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Charlie appointed as Distinguished Professor



Earlier this year, our very own Prof Charlie Shackleton received the prestigious ranking of 'Distinguished Professor', which is conferred on academic staff of outstanding scholarly reputation and productivity, and who have brought great distinction to the university through their academic work at

Rhodes. Charlie becomes one of only six others to hold this title at Rhodes, all leading researchers in their disciplines. This is evidenced by Charlie's more than 300 journal publications (at an average of approximately 15 per year over the last ten years, with most in leading journals for the discipline), 11 books and 57 book chapters, alongside 40+ policy briefs and popular media outputs. This is paralleled by Charlie having been the main or co-supervisor of more than 150 postgraduates (with 20 others still being supervised). Most of the postgraduates mentored by Charlie have gone on to publish from their thesis work.

This sort of research standing leads to opportunities for larger-scale impact through invitations to contribute to policy and global think-pieces. Exam-

ples from the last few years include Charlie serving for three years on the National Forestry Advisory Council (a statutory committee that advises the national Minister of Forestry, Fisheries & Environment), acting as a review editor for Chapter 3 of the seminal IPBES global report (2022) on "Sustainable Use of Wild Species Assessment", being an invited expert contributor to the IUFRO global synthesis on "Forests and Trees for Human Health" (2023), and an advisory board member of GreenPoPs restoration and urban forestry programme. Charlie has also recently been invited by the Food & Agriculture Organization in Rome to develop a manual for practitioners to assess ecological yield and harvest sustainability of non-timber forest products that they wish to distribute to forest department officials, development practitioners and NGOs globally.

Charlie is certainly flying the DES flag high and we congratulate him for this well-deserved recognition.



Inside this issue:

James' Inaugural Address	2
Jess' Distinguished Teaching Award Lecture	3
Hons River Rescue Service Learning	4
Housework for the Planet	5
DES Quiz Nights	6
Peer Support Groups Mentoring Program	7
NTPF course offered in Germany	8

DES Annual Research Form	9
Honors Fieldtrip to the Garden Route	10-11
Important Environmental Dates (2024)	
World Wetlands Day	2 Feb
World Wildlife Day	3 Mar
Earth Hour	23 Mar
Bike to Work Day	17 May

James' Inaugural Address



By Bukamuso Sebata

For Prof Gambiza, the inaugural lecture titled "Land degradation in a changing world: Looking back and into the future" reflected profoundly on his life's work. The lecture delved into the pressing environmental issue of land degradation in the 21st century, negatively impacting over 3.2 billion people worldwide. Despite existing efforts to combat it, the global area of degraded land continues to expand, leaving behind remnants of failed development projects.

Using the analogy of a "systems journey," Prof Gambiza's lecture evaluated past approaches to addressing land degradation and presented historical timelines of global and national efforts. He emphasised the need to re-think the implementation of development

programmes, teaching methods, and research approaches to tackle complex issues like land degradation effectively.

During the lecture, Prof Gambiza highlighted the interconnectedness of various challenges, such as climate change, biodiversity loss, and soil mismanagement, underscoring the urgency of adopting a systems approach to address these complex problems collaboratively. He drew attention to the devastating effects of extreme weather events and stressed the importance of adopting a holistic perspective to create a sustainable future for humanity.

The concept of doughnut economics, which advocates balancing the social foundation and ecological ceiling for sustainable development, was also discussed during the lecture. Prof Gambiza stressed the importance of positive trajectories and triggering positive tipping points with the help of keystone actors or agents of change. He mentioned nature-based solutions and the initiative of nature-positive universities as essential components of addressing land degradation and other environmental problems.

The inaugural address concluded with a passionate call to action. Prof Gambiza urged the audience to proactively seek solutions and engage in projects promoting ecological restoration and combating land degradation. He emphasised the power of collaboration and utilising local resources to impact the environment and people's lives positively.

The event celebrating Prof James Gambiza's promotion to the rank of full professor was not only a recognition of his scholarly achievements but also an inspirational moment for Rhodes University's academic community. With his wealth of knowledge and commitment to addressing environmental challenges, Prof Gambiza's inaugural lecture left a lasting impression on all who attended, sparking a sense of responsibility and motivation to work collectively for a sustainable and prosperous future.

To watch this inaugural lecture, go to: <https://youtu.be/bYYuihWr-Lc>

Prof Gambiza's strengths in systems thinking, research, and managing the human-nature interface have positively impacted Rhodes University and other institutions throughout his distinguished career.

Jess' Distinguished Teaching Award Lecture

By Carmen Visser

Starting her lecture, Jess shared a sentiment that the Environmental Science Department valued during the COVID-19 pandemic: "Getting your content online is not your priority - maintaining a connection with your students is". She used this as her 'golden rule' during remote teaching to stay connected with her students and help them continue their studies.

During the remote teaching period, Jess followed a teaching philosophy inspired partly by Associate Professor Karen Ellery - the 'Three Cs' - which focuses on connection, context and care. Specifically, she explained connection to consist of relationality in the form of building and maintaining connections with students and designing a coherent and connective curriculum. She emphasised that the need for compassion and empathy was more significant than ever during the isolating pandemic.

Jess described the context of her teaching philosophy to include "rapid global environmental change: the climate crisis" and "COVID-19: a world in crisis and a digital divide".

She also explained how South African Higher Education and its focus on diversity, social justice and decoloniality shape her teaching context.

Jess approached remote teaching with four main steps. Firstly, she and her colleagues carefully analysed her students' needs to determine how best to help them. Secondly, she focused on maintaining connection and showing empathy towards her students, supporting them individually and in group settings. Thirdly, she moved all her teaching content online using RUConnected. This step also included learning to narrate slides and relying more on multimodal teaching resources, such as videos, websites and interactive exercises. Finally, she researched and identified online platforms and tools to help her teach.

Through an interactive exercise, Jess illustrated her remote teaching approach by requesting attendees visit a website she had discovered which allows users to input a code (provided by a teacher) and answer specific questions. She then accessed the website to show the audience the results.



In the next part of her lecture, Jess explained how her post-pandemic experiences of teaching, now as a new mother of her one-year-old son Jonah, included "teaching, learning and living in the moment". Emerging from the pandemic, and then heading into the new challenge of being a working academic mother has not been easy, yet she is adapting as she learnt to do during the pandemic.

She said, "Environmental scientists take great inspiration from nature", highlighting the aloes blooming in Makhanda this year. "They are connective plants; growing flowers for their bird pollinators, typically found in degraded areas." She described them as seasonal, symbiotic and self-caring - three words she will be adopting as her own teaching philosophy going forward.

"Seasonal, symbiotic and self-caring - three words Jess will be adopting as her own teaching philosophy going forward."

Honours River Rescue Service Learning



“I learnt that in this journey of trying to save our planet, I am not alone” Faith Mshengu



“Wading through dirty water and other people’s trash was not a highlight, but the satisfaction of leaving a place cleaner was” Neale Howarth

“I learnt that action (picking up as much rubbish as we could) is better than inaction (feeling dispirited and having thoughts like there’s just too much rubbish to make a difference)” Amanda Gambiza

“Almost all of these initiatives are spearheaded by champions. We need stewardship legacies, not single actions” Kalita van Zyl

“The energy the kids brought really helped me get through it and we finished in just over an hour” Riaan van Straaten

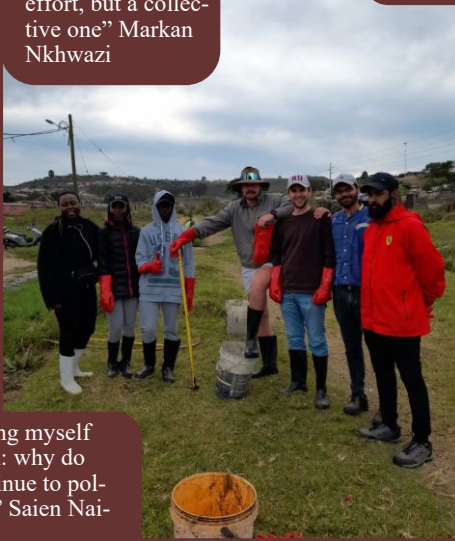


“I did enjoy the feeling of cleaning up the river and doing my bit and went around to my friends to encourage them to do some community service” Daniel Dillon

“The state of the river is not going to change by me having arrived. This is not an individual effort, but a collective one” Markan Nkhwazi

“After the cleanup you could hear the water flowing and the river singing” Kurhula Ndhlovu

“I realized that some of these children have never seen a river, and that this work was really necessary” Sasa Mkhize



“I kept asking myself the question: why do people continue to pollute rivers?” Saien Naidoo



Housework for the Planet

By Jess Cockburn

"It's not my trash, but it is my planet. And this planet is the only home we have". This is the sentiment which inspires residents from across Makhanda to keep on showing up to clean up our rivers. This despite the hard work – physically and emotionally – it takes to wade into the mountains of muck and filth time and time again. Clearing the rivers is housework - it has to be done repeatedly to keep them clean, flowing, healthy, singing.

Makhanda's River Rescuers put in a big effort this past weekend to do their housework for the planet. Helen Holleman of River Rescue calls it the "Spring Cleaning". The efforts were driven by a service learning partnership between River Rescue and the Rhodes University Department of Environmental Science, along with contributions from other partners. Volunteers donned their red gloves and gumboots and got stuck into cleaning the rivers across our city on World Cleanup Day (16 September). Partners who pitched in included Kingswood College, Makhanda Wild Hikers, and numerous entities from Rhodes University including Oakdene House, Gavin Relly Postgraduate Village, the Student Representative Council, and Honours students from the Department of Environmental Science.

Chris Botha from Gavin Relly who initiated the "Spring Cleaning" idea, led a big clean-up around the Monument. That might seem a long way from a river, but sooner or later that trash

is going to find its way into the rivers, into the seas. Their video proved that "housework" can be fun!

James Njoloza, the Environmental Councillor of the Rhodes University SRC commended River Rescue for catalysing this collective work for the greater good:

"I wanted to take a moment to express my heartfelt gratitude for providing me with all the resources I needed for a successful river cleanup. Your support and assistance made a significant difference in ensuring that everything went smoothly throughout the day. I am especially grateful to Helen, who went above and beyond by waking up early and helping me gather all the necessary resources. Her dedication and commitment were truly remarkable.

I believe that teamwork and collaboration are the key ingredients for achieving success in any endeavor. Your organization exemplifies these values, and I feel privileged to have had the opportunity to work alongside such a dedicated and passionate team. Your commitment to preserving our rivers and making a positive impact on the environment is truly inspiring."

Helen also acknowledged local champion, Elizabeth Davies, for the key role she plays in supporting the work of River Rescue. Kjetil Torp from the Village Scribe and Awarenet also made a significant contribution by donating essential gumboots and gloves. Helen went on to say:

"Fantastic work, in really windy, chilly conditions. I am grateful for all the self-organising that everyone did to make it happen... it's so encouraging, and I hope everyone looked on the end result with pride and ... wait for it ... love. This is the only home we have ... thank you for caring for it."

For more information on River Rescue contact Helen Holleman on 079 227 9698.

"It's not my trash, but it is my planet. And this planet is the only home we have".



Malwande Bebeza from the Makhanda Wild Hikers cleaning the river near Evans Road



James Njoloza the SRC Environmental Councillor and students from Rhodes University helping the river to flow and sing again near Evans Road.

Educational and fun: DES Quiz Nights foster community and learning



By Faith Mshengu

In the quest to build a healthy and happy community while also educating each other, the Department of Environmental Science (DES) held a series of quiz nights that took place at the Steve Biko building. Prof Charlie Shackleton has been the mastermind behind promoting and organising three successful quiz nights. These quiz nights involved the whole of the DES community, from the students to the lecturers and support staff. The quiz nights were well structured, with all participants put into groups. Each group had to consist of at least one person from each level of study, as well as a staff member. There were many different groups, each with their unique names, as each group was given the

freedom to pick their team's own name. Questions were gathered around many different topics, from identifying plant species, to general knowledge questions, right to hot off the press (news desk). Since these questions were drawn from these topics, this gave everyone a chance to shine.

One quiz night was hosted each term, and as the terms went by there was friendly competition that grew between the different groups. However, since the beginning, the Dream team (led by Jess) made a strong start, dominating by 40+ points. Right behind them was the "Unbothered" which was led by Glad. The "Earth Gang" team, who were not too far behind pulled their weight during the final match, coming to a tie with team "Unbothered" with a total of 25 points leaving the "T-room Terrors" (led by Monde) in last place with 23 points. But a good effort overall, from all teams involved.

All in all, the quiz nights have been an amazing

and fun experience for socialising and building relationships between the students and staff members, and also amongst the students themselves at all levels. A lot of memories were shared, and a lot of educational information gained. Hopefully the

"T-room Terrors" will have their revenge and make an epic comeback, in great spirit in 2024 and dominate the leaderboard. Guess we'll just have to wait and see.



"Seasonal, symbiotic and self-caring – three words Jess will be adopting as her own teaching philosophy going forward."

Peer Support Groups Mentoring Program

By Faith Mshengu

The department of Environmental Science (DES) has recently launched a Peer support and mentorship programme that has been facilitated and organised by Dr Cockburn. The main aim of the mentoring programme is to offer leadership skills to all levels of study in the department, and to provide a space for peer support. Mentors were picked from all the different levels of study; everyone was given an opportunity to apply and motivate as to why they wanted to become mentors and the successful candidates were assigned their own groups. Each group was named after different indigenous plant species.

On the 30th of August the Department of Environmental Science hosted their first meet and greet for the mentors with the students. All the students in the department from the second years right to up until PhD candidates were divided into these groups. Each group consisted of at least one student from each level of study. This was done to assist the students with promoting leadership skills, however one of the other very important ideas behind the mentorship programme was to form social relationships amongst peers. Thus, this whole programme was for department peers to come together and share differ-

ent opportunities that they many know off that may help other students, and to support each other in our respective research journeys.

Additionally, each peer support group was given the freedom to pick one event to do that they will host and facilitate sometime during the fourth term. However, the event chosen has to address specific DES Peer Support Group goals such as "DES Community-building", "Sustainability values", and or "Student support".

Going back to our first meet up event, during the event, we were also graced by the presence of Dr Carl from the CSIR who is the manager of the 'habitable planet' workshop, and is responsible for development, teaching and implementation of the "ACCESS" education, transformation, and training programmes. After a lovely lecture from him, we broke off into our PSG groups, and got to know each better, and plan some events for the term to come. The night ended outside on the lawns, with pizza, fizzy drinks, and a good time.

Our journey throughout the whole PSG mentorship programme has been nothing but extraordinary. It is clear to see that the Department of Environmental Science seeks to ensure that it remains a vibrant and interactive department, that is inclusive and supportive to all the students and staff members of our precious department.

"The main aim of the mentoring programme is to offer leadership skills to all levels of study in the department, and to provide a space for peer support".



NTFP course offered at Technical University Dresden (Germany)



Charlie and the Tea Factory

By Charlie Shackleton

Dresden Technical University boasts one of the oldest Forestry schools in the world and attracts postgraduates from every corner of the earth. Thus, it was with some anticipation that Sheona and I accepted an invitation to help them redesign and offer a week-long winter school on non-timber forest products (NTFPs) as an elective within their

Masters programme on Tropical Forests and Forestry.

Having assumed that the university was situated in the city of Dresden in northeast Germany (about an hour's drive east of the border with Poland and half an hour north of the border with the Czech Republic), we were surprised to find out that the Forestry Faculty is located 18 km out of the city in the rather small town, or perhaps village, of Tharandt. Since it is an easy commute by train from the city to Tharandt, most of the students and staff opt to live in Dresden. Consequently, Tharandt does not garner much of the economic benefits that might be expected from having a university faculty based there. This was evidenced by the relatively limited number of places to eat or shop, and the absence of any student bar.

Furthermore, since the course was a winter school it had to be held

in one of the university vacations, which meant there were very few students around – adding further to the quietness of the town. But we made up for that by encouraging some very lively discussions amongst the thirty or so course participants.

There was a good representation of participants from SE Asia, Latin America and Germany, along with a few from African and other European countries. Most had some work experience in NGOs, government institutions, as consultants or even had their own businesses. Consequently, they were able to draw from direct experiences with forests and/or NTFPs when debating particular topics during the winter school.

Along with Dr Eckhard Auch from DUT, we structured the school around a range of readings, participatory presentations and discussions, short presentations and field trips. With a core focus of the winter school being NTFPs and livelihoods in tropical forest regions, the field trips were a bit of challenge, exacerbated by the fact it was late winter in northern Germany which meant there were no obvious NTFPs in the surrounding (temperate) forests. But Dr Auch drew on his local contacts and arranged one trip to a mushroom research institute and another to an herbal tea and medicinals factory. Some of the products from the tea factory made use of honey-

bush leaves imported from South Africa.

We could not but compare the ease of arranging field trips when there are dense train and bus networks that operate according to schedule, with the need for several mini-busses and drivers required for group field trips in South Africa.

Overall, it seemed that the winter school was enjoyed and well-received by the participants. It represents an interesting case of 'impact' of the research we do at DES, in that DUT viewed Sheona and I as leading international scholars in the field of NTFPs and so invited us to assist them in redesigning their curriculum. The revised curriculum will be a the basis for an elective module for Masters students from around the globe for years to come.

Tharandt main street



“Some of the products from the tea factory made use of honey bush leaves imported from South Africa”

DES Annual Research Forum 2023

By Kathy Cassidy

On 5th and 6th October the department held its Annual Research Forum at the Centre for Continuing Education. Our keynote speaker was Brian van Wilgen from the Centre for Invasion Biology at Stellenbosch University. Brian spoke on designing research for impact and the case of invasive *Prosopis* trees in eastern Africa. Unfortunately, Brian was unable to attend physically, but that did not detract from his fascinating talk via Zoom.

The themes this year were as follows:

Theme 1: social-ecological restoration

and climate change responses.

Theme 2: sustainable consumption: renewable energy and waste management.

Theme 3: human-nature connections and stewardship.

Theme 4: integrated landscape management and conservation.

Theme 5: Exploring social-ecological interactions and the urban context.

Following two days of stimulating presentations, the best speakers were chosen. Third place, and a tied-second

place went to Anda Mtshintsho, Sasa Mkhize, and Ryana Johnson. First prize went to the 'mind-blowing' presentation by our very own Yumna Tombe who spoke on the spatial extent and composition of illegal solid waste dumping across an income gradient in Makhanda and Knysna, South Africa.

Each prize-winner received a book voucher. A very cold and rainy day did not deter us from having fun at the end of the event with a delicious lunch and another exciting quiz hosted by Charlie.



"illegal solid waste dumpsites occurrence, size and prevalence were unevenly distributed within both towns thus highlighting issues centered around socio-economic inequalities and poor service delivery which are disproportionately faced by low-income area residents".

Honors Fieldtrip to the Garden Route National Park

Addressing complex social-ecological challenges in open-access conservation systems

For the Honors fieldtrip held in Feb this year, we travelled to the Ebb & Flow rest camp, situated in the beautiful Garden Route. The Garden Route National Park comprises three sections (they used to be three different parks, and each has its own manager): The Tsitsikamma section, The Knysna Lakes, and the Wilderness Section. It comprises indigenous Tsitsikamma forests, sections of (often very old) Fynbos, and some of the country's most critical water systems, boasting many rare and endemic species. The Garden Route, more broadly, is an area that is celebrated for its natural beauty and relies heavily on a tourist economy. It also has a strong agricultural industry (particularly dairy). It is also a very risk-prone area, frequently subjected to fires and floods.

The Garden Route National Park (like Table Mountain National Park) is slightly different to most national parks and nature reserves in South Africa — people (of diverse socio-economic means) live there, and there are no fences. Like other conservation systems, the park is not an island—it is influenced by activities outside its border and also impacts those living around the

park.

After settling in upon our arrival, we were welcomed and introduced to what was in store for us during the trip. We then had an introduction to how to reflect, which was led by Jess, followed with a braai for dinner and getting to know one another. On day 2, we had an overview of the honors projects and modules on offer, and an introduction to social-ecological systems.

On day 3 we visited the Knysna Estuary and were hosted by Owen Govender, the SAN Parks Knysna section ranger. We met with various stakeholders in the management of the Knysna estuary and also went for a boat trip around the Lagoon.

On day 4 we travelled through a social-ecological landscape, driving through indigenous forests, wealthy and poor areas, agricultural areas and finally to the Wilderness lake systems. We learnt about the realities of managing an open-access national park from Jonathan Britton, the acting park manager. On the way back, we stopped at Hoekwill country café for some legendary cheesecake and coffee.

On day 5 we spent the morning working on our proposals on hypothetical research on a topic of our choice that would address the topic of "Managing water sys-



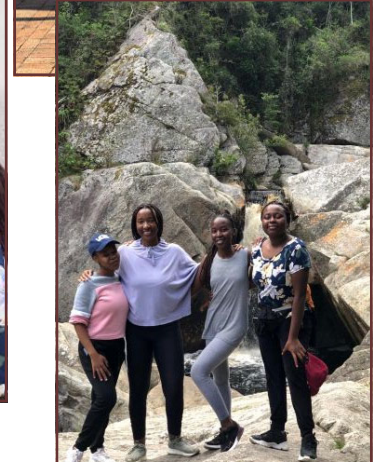
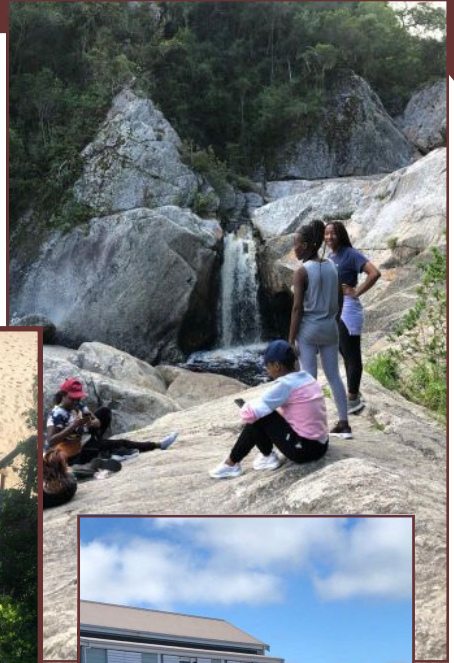
tems in open access parks as social-ecological systems." In the afternoon, most of us canoed down the Touwsriver and then climbed up to see the Waterfall.

We were due to travel the next day to the NMU George campus and present our proposals to NMU students and staff as well as SANParks staff, but an outbreak of Covid put paid to those plans. Instead, we presented our proposals at the camp to the staff. In the afternoon, we travelled to see the Big Tree in the Tsitsikamma Forest. This tree is an 800 year-old Yellowwood that stands 36 m tall with a trunk circumference of 9 m. Truly a giant of a tree.

"Real yellowwood (*Podocarpus latifolius*) is distinctly South African and aggressive felling in the past led to its near eradication. Today, this tree is protected."



Honors Fieldtrip 2023



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