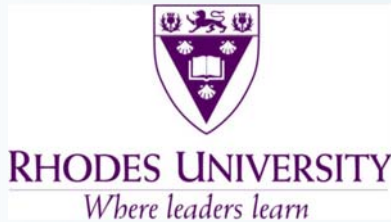


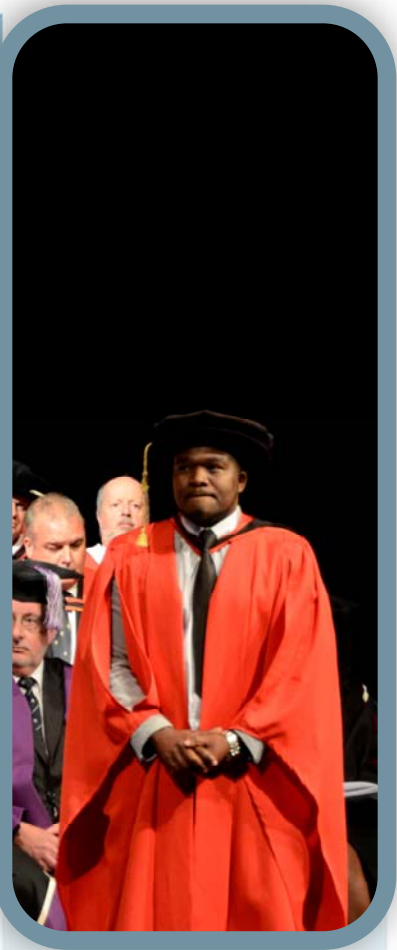
The Spekboom



Distinguished Teaching Award: Dr Gladman Thondhlana

The Rhodes University Distinguished Teaching Award is presented annually to a new staff member with ten or fewer years' experience of teaching in higher education who is able to demonstrate exceptional contribution to teaching in his/her discipline. The process involved in receiving this award is quite rigorous and includes: a) nomination from a student(s), b) provision of a teaching portfolio where one demonstrates engagement with the scholarship of teaching and learning and evidence of opportunities for students to learn how knowledge is constructed, c) lecture evaluation by a committee of past recipients of the award and d) an interview.

This year, our very own Gladman Thondhlana was the recipient of this prestigious award. Born and raised in Zimbabwe, Gladman arrived in Grahamstown in 2009 as a PHD student in the DES. Since then he has completed a post-doctoral fellowship with Prof Sheona Shackleton, lectured under the Kresge Accelerated Development Programme, and become a Senior Lecturer in the DES. While Gladman recognises the importance of research in his role as an academic, he describes how he derives the greatest satisfaction from teaching as he views it as a direct channel to make the greatest impact. In this sense, Gladman describes this award as "fulfilling" as it provides affirmation from students and colleagues that he has contributed to the lives of others. While this award affirms his teaching methods, Gladman emphasises that he will continue to value the opinions of his students and peers, and incorporate their feedback into his teaching approaches and methods.



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Environmental Days

- 01 Sept: National Arbor Day
- 16 Sept: World Ozone Day
- 19 Sept: International Coastal Clean-up Day
- 22 Sept: World Rhino Day
- 21 November World Fisheries Day

DES researchers at the Resilience for Development colloquium



In a world with complex problems, researchers and practitioners are increasingly recognising the need to integrate resilience as a core strategy to achieve sustainable development across multiple sectors, scales and regions. This is particularly pertinent in Africa, where achieving sustainable development comes with a particular set of challenges that requires creativity and collaboration in the way we understand and manage social-ecological systems.

Highlighting and discussing some of these approaches was the focus of the “[Resilience for Development](#)” colloquium, co-hosted by the [SAPECS](#) (Southern African Programme for Ecosystem Change and Society) and [GRAID](#) (Guidance for Resilience in the Anthropocene: Investments for Development) programmes, and held between the 8th and 10th of May 2017, in Johannesburg.

The meeting featured exciting dialogues and mini-workshops, showcased cutting-edge research, and featured exciting and provocative keynote speakers and panels, such as transformation guru Michelle-Lee Moore, Professor Lorenzo Fioramonti of “[wellbeing economy](#)” fame, Busiso

Moyo (Sonke Gender Justice), and Nathaniel Matthews, of the Global Resilience Partnership.

Rhodes’ DES made a really strong showing at the meeting, too. Jessica Cockburn, Joana Bezera and Sheona Shackleton led an innovative panel on knowledge co-production, with Jess, in a different presentation, also sharing more on how to mobilise local knowledge in multifunctional landscapes. Shannon Herd-Hoare wowed the audience with her talk on ecosystem disservices, in the same session that Alta De Vos presented insights on ecosystem services and protected areas.

Whilst all staff and students undoubtedly found the meeting value, it was a particularly novel and inspiring experience for our two youngest researchers at the colloquium. Honours students Sinethemba Xoxo and Shannon Hardisty not only gave a speed presentation and poster, respectively, but also had the opportunity to meet their co-supervisors, based at Stellenbosch and Stockholm Universities, in person. Aside from the diverse attendees (architects and artists were as welcome as your run-of-the-mill-academic) and the mingling of young researchers with the sustainability world’s brightest minds, perhaps the most encouraging aspect of ResDev2017 was the rise of young African voices in addressing the continent’s biggest developmental challenges. Given our geographical location and the challenges of our region, it is particularly uplifting to see DES’ young researchers raising their hands as the thought-leaders of the future in a very discernible way.

New Post-doc Penny Mograbi

Penny joined the Department as a post-doctoral Research Fellow under Prof. Charlie Shackleton’s SARCHI Chair in January 2017. Her research interests lie in human-environment interactions and she has a penchant for exploring these themes through spatial ecological methods.

As a result of her unreasonable persistence, she completed her PhD (WITS) under the collective supervision of Profs. Ed Witkowski (School of Animal, Plant & Environmental Sciences, WITS), Barend Erasmus (Global Change Institute, WITS), and Greg Asner (Department of Global Ecology, Carnegie Institution for Science, Stanford University). For her thesis, she assessed the spatiotemporal dynamics of woody vegetation biomass and 3D structure in the former Apartheid homelands in the Lowveld areas of South Africa, using airborne laser scanning technology. She was incredibly privileged to not only have the benefit of fantastic in-house supervisors, but also the mentorship of Profs. Konrad Wessels and Renaud Mathieu (Council for Scientific and Industrial Research), and repeat visits to the Carnegie Airborne Observatory and the Asner lab.

When she’s not stumbling down research rabbit-holes, Penny enjoys scuba diving, playing cello, reading fantasy and sci-fi novels, and cooking. She also enjoys B-grade horrors with two-headed sharks or zombies. She runs because she has to (see aforementioned cooking). Her claim to fame is that she was born in Pofadder. However, Pofadder was too small, Jo’burg was too big, so she moved to Grahamstown with her husband, Jon (an environment, social, and governance consultant), and their three dogs.



Honours fieldtrip Queenstown by Shamiso Mazango

The small-talk and cackle of laughter did nothing to ease the anticipation that had clasped its claws around each student as the journey seemed to not end. Sweating profusely, we had endured four hours in a *kombi* on one of the hottest days in the Eastern Cape. We were relieved to finally make a turn off the highway into a little dusty road leading us to our cosy cottages (and for others a humongous tent) that we would occupy for the next four days. Having spent the first day of the fieldtrip travelling and familiarizing with the new place, Day 2 kicked off with an early breakfast followed by discussions around Participatory Learning Activities (PLA). These as we learnt, refer to various ways in which to involve the community in gathering data and information. Although tiring, who would have guessed that involving the community in gathering information could be a real challenge. For example, a common method used in PLA is the pairwise ranking matrix where the community's needs are listed and people are asked to rank these in order to highlight which is the most important. Imagine a community with multiple stakeholders, would the needs that are most pressing to a farmer be the same as those of a business-owner? No, and wouldn't conflict arise thereof? It dawned on us then that as researchers at times we would be faced by challenging scenarios and we had to consider ways to navigate around those.

The following day we were taught about the Disc Pasture Method which is used to measure the above ground herbaceous matter, in simple language "grass". Thereafter, we were introduced to the Land Functional Analysis which includes laying out a transect and examining features of the landscape such as soil surface, erosion, litter and vegetation cover to determine the overall functionality. Day 4 included the long awaited visit to Macubeni. We started by viewing one of the bio-digesters which was previously introduced into the community in order to encourage sustainable land management practices. This project focused on improving energy access by providing alternative sources of energy such as bio-gas. It was fascinating to see how a bio-digester looked like and worked but most of all how cow dung if put to the right use could generate power. We were shown how the gas stove powered by this energy was operated and were pleased to learn that the household using it were able to cut down their electricity costs by R60 monthly. Thereafter, we visited a local woman who shared her story of how she strived to start her current B&B business and had eventually managed to succeed. It was humbling to hear and see how hard work and determination could yield great results. We left feeling inspired and ready to seize the year. That night we experienced one of the ravaging storms ever as thunder bolted ceaselessly whilst heavy rain poured noisily on the roof. Our colleagues who had occupied the "humongous tent" fell victim of this terrible storm as their tent was soaked wet.

Our final day involved NO fieldwork instead it was marked by a refreshing mountain hike where all 24 bodies climbed the mountain in a single file. We had time to reflect on all we had learnt throughout the week, make jokes, share some stories and take some group pictures. The long week had come to an end and nostalgia was slowly kicking in as we realised that we had finally reached the end of the trip and would soon be back in Grahamstown. We thought to ourselves how many students would be as lucky as us; how many would get to sip on cold drinks whilst enjoying a casual talk with their lecturers; how many would have never-ending debates with their classmates under the stars in a quiet and tranquil place; how many would share the disappointment of going for a swim in a local dam only to find that it was shallow and muddy. In fact, not many and we were grateful to have done it all and mostly to be the DES Honours class 2017!!!



Relaxing by the dam at Suntsani Lodge, Queenstown



Participatory Learning Activities session



Biogas digester in Macubeni



"I wanted to say Thank You for inviting me to be part of the climate change think tank take took place this week. It was wonderful being part of such a positive group of people who are doing amazing work. There is so much that we can learn from each other. I will definitely be taking the learning further with the people that I met whose work links with what we are doing in the uMngeni Resilience Project. Congratulations on organising a wonderful event."

Comment from Lungi Ndlovu, Project Manager of the uMngeni Resilience Project, Pietermaritzburg



Adaptation Think Tank 30-31 May

The Department of Environmental Science recently co-hosted the Adaptation Network think tank on better integrating Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA). This multi-stakeholder 'think tank', included a diverse set of participants, including representative from the National and Provincial Department of Environmental Affairs, the National Disaster Management Centre, GIZ, Amathole District Municipality (DM), Chris Hani DM, Buffalo City, Stenden College, Wits, UCT, Rhodes University, the uMngeni Resilience Project, SANBI, NGO's, community members, students and the private sector.

We had inputs from those different perspectives, with a variety of 'styles' or methods of input: workshops, panel discussions, presentations, with an emphasis on discussion and dialogue. Every effort was made to encourage cross-pollination of ideas and perspectives. People really appreciated the opportunity to hear things from different perspectives, and people felt encouraged to take what they learnt, and the new networks that were forged, back into their work, into developing new partnerships.

The theme/ objective was to look at the need to bring together the thinking and practices behind DRR and CCA, to help build resilience rather than just responding after disaster strikes. We discussed many current and recent cases studies of DRR in action (particularly the drought) ... and then, mere days after the think tank, the massive Cape Town storm and Knysna fires were a stark reminder of the critical need for adequate pre-emptive DRR / disaster management.

Difficult questions/ important areas for further thinking are: how do we better learn from the past?; the issue of inequality and how it leads to and exacerbates disasters; how to get political buy-in for doing better 'adaptation' and preparing for environmental disasters ahead of time (as opposed to waiting for disaster to strike and then applying for disaster relief money).

We greatly appreciate the support from GIZ/DEA and the Adaptation Network in making this such a successful event.

Excerpt from the Think Tank's flyer:

Why should we be thinking about the links between DRR and CCA?

The last few years have seen one of the most severe droughts in recent times in the southern African region, and the news at the beginning of 2017 was thick with warnings about cyclones, heavy storms and floods. There is no doubt that extreme hydrometeorological events, and their multiple and potentially disastrous impacts, are at the forefront of the public consciousness at the present time and are one of the key concerns regarding the impacts of climate change in the region.

While the links between extreme climate events, disaster risk reduction (DRR) and climate change adaptation (CCA) are recognised in the South African Climate Change White Paper, this is not the case for the whole region. Furthermore, even if there is national recognition of the need to synergise these two spheres of endeavour, this does not always trickle down to effective policy, planning and implementation at the local level. Moreover:

"Efforts to reduce disaster risk and poverty go hand in hand. Because disasters impoverish so many, disaster risk management is inseparable from poverty reduction policy, and vice versa. As climate change magnifies natural hazards, and because protection infrastructure alone cannot eliminate risk, a more resilient population has never been more critical to breaking the cycle of disaster-induced poverty".

DES welcomes Dr Kaera Coetzer-Hanack

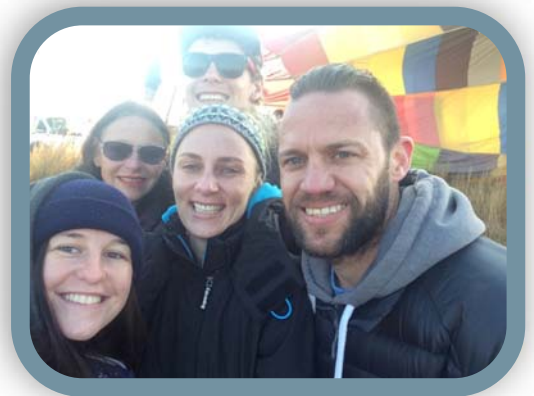
I am from Johannesburg, having lived there all my life. Moving to a small town is a first for me – but one that I’m already enjoying! My family is originally from Grahamstown, and I feel a bit like I have returned home, having lived through the stories of parents, aunts, uncles, grandparents and great-grandparents about their time at Rhodes and in the town. [Immediate family seen in photo below]

I did my degrees at Wits, having completed my doctorate in the School of Animal, Plant and Environmental Sciences under Ed Witkowski and Barend Erasmus in 2014. Thereafter I joined the Global Change Institute and School of Social Sciences: Department of International Relations at Wits as a post-doctoral fellow. I feel that my academic career thus far has emphasised the need for increased inter- and trans- disciplinary in environmental research and problem-solving, and this is something I prioritise in my work – and why I feel Enviros is an especially good fit for me.

Thus far most of my research has taken place in the Lowveld savannas of north-eastern SA, but I look forward to expanding upon this spatial footprint. Having trained originally as a spatial ecologist, I have a fair background in geospatial analysis, conservation planning and remote-sensing, but apply it as a tool rather than with a technical focus. I am interested in the management of large multi-use conservation landscapes and how governance networks and decision-making is operationalised across scales and across actors. I have experience in interpreting international conservation designations for local contexts through UNESCO’s Man and Biosphere Programme (MaB), and am embedded in MaB, mostly through my role in the Kruger to Canyons Biosphere Reserve.

I am interested in the co-exploration and co-production of knowledge between Academia and the Public Sector, within the fields of natural resource management and climate change adaptation specifically, and have begun to explore how values, world-views and perceptions may shape engagement.

I am incredibly competitive about ridiculous things. Musical chairs – don’t try your luck, as I commit to the win, even in high-heels. 30 seconds – you have been warned. A ‘friendly’ run – HAH! Challenge accepted. Karaoke – *YesPlease!* I am an enthusiastic dancer; not much talent but I have a repertoire of moves that will distract you from my gracelessness. Ask me about The Mermaid, The Field-Work Express, and The Run-a-way Leg. I esteem the late Sir Terry Pratchett’s Discworld novels above all other fiction, and find his observations on the human condition especially insightful and laugh-out-loud funny. I love bad TV and will binge watch series with little convincing: medical dramas, anything fantasy-related and made-for-TV movies – enjoyed best while eating condensed milk from the can or Nutella with a spoon.





Pilgrims offering dhoopa (Image courtesy- Dr Siddappa Setty)



Stand for dhoopa in a temple



Stand for dhoopa in a household



Dhoopa on stand emitting smoke



Disinfecting new-born's hair

A walk with Soumya Kori: PhD student from India

As a curious child I always questioned various rituals my mother practiced. Be it lighting the lamp, burning camphor or incense (dhoopa) and perform puja (act of worshiping) on idols of deities' everyday. She would either shut me down or scare me that god will cut my nose or send me to hell if I questioned anything related to god. Similar situations emerged while conducting interviews with a pilgrim during my PhD work, when he warned me against studying something that the local deity loves.

A research opportunity at ATREE (Bangalore, India) gave wings to fly and question one such ritual that many Hindus practice; i.e. burning of incense. Where does it come from, who collects it, how do they collect it, why do we burn it, what actually happens when one does it? The list of questions list goes on. With these questions in mind I started my PhD at Rhodes University on 'dhoopa', under the guidance of Prof Charlie Shackleton (at Rhodes) and Dr Siddappa setty (at ATREE). The dhoopa that I am studying is the gum-resin from *Boswellia serrata* which is a dry, deciduous forest tree species found in India and Pakistan. These trees are found in drier parts of Western Ghats (WGs) of Karnataka state in India. I chose Biligiri Rangaswamy Temple Tiger Reserve, Malai Mahadeshwara and Cauvery Wildlife Sanctuary to conduct a study on dhoopa. These sites are famous pilgrimage sites in Karnataka. Approximately 100,000 pilgrims visit these sites every year to worship and offer dhoopa to the local deity.

Soliga tribes in the WGs have harvested dhoopa for many years as one of the major NTFPs for their livelihood and cultural practices. Dhoopa is harvested in different forms including pure gum-resin, the same mixed with bark, and gum-resin mixed with soil. The Soliga harvest dhoopa in any of these forms, powder it and sprinkle it on a metal stand with burning charcoal which then emits a pleasant and soothing aroma from the smoke. This smoke is offered to the deities' in individual households or in the temples. One of the local deities that the Soliga community worship is Malai Mahadeshwara alias Madappa whose most favorite offering is dhoopa.

Also, a strong belief exists among the pilgrims and the Soliga community is that one should not get darshana (a glimpse of god) without offering dhoopa. The most common phrase heard in the Madappa temple area is 'dhoopa haaki papa kalko', which means 'get rid of your sins by offering dhoopa'. When a harvester decides to harvest dhoopa from a tree he would touch the base of the tree and thank Madappa for the dhoopa that he has given so that it could be offered to god or to Madappa himself.

The aromatic smoke is also used for the disinfection of newborns' and their mothers' clothes and hair. Another use of dhoopa in the Soliga community is in the funeral ceremonies where the dead body is offered the aromatic smoke by all the relatives and friends before the burial. It is also believed amongst Soligas that dhoopa gives mild euphoria and it calms one's nerves.

With above mentioned preliminary observations I am in the process of unwinding the mystery of this cultural practice and beliefs associated with dhoopa. I will also be looking at the ecology of *Boswellia serrata*, the impact of harvesting dhoopa on the species itself, demand and supply trajectories of dhoopa as an NTFP and ultimately conservation planning for the species by designing sustainable dhoopa harvest strategies if required. Currently, I am visiting villages, conducting group discussions, interviews with the harvesters, retailers, pilgrims and bureaucrats who are involved in the process of harvesting dhoopa, selling, using and possibly controlling the overharvesting.



Dhoopa and the Soliga tribal cuisines offered to the burial

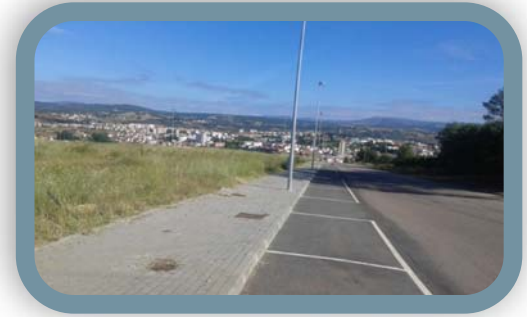
A trip to Portugal with Masters student Afika Njwaxu

On the 3rd of the June 2017, Charlie, Sheona and myself began our trip to Portugal, but somehow we were booked different flights from Port Elizabeth to Johannesburg. This was my first time on a plane and out of the country so this was all very exciting and terrifying at the same time. We arrived in Porto, Portugal on the 4th of June and travelled to Braganca by bus for about three to four hours. The purpose of the trip was to attend the 58th meeting of the Society for Economic Botany in a small town called Braganca from the 4th to the 9th of June. Braganca is a small town in the North-eastern Portugal with beautiful buildings, a castle and very steep slopes. Among attendees were two of Charlie's student from Mozambique, Angelina Martins and Annae Senkoro.

The theme of the conference was "living in a global world, local knowledge and sustainability" with several symposia and workshops. There were five symposia spread out through the week, which consisted of the following: 1. Ethnobotany of mountain regions, 2. Economic botany, 3. Ethnobotany, Ethnopharmacology and natural products, 4. Agrobiodiversity and traditional knowledge and 5. Free topics.

Apart from the presentations, there were other interesting activities that took place to mould the young scientists attending and among these was a mentorship lunch. This was an amazing initiative for students to speak to several exceptional, experienced and overall awesome researchers to get some guidance on their journey as natural scientists. Another interesting activities that took place was a medicinal plant walk to see some of the plants people of Braganca use as medicine. A lady whom I was sharing a lunch table with one time told me that one of the remedies local people make is a tea made with cherry stem which helps with a urinary tract infection. On Tuesday the 6th of June, students had a social event which was held in a proper walled citadel with a well-preserved medieval castle dating back to the 12th century overlooking the city centre of Braganca. The conference overall was an amazing experience, met a lot of passionate botanists which have fuelled and increased my interest in the relationship between plants and people and of course there was good food and wine.

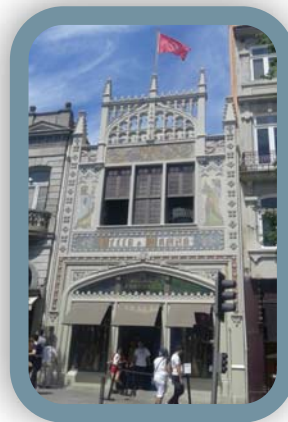
After the conference ended, we travelled to Porto where I would be catching my flight back home. I got to spend a day in Porto and this was a very different setting from Braganca. It is bigger, more beautiful with old buildings and churches dating back to the 13th century and beautiful bridges. When we arrived in Porto, there were activities happening to recruit people into the army and there was a tank right in the middle of the town. Among the interesting things one could do in Porto, from boat cruises to bus and tram rides around town, there is also a famous book store called Livraria lello. This book store is well known because of its beautiful and magical interior and magnificent staircase. There's also rumours that the bookshop inspired J.K Rowling's location/ setting for the famous fantasy story of Harry Potter.



City of Braganca



City centre, Braganca



Livraria lello bookstore



The Castle

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