHENKOV Y, TSAKALOS JL, MUCINA L.** (2020) Thermophilous oak forests of the steppe and forest-steppe zones of Ukraine and Western Russia. *Biologia*, **75**(3):337-353.

**VAN NIEKERK A, MUNCH Z.** (2020) The GIS revolution as Stellenbosch's anchor identity. *South African Geographical Journal*, **102**(3):310-326.

**GRENFELL SE, MAMPHOKA M, GRENFELL M, JOB N.** (2020) Evaluating the potential for natural ecosystem recovery in cut-and-fill wetlands: Case study of Pietersielieskloof palmiet wetland, South Africa. *Wetlands Ecology and Management*, **28**:863-882.

**HACKING CJ, POONA NK, POBLETE CA.** (2020) Vineyard yield estimation using 2-D proximal sensing: A multitemporal approach. *OENO One*, **4**:793-812.

**HONGWEI Z, BINGFANG WU, SHUAI W, MUSAKWA W, FUYOU T, MASHIMBYE ZE, POONA NK, MAVENGAHAMA S.** (2020) A synthesizing land-cover classification method based on Google Earth Engine: A case study in Nzhelele and Levhuvu catchments, South Africa. *Chinese Geographical Science*, **30**(3):397-409.

**HORN AJ.** (2020) Reviewing implications of urban growth management and spatial governance in the Global South. *Planning Practice and Research*, **35**(4):452-465.

**HORN AJ.** (2020) The darker side of muddling through: An analysis of spatial planning policy decision-making and policy termination in Cape Town, South Africa. *Urban Forum*, **31**:573-598.

**HORN AJ.** (2020) Urban growth management and governance in the Global South: An overview and some implications. *Journal of Public Administration*, **55**(1):5-25

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### Publications continued:

**JACKLIN DM, BRINK IC, DE WAAL JH.** (2020) The potential use of plant species within a Renosterveld landscape for the phytoremediation of glyphosate and fertiliser. *Water SA*, **46**(1):94-103.

**KATTGE J, DÍAZ S, TAUTENHAHN S, WERNER G, AAKALA T, ABEDI M, ACOSTA A, ADAMIDIS G, AIBA M, ALBERT C, TREURNICHT M, MUCINA L.** (2020) TRY plant trait database – enhanced coverage and open access. *Global Change Biology*, **26**:119-188.

**KÜZMIČ F, ŠILC U, LOSOSOVÁ Z, MUCINA L, CHYTRÝ M, KNOLLOVÁ I, HENNEKENS SM, BERG C, BERGMEIER E, BIURRUN I, FANFARILLO E, FONT X, ET AL.** (2020) European Weed Vegetation Database – a gap-focused vegetation-plot database. *Phytocoenologia*, **50**(1):93-100.

**LOGGENBERG K, POONA NK.** (2020) A feature selection approach for terrestrial hyperspectral image analysis. *South African Journal of Geomatics (formerly South African Journal of Surveying and Geo-Information)*, **9**(2):302-320.

**MACINTYRE PD, VAN NIEKERK A, MUCINA L.** (2020) Efficacy of multi-season Sentinel-2 imagery for compositional vegetation classification. *International Journal of Applied Earth Observation and Geoinformation*, **85**:101980, 10 pages

**MAPONYA MG, VAN NIEKERK A, MASHIMBYE ZE.** (2020) Pre-harvest classification of crop types using a Sentinel-2 time-series and machine learning. *Computers and Electronics in Agriculture*, **169**:105164, 12 pages.

**MEIJAARD E, BROOKS TM, CARLSON K, SLADE E, GARCIA-ULLOA J, GAVEAU D, SER HUAY LEE J, SANTIKA T, JUFFE-BIGNOLI D, STRUEBIG M, WICH S, ANCRENAZ M, ET AL, SZANTOI S.** (2020) The environmental impacts of palm oil in context. *Nature Plants*, **6**:1418-1426.

**MISTRY A, SPOCTER MA.** (2021) A categorization of gated eco-developments in South Africa. *South African Geographical Journal*, **1**:1-19.

**MISTRY A, SPOCTER MA.** (2020) Production of edibles and use of garden waste in domestic gardens of a middle-class suburb in Cape Town, South Africa. *Journal of Urbanism*, **13**(1):114-132.

**MUCINA L.** (2020) Biomes are everybody's kingdom: A platform where ecology and biogeography meet. *New*

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### Publications continued:

**MULLER SJ, SITHOLE P, SINGELS A, VAN NIEKERK A.** (2020) Assessing the fidelity of Landsat-based fAPAR models in two diverse sugarcane growing regions. *Computers and Electronics in Agriculture*, **170**:105248, 12 pages.

**MUNCH Z.** (2020) Global and local patterns of landscape change accuracy. *ISPRS Journal of Photogrammetry and Remote Sensing*, **161**:264-277.

**MUSAKWA W, SHUAI W, FANGLI W, LERATO MO, MASALA MT, SYDNEY M, ZENG H, BINGFANG WU, WENWU Z, NYATHI N, MASHIMBYE ZE, POONA NK, ET AL.** (2020) Survey of community livelihoods and landscape change along the Nzhelele and Levuvhu River catchments in Limpopo Province, South Africa. *Land*, **9**:91, 23 pages.

**PRINS AJ, VAN NIEKERK A.** (2021) Crop type mapping using LiDAR, Sentinel-2 and aerial imagery with machine learning algorithms. *Geo-Spatial Information Science*, **1**:1-13.

**PRINS AJ, VAN NIEKERK A.** (2020) Regional mapping of vineyards using machine learning and LiDAR Data. *International Journal of Applied Geospatial Research*, **11**(4):1-22.

**SAAED M, JACOBS SM, MASUBELELE ML, MUNCH Z, SAMUELS I, KHOMO L.** (2020) Fifteen-year resilience against further degradation of Succulent Karoo vegetation in South Africa. *Journal of Arid Environments*, **178**:10415

**SPOCTER MA, VISSER GE, DE WAAL JH.** (2020) An overview of trends in geographical publication at Stellenbosch University. *South African Geographical Journal*, **102**(3):297-309.

**SZANTOI S, BRINK A, LUPI A, MAMMONE C, JAFFRAIN G.** (2020) Key landscapes for conservation land cover and change monitoring, thematic and validation datasets for sub-Saharan Africa. *Earth System Science Data*, **12**:3001-3019.

**ZANTOI S, GELLER G, TSENDBAZAR NE, SEE L, GRIFFITHS P, FRITZ S, GONGG P, HEROLD M, MORA B, OBREGÓN A.** (2020) Addressing the need for improved land cover map products for policy support. *Environmental Science and Policy*, **112**:28-35.

**VESELÝ P, ŠMARDA P, BUREŠ P, STIRTON C, MUASYA S, MUCINA L, HOROVÁ L, VESELÁ K, ŠILEROVÁ A, ŠMERDA J, KNÁPEK O.** (2020) Environmental pressures on stomatal size may drive plant genome size evolution: evidence from a natural experiment with Cape geophytes. *Annals of Botany*, **126**(2):323-330.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### Publications continued:

**WIENER KD, SIMAIKA JP, GRENFELL SE, JACOBS SM.** (2020) Effects of invasive N<sub>2</sub>-fixing *Acacia mearnsii* on sediment nutrient concentrations in mountain streams: Implications of sediment geochemistry for ecosystem recovery. *CATENA*, **195**:104786, 12 pages.

**YAKUBU I, SPOCTER MA.** (2020) To move against the odds: A portrait of socio-spiritual underpinnings of residential mobility decisions in pro-poor housing systems of Tamale, Ghana. *Cities*, **105**:102698, 8 pages.

**BOCCIA V, SZANTOI S.** (2020) Copernicus Sentinel-2 Mission: Calibration and Validation activities. *Global Space-based Inter-Calibration System*, **14**(1):1-20.

**VISSER GE, DE WAAL JH.** (2020) *A Century of Geography at Stellenbosch University*. African Sun Media, Stellenbosch, South Africa.

### **Chapters in Books**

**ADAMS CF, DONALDSON SE.** (2020) In the footsteps of street busker groups in Stellenbosch. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 171-182.

**BUCHANAN LJ, DONALDSON SE.** (2020) Urban heritage conservation in Stellenbosch. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 49-70.

**CELE NM, PHAROAH RM.** (2020) Throw-away people: Insights on community waste-disposal behaviours in informal Kayamandi. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 139-153.

**DONALDSON SE, DUCKITT HC.** (2020) Geographies and branding impacts of non-metropolitan music festivals in the Western Cape province of South Africa. In: Cudny W, Bagchi-Sen S (eds.) *Urban Events, Place Branding and Promotion*, Routledge, New York, 141-161.

**DONALDSON SE, MARAIS L, NEL E.** (2020) Secondary cities in South Africa. In: Massey R, Gunter A (eds.) *Urban Geography in South Africa: Perspectives and Theory*, Springer Nature, Cham, Switzerland, 121-137.

**DONALDSON SE.** (2020) Stellenbosch as laboratory for human geography research. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 1-13.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### Publications continued:

**DU PLESSIS DJ, HORN AJ.** (2020) Evolution of spatial plans in Stellenbosch. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 13-30.

**FERREIRA SLA, GORDON NA.** (2020) The evolution and life cycle of the Stellenbosch Food and Wine Festival. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 203-226.

**FERREIRA SLA.** (2020) Wine tourism development: Lifecycles of Wine Routes, Wine resorts and Lifestyles in the Cape Wine lands. In: Rogerson J, VISSER GE (eds.) *New Directions in South African Tourism Geographies*, Springer, Cham, Switzerland, 203-226.

**HILLYER R, HORN AJ.** (2020) Planning for informal spaces in Stellenbosch: The need for participatory design. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 153-171.

**KRUGER R, DONALDSON SE.** (2020) Densification in the 'absence' of policy: The case of Die Weides, Stellenbosch, 2000 - 2016. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 31-48.

**LIGHT RA, DONALDSON SE.** Spatial residential changes of the Jamestown rural hamlet. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 2020: 71-88.

**MAKAN TJ, SPOCTER MA.** (2020) Backyarders and backyard dwellings in Smartie Town, Cloetesville. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 123-138.

**MORELAND M, ZWEIG PJ.** (2020) Urban risk and the lived experience of communal ablution facilities in Kayamandi. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 107-122.

**MULLER SJ, VAN NIEKERK A.** (2020) Within-Field Monitoring of Secondary Salinity in Irrigated Areas of South Africa. In: Lal R, Stewart BA (eds.) *Soil Degradation and Restoration in Africa*, CRC Press - Taylor & Francis Group, New York, USA, 89-110.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## STELLENBOSCH UNIVERSITY

### Publications continued:

**ROGERSON J, VISSER GE.** (2020) Recent Trends in South African Tourism Geographies. In: Rogerson J, VISSER GE (eds.) *Geographies of Tourism and Global Change*, Springer Nature, Cham, Switzerland, 1-14.

**VENEMA J, SPOCTER MA, DONALDSON SE.** (2020) Retail transformations in Stellenbosch: Central business district versus the decentralised mall. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 89-106.

**VILJOEN VA, DONALDSON SE.** (2020) Residents' perceptions and understanding of public art in Stellenbosch. In: DONALDSON SE (ed.) *Human Geographies of Stellenbosch: Transforming Space, Preserving Place?* African Sun Media, Stellenbosch, South Africa, 183-202.

**VISSER GE, EASTES N.** (2020) Mainstreaming Guesthouses: Reflections on the Evolution of South Africa's First Alternative Tourist Accommodation Sector. In: Rogerson J, VISSER GE (eds.) *New Directions in South African Tourism Geographies*, Springer Nature, Switzerland, 75-92.

**VISSER GE.** (2020) Leisure tourism space and urban change: Lessons from Cape Town and Stellenbosch to contemplate in urban South Africa. In: Massey R, Gunter A (eds.) *Urban Geography in South Africa: Perspectives and Theory*, Springer International, Cham, Switzerland, 173-188.

### *Research Reports*

**CAMPETELLA G, CHELLI S, SIMONETTI E, DAMIANI C, BARTHA S, WELLSTEIN C, GIORGINI D, PULETTI N, MUCINA L, CERVELLINI M, CANULLO R.** (2020) *Plant functional traits are correlated with species persistence in the herb layer of old-growth beech forests.* 13 pp.

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## STELLENBOSCH UNIVERSITY

### MSc and PhD graduations and supervisors:

#### MSc

Gabrielle Denner; Supervisor: Dr Jaco Kemp

Joseph Mazango; Supervisor: Dr Zahn Münch

#### Master's in Urban and Regional Planning

Carmen Adams; Supervisor: Dr Anele Horn

Quinton Balie; Supervisor: Dr Anele Horn

Moestaqem Esau; Supervisor: Ms Lodene Willemse

Richard McKnight; Supervisor: Mr Herman Geyer

Reinhardt Pienaar; Supervisor: Mr Herman Geyer

Sabelo Simelane; Supervisor: Prof Manie Geyer

Amber Willemse; Supervisor: Dr Anele Horn

#### MPhil (Urban and Regional Science)

Raimo Fernandez; Supervisor: Dr Danie du Plessis

Evashnie Govender; Supervisor: Mr Herman Geyer

Kriss Govinden; Supervisor: Mr Herman Geyer

Athi Gxumisa; Supervisor: Dr Anele Horn

Chantel Hauptfleisch; Supervisor: Dr Danie du Plessis

Rodney Khumalo; Supervisor: Prof Manie Geyer

Shonisani Maranda; Supervisor: Prof Manie Geyer

Fikile Matsimbi; Supervisor: Dr Anele Horn

Neo Nghenavo; Supervisor: Prof Manie Geyer

Mathapelo Phantshang; Supervisor: Ms Lodene Willemse

Freddie September; Supervisor: Prof Manie Geyer

#### PhD

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## STELLENBOSCH UNIVERSITY

### MSc and PhD graduations and supervisors continued:

*Dominique Ter Huurne; Supervisor: Dr Danie du Plessis*

### PhD

*Richman Gambe; Supervisor: Dr Anele Horn*

*Nitesh Poona; Supervisor: Prof Adriaan van Niekerk*

*Lauren Williams; Supervisor: Dr Melanie Luck-Vogel and Dr Robyn Pharoah*

### 2020 student numbers:

*First year: 271*

*Second year: 214*

*Third year: 105*

*Honours: 19*

*Master's: 89*

*Doctoral: 44*

### Changes to the curriculum or course offerings:

*New third-year module named Environmental Processes and Hazards offered in 2020.*

### Link to departmental webpage:

<https://www0.sun.ac.za/geography/>

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF WESTERN CAPE

### *Name of department:*

Geography and Environmental Studies & Tourism

### *Head of department:*

- Dr [Mark Boekstein](#)

### *Information about the Geographers and their area of specialisation in the department:*

- **Dr Mark Boekstein**, Senior Lecturer and Head of Department- Mark's main interest in both teaching and research is tourism, particularly tourism's potential to contribute to economic development. While his teaching focuses on the planning, development, and marketing of sustainable, community-based tourism, his research interests include health and wellness tourism and the use of thermal springs for healing purposes, and English language learning as a tourist attraction. He also has an interest in developments around Cape Town as a gateway for tourism to Antarctica and the sub-Antarctic islands.

### • **Prof Daniel Tevera**

Daniel's research is located at the interface of Human Geography and Development Studies with Southern Africa as the geographical focus. His early work focused on livelihoods and spatial strategies in the informal economy, migration geographies, and environmental security. However, it is the domain of food and the city that his recent work focuses on. He has served as an expert participant in policy debates around Temporary Labour Migration Schemes in small countries (Commonwealth), African migration (United Nations Economic Commission for Africa), and Migration Policy Framework for Africa (African Union). For three successive years, Daniel organised field trips for third-year and honours students to the hotly contested Philippi Horticultural Area (PHA).

### **Ms Mandy Carolissen**, Lecturer

Mandy is a physical geographer with teaching and research interests in integrated water resource management, catchment hydrology, ecosystem services, and the dynamic physical processes that shape our landscapes. Her current research focuses on understanding the spatial and temporal availability of water and storage of a depression wetland (using in-situ hydrological data and remote sensing), and to relate these to ecosystem services.



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### *Geographers continued:*

- **Associate Prof Shirley Brooks**

Shirley is a human geographer focusing on human-environment relationships, in particular postcolonial landscapes of conservation and land in Southern Africa. She teaches in the fields of nature-society relations and the political geography of land. In addition to working within a political ecology framework, she is interested in the quintessentially geographical theme of landscape meanings and contestations. Together with her students, she has explored Human and Non-human Geographies, focusing on Wilderness and Wildness as well as Animal Geographies.

- **Associate Prof Bradley Rink**

Bradley is a human geographer, focusing his research and teaching on mobilities, urban place-making, identities, and tourism. His research foregrounds mundane and subaltern mobilities to make them visible in the everyday movements and circulations of African cities. Through his research, teaching and community engagement, he aims to better understand mobilities and the relationships they articulate between urban dwellers and the cities in which they live.

- **Dr Mbulisi Sibanda**, Senior Lecturer  
Mbulisi joined the Department in January 2021 as Senior Lecturer specialising in GIScience and Earth Observation Data Applications. He completed his PhD on Optical Remote Sensing of Grassland Biomass in Data Scarce Environments at the University of KwaZulu-Natal (Pietermaritzburg) in 2016. He is an NRF-rated researcher with expertise in GIScience and Geospatial Data Applications in monitoring plant water use and productivity analysis, resource modelling as well as land-use change.

- **Mr Michael Dyssel**, Lecturer  
Michael's research and teaching interests include conservation and environmental management, urban-ecological challenges, the impacts of tourism, and mapwork. As a way of bridging (sub) disciplinary boundaries in Geography, transdisciplinary and multi-methods research and teaching approaches underpin his work

- **Mr David Frenchman**, Senior Officer  
David is the IT administrator in the Department and part of the Academic Support Staff in the Faculty. His work relates primarily to managing both undergraduate and postgraduate computer laboratories. However, he also offers GIS support to staff and students. He is solely responsible for the installation and maintenance of GIS software in the laboratories. GIS support involves compiling and issuing datasets for research and publications.

Email: [dfrenchman@uwc.ac.za](mailto:dfrenchman@uwc.ac.za)

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## UNIVERSITY OF WESTERN CAPE

### *Geographers continued:*

• **Mr Logan Plaatjies**, Administrative Officer

Logan was appointed as Administrator in the Department in 2020, having worked in other departments at UWC since 2015. Previously, he worked at UNISA and in the private sector at Shell Oil, but it is the academic environment that he has become attached to. His hobbies include reading and having endless conversations about the human being, following on his interest in Psychology.

• **Dr Erin Torkelson**, Postdoctoral Fellow  
Erin is a human geographer interested in the collision between normative assumptions about cash transfers as public goods and the lived experience of cash transfers as private debts in the Global South. Her work sits at the intersection of political economy, development studies, critical race theory, feminist kinship studies, and postcolonial science and technology studies. Her current project, Bantustan Banking, explores how a preeminent, state-sponsored cash transfer programme has become a means of racialised and gendered dispossession in post-apartheid South Africa. She examines the everyday practices by which poor, black South African women navigate their entitlements to social assistance against the pressures of expropriation built into the payment system

• **Prof Jonathan Crush**, Extraordinary Professor

More details on Jonathan and his research can be found here:

<https://www.balsillieschool.ca/jonathan-crush/>

## **E***xciting*

### *departmental news:*

Bradley Rink, Associate Professor in the Department of Geography, Environment Studies and Tourism, was awarded a 2021 [Royal Geographical Society Wiley Digital Archives Research Fellowship](#).

Dr Erin Torkelson was awarded a 2020 Hunt Postdoctoral Fellowship from the Wenner Gren anthropology foundation.

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## UNIVERSITY OF WESTERN CAPE

### 2020/2021 List of publications:

- Dyssel, M. (2020). Conservation tourism challenges and opportunities on the Cape Flats, South Africa. In Leonard, L, Musavengane R. & Siakwah, P (Eds.), *Sustainable Urban Tourism in Sub-Saharan Africa - Risk and Resilience*. Routledge, 2020 ISBN 9780367904142
- Rink, Bradley and Klaas, Lwando. (2021) Flying, health and the city: sensing aeromobility and risk in an informal settlement. *Cities & Health*, 5(1-2): 198-209. <https://doi.org/10.1080/23748834.2019.1598925>
- Rink, Bradley., Mohamed, Kharnita., Ngoasheng, Asanda., Behari-Leak, Kasturi. (2020). Crossing borders as 'new' academics in contested times: Reflexive narratives of curriculum change and transformation. *Critical Studies in Teaching and Learning*, 8(1): 1-20, <https://doi.org/10.14426/cristal.v8i1.229>
- Rink, Bradley. (2020). Liminality at-sea: Cruises to nowhere and their metaworlds. *Tourism Geographies*, 22(2): 392-412. <http://dx.doi.org/10.1080/14616688.2019.1637450>
- Rink, Bradley (2020). Mobilizing theory through practice: Authentic learning in teaching mobilities. *Journal of Geography in Higher Education*, 44(1): 108-123. <https://doi.org/10.1080/03098265.2019.1695107>
- Ramsawmy, Sharon, Rink, Bradley, and Anderson, Pippin. (2020). Rural and gated: Narratives of lifestyle migration to Grotto Bay Private Residential Estate, South Africa. *South African Geographical Journal*, 102(1): 77-96. <https://doi.org/10.1080/03736245.2019.1631209>
- Rink, Bradley. (2020). Queer bodies and the construction of tourism destination space. In C. Palmer & H. Andrews (Eds.), *Tourism and Embodiment* (pp. 41-53). London: Routledge. <https://www.routledge.com/Tourism-and-Embodiment/Palmer-Andrews/p/book/9781138573550>
- Rink, Bradley. (2020). Enclaves and quartering in urban South Africa. In R. Massey & A. Gunter (Eds.), *Urban Geography in South Africa - Perspectives and Theory* (pp. 75-84) Cham: Springer Nature.
- Rink, Bradley. (2020). Cruising nowhere: A South African contribution to cruise tourism. In J. Rogerson & G. Visser (Eds.), *New directions in South African tourism geographies* (pp. 249-266) Cham: Springer Nature. <https://www.springer.com/in/book/9783030293765>

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF WESTERN CAPE

### Publications continued:

Tevera D. (2020). Imagining Borders, Borderlands, Migration and Integration in Africa: The Search for Connections and Disjunctures. In: Nshimbi C., Moyo I. (eds) Borders, Mobility, Regional Integration and Development. Advances in African Economic, Social and Political Development. Springer, Cham. [https://doi.org/10.1007/978-3-030-42890-7\\_2](https://doi.org/10.1007/978-3-030-42890-7_2)

Kativhu, T., Mazvimavi, D., Tevera, D., and Nhapi, I. (2020). Influence of multiple uses of water on the sustainability of communally-managed rural water supply systems in Zimbabwe. *Journal of Water, Sanitation and Hygiene for Development*. <https://doi.org/10.2166/washdev.2020.173>

Paganini, N.; Adinata, K.; Buthelezi, N.; Harris, D.; Lemke, S.; Luis, A.; Koppelin, J.; Karriem, A.; Ncube, F.; Nervi Aguirre, E.; Ramba, T.; Raimundo, I.; Sulejmanović, N.; Swanby, H.; Tevera, D.; Stöber, S. (2020). Growing and Eating Food during the COVID-19 Pandemic: Farmers' Perspectives on Local Food System Resilience to Shocks in Southern Africa and Indonesia. *Sustainability*, 12, 8556. <https://doi.org/10.3390/su12208556>

Kanosvamhira, T. & Tevera, D. (2020). Urban agriculture in Mitchells Plain, Cape Town: Examining the linkages between urban gardeners and supporting actors. *South African Geographical Journal*, 102(2):1-16. DOI: 10.1080/03736245.2019.1648313.

Kanosvamhira, T. & Tevera, D. (2020). Urban agriculture as a source of social capital in the Cape Flats of Cape Town. *African Geographical Review*, 39(2):175-187. DOI: [10.1080/19376812.2019.1665555](https://doi.org/10.1080/19376812.2019.1665555)

Chikodzi, D., Tevera, D. and Mazvimavi, D. (2020). SDG 15 and Socioecological Sustainability: Spring Waterscapes and Rural Livelihoods in the Save Catchment of Zimbabwe. Scaling up SDGs Implementation: Emerging Cases from State, Development and Private Sectors, Springer, Cham, pp. 59-71.

Torkelson, Erin. (2020) "[Sophia's Choice: Debt, Welfare and Racial Finance Capital in South Africa.](#)" *Environment and Planning D: Society and Space*. 39(1).

Torkelson, Erin (2020) "[Collateral Damages: Cash Transfer and Debt Transfer in South Africa.](#)" *World Development* 126.

Torkelson, Erin, Deborah James, and David Neves. (2020) "[Legal but Reckless: Lending to Social Grant Recipients.](#)" *GroundUp*, 29 October 2020.

Torkelson, Erin, Deborah James, and David Neves. (2020) "Social Grants: Challenging Reckless Lending." *Black Sash Report*. Cape Town: Black Sash.

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## UNIVERSITY OF WESTERN CAPE

### *MA and PhD graduations and supervisors:*

Paulsen, Adrian. Mapping Urban Food Security in Delft: A Bottom Up Perspective, University of the Western Cape, MA, Geography & Environmental Studies (Supervisor: Bradley Rink)

### *L* *ink to departmental webpage*

<https://www.uwc.ac.za/study/all-areas-of-study/departments/department-of-geography-environmental-studies-and-tourism/overview>

### *2020 student numbers*

**Undergraduate:** 1959 students  
**Honours:** 18 students  
**Masters:** 5 students  
(GES802 enrolment to be added)

**PhD:** 2 students  
(GES902 enrolment to be added)

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE FREE STATE

### *Name of department:*

- Geography

### *Head of department:*

- Dr Jay le Roux (acting HOD for 2020)

### *Information about the Geographers and their area of specialisation in the department:*

#### Bloemfontein Campus

- Prof SA Adelabu; Professor GIS, Remote Sensing
- Mrs M Dunn; Lecturer Urban Geography
- Ms E Kruger Lecturer Environmental Management
- Dr JJ le Roux; Senior Lecturer GIS, Physical Geography
- Mrs TC Mehlomakhulu Lecturer Rural Development
- Dr EM Rudolph; Lecturer Physical Geography
- Mrs MH Stander; Lecturer Environmental Studies
- Dr AJ van der Walt; Lecturer GIS, Climate Studies

#### Qwaqwa Campus

- Dr MM Hansen; Lecturer Sustainability Science, Tourism
- Dr PS Mahasa; Lecturer Physical Geography
- Prof G Mukwada; Professor Environmental Sustainability
- Dr T Okello; Senior Lecturer Tourism
- Dr MKP Pewa Lecturer Human Geography
- Ms NM Sekhele; Lecturer Physical Geography
- Dr S Xulu; Lecturer Remote Sensing, GIS

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YUNIVESITHI YA  
FREISTATA



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### **E**xciting

### departmental news:

Prof Geoffrey Mukwada received a C2 NRF rating and has been promoted to the level of full professor. He was also admitted into the Responsible Research and Innovation Networking Globally (RRING) Project, which is coordinated by the United Nations Scientific and Cultural Organization (UNESCO). The main aim of this project is to create the linked up global world which promotes mutual learning and collaboration in Responsible Research and Innovation in scientific research.

Prof Samuel Adalabu was promoted to Associate Professor. He was also appointed as the Chair of the Investigating Committee of South African Council for Natural Scientific Profession.

Mr Adriaan van der Walt obtained his Ph.D. during December 2020 at the University of Witwatersrand, entitled: “*An analysis of extreme temperature events in South Africa: 1950-2015*”. Dr van der Walt presented at the Alliance for Collaboration on Climate and Earth System Science (ACCESS), Habitat Planet Workshop (HPW) Research Conference, 8-10 December 2020 where he was one of three winners for the best Ph.D. research paper presentations, entitled: “*Statistical classification of South African seasonal divisions on the basis of daily temperature data*”

Ms Elizabeth Rudolph obtained her Ph.D. on 17 December 2020, at the University of Fort Hare, entitled: “*Towards a reconstruction of Marion Island’s glacial history*”.

Prof Adalabu and Dr Adriaan van der Walt has been elected as board members of the Society of South African Geographers (SSAG). Dr van der Walt was elected as treasurer of the Society of South African Geographers’ (SSAG) Student and Young Professionals Group.

Dr. Sifiso Xulu and Dr. Adriaan van der Walt received the Society of the South African Geographers (SSAG) Centenary Award

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE FREE STATE

### 2020/2021 List of publications:

Adepoju, K.A. and **Adelabu, S.A.** 2020. Improving accuracy of Landsat-8 OLI classification using image composite and multisource data with Google Earth Engine. *Remote Sensing Letters*, 11(2), pp.107-116.

**Le Roux, J.J.**, and van der Waal, B. 2020. Gully erosion susceptibility modelling to support avoided degradation planning. *South African Geographical Journal*, 102(3), pp.406-420.

Mohamed, A.A. and **Mukwada, G.** 2020. Temperature changes in the Maloti-Drakensberg region: an analysis of trends for the 1960–2016 Period. *Atmosphere*, 10(8), p.471.

Mutana, S. and **Mukwada, G.** 2020. Can mountain route tourism work for the poor? Exploring worldviews from Maluti Route in the Drakensberg Region of South Africa. *Tourism and Hospitality Research*, 20(1), pp.18-30.

**Van der Walt, A.J.** and Fitchett, J.M. 2020. Trend Analysis of Cold Extremes in South Africa: 1960-2016. *International Journal of Climatology*.

**Van der Walt, A.J.** and Fitchett, J.M. 2020. Statistical classification of South African Seasonal Divisions on the Basis of Daily Temperature Data. *South African Journal of Science*, 116(9-10), pp.1-15.

Adepoju, K., **Adelabu, S.** and Mokubung, C. 2020. Mapping *Seriphium plumosum* encroachment and interaction with wildfire and environmental factors in a protected mountainous grassland. *Environmental monitoring and assessment*, 192(6), pp.1-15.

**Adelabu, S.A.**, Adepoju, K.A. and Mofokeng, O.D. 2020. Estimation of fire potential index in mountainous protected region using remote sensing. *Geocarto International*, 35(1), pp.29-46.

Adagbasa, E.G., **Adelabu, S.A.** and **Okello, T.W.** 2020. Development of post-fire vegetation response-ability model in grassland mountainous ecosystem using GIS and remote sensing. *ISPRS Journal of Photogrammetry and Remote Sensing*, 164, pp.173-183.

Adedeji, O., Olusola, A., James, G., Shaba, H.A., Orimoloye, I.R., Singh, S.K. and **Adelabu, S.** 2020. Early warning systems development for agricultural drought assessment in Nigeria. *Environmental Monitoring and Assessment*, 192(12), pp.1-21.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE FREE STATE

### Publications continued :

- Kudo, S., Allasiw, D.I., Omi, K. and **Hansen, M.** 2020. Translocal learning approach: A new form of collective learning for sustainability. *Resources, Environment and Sustainability*, 2, p.100009.
- Mararakanye, N., **Le Roux, J.J.** and Franke, A.C. 2020. Using satellite-based weather data as input to SWAT in a data poor catchment. *Physics and Chemistry of the Earth, Parts A/B/C*, 117, p.102871.
- Mofutsanyana, S.S., Collins, N.B., **Adelabu, S.A.**, Chatanga, P. and Sieben, E.J. 2020. Changes in plant functional composition of wetland vegetation along an aridity gradient on the Highveld plateau of South Africa. *Applied Vegetation Science*, 23(4), pp.622-634.
- Mukwada, G.**, Taylor, S.J., Manatsa, D., Mahasa, P. and Robinson, G. 2020. Combating food insecurity in a rapidly changing mountain climate environment: insights from Lesotho. *Climatic Change*, 163(2), pp.989-1006.
- Nel, W., Boelhouwers, J.C., Borg, C.J., Cotrina, J.H., Hansen, C.D., Haussmann, N.S., Hedding, D.W., Meiklejohn, K.I., Nguna, A.A., **Rudolph, E.M.** and Sinuka, S.S. 2020. Earth science research on Marion Island (1996–2020): a synthesis and new findings. *South African Geographical Journal*, pp.1-21.
- Olusola, A., Fashae, O., Onafeso, O. and **Adelabu, S.** 2020. Morphologic and hydraulic variability of small bedrock and alluvial channels in relation to lithological controls, Upper Ogun River Basin, Southwestern Nigeria. *Physical Geography*, 41(6), pp.537-557.
- Olusola, A., Olusola, B., Onafeso, O., Ajiola, F. and **Adelabu, S.** 2020. Early geography of the coronavirus disease outbreak in Nigeria. *GeoJournal*, pp.1-15.
- Onaolapo, T.F., **Okello, T.W.** and **Adelabu, S.A.** 2020. Assessing spatiotemporal settlement patterns in Eastern Free State, South Africa, pre and post transition from apartheid to majority rule. *Transactions of the Royal Society of South Africa*, 75(2), pp.140-158.
- Rudolph, E.M.**, Hedding, D.W., Fabel, D., Hodgson, D.A., Gheorghiu, D.M., Shanks, R. and Nel, W. 2020. Early glacial maximum and deglaciation at sub-Antarctic Marion Island from cosmogenic <sup>36</sup>Cl exposure dating. *Quaternary Science Reviews*, 231, p.106208.
- Stander, M.H.**, **Le Roux, J.J.**, Abd Elbasit, M.A.M. and Liu, G. 2020. A review of sediment fingerprinting for erosion hotspot assessment in southern Africa. *South African Geographical Journal*, pp.1-17.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE FREE STATE

### PhD

### Publications continued :

•Sumner, P.D., Rughooputh, S.D., Boojhawon, R., Dhurmea, K., Hedding, D.W., **le Roux, J.**, Pasnin, O., Tatayah, V., Zaynab, A. and Nel, W. 2020. Erosion studies on Mauritius: overview and research opportunities. *South African Geographical Journal*, pp.1-17.

•**Xulu, S.**, Mbatha, N., Peerbhay, K. and Gebreslasie, M. 2020. Detecting Harvest Events in Plantation Forest Using Sentinel-1 and-2 Data via Google Earth Engine. *Forests*, 11(12), p.1283.

**Adagbasa, E.** *Modelling Ecological Vulnerability to Fire in A Mountainous and Protected Area: A Remote Sensing and GIS Approach.* - Promoter: Prof Adelabu

**Onaolapo, T.** *Spatial Analysis of Housing Patterns in a Mountainous Area.* - Promoter: Dr Okello/Prof Adelabu

**Pretorius, A.** *A sustainable rural transport framework: The case of Maluti-a-Phofung Local Municipality.* - Promoter: Prof Mukwada

Three PhD students, on the QwaQwa campus, completed in 2020 (two of which are waiting to graduate and the third one is being examined).

### MSc and PhD graduations and supervisors:

#### MSc

**Semela, M.** Environmental Geography

**Nxumalo, P.** Environmental Geography

**Setshedi, K.** Plant Sciences

### 2020 student numbers

	1 <sup>ST</sup> Semester	2 <sup>nd</sup> Semester
First Year	210	168
Second Year	217	221
Third Year	171	172
Honours		21
Masters		23
PhD		24

**L**ink to departmental webpage

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### *Name of department:*

Geography, Archaeology and Environmental Studies

### *Head of department:*

- Professor Paida Mhangara

### *Information about the Geographers and their area of spacialisation in the department:*

#### •Sarita Pillay Gonzalez

Urban geography including the relationship between the state and real estate and how this shapes cities urban regeneration and displacement, property development and real estate, and the political economy of post-apartheid and Global South cities

#### •Dr Cletah Shoko

Remote sensing, GIS, Geospatial modelling, Surface hydrology, Spatial ecology

#### •Dr Raesa Moolla

Atmospheric Science, Air Pollution.

#### Dr Melanie Samson

Political ecology; feminist geography and political ecology; political economy and economic geography; waste and value; 'informal economy'; organising; participatory policy-making; reclamer (waste picker) integration.

#### Dr Alex Wafer

Urban and human geography

#### Prof Elhadi Adam

Use of remote sensing techniques and machine learning algorithms in monitoring vegetation

#### Prof Jennifer Fitchett

Biometeorology: climatology, tourism and climate change, phenology, climate and health, and palaeoclimatology

#### Dr Mary Evans

Optically Stimulated Luminescence Dating, palaeoenvironmental reconstructions of Quaternary landscapes, river dynamics, climatology and atmospheric processes, science education.

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# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Geographers continued:

#### **Dr Melanie Samson**

Political ecology; feminist geography and political ecology; political economy and economic geography; waste and value; 'informal economy'; organising; participatory policy-making; reclamer (waste picker) integration.

#### **Dr Alex Wafer**

Urban and human geography

#### **Prof Elhadi Adam**

Use of remote sensing techniques and machine learning algorithms in monitoring vegetation

#### **Prof Jennifer Fitchett**

Biometeorology: climatology, tourism and climate change, phenology, climate and health, and palaeoclimatology

#### **Prof Mulala Simatele**

Environmental management, governance and sustainability, environmental impacts assessments and environmental monitoring systems, coastal and marine resource management and sustainability, climate change adaptation.

#### **Prof Stefan Grab**

Historical climatology, geomorphology, climate and environmental change.

#### **Prof Craig Sheridan**

Water research: provision and treatment.

#### **Prof Francois Engelbrecht**

Climatology, climate modelling and climate futures

#### **Dr Annika Herbert**

Postdoctoral fellow – palaeoclimate modelling

#### **Prof Jasper Knight**

Geoscience: spatial and temporal variability in landscape system responses to climate and environmental changes during the late Pleistocene and Holocene, looking at sediments and geomorphology.

#### **Yingisani Chabalala**

Senior GIS and Remote Sensing Technician

#### **Wendy Phillips**

Cartographer

#### **Natanya Alexander**

Senior Administrative Officer

#### **Kerayamang Mafora**

Postgraduate Administrator

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Geographers continued:

**Khanyo Ngubo**

Finance Officer

**Hlokwa Madithapa**

Procurement Officer

**Thandizwe Nsimbi**

Senior Technician

## **Exciting**

### **departmental news:**

Prof Paida Mhangara was appointed as Head of School from 1 November 2019.

During 2020, we appointed a new Human Geography Associate Lecturer, Sarita Pillay Gonzalez, who started with the school at the beginning of 2021.

In 2020, Prof Jennifer Fitchett was elected as the President-Elect of the Society of South African Geographers. She was also elected to the South African Young Academy of Sciences, and appointed as editor of their blog, and elected as the African Councillor of the International Society of Biometeorology.

Dr Raesa Moolla was chosen to serve on the Scientific Steering Committee of the Tropospheric Ozone Assessment Report (TOAR), organised by the World Meteorological Organization.

DEFF published the “Waste Picker Integration Guideline for South Africa” in 2020. Dr Melanie Samson facilitated a three year participatory multi-stakeholder process to develop the Guideline and is the author of the Guideline. She also collaborated with the African Reclaimers Organisation and Unilever to develop and pilot a “Recycling with Reclaimers” project in which reclaimers/waste pickers and residents are working together to create a recycling collection service that is provided by reclaimers and pays them for the service they provide. This is a direct counter to Pikitup and the City contracting private companies which eliminates reclaimers’ jobs and incomes. The pilot is currently being expanded to new areas with additional support from Coca-Cola, Coca-Cola Bottling, and PETCO.

Prof Jasper Knight has been appointed to the national Community of Practice on Research Ethics and Integrity, managed by DSI and SARIMA.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### 2020/2021 List of publications.

Alemaw B.F. and **Simatele, D.M.** (2020). Integrating Climate Change Adaptation and Mitigation into Sustainable Development Planning: The Policy Dimension. In: Matondo, J.I., Alemaw, B.F. and Wennegouda, J.P.S. (eds), *Climate Variability and Change in Africa: Perspectives, Experiences and Sustainability*, Springer, Switzerland, pp. 191-208.

Bangelesa, F., **Adam, E., Knight, J.**, Dahu, I., Ramudzuli, M. and Mokotjomela, T.M. (2020). Predicting soil organic carbon content using hyperspectral remote sensing in a degraded mountain landscape in Lesotho. *Applied and Environmental Soil Science*, DOI: 10.1155/2020/2158573.

Beraki, A.F., Morioka, Y., **Engelbrecht, F.A.**, Nonaka, M., Thatcher, M., Kobo, N. and Behera, S. (2020). Examining the impact of multiple climate forcings on simulated Southern Hemisphere climate variability. *Climate Dynamics*, 54(11): 4775-4792.

Burman, N.W., **Sheridan, C.M.**, Harding, K.G. (2020) Feasibility assessment of the production of bioethanol from lignocellulosic biomass pretreated with acid mine drainage (AMD). *Renewable Energy*, 157: 1148-1155.

Burningham, H. and **Knight, J.** (2020). Biological zonation and bedrock strength on a high energy granite shore platform. *Journal of Coastal Research*, SI95: 23-28.

**Chabalala, Y., Adam, E.**, Oumar, Z. and Ramoelo, A. (2020). Exploiting the capabilities of Sentinel-2 and RapidEye for predicting grass nitrogen across different grass communities in a protected area. *Applied Geomatics*, 12(4): 379-395.

Chiloane, C., Dube, T. and **Shoko, C.** (2020). Monitoring and assessment of the seasonal and inter-annual pan inundation dynamics in the Kgalagadi Transfrontier Park, Southern Africa. *Physics and Chemistry of the Earth, Parts A/B/C*, 118: 102905.

Dube, T., **Shoko, C.**, Sibanda, M., Madileng, P., Maluleke, X.G., Mokwatedi, V.R., Tibane, L., and Tshebesebe, T. (2020). Remote Sensing of Invasive *Lantana camara* (Verbenaceae) in Semiarid Savanna Rangeland Ecosystems of South Africa. *Rangeland Ecology & Management*, 73(3): 411-419,

Dzoga, M., **Simatele, D.M.**, Munga, C. and Yonge, S. (2020). Application of the DPSIR Framework to Coastal and Marine Fisheries Management in Kenya. *Ocean Science Journal*, 55: 193-201.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Publications continued:

- Dzoga, M., Simatele, M.D. and Munga, C. (2020). Characterization of Artisanal Catches in Selected Fishing Areas of the Lower Tana Delta and Malindi Ungwana Bay, Kenya. *Western Indian Ocean Journal of Marine Science*, 19(1): 45-53
- Ebhuoma, E.E., Simatele, M.D., Leonard, L., Ebhuoma, O.O., Donkor, F.K. and Tantoh, H.B. (2020). Theorising Indigenous farmers' utilisation of climate services: Lessons from the oil rich Niger Delta. *Journal of Sustainability*, 12: 7349, DOI: 10.3390/su12187349
- Esteban, I., **Fitchett, J.M.** and de la Peña, P. (2020). Plant taphonomy, flora exploitation and palaeoenvironments at the Middle Stone Age site of Mwulu's Cave (Limpopo, South Africa): an archaeobotanical and mineralogical approach. *Archaeological and Anthropological Sciences*, 12:226, DOI: 10.1007/s12520-020-01181-4.
- Fenton, A., **Wafer, A.** and **Fitchett, J.M.** (2020). Youth mobility in a Post-Apartheid City: An analysis of the use of E-hailing by students in Johannesburg, South Africa. *Urban Forum*, 31(2): 255-272
- Fitchett, J.M.** (2020). Book Review: Drought, an interdisciplinary perspective, Benjamin I Cook. *African Journal of Range and Forage Science*, 37(1): 137-138.
- Fitchett, J.M.** (2020). Perspectives on biometeorological research on the African continent. *International Journal of Biometeorology*, 65: 133-147.
- Fitchett, J.M.** and Roshan, Gh.R. (2021). Climate change threats to cultural and heritage tourism in Iran. In: Hall, C.M. and Seyfi, S. (Eds.) *Cultural and Heritage Tourism in the Middle East and North America (MENA): Complexity, Management and Practices*. Routledge, London. DOI: 10.4324/9780429279065.
- Fitchett, J.M.**, Fortune, S-M. and Hoogendoorn, G. (2020). Tourists' reviews of weather in five Indian Ocean Islands. *Singapore Journal of Tropical Geography*, 41(2): 171-189
- Friedrich, J., Stahl, H., Hoogendoorn, G. and **Fitchett, J.M.** (2020). Exploring climate change threats to beach tourism destinations: Application of the Hazard-Activities Pairs Methodology to South Africa. *Weather, Climate and Society*, 12(3): 529-544
- Friedrich, J., Stahl, J., **Fitchett, J.M.** and Hoogendoorn, G. (2020). To beach or not to beach? Socio-economic factors influencing beach tourists' perceptions of climate and weather in South Africa. *Transactions of the Royal Society of South Africa*, 75(2): 194-202.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Publications continued:

Gangat, R., van Deventer, H., Naidoo, L. and **Adam, E.** (2020). Estimating soil moisture using Sentinel-1 and Sentinel-2 sensors for dryland and palustrine wetland areas. *South African Journal of Science*, 116(7-8): 1-9.

**Grab, S.** and Zumthurn, T. (2020). "Everything is scorched by the burning sun": missionary perspectives and experiences of 19th-and early 20th-century droughts in semi-arid central Namibia. *Climate of the Past*, 16(2): 679-697.

Harvey, P.J., **Grab, S.W.** and Malherbe, J. (2020). Major Volcanic Eruptions and Their Impacts on Southern Hemisphere Temperatures During the Late 19th and 20th Centuries, as Simulated by CMIP5 Models. *Geophysical Research Letters*, 47(14): e2020GL087792.

Hoogendoorn, G., Stockigt, L., Saarinen, J. and **Fitchett, J.M.** (2021). Adapting to climate change: the case of snow-based tourism in Afriski, Lesotho. *African Geographical Review*, 40(1): 92-104.

Jackson, C.M. and **Adam, E.** (2020). Remote sensing of selective logging in tropical forests: current state and future directions. *iForest-Biogeosciences and Forestry*, 13(4): 286.

Jombo, S., **Adam, E.**, Byrne, M.J. and Newete, S.W. (2020). Evaluating the capability of Worldview-2 imagery for mapping alien tree species in a heterogeneous urban environment. *Cogent Social Sciences*, 6(1): 1754146.

Khonje, L.Z., **Simatele, M.D.** and Musavengane, R. (2020). Environmental sustainability innovations in the accommodation sub-sector: Views from Lilongwe, Malawi. *Development Southern Africa*, 37(2): 312-327.

**Knight, J.** (2020). An environmental history of southern Africa. In: Mitchell, P. (ed), *Oxford Research Encyclopedia of African History*. Oxford University Press, New York, DOI: 10.1093/acrefore/9780190277734.013.370.

**Knight, J.** and Burningham, H. (2020). Bedrock hardness values and morphological zonation of a shore platform in South Africa. *Transactions of the Royal Society of South Africa*, 75 (1): 40-53.

**Knight, J.** and Burningham, H. (2020). What controls bedrock shore platform hardness? A field study from South Africa. *Journal of Coastal Research*, SI95: 537-541.

**Knight, J.** and **Fitchett, J.M.** (2020). Analysing trajectories of vegetation and landscape change in southern Africa from historical field photographs. *Anthropocene*, 32, DOI: 10.1016/j.ancene.2020.100271

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Publications continued:

- Knight, J.** and Harrison, S. (2020). Land's End: Landscape and mining heritage at the tip of England. In: Goudie, A.S. and Migoñ, P. (ed), *Landforms and Landscapes of England and Wales*. Springer, Switzerland, pp. 269-280.
- Knight, J.** and Harrison, S. (2020). Physical Geography, Human Geography, and Geographies in the Anthropocene. In: Kobayashi, A. (Ed.), *International Encyclopedia of Human Geography, 2nd edition. vol. 10*. Elsevier, Amsterdam, pp. 113–116.
- Knight, J.** and Strzelecki, M. (2020). Paraglacial coasts: challenges for coastal conservation in the Anthropocene. *Journal of Coastal Conservation*, 24: 28, DOI: 10.1007/s11852-020-00748-6.
- Kubanza, N.S. and **Simatele, M.D.** (2020). Sustainable solid waste management in developing countries: a study of institutional strengthening for solid waste management in Johannesburg, South Africa. *Journal of Environmental Planning and Management*, 63(2): 175-188.
- Lembani, R.L., **Knight, J.**, **Adam, E.** and Kalaba, F.K. (2020). Quantifying spatial-temporal changes of aboveground carbon stocks using Landsat time series data: A case study of Miombo woodlands. *International Journal of Environmental Studies*, 77(4): 581-601.
- Magowo, W.E., **Sheridan, C.**, Rumbold, K. (2020). Bioremediation of acid mine drainage using Fischer-Tropsch waste water as a feedstock for dissimilatory sulfate reduction. *Journal of Water Process Engineering*, 35: 101229.
- Magowo, W.E., **Sheridan, C.**, Rumbold, K. (2020). Global Co-occurrence of Acid Mine Drainage and Organic Rich Industrial and Domestic Effluent: Biological sulfate reduction as a co-treatment-option. *Journal of Water Process Engineering*, 38:101650.
- Mhangara, P.**, Mapurisa, W. and Mudau, N. (2020). Comparison of image fusion techniques using satellite pour l'Observation de la Terre (SPOT) 6 satellite imagery. *Applied Sciences*, 10(5): 1881.
- Mhangara, P.**, Mapurisa, W. and Mudau, N. (2020). Image Interpretability of nSight-1 Nanosatellite Imagery for Remote Sensing Applications. *Aerospace*, 7(2): 19.
- Morrissey, P., **Knight, J.** and **Stratford, D.J.** (2020). Early Marine Isotope Stage 5 sea levels, coastal dune palaeoenvironments, and human occupation on the southeast coast of South Africa. *Quaternary Science Reviews*, 245: 106504, DOI: 10.1016/j.quascirev.2020.106504.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Publications continued:

- Morrissey, P., **Knight, J.** and **Stratford, D.J.** (2020). Early Marine Isotope Stage 5 sea levels, coastal dune palaeoenvironments, and human occupation on the southeast coast of South Africa. *Quaternary Science Reviews*, 245: 106504, DOI: 10.1016/j.quascirev.2020.106504.
- Mpanza, M., **Adam, E.** and **Moolla, R.** (2020). Dust deposition assessment at a Gold Mine Village in the West Rand: Gauteng Province of South Africa. *International Journal of Environmental Research and Health*, 17: 4929.
- Mpanza, M., **Adam, E.** and **Moolla, R.** (2020). Perceptions of external costs of dust fallout from gold mine tailings: West Wits Basin. *Clean Air Journal*, 30(1), DOI: 10.17159/caj/2020/30/1.7566.
- Mumini D., **Simatele, D.M.**, Munga, C., and Yonge, S. (2020). Application of the DPSIR Framework to Coastal and Marine Fisheries Management in Kenya. *Ocean Science Journal*, DOI: 10.1007/s12601 019 .
- Naidu, T.S., **Sheridan, C.M.**, van Dyk, L.D. (2020). Basic oxygen furnace slag: Review of current and potential uses. *Minerals Engineering*, 149: 106234.
- Naidu, T.S., Van Dyk, L.D., **Sheridan, C.M.**, Grubb, D.G. (2020) Sugar and Steel By-Product Utilization in Acid Mine Drainage Remediation. *Journal of Hazardous, Toxic, and Radioactive Waste*, 24(1): 04019028.
- Ndebele, N.E., **Grab, S.** and Turasie, A. (2020). Characterizing rainfall in the south-western Cape, South Africa: 1841–2016. *International Journal of Climatology*, 40(4): 1992-2014.
- Ngwenya, N. and **Simatele, M.D.** (2020). The emergence of green bonds as an integral component of climate finance in South Africa. *South African Journal of Science*, 116(1-2): 1-3.
- Ngwenya, N. and **Simatele, M.D.** (2020). Unbundling of the green bond market in the economic hubs of Africa: Case study of Kenya, Nigeria and South Africa. *Development Southern Africa*, 37(6): 888-903.
- Parry, L., Harrison, S., Betts, R., Shannon, S., Jones, D. and **Knight, J.** (2020). Impacts of climate change on Himalayan glaciers: processes, predictions and uncertainties. In: Dimri, A.P., Bookhagen, B., Stoffel, M. and Yasunari, T. (eds), *Himalayan Weather and Climate and their Impact on the Environment*. Springer, Switzerland, pp. 331-349.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Publications continued:

- Morrissey, P., **Knight, J.** and **Stratford, D.J.** (2020). Early Marine Isotope Stage 5 sea levels, coastal dune palaeoenvironments, and human occupation on the southeast coast of South Africa. *Quaternary Science Reviews*, 245: 106504, DOI: 10.1016/j.quascirev.2020.106504.
- Mpanza, M., **Adam, E.** and **Moolla, R.** (2020). Dust deposition assessment at a Gold Mine Village in the West Rand: Gauteng Province of South Africa. *International Journal of Environmental Research and Health*, 17: 4929.
- Mpanza, M., **Adam, E.** and **Moolla, R.** (2020). Perceptions of external costs of dust fallout from gold mine tailings: West Wits Basin. *Clean Air Journal*, 30(1), DOI: 10.17159/caj/2020/30/1.7566.
- Mumini D., **Simatele, D.M.**, Munga, C., and Yonge, S. (2020). Application of the DPSIR Framework to Coastal and Marine Fisheries Management in Kenya. *Ocean Science Journal*, DOI: 10.1007/s12601 019 .
- Naidu, T.S., **Sheridan, C.M.**, van Dyk, L.D. (2020). Basic oxygen furnace slag: Review of current and potential uses. *Minerals Engineering*, 149: 106234.
- Naidu, T.S., Van Dyk, L.D., **Sheridan, C.M.**, Grubb, D.G. (2020) Sugar and Steel By-Product Utilization in Acid Mine Drainage Remediation. *Journal of Hazardous, Toxic, and Radioactive Waste*, 24(1): 04019028.
- Ndebele, N.E., **Grab, S.** and Turasie, A. (2020). Characterizing rainfall in the south-western Cape, South Africa: 1841–2016. *International Journal of Climatology*, 40(4): 1992-2014.
- Ngwenya, N. and **Simatele, M.D.** (2020). The emergence of green bonds as an integral component of climate finance in South Africa. *South African Journal of Science*, 116(1-2): 1-3.
- Ngwenya, N. and **Simatele, M.D.** (2020). Unbundling of the green bond market in the economic hubs of Africa: Case study of Kenya, Nigeria and South Africa. *Development Southern Africa*, 37(6): 888-903.
- Parry, L., Harrison, S., Betts, R., Shannon, S., Jones, D. and **Knight, J.** (2020). Impacts of climate change on Himalayan glaciers: processes, predictions and uncertainties. In: Dimri, A.P., Bookhagen, B., Stoffel, M. and Yasunari, T. (eds), *Himalayan Weather and Climate and their Impact on the Environment*. Springer, Switzerland, pp. 331-349.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Publications continued:

- Morrissey, P., **Knight, J.** and **Stratford, D.J.** (2020). Early Marine Isotope Stage 5 sea levels, coastal dune palaeoenvironments, and human occupation on the southeast coast of South Africa. *Quaternary Science Reviews*, 245: 106504, DOI: 10.1016/j.quascirev.2020.106504.
- Mpanza, M., **Adam, E.** and **Moolla, R.** (2020). Dust deposition assessment at a Gold Mine Village in the West Rand: Gauteng Province of South Africa. *International Journal of Environmental Research and Health*, 17: 4929.
- Mpanza, M., **Adam, E.** and **Moolla, R.** (2020). Perceptions of external costs of dust fallout from gold mine tailings: West Wits Basin. *Clean Air Journal*, 30(1), DOI: 10.17159/caj/2020/30/1.7566.
- Mumini D., **Simatele, D.M.**, Munga, C., and Yonge, S. (2020). Application of the DPSIR Framework to Coastal and Marine Fisheries Management in Kenya. *Ocean Science Journal*, DOI: 10.1007/s12601 019 .
- Naidu, T.S., **Sheridan, C.M.**, van Dyk, L.D. (2020). Basic oxygen furnace slag: Review of current and potential uses. *Minerals Engineering*, 149: 106234.
- Naidu, T.S., Van Dyk, L.D., **Sheridan, C.M.**, Grubb, D.G. (2020) Sugar and Steel By-Product Utilization in Acid Mine Drainage Remediation. *Journal of Hazardous, Toxic, and Radioactive Waste*, 24(1): 04019028.
- Ndebele, N.E., **Grab, S.** and Turasie, A. (2020). Characterizing rainfall in the south-western Cape, South Africa: 1841–2016. *International Journal of Climatology*, 40(4): 1992-2014.
- Ngwenya, N. and **Simatele, M.D.** (2020). The emergence of green bonds as an integral component of climate finance in South Africa. *South African Journal of Science*, 116(1-2): 1-3.
- Ngwenya, N. and **Simatele, M.D.** (2020). Unbundling of the green bond market in the economic hubs of Africa: Case study of Kenya, Nigeria and South Africa. *Development Southern Africa*, 37(6): 888-903.
- Parry, L., Harrison, S., Betts, R., Shannon, S., Jones, D. and **Knight, J.** (2020). Impacts of climate change on Himalayan glaciers: processes, predictions and uncertainties. In: Dimri, A.P., Bookhagen, B., Stoffel, M. and Yasunari, T. (eds), *Himalayan Weather and Climate and their Impact on the Environment*. Springer, Switzerland, pp. 331-349.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Publications continued:

- Picas, J. and **Grab, S.** (2020). Potential impacts of major nineteenth century volcanic eruptions on temperature over Cape Town, South Africa: 1834–1899. *Climatic Change*, 159(4): 523-544.
- Pillay, M.T. and **Fitchett, J.M.** (2021). Southern hemisphere tropical cyclones: A critical analysis of regional characteristics. *International Journal of Climatology*, 41(1): 146-161.
- Roffe, S.J., Fitchett, J.M.** and Curtis, C.J. (2020). Determining the utility of a percentile-based wet-season start- and end-date metric across South Africa. *Theoretical and Applied Climatology*, 140: 1331-1347
- Roffe, S.J., Fitchett, J.M.** and Curtis, C.J. (2021). Investigating change in rainfall seasonality across South Africa: 1987-2016. *International Journal of Climatology*, 41(1): 2031-2050.
- Rose, N.L., Milner A.M., **Fitchett, J.M.**, Langerman, K.E., Yang, H., Turner, S.D., Jourdan, A.-L., Shilland, J., Martins, C.C., Câmara de Souza, A. and Curtis, C.J. (2020). Natural archives of long-range transported contamination at the remote lake Letšeng-la Letsie, Maloti Mountains, Lesotho. *Science of the Total Environment*, DOI: 10.1016/j.scitotenv.2020.139642.
- Roshan, G., Faghani, M. and **Fitchett, J.M.** (2020). Developing a thermal stress map of Iran through modeling a combination of bioclimatic indices. *Environmental Modelling and Assessment*, 192:549, DOI: 10.1007/s10661-020-08503-y
- Roshan, G., **Grab, S.W.** and Najafi, M.S. (2020). The role of physical geographic parameters affecting past (1980–2010) and future (2020–2049) thermal stress in Iran. *Natural Hazards*, 102(1): 365-399.
- Rubin, M., **Samson, M., Butcher, S., Merlo, S.,** Smith, L. and **Wafer, A.** (2020). Investigating Infrastructures of Urban Inequality. In Webster, E. Francis, D. and Valodia, I. (eds). *Inequality Studies from the Global South*. London: Routledge, pp. 163-183.
- Samson, M.** (2020). The political work of waste picker integration. In: Chen, M. and Carré, F. (eds). *The informal economy revisited: examining the past, envisioning the future*. London: Routledge, pp. 195-200.
- Samson, M.** (2020). Whose frontier is it anyway? Reclaimer ‘integration’ and the battle over the ‘waste-based commodity frontier’ in the city of Gold. Special edition ‘Beyond the ‘end of Cheap Nature’: The production of waste-based commodity frontiers’, *Capitalism, Nature, Socialism*, 35(4): 60-75.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Publications continued:

- Sekhwela, M.M. and **Samson, M.** (2020). Contested Understandings of Reclaimer Integration – Insights from a Failed Johannesburg Pilot Project. *Urban Forum*, 31(1): 21-39.
- Shabalala, L.P. and **Simatele, M.D.** (2020). Perspectives on the Identification and Preservation of Cultural Heritage Tourism Products and Services in South Africa: Case Study of Mapungubwe and Barberton Makhonjwa Mountains World Heritage Sites. In Vanneste, D. and Gruijthuijsen, W. (eds), *Value of Heritage Tourism*. Leven, UNITWIN, pp. 249-260.
- Shoko, C.**, Mutanga, O., and Dube, T. (2020). Optimal season for discriminating C3 and C4 grass functional types using multi-date Sentinel 2 data. *GIScience & Remote Sensing*, 57(1): 127-139
- Shoko, C.**, Mutanga, O., and Dube, T. (2020). Remotely sensed characterization of *Acacia longifolia* invasive plants in the Cape Floristic region of the Western Cape, South Africa. *Journal of Applied Remote Sensing*, 14(4): 044511.
- Smit, A.J., **Fitchett, J.M.**, Engelbrecht, F.A., Scholes, R.J., Dzhivhuho, G. and Sweijd, N.A. (2020). Winter is coming: A Southern Hemisphere Perspective of the Environmental Drivers of SARS-CoV-2 and the Potential Seasonality of COVID-19. *International Journal of Environmental Research and Public Health*, 17(16): 5364,
- Smith, T. and **Fitchett, J.M.** (2020). Drought challenges to Nature-Based Tourism in the Sabi Sands Region of South Africa. *African Journal of Range and Forage Science*, 37(1): 107-117
- Strzelecki, M.C., Szczuciński, W., Dominiczak, A., Zagórski, P., Dudek, J. and **Knight, J.** (2020). New fjords, new coasts, new landscapes: the geomorphology of paraglacial coasts formed after recent glacier retreat in Brepollen (Hornsund, southern Svalbard). *Earth Surface Processes and Landforms*, 45(5): 1325-1334.
- Tantoh, H.B., Leonard, L. and **Simatele, M.D.** (2020). Strengthening the scaffolds of community flexibility: policy and institutional response to the rural water supply and sustainability challenge. *African Geographical Review*, 39(3): 208-223.
- Tantoh, H.B., **Simatele, M.D.** and Ebhuoma, E.E. (2020). Shifting the paradigm in community-based water resource management in North-West Cameroon: A search for an alternative management approach. *Community Development*, 51(2): 172-191.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF THE WITWATERSRAND

### Publications continued:

Thabeng, O.L., Merlo, S. and Adam, E. (2020). From the Bottom Up: Assessing the Spectral Ability of Common Multispectral Sensors to Detect Surface Archaeological Deposits Using Field Spectrometry and Advanced Classifiers in the Shashi-Limpopo Confluence Area. *African Archaeological Review*, 37(1): 25-49.

Tsoeleng, L.T., Odindi, J. and Mhangara, P. (2020). A comparison of two morphological techniques in the classification of urban land cover. *Remote Sensing*, 12(7): 1089.

Tsoeleng, L.T., Odindi, J. and Mhangara, P. (2020). A comparison of two morphological techniques in the classification of urban land cover. *Remote Sensing*, 12(7): 1089.

Tsoeleng, L.T., Odindi, J., Mhangara, P. and Malahlela, O. (2020). Assessing the performance of the multi-morphological profiles in urban land cover mapping using pixel based classifiers and very high resolution satellite imagery. *Scientific African*, 10: e00629.

Van der Walt, A. and Fitchett, J.M. (2020). Statistical classification of South African Seasonal Divisions on the Basis of Daily Temperature Data. *South African Journal of Science*, 116(9/10), DOI: 10.17159/sajs.2020/7614.

Van der Walt, A.J. and Fitchett, J.M. (2021). Exploring extreme warm temperature trends in South Africa: 1960-2016. *Theoretical and Applied Climatology*, 143: 1341-1360.

### MSc and PhD graduations and supervisors:

Adriaan van der Walt, PhD Geography, supervisors: Prof J Fitchett, Prof C Curtis

Linda Etale, PhD Geography, supervisor: Prof M Simatele

Lombuso Shabalala, PhD Geography, supervisor: Prof M Simatele

Nkulu Banze, PhD Geography, supervisor: Prof M Simatele

Olaotse Thabang, PhD Geography, supervisors: Dr S Merlo and Prof E Adam

Steve Mathesa, PhD Geography, supervisor: Prof M Simatele

Steven Matome, PhD Geography, supervisor: Prof M Simatele

Andronica Sidiki, MSc Geography (Research), supervisor: Prof M Simatele

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## UNIVERSITY OF THE WITWATERSRAND

### MSc and PhD graduations and supervisors continued:

Anela Fixi, MSc Geography (Research),  
supervisor: Prof M Simatele

Christopher Humphries, MSc Geography  
(Research), supervisor: Dr M Samson

Dineo Mokgehle: MSc in GIS and Remote  
sensing (CWRR), Supervisors: Dr Cletah  
Shoko and Prof Elhadi Adam.

Fazlin McPherson, MSc Geography  
(Research), supervisors: Prof J Fitchett, Dr C  
Namono

Humbelani Matsikha, MSc Geography  
(Research), supervisor: Prof M Simatele

Jesse Spratt, MSc Geography (Research),  
supervisors: Prof J Fitchett, Prof C Curtis

Jessica Auchterlonie, MSc (Eng), supervisor:  
Prof C Sheridan

Kirsten Noome, MSc Geography (Research),  
supervisor: Prof J Fitchett

Konanani Rambuda, MSc Environmental  
Science (CWRR), supervisor: Prof J Knight

Lara Aylward, MSc Chemical Engineering,  
supervisor: Prof C Sheridan, U Kappelmeyer

Makhosazana Dubazana, MSc Geography  
(Research), supervisor: Dr R Moolla

Nicholas Burman, PhD Chemical Engineering,  
supervisor: Prof C Sheridan  
Pascal Snyman, MSc Geography (Research),  
supervisor: Prof J Fitchett

Samantha Pearson, MSc (Eng), supervisor:  
Prof C Sheridan  
Sinxolo Magaya, MSc Geography (Research,  
with distinction), supervisor: Prof J Fitchett

Siyasanga Gxaba, MSc Geography  
(Research), supervisor: Prof M Simatele

Siyaxola Gadu, MSc Geography (Research),  
supervisor: Prof M Simatele

Webster Magowo, PhD Chemical  
Engineering, supervisor: Prof C Sheridan  
Zandile Ntuli, MSc Geography (Research),  
supervisor: Dr M Samson

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## UNIVERSITY OF THE WITWATERSRAND

### 2020 student numbers      Link to departmental webpage

1st year:	117 (with additional 38 Urban and Regional Planning students)
2nd year:	86
3rd year:	61
Honours:	38
Masters –	32 Coursework and Research Report:
Masters –	Research: 37
PhD:	61

<https://www.wits.ac.za/gaes/>

### Changes to their curriculum or course offerings:

From 2021 the School of Geography, Archaeology and Environmental Studies is introducing a major in environmental studies in the second and third year of the BSc and BA undergraduate programmes. This joins our new undergraduate major in Geospatial science which was introduced in 2019, and our existing double major in Geography. Within the school we also offer a major in Archaeology.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF SOUTH AFRICA

### *Name of department:*

- Geography

### *Head of department:*

- Dr Shandu Nenwiini

### *Information about the Geographers and their area of specialisation in the department:*

Prof Gunter, A; Professor Urban Geography  
Distance Education. D.Phil  
[gunteaw@unisa.ac.za](mailto:gunteaw@unisa.ac.za)

Prof Horn, AC; Professor Urban and Social  
Geography. D.Phil [hornac@unisa.ac.za](mailto:hornac@unisa.ac.za)

Prof Mini, SE  
(retired 2020); Professor Urban Geography. PhD  
[minise@unisa.ac.za](mailto:minise@unisa.ac.za)

Prof Nicolau, MD; Professor Citizen driven  
socio-economic change, poverty and quality of  
life, migration studies. PhD  
[nicolmd@unisa.ac.za](mailto:nicolmd@unisa.ac.za)

Prof Hedding, DW; Associate Professor  
Geomorphology. PhD [heddidw@unisa.ac.za](mailto:heddidw@unisa.ac.za)

Prof Pretorius, RW; Associate Professor  
Education for Sustainability; ODeL  
applications in Geography & Environmental  
Studies; Scholarship of teaching and  
learning; Sustainable Development in HE.  
PhD [pretorw@unisa.ac.za](mailto:pretorw@unisa.ac.za)

Prof Schmitz, P; Associate Professor Spatial  
analysis GIS . D.Phil [schmitp@unisa.ac.za](mailto:schmitp@unisa.ac.za)

Dr De Jager, AE; Senior Lecturer Teaching  
and learning in Geography;  
Urban geography, services provision,  
Tourism, quality of life. PhD  
[djageae@unisa.ac.za](mailto:djageae@unisa.ac.za)

Dr Dirsuweit, T Senior Lecturer Urban  
Geography; Geographies of Gender; Food  
Studies; Political Geography. PhD  
[dirtsutc@unisa.ac.za](mailto:dirtsutc@unisa.ac.za)

Dr Du Plessis, A; Senior Lecturer Hydro  
Geography. PhD [duplea@unisa.ac.za](mailto:duplea@unisa.ac.za)

Dr Nenwiini, SC (Acting Chair of  
Department); Senior Lecturer Climatology.  
PhD [nenwisc@unisa.ac.za](mailto:nenwisc@unisa.ac.za)

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF SOUTH AFRICA

### *Geographers continued:*

Mr Vlok, AC; Senior Lecturer Remote sensing / GIS / Geographical Analysis. MA  
[vlokac@unisa.ac.za](mailto:vlokac@unisa.ac.za)

Mr Anderson, R; Lecturer Geomorphology. MSc  
[anderrl@unisa.ac.za](mailto:anderrl@unisa.ac.za)

Mrs Carow, S; Lecturer GIS. MSc  
[sanetpc@unisa.ac.za](mailto:sanetpc@unisa.ac.za)

Mrs Coetzee, R; Lecturer Environmental Geography; ODeL within the context of geography and e-learning. MA  
[coetzr@unisa.ac.za](mailto:coetzr@unisa.ac.za)

Mr Greyling, C; Lecturer Geomorphology. MSc  
[egreyla1@unisa.ac.za](mailto:egreyla1@unisa.ac.za)

Mr Khanye, B; Lecturer Settlement Geography. MSc  
[khanyb@unisa.ac.za](mailto:khanyb@unisa.ac.za)

Mrs Khotoo, A; Lecturer Human Geography. MA  
[khotoa@unisa.ac.za](mailto:khotoa@unisa.ac.za)

Ms Lombard, A; Lecturer Environmental and Tourism Geography. MA  
[Lombae1@unisa.ac.za](mailto:Lombae1@unisa.ac.za)

Mr Mafanya, M; Lecturer Geographic Information Systems Remote Sensing Geospatial analysis. MSc  
[mafanm@unisa.ac.za](mailto:mafanm@unisa.ac.za)

Mrs Mashau, SJ; Lecturer Rural Geography, Gender equity studies. MSc  
[todansj@unisa.ac.za](mailto:todansj@unisa.ac.za)

Ms Mulibana, L; Lecturer Urban Geography. MA  
[mulibl@unisa.ac.za](mailto:mulibl@unisa.ac.za)

Ms Pienaar, R; Lecturer Geography of education. BSc (Hon) [pienar@unisa.ac.za](mailto:pienar@unisa.ac.za)

Mr Tshabalala, S; Lecturer Transport geography. MSc [tshabas1@unisa.ac.za](mailto:tshabas1@unisa.ac.za)

Mr Ramasunga, P; Junior Lecturer Land and agrarian reform, livelihoods, renewable energy, human settlement and land use. BES (Hon) [ramasp@unisa.ac.za](mailto:ramasp@unisa.ac.za)

Mr Schoeman, RC; Junior Lecturer Urban Geography. BA (Hon) [eschoerc@unisa.ac.za](mailto:eschoerc@unisa.ac.za)

Prof Kotze, NJ; Associate Professor Urban Geography. PhD [kotzenj@unisa.ac.za](mailto:kotzenj@unisa.ac.za)

Ms de Vries, L; Lecturer Urban Geography Human Geography Parks and Public Space. MSc  
[dvriel@unisa.ac.za](mailto:dvriel@unisa.ac.za)

Mr Manuel, K; Lecturer Urban Geography, Migration Studies. MSc  
[manuek@unisa.ac.za](mailto:manuek@unisa.ac.za)

Mr Mbhamali, TW; Lecturer Environmental Sciences Atmospheric Sciences Hydrology Spatio-temporal Analysis. MSc  
[mbhamtw@unisa.ac.za](mailto:mbhamtw@unisa.ac.za)

Mr Munyai, RB; Lecturer Risk hazard and vulnerability Weather and Climate variability Population dynamics and demography. MSc  
[munyarb@unisa.ac.za](mailto:munyarb@unisa.ac.za)

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF SOUTH AFRICA

### *Geographers continued:*

Mrs Radingoana, MP; Lecturer Greywater reuse  
Food security Waste management. MSc  
[radinmp@unisa.ac.za](mailto:radinmp@unisa.ac.za)

Ms Sindie Kuhlase; Administrative Officer  
[kuhlasv1@unisa.ac.za](mailto:kuhlasv1@unisa.ac.za)

Ms M Maepe; Administrative Officer  
[maepem@unisa.ac.za](mailto:maepem@unisa.ac.za)

Ms Lotz, CE; Technical Assistant  
Environmental degradation Rehabilitation.  
BSc(Hons) [potgice@unisa.ac.za](mailto:potgice@unisa.ac.za)

Mrs Hellene Steenkamp; Departmental  
Secretary [steenhe@unisa.ac.za](mailto:steenhe@unisa.ac.za)

Mr Lufuno Thenga ; Administrative Support  
[thengla@unisa.ac.za](mailto:thengla@unisa.ac.za)

### **Exciting** **departmental news**

Despite the restrictions and lockdown of 2020, a number of activities and awards took place in the Department of Geography. Prof David Hedding was awarded the Vice Chancellor's Award for Excellence in Research. Prof Rudi Pretorius was appointed as one of the deputy editors of the newly launched Springer Nature journal 'Discover Sustainability'. The journal is currently co-editing a topical collection of papers titled "Enhancing sustainability in the Global South: Insights, perspectives and approaches". The call for papers can be accessed at:

<https://link.springer.com/collections/bhhedifgbe>.

Prof Hedding, along with Prof Ashley Gunter have been appointed the Editors of the South African Geographical Journal. Prof Gunter and Dr Massey (Huddersfield University, UK) produced an edited volume published with Springer entitled Urban Geography in South Africa: Perspective and Theory. Prof Gunter was asked to serve on the Steering Committee of the IGU Local Development Committee.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF SOUTH AFRICA

### *departmental news continued:*

In March, the Department hosted a symposium on “Accelerating the Implementation of the Sustainable Development Goals in Africa” and alongside it, a GIS workshop was held. Prof Rudi Pretorius co-chaired this symposium with Prof Walter Leal Filho from the Hamburg University of Applied Sciences (Germany). Prof Rudi Pretorius and Melanie Nicolau are guest editors of a special edition of the International Journal of Sustainability in Higher Education with theme related to this symposium.

After a career of service to the discipline of Geography in South Africa, Prof Simphiwe Mini retired at the end of 2020. Prof Mini was appointed at UNISA in 2010 as full professor and has contributed to academia and academic life of the Department. He served as Chair of the Department from 2018 to 2019 and was acting Deputy Dean of the College of Agriculture and Environmental Science in 2020.

### Promotions

Prof Ashley Gunter was promoted to Professor

Dr Anna De Jager received a PhD from UNISA and was promoted to Senior Lecturer.

Mr Butho Khanye received a MSc from UNISA and was promoted to Lecturer.

### Funding

Prof Hedding was awarded a NSFC / NRF Grant of R1 500 000 million to explore landscape evolution of the basaltic regions.

Prof Hedding was awarded as co-investigator a NSFC NRF SANAP Grant of R2 000 000 to conduct research on Marine Marion Island

Prof Gunter received a Arts and Humanities Research Council (UK) Grant to Investigate Decolonising Peace Education in Africa to the Value of R4 000 000.

Prof Gunter was part of a team awarded a European Association for Research on Learning and Instruction (EARLI) grant of €20 000.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF SOUTH AFRICA

### 2020/2021 List of publications

**de Jager, A.E. and Nicolau, M.D.**, 2020. Opening the Door for Wider Application of the Tourism Area Life Cycle Model with Application to the Rietvlei Nature Reserve, Tshwane, South Africa. *African Journal of Hospitality, Tourism and Leisure*, 9(6), pp. 912-929

**du Plessis, A.** 2020. Freshwater and Industries. In: Goldstein, M.I., DellaSala, D.A. (Eds.), *Encyclopedia of the World's Biomes*, vol. 4. Elsevier, pp. 55–62

Breetzke, G.D. and **Hedding, D.W.**, 2020. The changing and challenging research landscape in South Africa. *Studies in Higher Education*, 45(11), pp.2245-2259.

**Hedding, D.W.**, Erofeev, A.A., Hansen, C.D., Khon, A.V. and Abbasov, Z.R., 2020. Geomorphological processes and landforms of glacier forelands in the upper Aktru River basin (Gornyi Altai), Russia: evidence for rapid recent retreat and paraglacial adjustment. *Journal of Mountain Science*, 17(4), pp.824-837.

**Hedding, D.W.**, 2020. Comment on “Clinopyroxene megacrysts from Marion Island, Antarctic Ocean: evidence for a late stage shallow origin”(2019) by RJ Roberts, KD Lehong, AEJ Botha, G. Costin, FC De Beer, WJ Hoffman and CJ Hetherington. *Mineralogy and Petrology*, 114(4), pp.357-359.

**Hedding, D.W.**, Greve, M., Breetzke, G.D., Nel, W. and Van Vuuren, B.J., 2020. COVID-19 and the academe in South Africa: Not business as usual. *South African Journal of Science*, 116(7-8), pp.1-3.

Wang, H., Li, X., Chen, Y., Li, Z., **Hedding, D.W.**, Nel, W., Ji, J. and Chen, J., 2020. Geochemical behavior and potential health risk of heavy metals in basalt-derived agricultural soil and crops: A case study from Xuyi County, eastern China. *Science of The Total Environment*, 729, p.139058.

Breetzke, G.D., **Hedding, D.W.** and Pijper, L., 2020. The academic staff profile of Geographers at higher education institutions (HEIs) in South Africa: the challenges for transformation. *Journal of Geography in Higher Education*, pp.1-19.

Dilley, B.J., **Hedding, D.W.**, Schoombie, S. and Ryan, P.G., 2020. A survey of Great-winged Petrels *Pterodroma macroptera* breeding at sub-Antarctic Marion Island and a revised global population estimate. *Ostrich*, 91(2), pp.101-106.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF SOUTH AFRICA

### Publications continued

Rudolph, E.M., **Hedding, D.W.**, Fabel, D., Hodgson, D.A., Gheorghiu, D.M., Shanks, R. and Nel, W., 2020. Early glacial maximum and deglaciation at sub-Antarctic Marion Island from cosmogenic <sup>36</sup>Cl exposure dating. *Quaternary Science Reviews*, 231, 106208.

**Hedding, D.W.**, 2020. Comments on "Factors affecting global flow of scientific knowledge in environmental sciences" by Sonne et al.(2020). *Science of the Total Environment*, 705, 135933.

**Hedding, D.W.**, Calvert, D.R., Tatayah, V., Cole, N., Ruhomaun, K., Khadun, A., Sumner, P.D. and Nel, W., 2020. A comprehensive study of erosivity and soil erosion over a small tropical islet: Round Island, Mauritius. *Land Degradation & Development*, 31(3), pp.372-382.

Li, L., Chen, J., **Hedding, D.W.**, Fu, Y., Ye, M. and Li, G., 2020. Uranium isotopic constraints on the nature of the prehistoric flood at the Lajia site, China. *Geology*, 48(1), pp.15-18.

Chen, Y., **Hedding, D.W.**, Li, X., Greyling, A.C. and Li, G., 2020. Weathering dynamics of large Igneous Provinces (LIPs): A case study from the Lesotho Highlands. *Earth and Planetary Science Letters*, 530, #115871.

Nel, W., Boelhouwers, J.C., Borg, C.J., Cotrina, J.H., Hansen, C.D., Haussmann, N.S., **Hedding, D.W.**, Meiklejohn, K.I., Nguna, A.A., Rudolph, E.M. and Sinuka, S.S., 2020. Earth science research on Marion Island (1996–2020): a synthesis and new findings. *South African Geographical Journal*, pp.1-21.

**Horn, A.C.**, and Ramudzuli, M.R., 2020. Arsenic Contamination of Soil in Relation to Water in Northeastern South Africa. In *Arsenic Water Resources Contamination*. (pp. 157-175). Springer, Cham.

**Kotze, N., Schoeman, R., Carow, S. and Schmitz, P.**, 2020. Orania—24 Years After Apartheid: The Sociopolitical Reanimation of a Small Rural Town in South Africa. In *Smart Geography* (pp. 217-230). Springer, Cham

Massey, R., and **Gunter, A.**, 2000. *Urban Geography in South Africa: Theory and Perspective*. Springer, Cham.

Raghuram, P., Breines, M.R. and **Gunter, A.**, 2020. Beyond #FeesMustFall: International students, fees and everyday agency in the era of decolonisation. *Geoforum*, 109, pp.95-105.

**Gunter, A.**, Raghuram, P., Breines, M.R. and Prinsloo, P., 2020. Distance education as socio-material assemblage: Place, distribution, and aggregation. *Population, Space and Place*, 26(3), pp. 23-34

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF SOUTH AFRICA

### Publications continued

- Massey, R., and **Gunter, A.** 2020. Introduction to Urban Geography in South Africa. In *Urban Geography in South Africa* (pp. 283-292). Springer, Cham.
- Gunter, A.** and Massey, R., 2020. South Africa's urban future: Challenges and opportunities. In *Urban Geography in South Africa* (pp. 283-292). Springer, Cham.
- Gunter, A.** and **Manuel, K.**, 2020. Urban Housing in South Africa: The Role of Housing in Development and Transformation. In *Urban Geography in South Africa* (pp. 209-223). Springer, Cham.
- Lembani, R., **Gunter, A.**, Breines, M. and Dalu, M.T.B., 2020. The same course, different access: the digital divide between urban and rural distance education students in South Africa. *Journal of Geography in Higher Education*, 44(1), pp.70-84.
- Long, D., Dalu, M.T., Lembani, R.L. and **Gunter, A.**, 2020. Responding to 'On shaky ground', Daya (2020). *South African Journal of Science*, 116 (3-4),
- Gunter, A.**, 2020. Pro-poor Local Economic Development and the demand for economic growth. *Dilemmas of Regional and Local Development*. London: Routledge
- Mittelmeier, J., Rienties, B., **Gunter, A.** and Raghuram, P., 2020. Conceptualizing internationalization at a distance: A "third category" of university internationalization. *Journal of Studies in International Education*.
- Pretorius, R.W.**, 2019, "Towards an integrated disciplinary narrative and an enhanced role for Geography in Education for Sustainability: Reflections on South African Higher Education", Chapter in Leal Filho, W. and Consorte-McCrea, A. (Eds.) *Sustainability and Humanities: linking social values, theology and spirituality towards sustainability*. Springer, Cham.
- Pretorius, R.W.**, 2019, "Simposia in Afrikaans: 'n Nasionale platform vir nagraadse studente", Chapter in Van der Elst, J (Ed.) *Verlede l Hede l Toekoms – Die S.A. Akademie vir Wetenskap en Kuns*, 1909 – 2019. V&R Drukkery, Pretoria.
- Wilson, G.D. and **Pretorius, R.W.**, 2020, "Adding value to open and distance learning programmes in nature conservation through sustainability related work-integrated learning", Chapter in Leal Filho, W. et al (Eds.) *Universities as Living Labs for Sustainable Development: Supporting the Implementation of the Sustainable Development Goals*. Springer, Cham.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF SOUTH AFRICA

### Publications continued

Pretorius, R.W. and Nicolau, M.D., 2020, "Empowering communities to drive sustainable development: Reflections on experiences from rural South Africa", Chapter in Leal Filho, W. et al (Eds.) *Universities and Sustainable Communities: meeting the goals of the Agenda 2030*. Springer, Cham.

Leal Filho, W., Salvia, A.L., Pretorius, R.W., Brandli, L.L., Manolas, E., Alves, F., Azeiteiro, U., Rogers, J., Shiel, C. and Do Paco, A. (Eds.) 2020, *Universities as Living Labs for Sustainable Development: Supporting the Implementation of the Sustainable Development Goals*. Springer, Cham

Kurwakumire, E., Coetzee, S. and Schmitz, P., 2020. Towards monitoring and managing the production on land information in land information infrastructures based on supply chain mapping and the supply chain operations reference (SCOR) model. *South African Journal of Geomatics*, 9(2), pp.163-178.

de Bruin, M. and Schmitz, P.M.U., 2020. The application of forensic geomorphology in rhinoceros poaching investigations in Africa. *South African Geographical Journal*, pp.1-21.

### MSc and PhD graduations and supervisors:

#### MSc

T. Ralarala	Supervisor	Prof M Nicolau
M E.Keeley	Supervisor	Prof A C Horn
B. Khanye	Supervisor	Prof A Gunter
C. Steyn	Supervisor	Prof A Gunter
N. Nthungeni	Supervisor	Mr R Anderson and Prof D Hedding
T. Kgote	Supervisor	Prof D Hedding
S. Nkubungu	Supervisor	Prof Pretorius

#### PhD

J M. Letsoalo	Supervisor	Prof M Nicolau
A E. de Jager	Supervisor	Prof M Nicolau and Dr J Olivier
_G D. Desta	Supervisor	Prof M Nicolau and Prof M Abshare
E T. Dando	Supervisor	Prof A Gunter
G M. Geremew	Supervisor	Prof S Mini

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF SOUTH AFRICA

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### 2020 Student numbers:

<i>First Year</i>	7728
<i>Second Year</i>	2705
<i>Third Year</i>	221
<i>Honours</i>	129
<i>MSc</i>	26
<i>PhD</i>	34

### *Link to departmental webpage*

<https://www.unisa.ac.za/sites/corporate/default/Colleges/Agriculture-&-Environmental-Sciences/Schools,-departments,-centres-&-units/School-of-Ecological-and-Human-Sustainability/Department-of-Geography>

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NELSON MANDELA UNIVERSITY

### *Name of department:*

- Geosciences

### *Head of department:*

- Anton de Wit

### *Information about the Geographers and their area of specialisation in the department:*

Dr Anton de Wit (Environmental Management)

Dr Leizel Williams-Bruinders (Human Geography)

Dr Wilma Britz (GIS / Cartography)

Prof Vincent Kakembo (Physical Geography)

### *Exciting*

### *departmental news*

The department will host the International Geographical Union's Commission on African Studies' 2022 conference, titled *Critical Dialogues for a Sustainable African Future*.

### *2020/2021 List of publications*

Jani, V., De Wit, A.H. and Webb, N.L. (2020). An assessment of human-wildlife conflicts in local communities bordering Chewore and Dande Safari areas in Mbire District, northern Zimbabwe, *African Journal of Ecology*, 58:891-896.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NELSON MANDELA UNIVERSITY

### Publications continued:

- Jani, V., De Wit, A.H. and Webb, N.L. (2020). Disputes, relationships, and identity: a 'levels of conflict' analysis of human-wildlife conflict as human-human conflict in the mid-Zambezi valley, Northern Zimbabwe, *South African Geographical Journal*, 102(1): 59-76.
- Dhliwayo, N., Chanza, N. and De Wit, A.H. (2020). Beyond climatic intervention: The social dimension of a biogas project in Sogwala village, Zimbabwe. *Journal of Energy in Southern Africa*, 31(4):43-56.
- Chanza, N., Siyongwana, P.Q., Williams-Bruinders, L. et al. (2020) Closing the Gaps in Disaster Management and Response: Drawing on Local Experiences with Cyclone Idai in Chimanimani, Zimbabwe. *International Journal of Disaster Risk Science*, 11, 655–666.
- Williams-Bruinders, L. and De Wit, A. (2020). 'Living on the Edge: Housing Challenges of the Urban Poor in Port Elizabeth, South Africa', in Fuerst-Bjeli, B. and Leimgruber, W. (eds) *Globalization, Marginalization and Conflict: Political, Economic and Social Processes*. 1st Ed. Chan, Switzerland: Springer Nature AG.
- Jjagwe, A., Kakembo, V and Barasa, B. (2020). *Land Use Cover Types and Forest Management Options for Carbon in Mabira Central Forest Reserve*. Leal Filho W., Ogugu N., Adelake L., Ayal D., da Silva I. (eds) *African Handbook of Climate Change Adaptation*. Springer, Cham.
- Wabusya, W.M., Pili, N.N., Bekuta, B.K., Tsingalia, H.M. and Kakembo, V. (2020). Effects of Land-Use Changes on Soil Chemical Parameters in Kakamega-Nandi. *Tropical and Subtropical Agroecosystems*, 23#78.
- Mawasha, T. and Britz, W. (2020). Simulating Change in Surface Runoff due to LULC Change using Soil Water and Assessment Tool for Flash Flood Prediction. *South African Journal of Geomatics*, 9(2):282-301.
- Kiggundu, J. 2020. *Towards a community-based model for agricultural development in Uganda, using the Kumi and Gomba Districts as case studies* (2020). Unpublished PhD thesis, Nelson Mandela University (Supervised by Dr A de Wit).
- Karungi, D. 2020. *The Impact of the Slum Upgrading Approach on the Livelihoods of Scheme Participants in Uganda: Using the Sustainable Livelihoods Framework*. Unpublished PhD thesis, Nelson Mandela University (Supervised by Dr NL Webb).

### MSc and PhD graduations and supervisors

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## NELSON MANDELA UNIVERSITY

### MSc and PhD graduations and supervisors continued:

MacArthur, B. 2020. *The geography of inequality in Port Elizabeth: post-apartheid trends*. Unpublished MSc dissertation, Nelson Mandela University (Supervised by Dr A de Wit).

Hechter, J.P. 2020. *Assessing the social sustainability of wind energy in the Karoo*. Unpublished MSc dissertation, Nelson Mandela University (Supervised by Dr A de Wit).

Maposha, S. 2020. *The state of sustainability literacy in a corporate environment: a case study approach from the Nelson Mandela Bay Metro*. Unpublished MSc dissertation, Nelson Mandela University (Supervised by Dr A de Wit).

Maxama, A. 2020. *A Spatial assessment of riparian vegetation density and implications for streambank erosion in the Mgwalana catchment, Eastern Cape Province, South Africa*. Unpublished MSc dissertation, Nelson Mandela University (Supervised by Prof V Kakembo).

### 2020 Student numbers:

First Year:	220
Second Year:	78
Third Year:	55
Hons:	14
Masters:	8
Doctoral:	6

### Link to departmental webpage

<https://geosci.mandela.ac.za/>

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF VENDA

### *Name of department:*

- Geography and Geo-Information Sciences

### *Head of department:*

- Dr. NS Nethengwe (Actign Dean- SES)

### *Information about the Geographers and their area of spacialisation in the department:*

- Dr. NS Nethengwe; Remote Sensing & GIS; Disaster management; Gully Extraction, soil erosion, Climate change adaptation, Green economy.  
[nthaduleni.nethengwe@univen.ac.za](mailto:nthaduleni.nethengwe@univen.ac.za) +27 (0) 15 962 8593
- Prof Odhiambo BDO; Associate Professor - Geomorphology, Geology, Remote Sensing & GIS [beneah.odhiambo@univen.ac.za](mailto:beneah.odhiambo@univen.ac.za) 015 962 8587
- Dr Nelwamondo, T; Senior Lecturer- Eco-Tourism; Settlement Development and Urbanization  
[tshililo.nelwamondo@univen.ac.za](mailto:tshililo.nelwamondo@univen.ac.za) 015 962 8582

- Dr NV Mudau; Senior Lecturer - Rural Geography [virginia.mudau@univen.ac.za](mailto:virginia.mudau@univen.ac.za) 015 962 8591
- Dr MJ Mokgoebo; Lecturer- Biogeography  
[matjutla.mokgoebo@univen.ac.za](mailto:matjutla.mokgoebo@univen.ac.za) 015 962 8581
- Mr Kori, E; Lecturer- Geomorphology  
[edmore.kori@univen.ac.za](mailto:edmore.kori@univen.ac.za) 015 962 8565
- Ms KH Netshisaulu; Lecturer- Population and Demography  
[khathu.mathivha@univen.ac.za](mailto:khathu.mathivha@univen.ac.za) 015 962 8590
- Mr F. Dondofema,; Chief Technician GIS and Remote Sensing, Ecology  
[farai.dondofema@univen.ac.za](mailto:farai.dondofema@univen.ac.za) 015 962 8044
- Mr. AP Nekhavhambe; Part-time Lectuer Human/Environmental Geography  
[Ailwei.nekhavhambe@univen.ac.za](mailto:Ailwei.nekhavhambe@univen.ac.za)



University of Venda  
Creating Future Leaders

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF VENDA

### Exciting departmental news

#### **South Africa / Flanders Climate Adaptation Research and Training Partnership (SAF-ADAPT)**

Dr. NS Nethengwe, is a Univen Research Lead of the SAF-ADAPT project on Climate Change Adaptation and Development and was awarded **R771, 535.00**. This is the first installment of 4.5-year collaborative project between three South African universities (University of Cape Town, [University of Fort Hare](#), and [University of Venda](#)); KLIMOS, a consortium of Belgian universities and research groups; and the [South African Adaptation Network](#). It aims to fill critical adaptation research gaps and enhance the capacity of South African universities and individuals, especially early career researchers, to generate and communicate research evidence for impact, and build the capacity of those tasked with climate adaptation to deliver on their mandates.

The SAF-ADAPT project (Univen) has also appointed 1 Postdoctoral Fellow, awarded 2 PhD and 2 Master's Scholarships as well as sending through the RESIDER wing, Mr T. Manyanya to do PhD in KU Leuven, Belgium.

#### **SAF-ADAPT Summer School**

Dr. NS Nethengwe is a Research Lead of SAF-ADAPT project (Univen) on Climate Change Adaptation and Development which hosted a very successful Virtual Summer School for Postdoctoral fellow as well as Master and PhD students enrolled at UNIVEN, UCT and UFH.

Here is the link to access the SAF-ADAPT Summer School Programme 2021:

[SAF-ADAPT Summer School 2021 \(mailchi.mp\)](#).

The SAF-ADAPT project (Univen) has: - appointed 1 Postdoctoral Fellow; awarded 2 PhD and 2 Master's Scholarships. allocated first instalment of R771,535.00 (2021)

#### **USDP Summer School 2021**

The Univen USDP scholars (4) under Climate Risk, Resilience and Sustainable development, Project (Univen led by Dr. NS Nethengwe) hosted a Virtual Summer School from (2-3 March) to 9-10 March 2021 in collaborations with three South African universities (University of Cape Town, [University of Fort Hare](#), and [University of Venda](#)); KLIMOS, a consortium of Belgian universities and research groups; and the [South African Adaptation Network](#)

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF VENDA

### Departmental news continued:

#### **Mr Mokgoebo's PhD and Promotion of Dr Chikoore**

Mr MJ Mokgoebo was awarded his PhD from UNISA in November 2020. We are proud of his achievement, and wish Dr Mokgoebo a long and fruitful academic discourse in his field of specialization in Physical Geography.

Dr Hector Chikoore left the Department of Geography and GISc in the service of the University of Venda to join North-West University (Vaal Triangle Campus) on promotion to Associate Professor. During his tenure in the Department of Geography & GIS, Prof Chikoore saw the inception and development of Meteorology and Climate Science in the department (and the School of Environmental Sciences). He graduated many honours and masters students.

### 2020/2021 List of publications:

Kori, E., Odhiambo, B.D.O., and Chikoore, H., 2019: A Geomorphodiversity map of the Soutpansberg Range, South Africa. *Landform Analysis*, 3(14-24).

Dalu T, Dlamini P, Wasserman RJ, Mokgoebo MJ, Mutshekwa T, Dondofema F and Cuthbert RN. 2021. Effects of environmental variables on littoral macroinvertebrate community assemblages in subtropical reservoirs. *Chemistry and Ecology*. DOI:10.1080/02757540.2021.1892656

Dalu T, Murudi T.T., Dondofema F, Wasserman RJ, Chari L.D., Murungweni FM and Cuthbert RN. 2020. Balloon milkweed *Gomphocarpus physocarpus* distribution and drivers in an internationally protected wetland. *BioInvasions Record*, 9(3):627–641.

Muofhe, P.C., Chikoore, H., Bopape, M.M., Nethengwe, N.S., Ndarana, T., & Rambuwani, G.T. 2020. Forecasting Intense Cut-Off Lows in South Africa Using the 4.4 km Unified Model. *MDPI, Climate* (Accepted for publication).

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF VENDA

### publications continued:

Uhunamure, S.E., Nethengwe, N.S & Tinarwo, D. 2020. Evaluating Biogas Technology in South Africa: Awareness and Perception towards Adoption at Household Level in Limpopo Province (Book Chapter). In M., Al Qubeissi (ed.), *Renewable Energy: Resources, Challenges and Applications*. IntechOpen. ISBN: 978-1-83962-155-0.

Zongho, K., Nethengwe, N. S., Mpandeli, S & Chikoore, H. 2020. Determinants of small-scale farmers' choice and adaptive strategies in response to climatic shocks in Vhembe District, South Africa. *Geo-Journal*.  
<https://doi.org/10.1007/s10708-020-10272-7>.

Okaka, F.O. & Odhiambo, B.D.O., 2019: Households' Perception of flood risk and health impact of exposure to flooding in flood-prone informal settlements in the Coastal city of Mombasa, Kenya. *International Journal Climate Change Strategies and Management*, Vol, 11 No.4, pp.592 - 606, ISSN 1756-8692; Emerald Publishing Limited.

### MSc and PhD graduations and supervisors:

Dlamini, P; Assessing the influence of water level fluctuations on macroinvertebrate community assemblages in two small subtropical farm reservoirs. MEnvSc Supervisor- Dr. T. Dalu & Dr MJ Mokgoebo

Netshaulu, M; Development of a GIS Database Prototype for Effective Solid Waste management in Thohoyandou CBD and its environs, Limpopo Province. MEnvSc (with Distinction) Supervisor- Dr. NS Nethengwe & Dr. NV Mudau

Mosima Florina Mphidi ; The Effectiveness of Biosphere Reserve as a tool for sustainable resource management in Vhembe District Municipality, Limpopo Province, South Africa. MEnvSc. Supervisor- Prof Odhiambo BDO & Dr MJ Mokgoebo

Mandaha Tshifhiwa; Impacts of Climate Change on Irrigation and Adaptation Strategies of Small Holder Farmers in Khumbe Irrigation Scheme, Limpopo, South Africa. MEnvSc. Supervisor-Prof BDO Odhiambo & Mr M.J Mokgoebo

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF VENDA

### MSc and PhD graduations and supervisors continued:

Mudau Thifhatelwi Jnr; The Use of Multi-Temporal MODIS Satellite Data to Map Veldfire Hazards in Limpopo Province, South Africa. M.Env.Sc. Supervisor- Prof BDO Odhiambo & Mr Dondofema, F

Phuluwa, TS; Climatology of tropospheric ozone over South Africa: variability and sources. MEnvSc. Supervisor- Dr.H. Chikoore & Dr. NS Nethengwe  
Dr. NB Mbatha (UNIZULU)

Thavhanyedza, H; Vegetation change in response to climate extremes in Limpopo Province, South Africa. MEnvSc. Supervisor- Dr. NS Nethengwe & Dr. H. Chikoore

Chineka, J; Conservation Agriculture as an Adaptation Strategy to Drought in Chivi District, Zimbabwe. PhD (Geography) Supervisor- Dr. H. Chikoore & Dr. NS Nethengwe

Rumutsa, BN; Integrating Indigenous and Modern Scientific Knowledge in Community-Based Early Warning System Development for Climate Related Malaria Risk Reduction in Mopani District of South Africa. PhD (Geography) Supervisor- Dr. NS Nethengwe & Dr. H. Chikoore

Zongho, K; Assessing the Impacts of Climate Change and Adaptation Strategies on Smallholder Farming in the Vhembe District, South Africa. PhD (Geography). Supervisor- Dr. NS Nethengwe & Prof. S. Mpandeli Dr. H. Chikoore

### 2020 student numbers:

*First year* 380

*Second year* 385

*Third year* 158

*Honours* 0

*Masters* 16

*Doctoral* 2

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF VENDA

*Changes to the  
Curriculum or course  
offerings:*

### **Confirmation of Additional CESMS for Accredited Programme**

CHE informed DHET that new major fields of study, namely Geography and Cartography (CESM1405) and Geology and Earth Sciences/Geosciences (CESM1406) may be re-added to the existing Bachelor of Environmental Sciences Honours. This re-allows the offering of Bachelor of Environmental Sciences Honours with Geography specialisation and that of Hydrology and Water Resources.

### **Bachelor of Environmental Science in Disaster Risk**

The long-awaited curriculum of Bachelor of Environmental Science in Disaster Risk Reduction, to be offered in the Department of Geography and GISc has finally been approved by the DHET and is currently on offer starting the 2021 academic year. There is a bursary programme for this curriculum funded by the National Disaster Management Centre (NDMC).

*Link to departmental  
webpage:*

<https://www.univen.ac.za/about/schools/school-of-environmental-sciences/geography-and-geo-information-sciences/>

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF JOHANNESBURG

### *Name of department:*

- Geography Environmental Management and Energy Studies

### *Head of department:*

- Prof. Clare Kelso

### *Information about the Geographers and their area of specialisation in the department:*

- Dr. Langerman K ; Senior Lecturer- Energy Studies, Air Quality Management [klangerman@uj.ac.za](mailto:klangerman@uj.ac.za) 011 559 2439
- Dr. Sinthumule I; Senior Lecturer- Transfontier Conservation, Environmental Conservation and Society Border Studies, Environmental Geography, Land Reform and Political Ecology [isinthumule@uj.ac.za](mailto:isinthumule@uj.ac.za) 011 559 3810
- Dr. Modley L; Senior Lecturer- Environmental Monitoring and Management [lee-annm@uj.ac.za](mailto:lee-annm@uj.ac.za) 011 559 3928
- Dr. Kambule N; Lecturer- Energy Studies [nkambule@uj.ac.za](mailto:nkambule@uj.ac.za) 011 559 4423
- Mrs. Block EK; Lecturer- Human Geography & Environmental Education [eblock@uj.ac.za](mailto:eblock@uj.ac.za) 011 559 2173
- Ms. Greenberg D; Lecturer- Physical and Environmental Geography [dgreenberg@uj.ac.za](mailto:dgreenberg@uj.ac.za) 011 559 4799
- Prof. Chris Curtis; Professor- Biogeochemistry & Aquatic Science [cjcurtis@uj.ac.za](mailto:cjcurtis@uj.ac.za) 011 559 4745
- Prof. Rampedi I; Associate Professor- Environmental Management [isaacr@uj.ac.za](mailto:isaacr@uj.ac.za) 011 559 2429
- Prof. Tesfamichael SG; Associate Professor- GIS & Remote Sensing [sgtesfamichael@uj.ac.za](mailto:sgtesfamichael@uj.ac.za) 011 559 3927
- Prof. Hoogendoorn G; Associate Professor- Tourism Geography [ghoogendoorn@uj.ac.za](mailto:ghoogendoorn@uj.ac.za) 011 559 4628
- Prof. Yessoufou K; Associate Professor- Environmental Management [kowiyouy@uj.ac.za](mailto:kowiyouy@uj.ac.za) 011 559 2434



# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF JOHANNESBURG

### Geographers continued:

- Ms. Mugwena T; Lecturer-GIS & Remote Sensing [thendom@uj.ac.za](mailto:thendom@uj.ac.za) 011 559 3645
- Ms. Rabumbulu M; Lecturer-Geomorphology [mrabumbulu@uj.ac.za](mailto:mrabumbulu@uj.ac.za) 011 559 3302
- Mr. Mushawemhuka WJ; Lecturer-Tourism and Climate change GIS & Remote sensing [williamjm@uj.ac.za](mailto:williamjm@uj.ac.za) 011 559 3889
- Ms. Stockigt L; Lecturer- Human Geography [lstockigt@uj.ac.za](mailto:lstockigt@uj.ac.za) 011 559 4452
- Mrs. Schoeman DC Lecturer; Waste and Environmental Management [theas@uj.ac.za](mailto:theas@uj.ac.za) 011 559 3226

### **E**xciting

### departmental news:

Buntu Fanteso, a Masters graduate of the Masters in Environmental Management from UJ received the Rhodes scholarship to complete his PhD at the University of Oxford

Bopaki Phogole (Environmental Management Masters student) was awarded Best Student Paper at the NACA (National Association for Clean Air) Conference held virtually from 16-20 November 2020.

Ms Patience Mamathaba won the best MSc Presentation Award at UJ Botany Annual Symposium 2020, supervised by Prof Kowiyou Yessoufou.

Dr Simangele Dlamini who completed his Phd in Geography in 2020, was awarded the best Junior Research Excellence Award of 2020 at the Human Science Research Council (HSRC). The award, which considers scholarship, specifically noted his peer-reviewed research outputs within a short period of time. Dr Dlamini was supervised by Prof Solomon Tesfamichael (GEMES) and Dr Tholang Mokhele (HSRC).

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF JOHANNESBURG

### Departmental news continued:

UJ has been ranked 3<sup>rd</sup> in South Africa for the Geography subject in the 2020 Shangai Ranking's Global Ranking of Academic Subjects.

Dr Kowiyou Yessoufou joined the Board of the South African Biodiversity Institute (SANBI) and he also gave an interview on JoburgToday TV on the State of Environment under Lockdown.

Dr Innocent Sinthumule is now on the Editorial Board of Dialogues in Human Geography effective from February 2020.

Dr Innocent Sinthumule invited Dr Abel Ramoelo from South African National Parks (SANParks) to present a departmental seminar on "Essential Biodiversity variables' framework: Contribution of earth technologies for monitoring protected areas", on 13 March 2020

### 2020/2021 List of publications:

Omo-Okoro, P.N., **Curtis, C.J.**, Karásková, P. *et al.* Kinetics, Isotherm, and Thermodynamic Studies of the Adsorption Mechanism of PFOS and PFOA Using Inactivated and Chemically Activated Maize Tassel. *Water Air Soil Pollut* **231**, 485 (2020). <https://doi.org/10.1007/s11270-020-04852-z>

Roffe, S.J., Fitchett, J.M. & **Curtis, C.J.** Determining the utility of a percentile-based wet-season start- and end-date metrics across South Africa. *Theor Appl Climatol* **140**, 1331–1347 (2020). <https://doi.org/10.1007/s00704-020-03162-y>

Neil L. Rose, Alice M. Milner, Jennifer M. Fitchett, **Kristy E. Langerman**, Handong Yang, Simon D. Turner, Anne-Lise Jourdan, James Shilland, César C. Martins, Amanda Câmara de Souza, **Christopher J. Curtis**. Natural archives of long-range transported contamination at the remote lake Letšeng-la Letsie, Maloti Mountains, Lesotho, *Science of The Total Environment*, Volume 737, 2020, 139642, ISSN 0048-9697, <https://doi.org/10.1016/j.scitotenv.2020.139642>

Lourenco, M. and **Curtis, C.** (2021) The influence of the Eastern Basin Acid Mine Drainage (AMD) Chemical Treatment Plant on water quality along the Blesbokspruit Wetland, South Africa. *Water SA* **47(1)**, 35-44.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF JOHANNESBURG

### Publications continued:

- Du Plessis, D.M. and **Curtis, C.J.** (2021) Trace element contaminants associated with historic gold mining in sediments of dams and pans across Benoni, Ekurhuleni. *Environmental Monitoring and Assessment* **193**: 122 (17pp).
- Fitchett, J.M., Fortune, S.M. and **Hoogendoorn, G.**, 2020. Tourists' reviews of weather in five Indian Ocean islands. *Singapore Journal of Tropical Geography*, *41*(2), pp.171-189.
- Maria A. Casado-Díaz, Ana B. Casado-Díaz & **Gijsbert Hoogendoorn** (2020) The home exchange phenomenon in the sharing economy: a research agenda, *Scandinavian Journal of Hospitality and Tourism*, *20*:3, 268-285, DOI: [10.1080/15022250.2019.1708455](https://doi.org/10.1080/15022250.2019.1708455)
- J. Friedrich, J. Stahl, J.M. Fitchett & **G. Hoogendoorn** (2020) To beach or not to beach? Socio-economic factors influencing beach tourists' perceptions of climate and weather in South Africa, *Transactions of the Royal Society of South Africa*, *75*:2, 194-202, DOI: [10.1080/0035919X.2020.1716869](https://doi.org/10.1080/0035919X.2020.1716869)
- Friedrich, J., Stahl, J., **Hoogendoorn, G.** and Fitchett, J.M., 2020. Exploring Climate Change Threats to Beach Tourism Destinations: Application of the Hazard–Activity Pairs Methodology to South Africa. *Weather, Climate, and Society*, *12*(3), pp.529-544.
- Hoogendoorn, G.**, Letsatsi, N., Malleka, T. *et al.* Tourist and resident perspectives on 'slum tourism': the case of the Vilakazi precinct, Soweto. *GeoJournal* **85**, 1133–1149 (2020). <https://doi.org/10.1007/s10708-019-10016-2>
- Gijsbert Hoogendoorn** & Daniel Hammett (2020) Resident tourists and the local 'other', *Tourism Geographies*, DOI: [10.1080/14616688.2020.1713882](https://doi.org/10.1080/14616688.2020.1713882)
- Gijsbert Hoogendoorn, Lara Stockigt, Jarkko Saarinen & Jennifer M. Fitchett** (2021) Adapting to climate change: the case of snow-based tourism in Afriski, Lesotho, *African Geographical Review*, *40*:1, 92-104, DOI: [10.1080/19376812.2020.1773878](https://doi.org/10.1080/19376812.2020.1773878)
- Mushawemhuka, W.J., Fitchett, J.M. and **Hoogendoorn, G.**, 2020. Towards quantifying climate suitability for Zimbabwean nature-based tourism. *South African Geographical Journal*, pp.1-21.
- Semelane, S., Nwulu, N., **Kambule, N.** and Tazvinga, H., 2021. Economic feasibility assessment of manufacturing solar panels in South Africa—A case study of Steve Tshwete Local Municipality. *Sustainable Energy Technologies and Assessments*, *43*, p.100945.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF JOHANNESBURG

### Publications continued:

Azong, M.N. and **Kelso, C.J.**, 2021. Gender, ethnicity and vulnerability to climate change: The case of matrilineal and patrilineal societies in Bamenda Highlands Region, Cameroon. *Global Environmental Change*, 67, p.102241.

Hart, A., Biggs, S., Scott-Bottoms, S., Buttery, L., Dennis, S., Duncan, S., Ebersöhn, L., Flegg, M., **Kelso, C.**, Khaile, N.M. and Mampane, M.R., 2020. Negotiating Leadership in Interdisciplinary Co-Productive Research: A Case Study of An International Community-Based Project Between Collaborators From South Africa and the United Kingdom. *SAGE Open*, 10(4), p.2158244020971598.

**Langerman, K.**, Garland, R. and Feig, G., 2020. Call for Papers: Special Issue of the Clean Air Journal. *Clean Air Journal*, 30(1).

Morosele, I.P. and **Langerman, K.E.**, 2020. The impacts of commissioning coal-fired power stations on air quality in South Africa: insights from ambient monitoring stations. *Clean Air Journal*, 30(2), pp.1-11.

Garland, R.M., Feig, G.T. and **Langerman, K.**, 2020. Clean Air Journal: supporting discussion on key African air quality issues. *Clean Air Journal*, 30(1), pp.1-1.

Bezeng, B.S., **Yessoufou, K.**, Taylor, P.J. & **Tesfamichael, S.G.** Expected spatial patterns of alien woody plants in South Africa's protected areas under current scenario of climate change. *Sci Rep* 10, 7038 (2020).  
<https://doi.org/10.1038/s41598-020-63830-x>

**Ndidzulafhi Innocent Sinthumule** (2020) Municipal border disputes in Vhembe district municipality, Limpopo province of South Africa, *African Geographical Review*, DOI: [10.1080/19376812.2020.1826992](https://doi.org/10.1080/19376812.2020.1826992)

Elansary, H.O., Abdel-Hamid, A.M.E., **Yessoufou, K.** *et al.* Physiological and molecular characterization of water-stressed *Chrysanthemum* under robinin and chitosan treatment. *Acta Physiol Plant* 42, 31 (2020).  
<https://doi.org/10.1007/s11738-020-3021-8>

Miner, Kangyang & **Rampedi, Isaac** & Ifegbesan, Ayodeji & Machate, Machate. (2020). Survey on Household Awareness and Willingness to Participate in E-Waste Management in Jos, Plateau State, Nigeria. *Sustainability*. 12. 1047.  
10.3390/su12031047.

Jauro, T.I., **Tesfamichael, S.G.** & **Rampedi, I.T.** Tracking conservation effectiveness in the Vhembe Biosphere Reserve in South Africa using Landsat imagery. *Environ Monit Assess* 192, 469 (2020).  
<https://doi.org/10.1007/s10661-020-08416-w>

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF JOHANNESBURG

### Publications continued:

**Ndidzulafhi Innocent Sinthumule**, Mbuelo Laura Mashau. Traditional ecological knowledge and practices for forest conservation in Thathe Vondo in Limpopo Province, South Africa. *Global Ecology and Conservation*, Volume 22, 2020, e00910, ISSN 2351-9894, <https://doi.org/10.1016/j.gecco.2020.e00910>.

**Ndidzulafhi Innocent Sinthumule**, Tshimangadzo Ratshivhadelo & Tshililo Nelwamondo (2020) Stakeholder perspectives on land-use conflicts in the South African section of the Greater Mapungubwe Transfrontier Conservation Area, *Journal of Land Use Science*, 15:1, 11-24, DOI: [10.1080/1747423X.2020.1739767](https://doi.org/10.1080/1747423X.2020.1739767)

Simangele Dlamini & **Solomon G. Tesfamichael** & Yegnanew Shiferaw & Tholang Mokhele, 2020. "[Determinants of Environmental Perceptions and Attitudes in a Socio-Demographically Diverse Urban Setup: The Case of Gauteng Province, South Africa](#)," *Sustainability*, MDPI, Open Access Journal, vol. 12(9), pages 1-15, April.

Fundisi E, Musakwa W, Ahmed FB, **Tesfamichael SG** (2020) Estimation of woody plant species diversity during a dry season in a savanna environment using the spectral and textural information derived from WorldView-2 imagery. *PLoS ONE* 15(6): e0234158. <https://doi.org/10.1371/journal.pone.0234158>

Dlamini, S., **Tesfamichael, S.G.**, Shiferaw, Y.A. *et al.* Socio-demographic determinants of place attachment in Gauteng, South Africa, using partial proportional odds models. *GeoJournal* (2020). <https://doi.org/10.1007/s10708-020-10240-1>

Margaret Phiri, Yegnanew A. Shiferaw & **Solomon G. Tesfamichael** (2020) Biome-level relationships between vegetation indices and climate variables using time-series analysis of remotely-sensed data, *GIScience & Remote Sensing*, 57:4, 464-482, DOI: [10.1080/15481603.2020.1733325](https://doi.org/10.1080/15481603.2020.1733325)

Mabaso, Thembeke & Topkin, James & **Rampedi, Isaac & Modley, Lee-Ann.** (2020). The Potential of Generating Electrical Energy from Digester Carbon Waste Sources at Erwat Wastewater Treatment Facilities, South Africa. *The Journal of Solid Waste Technology and Management*. 46. 148-159. 10.5276/JSWTM/2020.148

Mankga LT, **Yessoufou K, Mugwena T** and Chitakira M (2020) The Cycad Genus *Cycas* May Have Diversified From Indochina and Occupied Its Current Ranges Through Vicariance and Dispersal Events. *Front. Ecol. Evol.* 8:44. doi: 10.3389/fevo.2020.00044

Mankga, Ledile & **Yessoufou, Kowiyou & Chitakira, Munyaradzi.** (2020). On the origin and diversification history of the African genus *Encephalartos*. *South African Journal of Botany*. 130. 231-239. 10.1016/j.sajb.2019.12.007.

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF JOHANNESBURG

### Publications continued:

[Sheltah Ndenda](#) , [Kowiyou Yessoufou](#). Updating the correlates of alien mammal invasion intensity in South Africa: the basal metabolic rate matters, *African Journal of Ecology*, Volume 58 Issue 2 (2020)  
<https://doi.org/10.1111/aje.12694>

**Yessoufou K**, Sithole M, Elansary HO (2020) Effects of urban green spaces on human perceived health improvements: Provision of green spaces is not enough but how people use them matters. *PLoS ONE* 15(9): e0239314.  
<https://doi.org/10.1371/journal.pone.0239314>

Horamo, Y., Chitakira, M., **Yessoufou, K.** and Woldemichael, G., 2020. Adoption of Introduced Homestead Agro-Forestry Technologies in Lemo Woreda, Hadiya Zone, Southern Ethiopia. *International Journal of the Science of Food and Agriculture*, 4(3), 278-292.

Monaledi Modiegi, **Isaac T. Rampedi**, **Solomon G. Tesfamichael**, Comparison of multi-source satellite data for quantifying water quality parameters in a mining environment, *Journal of Hydrology*, Volume 591,2020,125322,ISSN 0022-1694,  
<https://doi.org/10.1016/j.jhydrol.2020.125322>.

**Ndidzulafhi Innocent Sinthumule** (2020) Borders and border people in the Greater Mapungubwe Transfrontier, *Landscape Research*, 45:3, 280-291, DOI:  
[10.1080/01426397.2019.1632819](https://doi.org/10.1080/01426397.2019.1632819)

Dlamini, S., **Tesfamichael, S.G.** and Mokhele, T., 2020. A review of place identity studies in post-apartheid South Africa. *South African Journal of Psychology*, p.0081246320954040.

Muleba, I., Yessoufou, K. and **Rampedi, I.T.**, 2020. Testing the non-random hypothesis of medicinal plant selection using the woody flora of the Mpumalanga Province, South Africa. *Environment, Development and Sustainability*, pp.1-12.  
**Sinthumule, N. I.** (2021). Window of Economic Opportunity or Door of Exclusion? Nandoni Dam and Its Local Communities. *Sustainability*, 13, 2502.  
<https://doi.org/10.3390/su13052502>.

Masekamani, MD; Makonese, T; **Rampedi, IT** & Keretsetse, GA. (2020). Morphology and elemental analysis of freshly emitted particles from packed-bed domestic coal combustion. *Clean Air Journal*.  
<https://doi.org/10.17159/caj/2020/30/2.8582>

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF JOHANNESBURG

### Publications continued:

Ifegbesan, AP; **Rampedi IT**, & Odumosu, T. (2020). Residents' participation and perception of environmental sanitation program in Ogun East Senatorial District, Nigeria: a mixed-method approach. *International Journal of Environment and Waste Management*, Copyright © 20XX Inderscience Enterprises Ltd.

Modley, LAS., **Rampedi, IT.**, Avenant-Oldewage, A. & Van Dyk, C. (2020). A comparative study on the biotic integrity of the rivers supplying a polluted, hyper-eutrophic freshwater system: A multi-indicator approach. *Ecological Indicators*, 111, p.105940.

Davies, T.J., Maurin, O., **Yessoufou, K.**, Daru, B.H., Bezeng, B.S., Schaefer, H., Thuiller, W. and van der Bank, M., 2021. Tree phylogenetic diversity supports nature's contributions to people, but is at risk from human population growth. *bioRxiv*.

Omo-Okoro, P.N, **Curtis, C.J.**, Marco, A.M., Melymuk, L., Okonkwo, J.O. (2021) Removal of per- and polyfluoroalkyl substances from aqueous media using synthesized silver nanocomposite-activated carbons. *Journal of Environmental Health Science and Engineering*  
<https://doi.org/10.1007/s40201-020-00597-3>

Roffe, S.J., Fitchett, J.M. & **Curtis, C.J.** (2021) Quantifying rainfall seasonality across South Africa on the basis of the relationship between rainfall and temperature. *Climate Dynamics* (2021).  
<https://doi.org/10.1007/s00382-020-05597-5>

### MSc Graduations and supervisors:

#### MSc

Maruapula Karabo; Community perceptions on Water Resource Management: A case study of the Roodeplaats Dam, South Africa. MSc Environmental Management. Supervisor- Dr. LS Modley & Dr. K Yessoufou

Marole Malebo Salome; Water quality monitoring in Kaalspruit River, Tembisa, South Africa. MSc Environmental Management. Supervisor- Dr. LS Modley & Prof. IT Rampedi & Prof.S Bufo

Morosele Itumeleng Pearl; An assessment of the impacts of commissioning coal-fired power stations on ambient air quality. MSc Environmental Management. Supervisor- Dr. K Langerman

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### MSc Graduations and supervisors continued:

Zwedzi Lutendo; Delineating wetland waterbodies of wide spatial variation using remote sensing techniques. MSc Geography. Supervisor- Prof. SG Tesfamichael

Boihang Mothusi Thabiso Ernest; Community perspectives on socio-economic benefits of mining industries in the Moses Kotane Local Municipality, North-West Province, South Africa. MSc Environmental Management. Supervisor- Prof. K Yessoufou

Khophathe Ndamulelo Mildred; Investigating the effects of biotic and abiotic interactions on the tradeoff in plant investment in size-dependent survival and reproductive strategies along an elevational gradient. MSc Environmental Management. Supervisor- Prof. K Yessoufou

### *PhD*

Dlamini Bonginkosi Robert; Evaluating the performance (effectiveness and efficiency) of waste management and minimization practices in the District Municipalities (Umkhanyakude and Zululand) in the KwaZulu-Natal Province, South Africa. PhD Environmental Management. Supervisor- Prof. IT Rampedi

Dlamini Simangele; Spatial and Demographic Characterisation of Environmental Perceptions, Attitudes and Place Attachment: The case of Gauteng, South Africa. PhD Geography. Supervisor- Prof. SG Tesfamichael & Dr T Mokhele

### 2020 Student Numbers:

<i>First year</i>	192
<i>Second year</i>	135
<i>Third Year</i>	70
<i>Honours</i>	50
<i>Masters</i>	57
<i>Doctoral</i>	25

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### Changes to curriculum:

The department developed and offers six accredited short learning programmes (SLPs) to address the skill shortage of Geography teachers. Five of the SLPs are aimed at teachers in the FET Phase and include training in mapwork, GIS, Climatology, Geomorphology and Economic Geography. The sixth SLP is for teachers in the Intermediate Phase and provides training in mapwork. During 2019/2020 the department trained 304 teachers and currently (2021) 500 Gauteng Geography teachers are enrolled for training.

A additional new short learning programme was developed for environmental management practitioners entitled: Risks and Socio-Environmental Sustainability. This programme aims to train current and future leaders on risk prevention, risk assessment and risk management towards more sustainable human-environment interactions. Students who complete the short learning programme in risk and socio-environmental sustainability will acquire a number of competencies and skills. This SLP will enable students to be professionally competent and to become acquainted with the different procedures in environmental risk assessment as well basic skills in understanding social and environmental sustainability and its relevance for organizations in their different contexts

### Link to departmental page

<https://www.uj.ac.za/faculties/science/geography>

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### *Name of department:*

- Environmental and Geographical Science

### *Head of department:*

- M R Sowman

### *Information about the Geographers and their area of specialisation in the department:*

#### **South African Research Chairs:**

B C Hewitson – Climate Science

R P Wynberg - Environmental and Social Dimensions of the Bioeconomy

#### **Professors:**

M New - Climate Change

S E Oldfield - Urban Studies

M Ramutsindela - Political Geography and Political Ecology

#### **Associate Professors:**

B J Abiodun - Atmospheric Science

P Anderson - Urban Ecology

F D Eckardt - Dryland Geomorphology

Z Patel - Urban Transitions and Transdisciplinary Research

M R Sowman - Environmental Governance and integrated coastal fisheries

G Ziervogel - Climate Change Adaptation, Urban Governance, Transdisciplinary Approaches

#### **Senior Lecturers:**

Dr S Daya - Culture and identity

Dr K J Winter - Water Science and Resource Management

#### **Lecturers:**

Dr J von Holdt - Physical Geography, Land/Atmosphere interactions

Dr P Mbatha - Environmental governance and human geography

Dr S Suraya - Urban studies, urban citizenship, water & land/housing politics



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### Geographers continued:

#### **Emeritus Professor:**

R F Fuggle - impact assessment and management

#### **Senior Research Scholar**

M E Meadows - Physical Geography, Quaternary Environments

### Exciting departmental news

Gina Ziervogel was awarded a Fulbright for 2021 to spend time at University of California, Santa Cruz. She received a B2 NRF rating and was awarded the University's Social Responsiveness award for 2020. She was also chosen for the [6th cohort](#) of the Homeward Bound programme in 2021, a women in STEMM leadership programme culminating in an Antarctic voyage.

### 2020/2021 List of publications

Abba Omar Sabina & Abiodun, B.J. 2020. Characteristics of cut-off lows during the 2015–2017 drought in the Western Cape, South Africa. *Atmospheric Research*. 235:104772.

DOI:10.1016/j.atmosres.2019.104772

Available: <https://doi-org.ezproxy.uct.ac.za/10.1016/j.atmosres.2019.104772> <https://linkinghub-elsevier-com.ezproxy.uct.ac.za/retrieve/pii/S016980951930345X>.

Abiodun, B.J., Mogebeisa, T.O., Petja, B., Abatan, A.A. & Roland, T.R. 2020. Potential impacts of specific global warming levels on extreme rainfall events over southern Africa in CORDEX and NEX-GDDP ensembles. *International Journal of Climatology*.

40(6):3118-3141. DOI:10.1002/joc.6386

Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1002/joc.6386>.

Acuto, M., Larcom, S., Keil, R., Ghojeh, M., Lindsay, T., Camponeschi, C. & Parnell, S. 2020. Seeing COVID-19 through an urban lens. *Nature Sustainability*. 3(12):977-978.

DOI:10.1038/s41893-020-00620-3

Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1038/s41893-020-00620-3>.

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## UNIVERSITY OF CAPE TOWN

### Publications continued:

Anderson, P., Charles-Dominique, T., Ernstson, H., Andersson, E., Goodness, J. & Elmqvist, T. 2020. Post-apartheid ecologies in the City of Cape Town: An examination of plant functional traits in relation to urban gradients. *Landscape and Urban Planning*. 193

DOI:10.1016/j.landurbplan.2019.103662

Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1016/j.landurbplan.2019.103662>.

Armitage, D., Mbatha, P., Muhl, E., Rice, W. & Sowman, M. 2020. Governance principles for community-centered conservation in the post-2020 global biodiversity framework. *Conservation Science and Practice*. 2(2)

DOI:10.1111/csp2.160 Available: <https://doi.org.ezproxy.uct.ac.za/10.1111/csp2.160>.

Banerjee, A., Chen, R., Meadows, M.E., Singh, R.B., Mal, S. & Sengupta, D. 2020. An analysis of long-term rainfall trends and variability in the uttarakhand himalaya using google earth engine. *Remote Sensing*. 12(4) DOI:10.3390/rs12040709

Available: <https://doi.org.ezproxy.uct.ac.za/10.3390/rs12040709>.

Blasiak, R., Wynberg, R., Grorud-Colvert, K., Thambisetty, S., Bandarra, N.M., Canário, A. V. M., da Silva, J., Duarte, C. M., Jaspars, M., Rogers, A., Sink, K., and Wabnitz, C. C. C., 2020 The ocean genome and future prospects for conservation and equity, *Nature Sustainability*

<https://doi.org/10.1038/s41893-020-0522-9>

Brom, P., Anderson, P., Channing, A. & Underhill, L.G. 2020. The role of cultural norms in shaping attitudes towards amphibians in Cape Town, South Africa. *PLoS ONE*. 15(2)

DOI:10.1371/journal.pone.0219331.

Walker, S. et al. 2020. Integrated assessment of climate change impacts on crop productivity and income of commercial maize farms in northeast South Africa. *Food Security*. 12(3):659-678.

DOI:10.1007/s12571-020-01023-0

Available:

<http://doi.org.ezproxy.uct.ac.za/10.1007/s12571-020-01023-0>.

Chase, B. 2020. Temperature change in subtropical southeastern Africa during the past 790,000 yr. *Geology*. 49(1)

DOI:10.1130/G47841.1 Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1130/g47841.1>.

Cockburn, J., Cundill, G., Shackleton, S., Cele, A., Cornelius, S.F., Koopman, V., le Roux, J.P., McLeod, N. et al. 2020.

Relational Hubs for Collaborative Landscape Stewardship. *Society and Natural Resources*. 33(5):681-693.

DOI:10.1080/08941920.2019.1658141

Available: <https://doi.org.ezproxy.uct.ac.za/10.1080/08941920.2019.1658141>

<https://doi.org.ezproxy.uct.ac.za/10.1080/08941920.2019.1658141>

Council, I.S. 2020. *Advancing the 2030 Agenda in African cities through knowledge co-production: Urban experiments led by early-career African scientists*. Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.24948/2020.01>.

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## UNIVERSITY OF CAPE TOWN

### Publications continued:

Crespo, O.B. 2020. *The impact of climate variability and extremes on agriculture and food security - An analysis of the evidence and case studies*. FAO. DOI:10.4060/cb2415en.

Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.4060/cb2415en>

<http://www.fao.org/documents/card/en/c/cb2415en>.

Culwick, C. & Patel, Z. 2020. Building just and sustainable cities through government housing developments. *Environment and Urbanization*. 32(1):133-154.

DOI:10.1177/0956247820902661 Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1177/0956247820902661>.

Davies, J.E., Spear, D., Ziervogel, G., Hegga, S., Ndapewa Angula Margaret, Kunamwene, I. & Togarepi, C. 2020. Avenues of understanding: mapping the intersecting barriers to adaptation in Namibia. *Climate and Development*. 12(3):268-280.

DOI:10.1080/17565529.2019.1613952

Available: [https://doi-](https://doi.org.ezproxy.uct.ac.za/10.1080/17565529.2019.1613952)

[org.ezproxy.uct.ac.za/10.1080/17565529.2019.1613952](https://doi.org.ezproxy.uct.ac.za/10.1080/17565529.2019.1613952).

Daya, S. 2020. *NOT FOR PUB COUNT: On shaky ground: A response to Long et al. (2019)*.

Available: [https://doi-](https://doi.org.ezproxy.uct.ac.za/10.17159/sajs.2020/7932)

[org.ezproxy.uct.ac.za/10.17159/sajs.2020/7932](https://doi.org.ezproxy.uct.ac.za/10.17159/sajs.2020/7932).

Dosio, A., Turner, A.G., Tamoffo, A.T., Sylla, M.B., Lennard, C., Jones, R.G., Terray, L., Nikulin, G. et al. 2020. A tale of two futures: Contrasting scenarios of future precipitation for West Africa from an ensemble of regional climate models.

*Environmental Research Letters*. 15(6)

DOI:10.1088/1748-9326/ab7fde Available:

[https://doi-](https://doi.org.ezproxy.uct.ac.za/10.1088/1748-9326/ab7fde)

[org.ezproxy.uct.ac.za/10.1088/1748-9326/ab7fde](https://doi.org.ezproxy.uct.ac.za/10.1088/1748-9326/ab7fde).

du Plessis, N., Chase, B.M., Quick, L.J., Haberkzettel, T., Kasper, T. & Meadows, M.E. 2020. Vegetation and climate change during the Medieval Climate Anomaly and the Little Ice Age on the southern Cape coast of South Africa: Pollen evidence from Bo Langvlei. *Holocene*. 30(12):1716-1727.

DOI:10.1177/0959683620950444 Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1177/0959683620950444>.

Duminy, J. & Parnell, S. 2020. City Science: A Chaotic Concept—And an Enduring Imperative. *Planning Theory and Practice*. 21(4):648-655.

DOI:10.1080/14649357.2020.1802155

Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1080/14649357.2020.1802155>.

Eckardt, F.D., Bekiswa, S., Von Holdt, J.R., Jack, C., Kuhn, N.J., Mogane, F., Murray, J.E., Ndara, N. et al. 2020. South Africa's agricultural dust sources and events from MSG SEVIRI. *Aeolian Research*. 47:100637.

DOI:10.1016/j.aeolia.2020.100637

Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1016/j.aeolia.2020.100637>.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Enqvist, J.P., Tengo Maria & Bodin, O. 2020. Are bottom-up approaches good for promoting social–ecological fit in urban landscapes? *Ambio*. 49(1):49-61. DOI:10.1007/s13280-019-01163-4 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1007/s13280-019-01163-4>.

Enqvist, J., Ziervogel, G., Metelerkamp, L., van Breda, J., Dondi, N., Lusithi, T., Mdunyelwa, A., Mgwigwi, Z. et al. 2020. Informality and water justice: community perspectives on water issues in Cape Town's low-income neighbourhoods. *International Journal of Water Resources Development*. DOI:10.1080/07900627.2020.1841605 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1080/07900627.2020.1841605>.

Fu vckar, N.S., Otto, F.E.L., Lehner, F., Pinto, I., Howard, E., Sparrow, S., Li, S. & Wallom, D. 2020. On high precipitation in Mozambique, Zimbabwe, and Zambia in February 2018. *Bulletin of the American Meteorological Society*. 101(1):S47-S52. DOI:10.1175/BAMS-D-19-0162.1 Available: <https://doi.org.ezproxy.uct.ac.za/10.1175/BAMS-D-19-0162.1>.

Gore, M., Abiodun, B.J. & Kucharski, F. 2020. Understanding the influence of ENSO patterns on drought over southern Africa using SPEEDY. *Climate Dynamics*. 54(1-2):307-327. DOI:10.1007/s00382-019-05002-w Available: <https://doi.org.ezproxy.uct.ac.za/10.1007/s00382-019-05002-w>.

Gudoshava, M., Misiani, H.O., Segele, Z.T., Jain, S., Ouma, J.O., Otieno, G., Anyah, R., Indasi, V.S. et al. 2020. Projected effects of 1.5 ° C and 2 ° C global warming levels on the intra-seasonal rainfall characteristics over the Greater Horn of Africa. *Environmental Research Letters*. 15(3) DOI:10.1088/1748-9326/ab6b33 Available: <https://doi.org.ezproxy.uct.ac.za/10.1088/1748-9326/ab6b33>.

Guo, F., Meadows, M.E., Duan, Y. & Gao, C. 2020. Geography pre-service teachers' perspectives on multimedia technology and environmental education. *Sustainability (Switzerland)*. 12(17) DOI:10.3390/SU12176903 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.3390/su12176903>.

Hamann, M., Biggs, R., Pereira, L., Preiser, R., Hichert, T., Blanchard, R., Warrington-Coetzee, H., King, N. et al. 2020. Scenarios of Good Anthropocenes in southern Africa. *Futures*. 118:102526. DOI:10.1016/j.futures.2020.102526 Available: <https://doi.org.ezproxy.uct.ac.za/10.1016/j.futures.2020.102526>.

Hamann, R., Makaula, L., Ziervogel, G., Shearing, C. & Zhang, A. 2020. Strategic Responses to Grand Challenges: Why and How Corporations Build Community Resilience. *Journal of Business Ethics*. 161(4):835-853. DOI:10.1007/s10551-019-04345-y Available: <https://link.springer.com.ezproxy.uct.ac.za/article/10.1007%2Fs10551-019-04345-y>.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Hegga, S., Kunamwene, I. & Ziervogel, G. 2020. Local participation in decentralized water governance: insights from north-central Namibia. *Regional Environmental Change*. 20(3) DOI:10.1007/s10113-020-01674-x Available: <https://doi.org.ezproxy.uct.ac.za/10.1007/s10113-020-01674-x>.

Hoang TV, Chou, TY, Nguyen NT, Fang YM, Nguyen QH, Canh PX, Bao Tuan DN, Nguyen XL and Meadows ME. 2020. Mapping forest fire risk and development of early warning system for NW Vietnam using AHP and MCA/GIS methods. *Applied Sciences* 10, 4348. <https://doi:10.3390/app10124348>

Humphries, F., Gottlieb, H.M., , Laird, S., Wynberg, R., Lawson, C., Rourke, M., Tvedt, M.W., Oliva, M.J., Jaspas, M., 2020. A tiered approach to the marine genetic resource governance framework under the proposed UNCLOS agreement for biodiversity beyond national jurisdiction (BBNJ). *Marine Policy*, <https://doi.org/10.1016/j.marpol.2020.103910>

Iturbide, M., Guti 'errez, Jos 'e Manuel, Alves, L.M., Bedia, J.', Cimadevilla, E., Cofi no, A., Cerezo-Mota, R., Di Luca Alejandro et al. 2020. An update of IPCC climate reference regions for subcontinental analysis of climate model data: Definition and aggregated datasets. *Earth System Science Data Discussions*. :1-16. DOI:10.5194/essd-2019-258 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.5194/essd-2019-258>.

Ives, S., Wynberg, R., and Dutfield, G. 2020. Rooibos settlement omits other marginalized people. *Nature*, 01 Jan 2020, 577(7790):318, DOI: 10.1038/d41586-020-00056-x  
Jack, C.D., Jones, R., Burgin, L. & Daron, J. 2020. Climate risk narratives: An iterative reflective process for co-producing and integrating climate knowledge. *Climate Risk Management*. 29:100239. DOI:10.1016/j.crm.2020.100239 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1016/j.crm.2020.100239>.

Johnston, P., Human, M. & Arowolo, S. 2020. Climate change will impact entire grain value chain - SA Grain. *South Africa Grain Magazine*. 35 Available: <https://sagrainmag.co.za/2020/06/12/climate-change-will-impact-entire-grain-value-chain/>.

Ke, X. & Gatzweiler, F.W. 2020. *Health and Well-Being in the Changing Urban Environment*. Singapore: DOI:10.1007/978-981-15-1380-0\_11. Available: <https://doi.org.ezproxy.uct.ac.za/10.1007/978-981-10-3364-3>.

Keith, M., O'Clery, N., Parnell, S. & Revi, A. 2020. The future of the future city? The new urban sciences and a PEAK Urban interdisciplinary disposition. *Cities*. 105 DOI:10.1016/j.cities.2020.102820 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1016/j.cities.2020.102820>.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Kumi, N., Abiodun, B.J. & Adefisan, E.A. 2020. Performance Evaluation of a Subseasonal to Seasonal Model in Predicting Rainfall Onset Over West Africa. *Earth and Space Science*. 7(8) DOI:10.1029/2019EA000928 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1029/2019ea000928>.

Laird, S., Wynberg, R., Rourke, M., Humphries, F., Muller, M.R., Lawson, C. 2020. Rethink the expansion of access and benefit sharing, March 2020, *Science* 367(6483):1200, DOI: [10.1126/science.aba9609](https://doi.org/10.1126/science.aba9609)

Landman, W.A., Archer, E.R.M. & Tadross, M.A. 2020. Citizen Science for the Prediction of Climate Extremes in South Africa and Namibia. *Frontiers in Climate*. 2(5) DOI:10.3389/fclim.2020.00005 Available: [https://doi-org.ezproxy.uct.ac.za/10.3389/fclim.2020.00005](https://doi.org.ezproxy.uct.ac.za/10.3389/fclim.2020.00005)

Lawal, S., Sitch, S., Lombardozzi, D., Nabel, J., Wey, H., Friedlingstein, P., Tian, H. & Hewitson, B. 2020. Investigating the response of LAI to droughts in southern African vegetation using observations and model-simulations. *Hydrology and Earth System Sciences Discussions*. :1-34. DOI:10.5194/hess-2020-528 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.5194/hess-2020-528>.

Liu, M., Hou, L., Yang, Y., Zhou, L. & Meadows, M.E. 2020. The Case for a Critical Zone Science Approach to Research on Estuarine and Coastal Wetlands in the Anthropocene. *Estuaries and Coasts*. DOI:10.1007/s12237-020-00851-9 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1007/s12237-020-00851-9>.

Lee, A.T.K., Barnard, P., Fraser, M., Lennard, C., Smit, B. & Oschadleus, H.D. 2020. Body mass and condition of a fynbos bird community: investigating impacts of time, weather and raptor abundance from long-term citizen- science datasets. *Ostrich*. 91(2):142-157. DOI:10.2989/00306525.2019.1683093 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.2989/00306525.2019.1683093>.

Long, D. & Ziervogel, G. 2020. Vulnerability and Adaptation to Climate Change in Urban South Africa. In Massey R Gunter A, Ed. 139-153. Available: [https://doi-org.ezproxy.uct.ac.za/10.1007/978-3-030-25369-1\\_9](https://doi-org.ezproxy.uct.ac.za/10.1007/978-3-030-25369-1_9) [http://link.springer.com.ezproxy.uct.ac.za/10.1007/978-3-030-25369-1\\_9](http://link.springer.com.ezproxy.uct.ac.za/10.1007/978-3-030-25369-1_9).

Lukas-Sithole, M. 2020. Greening Nyanga: Developing a Community Park in a Complex Urban Environment in Cape Town, South Africa. *Acta Horticulturae Et Regiotecturae*. 23(2):96-100. DOI:10.2478/ahr-2020-0019.

MacAlister, D., Muasya, A.M., Crespo, O., Ogola, J.B.O., Maseko, S.T., Valentine, A.J., Ottosen, C.O., Rosenqvist, E. et al. 2020a. Effect of temperature on plant growth and stress tolerant traits in rooibos in the Western Cape, South Africa. *Scientia Horticulturae*. 263:109137. DOI:10.1016/j.scienta.2019.109137 Available: <https://www-sciencedirect-com.ezproxy.uct.ac.za/science/article/pii/S0304423819310234> <https://www-sciencedirect-com.ezproxy.uct.ac.za/science/article/abs/pii/S0304423819310234>

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

MacAlister, D., Muasya, A.M., Crespo, O., Ogola, J.B.O., Maseko, S., Valentine, A.J., Ottosen, C.O., Rosenqvist, E. et al. 2020b. Stress tolerant traits and root proliferation of *Aspalathus linearis* (Burm.f.) R. Dahlgren grown under differing moisture regimes and exposed to drought. *South African Journal of Botany*. 131:342-350.

DOI:10.1016/j.sajb.2020.03.003 Available: [https://doi-org.ezproxy.uct.ac.za/10.1016/j.sajb.2020.03.003](https://doi.org.ezproxy.uct.ac.za/10.1016/j.sajb.2020.03.003).

Makonya, G.M., Ogola, J.B.O., Muasya, A.M., Crespo, O., Maseko, S., Valentine, A.J., Ottosen, C.O., Rosenqvist, E. et al. 2020. Intermittent moisture supply induces drought priming responses in some heat-tolerant chickpea genotypes. *Crop Science*. 60(5):2527-2542. DOI:10.1002/csc2.20228 Available: <https://dx-doi-org.ezproxy.uct.ac.za/10.1002/csc2.20228>.

Matikinca, P., Ziervogel, G. & Enqvist, J.P. 2020. Drought response impacts on household water use practices in Cape Town, South Africa. *Water Policy*. 22(3):483-500. DOI:10.2166/wp.2020.169 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.2166/wp.2020.169>.

Mbatha, N. . 2020. Post-mining Transformation Strategies in South Africa and its Impact on Rural-Urban Linkages: The Richards Bay Case Study. In Kapfudzaruwa F Kudo S Matsuyama K Allasiw D I, Ed. Available: <https://spearsmedia.com/shop/rural-urban-linkages-and-sustainable-development-case-studies-from-africa/>.

Mbatha, P. 2020. *Commentary on 'Life Above Water'*—MARE Conference keynote by Svein Jentoft. Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1007/s40152-020-00209-8> .

Meadows ME 2020. Geography education for sustainability. *Geography and Sustainability* 1(1): 88-92. <https://doi.org/10.1016/j.geosus.2020.02.001>

Mkuhlani, S., Crespo, O., Rusere, F., Zhou, L. & Francis, J. 2020. Classification of small-scale farmers for improved rainfall variability management in South Africa. *Agroecology and Sustainable Food Systems*. 44(1):7-29. DOI:10.1080/21683565.2018.1537325 Available: <https://www-tandfonline-com.ezproxy.uct.ac.za/doi/full/10.1080/21683565.2018.1537325>.

Mogende, E. & Ramutsindela, M. 2020. Political leadership and non-state actors in the greening of Botswana. *Review of African Political Economy*. 47(165):399-415. DOI:10.1080/03056244.2020.1826298 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1080/03056244.2020.1826298>.

Muhl, E.K. & Sowman, M. 2020. Rights, Resources, Rezoning and the Challenges of Governance in South Africa's Oldest Marine Protected Area. *Conservation and Society*. 18(4):366-377. DOI:10.4103/cs.cs\_19\_154 Available: [http://dx.doi.org.ezproxy.uct.ac.za/10.4103/cs.cs\\_19\\_154](http://dx.doi.org.ezproxy.uct.ac.za/10.4103/cs.cs_19_154)

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Mupangwa, W., Chipindu, L., Nyagumbo, I., Mkuhlani, S. & Sisito, G. 2020. Evaluating machine learning algorithms for predicting maize yield under conservation agriculture in Eastern and Southern Africa. *SN Applied Sciences*. 2(5) DOI:10.1007/s42452-020-2711-6 Available: <https://doi.org.ezproxy.uct.ac.za/10.1007/s42452-020-2711-6>.

Naik, M. & Abiodun, B.J. 2020. Projected changes in drought characteristics over the Western Cape, South Africa. *Meteorological Applications*. 27(1) DOI:10.1002/met.1802 Available: <https://doi.org.ezproxy.uct.ac.za/10.1002/met.1802>.

Nthane, T.T., Saunders, F., Fern 'andez, Gloria L. Gallardo & Raemaekers, S. 2020. Toward sustainability of South African small-scale fisheries leveraging ICT transformation pathways. *Sustainability (Switzerland)*. 12(2) DOI:10.3390/su12020743 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.3390/su12020743>.

Odoulami, R.C., New, M., Wolski, P., Guillemet, G., Pinto, I., Lennard, C., Muri, H. & Tilmes, S. 2020. Stratospheric Aerosol Geoengineering could lower future risk of 'Day Zero' level droughts in Cape Town. *Environmental Research Letters*. 15(12) DOI:10.1088/1748-9326/abbf13 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1088/1748-9326/abbf13>.

Ofoegbu, C., New, M., Nyamwanza, A.M. & Spear, D. 2020. Understanding the current state of collaboration in the production and dissemination of adaptation knowledge in Namibia. *Environment, Development and Sustainability*. 22(2):1017-1037. DOI:10.1007/s10668-018-0231-y Available: <https://doi.org.ezproxy.uct.ac.za/10.1007/s10668-018-0231-y>.

Oguntunde, P.G., Abiodun, B.J., Lischeid, G. & Abatan, A.A. 2020. Droughts projection over the Niger and Volta River basins of West Africa at specific global warming levels. *International Journal of Climatology*. 40(13):5688-5699. DOI:10.1002/joc.6544 Available: <https://doi.org.ezproxy.uct.ac.za/10.1002/joc.6544> <https://onlinelibrary-wiley-com.ezproxy.uct.ac.za/doi/10.1002/joc.6544>.

Oldfield, S., Anand, G., Viviers, A. (eds.) 2020. Present and Visible: Napier Settlement and Its Stories. Cape Town: African Centre for Cities, pp. 1-186. Available: <http://africancentreforcities.net>

Otto, F.E.L., Harrington, L., Schmitt, K., Philip, S., Kew, S., van Oldenborgh, G.J., Singh, R., Kimutai, J. et al. 2020. Challenges to understanding extreme weather changes in lower income countries. *Bulletin of the American Meteorological Society*. 101(10):E1851-E1860. DOI:10.1175/BAMS-D-19-0317.1 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1175/bams-d-19-0317.1>.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Ouweneel, B., Winter, K. & Carden, K. 2020. How different Cape Town residential suburbs helped avert Day Zero. *H2Open Journal*. 3(1):118-134.

DOI:10.2166/h2oj.2020.018 Available:

<https://doi.org.ezproxy.uct.ac.za/10.2166/h2oj.2020.018>.

Parnell, S. 2020. The enabling conditions of post-pandemic city government.

*Environment and Planning B: Urban Analytics and City Science*. 47(7):1143-1145. DOI:10.1177/2399808320950041

Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1177/2399808320950041>.

Pasquini, L. 2020. The urban governance of climate change adaptation in least-

developed African countries and in small cities: the engagement of local decision-makers in Dar es Salaam, Tanzania, and Karonga, Malawi. *Climate and Development*. 12(5):408-419.

DOI:10.1080/17565529.2019.1632166

Available: [https://doi-](https://doi.org.ezproxy.uct.ac.za/10.1080/17565529.2019.1632166)

[org.ezproxy.uct.ac.za/10.1080/17565529.2019.1632166](https://doi.org.ezproxy.uct.ac.za/10.1080/17565529.2019.1632166).

Pasquini, L., van Aardenne, L., Godsmark, C.N., Lee, J. & Jack, C. 2020. Emerging climate change-related public health challenges in Africa: A case study of the heat-health vulnerability of informal settlement residents in Dar es Salaam, Tanzania. *Science of the Total Environment*. 747 DOI:10.1016/j.scitotenv.2020.141355

Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1016/j.scitotenv.2020.141355>.

Patel, Z., Marrengane, N., Smit, W. & Anderson, P.M.L. 2020. Knowledge Co-production in Sub-Saharan African Cities: Building Capacity for the Urban Age. In Gasparatos A Naidoo M Ahmed A Karanja A Fukushi K Saito O Takeuchi K, Ed. 189-214. Available:

[http://dx.doi.org.ezproxy.uct.ac.za/10.1007/978-981-15-5358-5\\_8](http://dx.doi.org.ezproxy.uct.ac.za/10.1007/978-981-15-5358-5_8)

[http://link.springer.com.ezproxy.uct.ac.za/10.1007/978-981-15-5358-5\\_8](http://link.springer.com.ezproxy.uct.ac.za/10.1007/978-981-15-5358-5_8).

Pinto, I., Jack, C., Lennard, C., Tilmes, S. & Odoulami, R.C. 2020. Africa's Climate Response to Solar Radiation Management With Stratospheric Aerosol. *Geophysical Research Letters*. 47(2)

DOI:10.1029/2019GL086047 Available:

[https://doi-](https://doi.org.ezproxy.uct.ac.za/10.1029/2019GL086047)

[org.ezproxy.uct.ac.za/10.1029/2019GL086047](https://doi.org.ezproxy.uct.ac.za/10.1029/2019GL086047).

Potter, E., Miller, F., Lovbrand, E., Houston, D., McLean, J., O'Gorman, E., Evers, C. & Ziervogel, G. 2020. A manifesto for shadow places: Re-imagining and co-producing connections for justice in an era of climate change. *Environment and Planning E: Nature and Space*. :251484862097702.

DOI:10.1177/2514848620977022 Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1177/2514848620977022>.

Quagraine, K.A., Hewitson, B., Jack, C., Wolski, P., Pinto, I. & Lennard, C. 2020.

Using Co-behavior analysis to interrogate the performance of CMIP5 GCMs over Southern Africa. *Journal of Climate*.

33(7):2891-2905. DOI:10.1175/JCLI-D-19-

0472.1 Available: [https://doi-](https://doi.org.ezproxy.uct.ac.za/10.1175/JCLI-D-19-0472.1)

[org.ezproxy.uct.ac.za/10.1175/JCLI-D-19-](https://doi.org.ezproxy.uct.ac.za/10.1175/JCLI-D-19-0472.1)

[0472.1](https://doi.org.ezproxy.uct.ac.za/10.1175/JCLI-D-19-0472.1).

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Quagraine, K.A., Nkrumah, F., Klein, C., Klutse, N.A.B. & Quagraine, K.T. 2020. West African summer monsoon precipitation variability as represented by reanalysis datasets. *Climate*. 8(10):1-18. DOI:10.3390/cli8100111 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.3390/cli8100111>.

Rahaman, S., Kumar, P., Chen, R., Meadows, M.E. & Singh, R.B. 2020. Remote Sensing Assessment of the Impact of Land Use and Land Cover Change on the Environment of Bardhaman District, West Bengal, India. *Frontiers in Environmental Science*. 8 DOI:10.3389/fenvs.2020.00127 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.3389/fenvs.2020.00127>

Ramsawmy, S., Rink, B. & Anderson, P. 2020. Rural and gated: narratives of lifestyle migration to Grotto Bay private residential Estate, South Africa. *South African Geographical Journal*. 102(1):77-96. DOI:10.1080/03736245.2019.1631209 Available: <https://doi.org.ezproxy.uct.ac.za/10.1080/03736245.2019.1631209>.

Ramutsindela, M.F. 2020. *not for pub count: The COVID-19 pandemic: territorial, political and governance dimensions of the crisis*. Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1080/21622671.2020.1771022> .

Ramutsindela, M. & Chauke, P.A. 2020. Biodiversity, Wildlife and the Land Question in Africa. In Ramutsindela M Mickler D, Ed. Cham:197-205. Available: [https://doi.org.ezproxy.uct.ac.za/10.1007/978-3-030-14857-7\\_19](https://doi.org.ezproxy.uct.ac.za/10.1007/978-3-030-14857-7_19).

Ramutsindela, M., Guyot, S., Boillat, S.', Giraut, F.' & Bottazzi, P. 2020. The Geopolitics of Protected Areas. *Geopolitics*. 25(1):240-266. DOI:10.1080/14650045.2019.1690413 Available: <https://doi.org.ezproxy.uct.ac.za/10.1080/14650045.2019.1690413>.

Ramutsindela, M. & Mickler, D. 2020. Global Goals and African Development. In Ramutsindela M Mickler D, Ed. 1-9. Available: [https://doi.org.ezproxy.uct.ac.za/10.1007/978-3-030-14857-7\\_1](https://doi.org.ezproxy.uct.ac.za/10.1007/978-3-030-14857-7_1).

Rice, W.S., Sowman, M.R. & Bavinck, M. 2020. Using Theory of Change to improve post-2020 conservation: A proposed framework and recommendations for use. *Conservation Science and Practice*. 2(12) DOI:10.1111/csp.2.301 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1111/csp.2.301>.

Rudolph, T.B., Ruckelshaus, M., Swilling, M., Allison, E.H., Osterblom, H., Gelcich, S. & Mbatha, P. 2020. A transition to sustainable ocean governance. *Nature Communications*. 11(1) DOI:10.1038/s41467-020-17410-2 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1038/s41467-020-17410-2>.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Sawadogo, W., Reboita, M.S.o., Faye, A., da Rocha, Rosmeri Porf'irio, Odoulami, R.C., Olusegun, C.F., Adeniyi, M.O., Abiodun, B.J. et al. 2020. Current and future potential of solar and wind energy over Africa using the RegCM4 CORDEX-CORE ensemble. *Climate Dynamics*. DOI:10.1007/s00382-020-05377-1 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1007/s00382-020-05377-1>.

Scheba, S. 2020a. Day Zero and The Infrastructures of Climate Change: Water Governance, Inequality, and Infrastructural Politics in Cape Town's Water Crisis. *International Journal of Urban and Regional Research*. 45 DOI:10.1111/1468-2427.12899 Available: <https://doi.org.ezproxy.uct.ac.za/10.1111/1468-2427.12899>.

Scheba, S. 2020b. *Lived Realities of Urban Peripheries: Building Infrastructures of Change*. Available: <http://repository.hsrc.ac.za/bitstream/handle/20.500.11910/15398/11512.pdf?sequence=1&isAllowed=y>.

•Sekonya, J.G., McClure, N.J. & Wynberg, R.P. 2020. New pressures, old foodways: Governance and access to edible mopane caterpillars, imbrasia (=gonimbrasia) Belina, in the context of commercialization and environmental change in South Africa. *International Journal of the Commons*. 14(1):139-153. DOI:10.5334/ijc.978 Available: <https://www.thecommonsjournal.org/articles/10.5334/ijc.978/> <http://doi.org.ezproxy.uct.ac.za/10.5334/ijc.978>.

Seymour, C.L., Gillson, L., Child, M.F., Tolley, K.A., Curie, J.C., da Silva, J.M., Alexander, G.J., Anderson, P. et al. 2020. Horizon scanning for South African biodiversity: A need for social engagement as well as science. *Ambio*. 49(6):1211-1221. DOI:10.1007/s13280-019-01252-4. Simmonds, M.S.J., Fang, R., Wyatt, L., Bell, E., Allkin, B., Forest, F., Wynberg, R., Silva, M. et al. 2020. Biodiversity and patents: Overview of plants and fungi covered by patents. *Plants, People, Planet*. 2(5):546-556. DOI:10.1002/ppp3.10144 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1002/ppp3.10144>.

Sowman, M. 2020. Participatory and rapid vulnerability assessments to support adaptation planning in small-scale fishing communities of the Benguela Current Large Marine Ecosystem. *Environmental Development*. 36 DOI:10.1016/j.envdev.2020.100578 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1016/j.envdev.2020.100578>.

Spinoni, J., Barbosa, P., Buchignani, E., Cassano, J., Cavazos, T., Christensen, J.H., Christensen, O.B., Coppola, E. et al. 2020. Future global meteorological drought hot spots: A study based on CORDEX data. *Journal of Climate*. 33(9):3635-3661. DOI:10.1175/JCLI-D-19-0084.1 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1175/jcli-d-19-0084.1>.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Steynor, A., Lee, J. & Davison, A. 2020. Transdisciplinary co-production of climate services: a focus on process. *Social Dynamics*. 46(3):414-433.

DOI:10.1080/02533952.2020.1853961

Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1080/02533952.2020.1853961>.

Steynor, A., Leighton, M., Kavonic, J., Abrahams, W., Magole, L., Kaunda, S. & Mubaya, C.P. 2020. Learning from climate change perceptions in southern African cities. *Climate Risk Management*. 27(100202):100202.

DOI:10.1016/j.crm.2019.100202 Available:

<https://doi.org.ezproxy.uct.ac.za/10.1016/j.crm.2019.100202>.

Steynor, A. & Pasquini, L. 2020. *WISER TRANSFORM WORKING PAPER Using environmental psychology to increase the use of climate information*. Available:

[https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/business/international/wiser/wiser0243\\_environmental\\_psychology\\_working\\_paper.pdf](https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/business/international/wiser/wiser0243_environmental_psychology_working_paper.pdf)

Steynor, A. & Waagsaether, K.L. 2020a. Addressing power imbalances in co-production. *Nature Climate Change*. 10

DOI:10.1038/s41558-020-00910-w Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1038/s41558-020-00910-w>.

Steynor, A. & Waagsaether, K.L. 2020b. *Building blocks for co-producing climate services for better policy outcomes in Africa*. Available:

<https://www.africaportal.org/publications/building-blocks-co-producing-climate-services/>

Swart, I., Hankela, E. & Nyamnjoh, H. 2020. Language Practices as Religious Innovation: The Case of Pentecostal Charismatic Churches in Xenophobic Contexts.

*International Bulletin of Mission Research*.

DOI:10.1177/2396939320951560 Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1177/2396939320951560>.

T`abara, J.D., Takama, T., Mishra, M., Hermanus, L., Andrew, S.K., Diaz, P., Ziervogel, G. & Lemkow, L. 2020. Micro-solutions to global problems: understanding social processes to eradicate energy poverty and build climate-resilient livelihoods.

*Climatic Change*. 160(4):711-725.

DOI:10.1007/s10584-019-02448-z

Available:

<http://dx.doi.org.ezproxy.uct.ac.za/10.1007/s10584-019-02448-z>.

Taguela, T.N., Vondou, D.A., Moufouma-Okia, W., Fotso-Nguemo, T.C., Pokam, W.M., Tanessong, R.'S., Yepdo, Z.'D., Haensler, A. et al. 2020. CORDEX Multi-RCM Hindcast Over Central Africa: Evaluation Within Observational

Uncertainty. *Journal of Geophysical Research: Atmospheres*. 125(5)

DOI:10.1029/2019JD031607 Available:

<https://www.scopus-com.ezproxy.uct.ac.za/inward/record.uri?partnerID=HzOxMe3b&scp=85081233377&origin=inward>.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Van Hoang Thanh, Chou, T.Y., Fang, Y.M., Nguyen, N.T., Nguyen, Q.H., Canh, P.X., Toan, D.N.B., Nguyen, X.L. et al. 2020. Mapping forest fire risk and development of early warning system for NW vietnam using AHP and MCA/GIS methods. *Applied Sciences (Switzerland)*. 10(12)  
DOI:10.3390/app10124348 Available:  
<http://dx.doi.org.ezproxy.uct.ac.za/10.3390/app10124348>.

Vickery, K. & Eckardt, F. 2020. A closer look at mineral aerosol emissions from the Makgadikgadi Pans, Botswana, using automated SEM-EDS (QEMSCAN\textregistered). *South African Geographical Journal*.  
DOI:10.1080/03736245.2020.1824805  
Available:  
<http://dx.doi.org.ezproxy.uct.ac.za/10.1080/03736245.2020.1824805>.

Vimont, U., Gain, J., Lastic, M., Cordonnier, G., Abiodun, B. & Cani, M.P. 2020. Interactive Meso-scale Simulation of Skyscapes. *Computer Graphics Forum*. 39(2):585-596.  
DOI:10.1111/cgf.13954 Available:  
<http://dx.doi.org.ezproxy.uct.ac.za/10.1111/cgf.13954> <https://onlinelibrary-wiley-com.ezproxy.uct.ac.za/doi/abs/10.1111/cgf.13954>

Vos, H.C., Fister, W., Eckardt, F.D., Palmer, A.R. & Kuhn, N.J. 2020. Physical crust formation on sandy soils and their potential to reduce dust emissions from croplands. *Land*. 9(12):1-20. DOI:10.3390/land9120503  
Available:  
<http://dx.doi.org.ezproxy.uct.ac.za/10.3390/land9120503>.

Wabyanga, R.K., Nyamnjoh, H. & Ugba, A. 2020. Innovation or Competition? A Critical Analysis of Contemporary Divine Healing Practices of Pentecostal Africans in Africa and the Diaspora. *International Bulletin of Mission Research*.  
DOI:10.1177/2396939320961102 Available:  
<http://dx.doi.org.ezproxy.uct.ac.za/10.1177/2396939320961102>.

Wang, M., Li, J., Kuang, S., He, Y., Chen, G., Huang, Y., Song, C., Anderson, P. et al. 2020. Plant diversity along the urban-rural gradient and its relationship with urbanization degree in Shanghai, China. *Forests*. 11(2) DOI:10.3390/f11020171  
Available: <https://doi-org.ezproxy.uct.ac.za/10.3390/f11020171>.

Weeber, J., Hempson, G.P. & February, E.C. 2020. Large herbivore conservation in a changing world: Surface water provision and adaptability allow wildebeest to persist after collapse of long-range movements. *Global Change Biology*. 26(5):2841-2853.  
DOI:10.1111/gcb.15044 Available:  
<http://dx.doi.org.ezproxy.uct.ac.za/10.1111/gcb.15044>.

Wei F, Wang S, Brandt M, Fu B, Meadows ME, Wang L, Wang L, Tong X and Fensholt R 2020. Responses and feedbacks of African dryland ecosystems to environmental changes. *Current Opinion in Environmental Sustainability* 48: 29-35.  
<https://doi.org/10.1016/j.cosust.2020.09.004>

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Whittingham, J. and Wynberg, R. 2020. Is the Feminist Ethics of Care framework a useful lens for GM crop risk appraisal in the global south? *Technology in Society* (64), 101455 DOI: [10.1016/j.techsoc.2020.101455](https://doi.org/10.1016/j.techsoc.2020.101455)

Williams, P.A., Crespo, O. & Abu, M. 2020. Assessing vulnerability of horticultural smallholders' to climate variability in Ghana: applying the livelihood vulnerability approach. *Environment, Development and Sustainability*. 22(3):2321-2342. DOI:10.1007/s10668-018-0292-y Available: [https://doi-org.ezproxy.uct.ac.za/10.1007/s10668-018-0292-y](https://doi.org.ezproxy.uct.ac.za/10.1007/s10668-018-0292-y).

Williams, P.A., Ng'ang'a, S.K., Crespo, O. & Abu, M. 2020. Cost and benefit analysis of adopting climate adaptation practices among smallholders: The case of five selected practices in Ghana. *Climate Services*. 20 DOI:10.1016/j.cliser.2020.100198 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1016/j.cliser.2020.100198>.

Williams, T. 2020. A coupled wave, tide and storm surge operational forecasting system for South Africa: validation and physical description. *Natural Hazards*. 103 DOI:10.1007/s11069-020-04042-4 Available: <https://doi-org.ezproxy.uct.ac.za/10.1007/s11069-020-04042-4>.

Windmanagda, S. & Abiodun, B.J. 2020. Impacts of global warming on photovoltaic power generation over West Africa. *Renewable Energy*. 151 DOI:10.1016/j.renene.2019.11.032 Available: <https://doi-org.ezproxy.uct.ac.za/10.1016/j.renene.2019.11.032>.

Wolski, P. 2020. Predicting drought. *Quest: Science for South Africa*. 16(2) Available: <http://hdl.handle.net/20.500.11911/150>.

Wolski, P., Conradie, W., Jack, C. & Tadross, M.A. 2020. Spatio-temporal patterns of rainfall trends and the 2015–2017 drought over the winter rainfall region of South Africa. *International Journal of Climatology*. DOI:10.1002/joc.6768 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1002/joc.6768>.

Wolski, P., Lobell, D., Stone, D., Pinto, I., Crespo, O. & Johnston, P. 2020. On the role of anthropogenic climate change in the emerging food crisis in southern Africa in the 2019–2020 growing season. *Global Change Biology*. 26(5):2729-2730. DOI:10.1111/gcb.15047 Available: <https://onlinelibrary-wiley-com.ezproxy.uct.ac.za/doi/abs/10.1111/gcb.15047>.

Xiang, X. & Meadows, M.E. 2020. Preparing adolescents for the uncertain future: Concepts, tools and strategies for teaching anthropogenic environmental change. *Sustainability (Switzerland)*. 12(17) DOI:10.3390/SU12176832 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.3390/su12176832>.

# SSAG NEWS 2020/21

SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### Publications continued:

Yang, X., Yang, X., Yang, X., Chen, R., Chen, R., Chen, R., Meadows, M.E., Meadows, M.E. et al. 2020. Modelling water yield with the InVEST model in a data scarce region of northwest China. *Water Science and Technology: Water Supply*. 20(3):1035-1045. DOI:10.2166/ws.2020.026 Available: <https://doi.org.ezproxy.uct.ac.za/10.2166/ws.2020.026>.

Zhao, L., Lu, H., Wang, H., Meadows, M., Ma, C., Tang, L., Lei, F. & Zhang, H. 2020. Vegetation dynamics in response to evolution of the Asian Monsoon in a warm world: Pollen evidence from the Weihe Basin, central China. *Global and Planetary Change*. 193 DOI:10.1016/j.gloplacha.2020.103269 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1016/j.gloplacha.2020.103269>.

Zhao, W., Zhang, J., Meadows, M.E., Liu, Y., Hua, T. & Fu, B. 2020. A systematic approach is needed to contain COVID-19 globally. *Science Bulletin*. 65(11):876-878. DOI:10.1016/j.scib.2020.03.024 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1016/j.scib.2020.03.024>.

Ziervogel, G. 2020. Climate urbanism through the lens of informal settlements. *Urban Geography*. DOI:10.1080/02723638.2020.1850629 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1080/02723638.2020.1850629>.

Zvobgo, L. 2020. Performance evaluation of water supply services in Chitungwiza: How water supply services mirrors poor governance and lack of management. *Journal of Local Government Research and Innovation*. 1(0) DOI:10.4102/jolgri.v1i0.17 Available: <https://jolgri.org/index.php/jolgri/article/view/17>.

Zvobgo, L. & Do, P. 2020. COVID-19 and the call for 'Safe Hands': Challenges facing the under-resourced municipalities that lack potable water access - A case study of Chitungwiza municipality, Zimbabwe. *Water Research X*. 9 DOI:10.1016/j.wroa.2020.100074 Available: <http://dx.doi.org.ezproxy.uct.ac.za/10.1016/j.wroa.2020.100074>

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SOCIETY OF SOUTH AFRICAN GEOGRAPHERS

## UNIVERSITY OF CAPE TOWN

### MSc and PhD graduations and supervisors :

#### MSc:

Anand Geetika; Supervisor - Oldfield,Sophie Elaine

Aziz Fahad; Supervisor- Winter,Kevin

Brain Ruth; Supervisor- Haysom,Gareth Duff

Brom Peta; Supervisor -Anderson, Pippin

Christopher James; Supervisor- Norton,Marieke

Dlamini Majaha; Supervisor - Oldfield,Sophie Elaine

Dlamini Luleka; Supervisor- Crespo, Olivier

Dorbor Sylvia; Supervisor - New,Mark George

EzekannaghaEzinwanne; Supervisor Crespo, Olivier

Fikileni Sesethu; Supervisor Wolski,Piotr

Ghedi Alasow Khadra; Supervisor- Ramutsindela,Maano Freddy

Hassan Abdullahi Ali; Supervisor Oldfield,Sophie Elaine

Hill Erin; Supervisor Scott,Diane Lesley

Karlie Makeya; Supervisor Wolski,Piotr

Kganyago Mpho Clementine; Supervisor Wynberg,Rachel Paula

Lethugile Goabamang; Supervisor Skinner,Caroline Jane

Maarstoel Marte; Supervisor Shackleton,Sheona

Macdonald Margaret; Supervisor Raemaekers,Serge

Moshani Aphiwe; Supervisor Mbatha,Philile

Ngben Joseph; Supervisor Oldfield,Sophie Elaine

Pelaez Avila Julia; Supervisor Scott,Diane Lesley

Rabenold Colton; Supervisor Sowman,Merle Rozanne

Ramugondo Ntanganedzeni; Supervisor Crespo, Olivier

Roy Sayak; Supervisor -Oldfield,Sophie Elaine

Samuels Mogammad; Supervisor - Sowman,Merle Rozanne

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## UNIVERSITY OF CAPE TOWN

***M** Sc and PhD graduations and supervisors continued:*

Simon Gutierrez Ana Ali; Supervisor - Rennkamp, Britta

Warries Rosca; Supervisor- Sitas, Friderike

Webster Kelly

*PhD:*

Abba Omar Sabina Supervisor  
Abiodun, Babatunde Joseph

Cowan Oliver; Supervisor-Anderson, Pippin

Egbebiyi Temitope; Supervisor -Crespo, Olivier

Lavelle Jessica-Jane; Supervisor - Wynberg, Rachel Paula

Lukas Megan; Supervisor -Daya, Shari Lynne

Mogende Emmanuel; Supervisor - Ramutsindela, Maano Freddy

Nguvava Mariam; Supervisor - Abiodun, Babatunde Joseph

Williams Portia; Supervisor- Crespo, Olivier

***2** 020 student numbers:*

*First year* 301

*Second year* 210

*Third year* 219

*Honours* 16

*Masters Diss* 46

*Masters CW* 95

*PHD* 65

*Post doc* 15

***Link to departmental web page:***

<http://www.egs.uct.ac.za/>